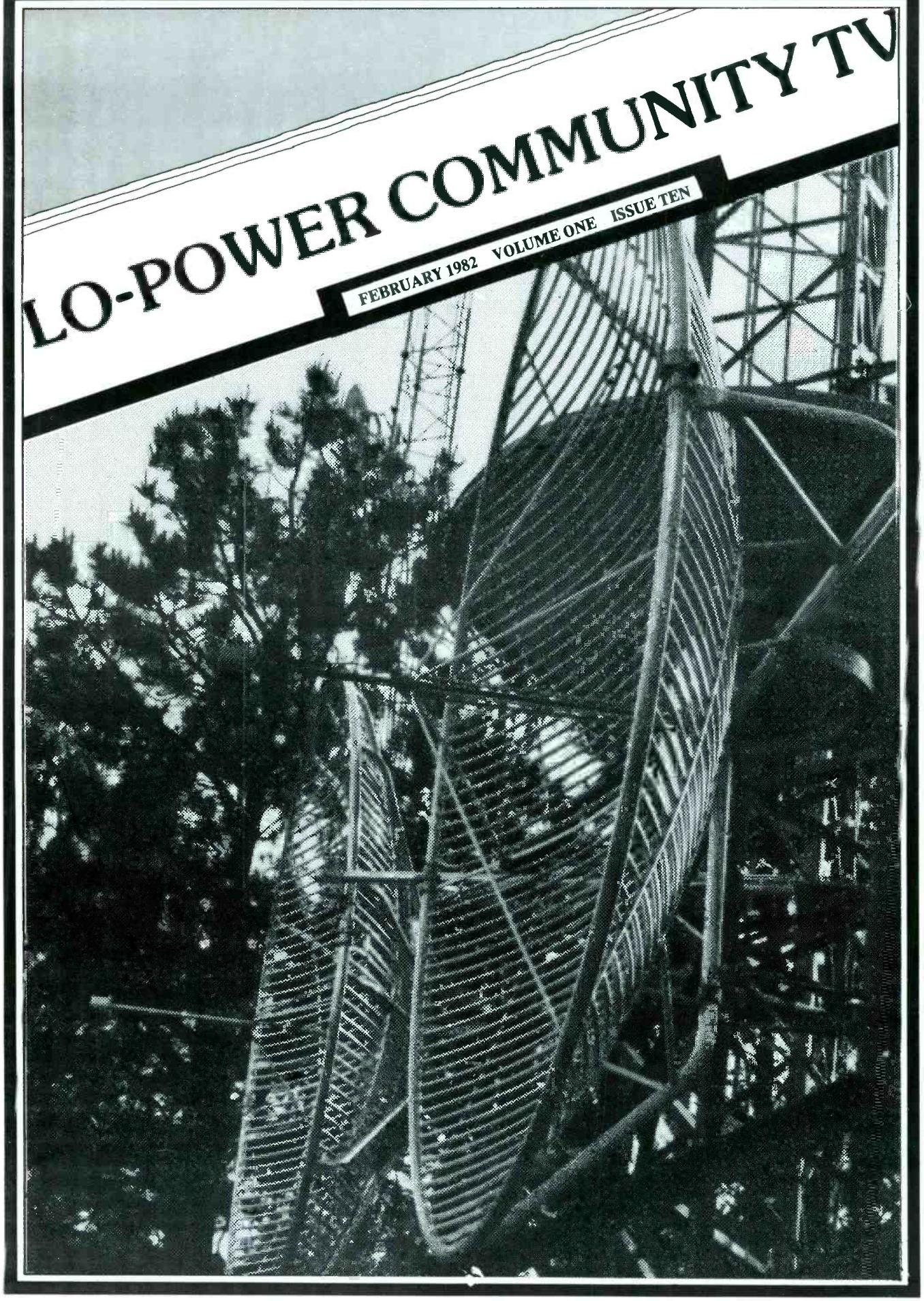
LO-POWER COMMUNITY TV

FEBRUARY 1982 VOLUME ONE ISSUE TEN



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would cost you $60 to receive all cut-offs for a year first class, $120 express mail.

Cut-offs listed in the magazine are still useful after they have expired as a way of knowing which channels not to apply for. This is why we suggest you get a ring binder and keep your magazines handy for reference; they are drilled for that purpose.

Our "Up-to" printout of applications to date will be updated to include all cut-offs when the freeze is lifted. After that we will keep cut-off addenda added in the magazine each month. If you would like to order an "Up-to" which includes all applications and cut-offs to the thaw, send $15 and tell us you would like to wait for the thaw. As soon as it is finished we

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Lo-Power Community Television magazine and associated low power manual and other publications are edited and published by Harlan L. Jacobsen to bring together the information required to make the concept of low power television work.

Lo-Power Community Television Magazine is published twelve times per year. Sample copies are $5, subscription $50 per year. Intended to supply needed information on Low Power Television at reasonable cost.

Postmaster, send address changes to **7432 E. Diamond, Scottsdale, AZ 85257.** Telephone, **(602) 945-6746**. Application to mail at second class rates applied for at the main post office at Scottsdale, AZ 85257.

At Last! An Organization for LPTV's "Little Guys"!

I C T V

Independent Community Television

ALLIANCE

We are getting together the people with skills to help the small LPTV entrepeneur, little guys that get all enthused about operating an LPTV station and then get lost in the filing process or get scared about their chances if they do get a license. Getting yourself started and filing your own application is tough to do, like filing your own income tax -- you just keep putting it off.

We have had potential LPTV broadcasters tell us they have paid up to $10,000 to have an application filed. The preparers give them no guarantee of any kind that they will ever get a license nor is there any gurantee the application they prepared is even correct or adequate. Paying three or four thousand each for applications is quite common with some paying for filing 10 to 20 at $3,000 each. Paying a lot of money for something does not mean it is better; it often means that you have been ripped off.

Many will wind up paying nearly as much to the application filer for getting a license (or not getting a license -- no guarantee, remember) as the station itself might cost. This is ridiculous. That's all reasonable if you are going to put $250,000 to a million into a station, but in low power it keeps out or ruins the little guy, who is really the person who should be in rural TV -- not networks or chains.

The reason for the new setup -- we spend several hours a day on the telephone, starting as early as 5 a.m., talking and providing free help to little guys all over the country and in foreign countries, answering all their low power questions, helping them get an application filed, etc. We often return phone calls at our expense with lengthy conversations for their benefit.

We do not get paid for it. We cannot keep things going and be able to do that indefinitely. We draw on the knowledge of a lot of people who aren't getting paid for their time and help, either.

What we are doing is setting up a process now whereby we can get help for the little guy who can't pay thousands of dollars to get an application filed nor tens of thousands of dollars to get it on the air if he gets licensed.

We will knock ourselves out for those who sign up as members of this process (which is like the National Federation of Cable Programmers run by Pat Watkins for non-profit groups). The process is intended for little guys unfamiliar with the field who intend to get into it and run a few community stations and hope to make a buck doing it.

Members will be supplied free of extra cost, other than shipping and handling charges, every bit of printed materials, monthly magazines and more than 20 hours of LPTV video and production tapes loaned and Hotline phone assistance six days a week, with instant access to the FCC data base.

For a small additional fee per application we will put together assistance to do 90 per cent of the work of filing for the small entrepeneur.

1. Promote the successful licensing and operation of independent community LPTV service.

2. Source of LPTV information and assistance for the little guy in gaining the knowledge and help in taking the action to succeed in getting applications filed, licensed, on the air and profitable.

3. Technical assistance in applications, construction and operation. Monthly magazine free, How-To Books, printouts, Washington research and dozens of video instruction tapes available to members to use.

4. Cooperative purchases of station and studio equipment at better prices, as well as cooperative commercial production, and specialized minority program bycycling.

5. Lobbying and cooperatively opposing the taking over of LPTV by the large chain (over 15) multiple stations and by conventional broadcasters, as well as opposing the takeover of ownership of low power by the networks, present or forthcoming, either through licensing or purchase.

6. Development of low-cost automated equipment for running LPTV stations unmanned the majority of the day. Development of low-cost studio equipment, remote-to-studio and studio-to-transmitter, inexpensive microwave and laser links, as well as low-cost ½-inch production and editing systems. Development of satellite equipment and purchases at lower cost.

7. Collective selling of time and spots in group packages of member stations as well as P.I. sports development, etc.

8. Collective purchase and lease arrangements for encoding and decoding equipment for STV.

9. Group negotiations for programming and central point for contact for suppliers with program avails, and developing standardized rate cards and procedures for advertisers buying time on an entire group of community stations in exchange for use of satellite-delivered programming.

10. By calling our Hotline members will have access to the FCC data base six days a week and phone notification of hot information releases.

11. Purchasing equipment at dealer prices can save 25 per cent or more on station set-up costs.

A library of books on setting up a small studio, lighting, etc., are available for free loan as well as video tapes.

12. Central production of commercials not feasible for small stations.

ICTV

Membership Information

Independent Community Television Alliance

- ☐ Local Power Hot Line - 50 hours a week.
- ☐ Subscription - Monthly Lo Power Magazine
- ☐ Co-Op Group Purchases of Equipment
- ☐ Expedited Washington Research Information
- ☐ Collective Lobbying for the Little Guy in LPTV.
- ☐ Washington Follow-up on Applications
- ☐ Verbal Phone Access to Commission Data Base - 6 Days a Week
- ☐ Use of Instructional "How To" Video Tapes (1 week) Members pay only for shipping, handling, record keeping.

INSTRUCTIONAL "HOW TO" VIDEO TAPES AVAILABLE
(Use for one week; members pay only for shipping, handling, record-keeping.)

• Techniques of Using One Camera	1 hour
• Setting Up a Studio	30 minutes
• Television Tape Production	45 minutes
• Lighting for Television	25 minutes
• Multiple Camera Techniques	30 minutes
• Shooting Video "Basics"	60 minutes
• How to Shoot a Sports Event	20 minutes
• How to Broadcast a Local Wedding	20 minutes
• How to Broadcast a Church Service	20 minutes
• How to Set Up a Video Tape Business	20 minutes
• Shooting Local Commercials for Cable or LPTV	20 minutes
• LPTV Crash Course	12 hours
• LPTV Crash Course "B"	10 hours
• Subscription TV	17 minutes
• World's Smallest Full Service TV Station	35 minutes
• The New *Mavica* "Still Camera"	17 Minutes

Tapes Under Development:
• Investing in Low Power TV

BOOKS AND MANUALS LOANED -- TWO WEEKS FREE TO MEMBERS

- ★ How To File Under The New LPTV Rules
- ★ Printout Of Applications And Cutoffs To Date
- ★ How To Run A Successful Low Power TV Station
- ★ Color TV Studio Design And Operation
- ★ Video Tape Production And Communication Techniques
- ★ Designing And Maintaining a Small TV Studio
- ★ Television Production Handbook

Members free one week use of each tape

•••WE DO A COMPLETE RURAL AREA VHF LPTV FCC APPLICATION FOR YOU!
•Members Price: $250 Non-Members: $450

FREE APPLICATION ASSISTANCE HOTLINE FOR MEMBERS - 6 DAYS A WEEK

ICTV

Independent Community Television Alliance

Below is my application for membership in ICTV. I have deducted $ _____ for which I have already paid Lo-Power Publishing for publications and enclose a check for $ _____ the two totalling $250.00 for my one-year membership.

7432 E. DIAMOND, SCOTTSDALE, AZ 85257

Membership Application

Individual(s) to contact: _____ Name _____ Position

_____ _____

Company _____

Address _____

City _____ State _____ Zip Code _____

Phone ( ) _____

LO-POWER TELEVISION
7432 E. Diamond, Scottsdale, AZ 85257 Tel: (602) 945-6746

Dear Low Power TV Entrepreneur:

The Federal Communications Commission has made Low Power Television official, has licensed over 35 LPTV stations in the last few weeks and released the Final FCC rules April 26, 1982. The FCC does not have nor will they mail you copies of the new rules. The government printing office will not be printing the rules. They are only available through the government contractor, Downtown copy service and other copy services at $15.40, plus postage.

We have printed, on a web fed rotary press on newsprint, several thousand copies and have them available for $5.00 postpaid for immediate shipment by first class mail on all phone mail orders. We can bill you.

You may have heard of our magazine, Lo-Power Community Television. We have been publishing the magazine for one year and would like you to subscribe. Send us your subscription now and you will get the FCC rules included free of charge by first class mail, and if you act now, we will also enclose a report on the first LPTV station, channel 26, at Bemidji; including over 35 photos and a full financial overview and report on methods of operation. If you're skeptical, phone or send $10.00 for the May and June issues as a trial and you'll get the final FCC rules included by first class mail.

We guarantee you that if you are not satisfied you get more than your money's worth in valuable information, return the materials and we will refund your money.

Sincerely,

Harlan L. Jacobsen
Editor and Publisher
Lo-Power Community Television Magazine

P.S. Phone orders will be billed, (602) 945-6746

☐ Please rush the new rules first class mail, $5.00.
☐ Please rush the May issue of Lo-Power magazine and the new final FCC LPTV rules by first class mail and send the June issue also, for $10.00.
☐ Please rush by first class mail the May issue including the new rules and enclose report No.6 on the first LPTV station at Bemidji; enter my subscription for one year, total $50.00.

☐ Send, How to File Under the New Rules, $25.00 by first class mail.
☐ Send report No.7, Opportunities in Wireless Cable Television, $25.00.
☐ Send, How to Run a Successful Low Power TV Station, $30.00.
☐ Please send a printout of LPTV applications on file to date in the entire U.S., $20.00.

Phone (602) 945-6746 for rush shipment

To: Lo Power Community Television, 7432 E. Diamond, Scottsdale, AZ 85257:

Name John R. Powley **Title** Owner

Organization WOPC/WOPC P.O. Box 609

City/State/Zip Altoona, PA 16603 **Telephone** 814-943-2607

FINAL FCC LOW POWER TELEVISION RULES

PUBLISHED BY
LO-POWER TELEVISION PUBLISHING CO.
7432 E. Diamond
Scottsdale, AZ 85257
AC 602 945-6746

Additional copies of the new rules $5.00 each by first class mail. Quantity copies at low cost. Call for quote.

PUBLISHERS OF ADDITIONAL LOW POWER INFORMATION

Basic LPTV and how to file LPTV applications under the new rules $25.00

Nationwide printout of LPTV applications filed up to date $20.00

Opportunities in Wireless Cable Television, Report No. 7 $25.00

How to run a successful low power TV station $30.00

World's smallest full service TV station report No. 2 $5.00

First U.S. LPTV station at Bemidji, Report No. 6 $5.00

Printout LPTV channels still available to file on in your city (supply coordinates of your antenna site). $50.00

No charges if none available.

Not too many years ago, I knew a man in Phoenix who got an FM license and had the little transmitter in his living room and ran the show part time. That FM license to broadcast alone (never mind equipment) in Phoenix is now worth over one million dollars.

In FM he had to wait years for people to get FM radios. In low power, there is no waiting. This is on standard television channels and your market and audience and standard TV sets are already in place.

The average full service TV station in 1980 made a profit after expenses of only $980,000 down from the over one million profit each the year before. The average TV station had 20% of the audience. At the same rate, if you had only 2% of the audience and a correspondingly lower overhead, you would have an annual profit of $100,000.

The history of broadcasting is that licenses become more valuable each year. There are only so many channels available, and like land, when they are gone and you have it and others want it, the price goes up rapidly.

IN THE JUNE ISSUE OF LO-POWER COMMUNITY TV

★ A two color LPTV camera setup genlocked with switcher-fader and special dissolve effects that includes a keying camera for superimposing titles, etc. priced at $5,800.

★ Details and photos on the second low power TV station to come on the air.

★ Cutoffs and update of recent applications filed and list of the latest CP's.

★ A vertical blanking interval customer that is on the satellite now and wants to buy distribution through rural low power stations as soon as possible.

★ Report on new equipment and program sources applicable to low power from the April NAB convention and the May NCTA conventions.

★ Every issue contains the latest information and ideas on low power television and now on low power Fm as well.

Lo-Power Television
7432 E. Diamond
Scottsdale, AZ 85257

PHOENIX, AZ MAY 3 PM

FIRST CLASS MAIL

USA 20¢

WHAT YOU SHOULD KNOW ABOUT LOW POWER TELEVISION

WHGM/WOPC
Mr. John R. Powley
Box 609
Altoona, Pa. 16603

FINAL FCC RULES NOW AVAILABLE

IF YOU KNOW ALL THERE IS TO KNOW ABOUT LO POWER, DON'T READ THIS

If you are, however, the kind of person I think you are, one who actually gets all the information available before making decisions, then I know you are going to be one of the people that succeed and make it big in low power television. I also know that you are then one of the people that knows it pays to get every bit of new information available, particularly when you are involved in a new fledgling untried industry. Whether your interest is being an applicant and subsequently a broadcaster or you are interested in related support businesses, you already know the kind of information you are lacking on low power and need to make the right decisions.

You may be unaware of just how big an opportunity Low Power Community Television is. You may be missing out on many aspects of the coming explosive expansion of television stations and the opportunity it presents for new people in the industry. Low power television in the next five years, is expected to increase the number of television stations in this country ten fold. With slightly over 1,000 conventional stations in operation now, and nearly 4,000 translator stations in present operation, the addition of as many as 10,000 new low power stations and conversion of some translators will create thousands of opportunities for new people to get a solid footing in the TV field. We are sure you want to be a big part of that boom.

You know the gap that has plagued the industry so far, that the explosive growth and interest has outstripped reliable information about LPTV.

We publish the only magazine for the fledgling LPTV industry and we keep our readers on top of and ahead of the rapid developments coming down the pike.

Bonus newsletter issues and special reports too hot to wait for the next regular magazine issue are rushed to you by first class mail.

Just to get the FCC releases out of Washington alone costs you $25 or more per month, and you have to sort thru at least 100 pages of non-low power to find one page of what you want applying to low power. We reproduce all FCC low-power releases, including all low power applications, those up for cut off dates and everything affecting low power. Lo-Power Community Television Magazine don't just tell you what's happening at the FCC, you can read the entire uncut releases yourself. The applications we put in order by states and cities for easier checking.

We give you the LPTV governmental news and the technical developments affecting low-power that you get nowhere else. We are not in Washington D.C. but we carried news of the licensing of the first low power station ten days before any Washington publication carried it.

This magazine carries advice and information and profiles other experienced people in this business, who can show you how to do it, ---- so you can do it too. This is a new industry but we are already on our 9th monthly edition and getting bigger and better each issue. Remember, this magazine gives you information on what business and technical aspects of low power you can exploit as well as warnings of what to avoid, and specific, detailed concise information that will help you make day-to-day decisions as well as long term LPTV strategy.

What more can we say, frankly we would like you to subscribe.

As a subscriber to the magazine serving low power community television, you will discover a continuing source of priceless information and new ways to capitalize on the opportunities that will present themselves in the coming months. You will be a witness to one of the major growth industries of the 80's, and you will have the best seat in the house.

LO-POWER COMMUNITY TELEVISION

7432 E. DIAMOND, SCOTTSDALE, AZ 85257
[602] 945-6746

☐ **ENTER MY SUBSCRIPTION FOR 1 YEAR**
☐ **$50.00 enclosed** ☐ **Bill us.**
☐ **Send "How to File Under the New Rules" (which includes the new application blank) $25. postpaid - check enclosed.**
☐ **Send the Printout of all Low Power applications by city Up To Date $15.00**

Name _____

Firm _____

Address _____

City _____ **StateZip** _____

RE: NEW RULES

As this is being written, the FCC's new rule-making is not yet out and the applications freeze has not thawed. If it comes out by Feb. 6, we plan to have someone from the commission explain the new rules at the crash course Febuary 6 & 7. There is, however, some speculation that the rule making will not be out nor the freeze lifted until late Febuary or even sometime in March.

The new rules are expected to include an all new form for filing. Lo-Power magazine subscribers will be mailed a copy of the new rules and the application blank by first class mail automatically one day after they are released in full. If the rules turn out to be too voluminous, subscribers will be billed a small charge for it. If not, the cost will be absorbed by the publisher.

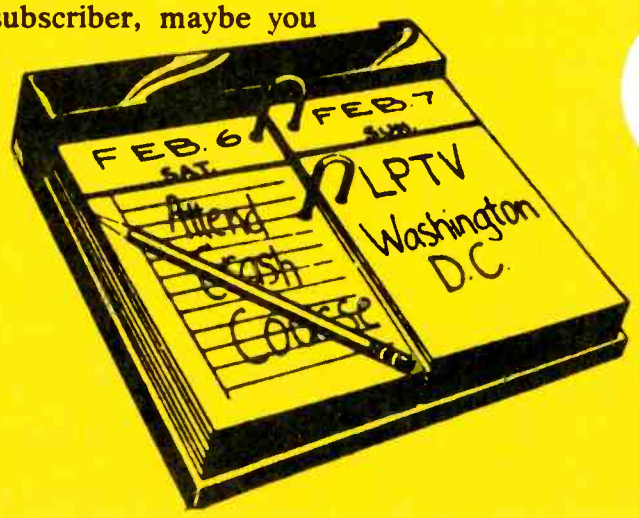
Non-subscribers can obtain a copy of the new rules and application blank by sending $10 and asking for a standby order to rush first class mailing one day after release. If you live in an area with express mail service and would like next day delivery, send $20. Subscribers wanting express mail delivery send $10. We expect to have a new Manual, **How to Apply for a Low Power License Under the New Rules**, out within five to ten days after their release. This will include the new rules and application form and will cost $25, mailed first class, postpaid. A new "Up-to" date printout of applications filed to the thaw will include all those applications that have been cut off (you can no longer file for cut-off channels). Cost will be $15 postpaid. Complete copies of any previously or recently filed FCC LPTV applications are still available for $20 by first class mail.

There will be no big rush to file on previously filed non-cut-off channels, but if the new rules give a preference for first filing it would be best to rush any completed applications on the new form immediately, express mail, with a receipt for proof of date of delivery if you are filing for a channel not previously filed for. If there is no preference for first filing on new channels in the new rules, then there is not that big of a hurry.

Keep informed. If you are not a subscriber, maybe you should be.

LO-POWER COMMUNITY TV
7432 E. Diamond
Scottsdale, AZ 85257

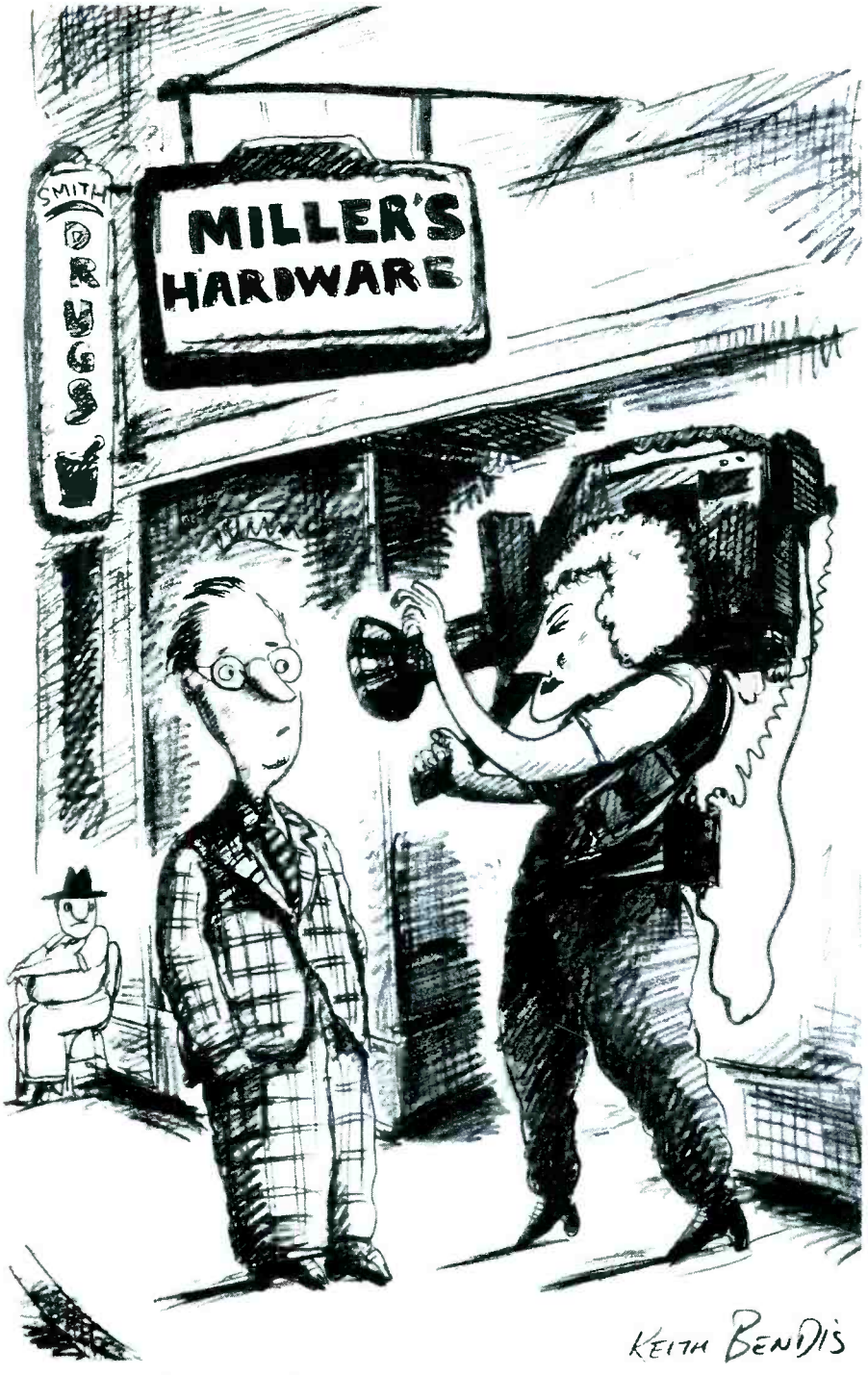
Phone (602)
990-2669.



Live! From Hutchinson, Minn.

Public-access television in this small town may look a bit ragged, but the people of Hutch have come to cherish it.

by Julie Talen



THE SNOWFLAKE POLKA blares out over the town square of Hutchinson, Minnesota. It's the Tuesday-night ice cream social, and folks have gathered to hear the Wally Pikal Band. Next to the bandstand, volunteers are serving seven varieties of homemade pie: rhubarb, cherry, blueberry, pumpkin, peach, and two kinds of apple. A slice with ice cream costs ninety cents. Most of the crowd is elderly, but off to the sides young families lean back on blankets, the mother with a tiny baby, the father wearing a hat advertising a seed company. Chubby blond children race on the sidewalks.

The only thing that keeps this scene from seeming straight out of Norman Rockwell's imagination is the auburn-haired young woman with a video camera hoisted on her shoulder, taping the event for the local cable-television system. The crowd gives her perplexed looks; one man waves. Just after the number where he plays two trumpets at once, Wally Pikal stops, yelling to the woman to tell the audience what time the tape will be shown. "Sometime next week," she yells back. "On Channel 7. Check the paper."

This is public access in a rural town of nearly ten thousand, in a town with fifteen blacks and 160 softball teams, where unemployment hovers near 2.5 percent, and where pedestrians wait on the corner for the light to flash "Walk" even when there isn't a car in sight. America doesn't get much more middle than Hutchinson.

Local access itself has a strong tradition in Minnesota, one of the few states to guarantee access channels and equipment for public use. Crow River Cable in "Hutch" (as it is called by anyone there for longer than an afternoon) offered a limited amount of public access when it began eight years ago.

Last year, Mickelson Media Inc., a Minnesota-based company with seventeen cable franchises scattered across the country, bought the system and decided

Julie Talen is a writer who often visits Hutchinson, Minnesota.

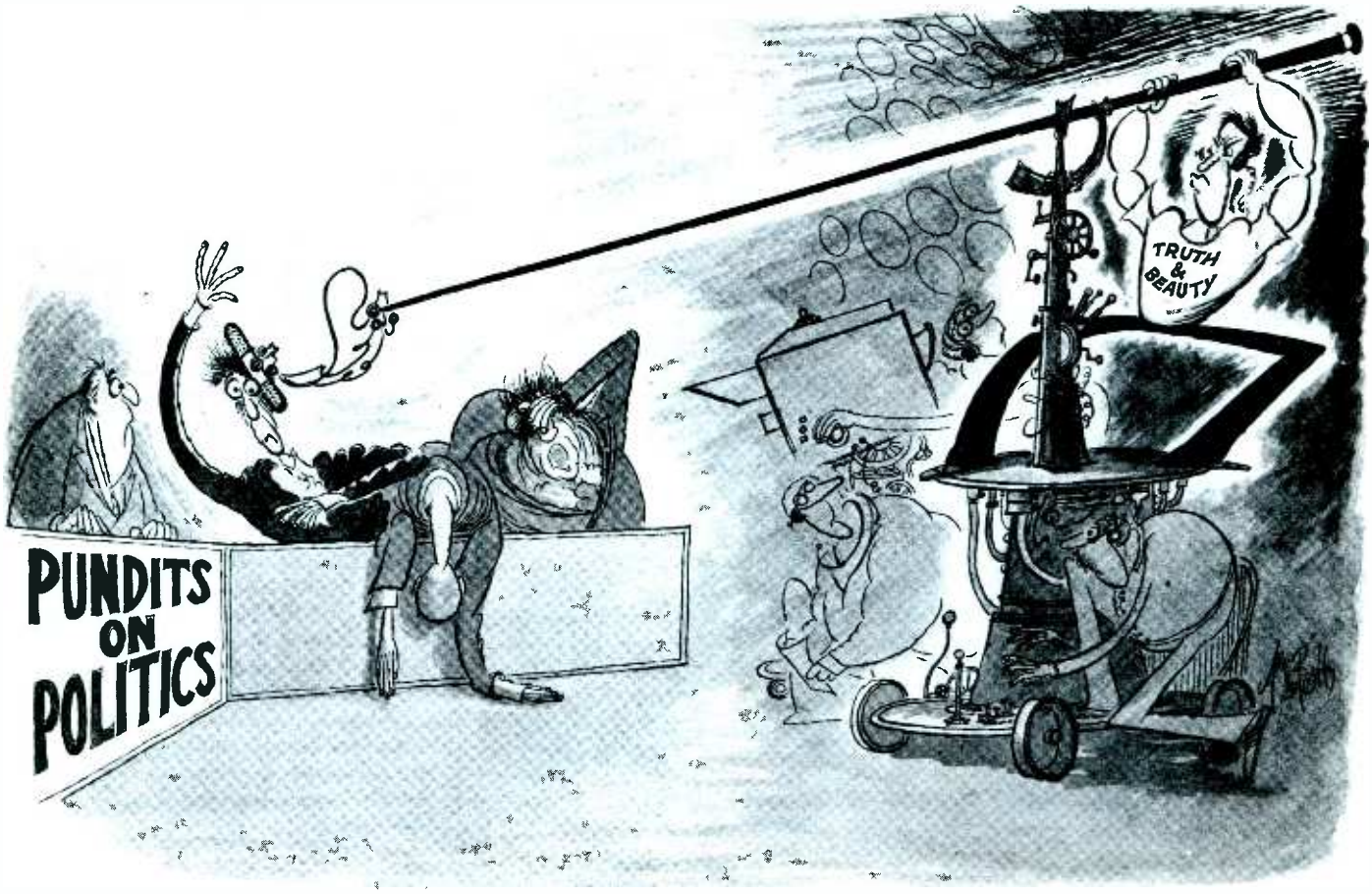
to make Hutchinson a showcase for local-access programming. They hired Janet Wigfield, an outgoing and energetic former high-school English teacher, as local-programming director, outfitting her with $20,000 worth of equipment—a noble sum by local-access standards. "Historically," says Huburtis Sarrazin, the Mickelson vice president behind the idea, "local access has been a lousy investment, and it doesn't even necessarily win franchises. But we look at it as a long-term investment—and I think it's a really good one."

Unlike such cities as New York, Hutch is not filled with scores of media-hungry wazoos ready to take to the airwaves. The number of genuinely "public" access shows, in the sense that a group or individual comes to the station and asks to put something on, can be counted on the fingers of one hand. None is particularly compelling—except, of course, to its sponsors: The local Army recruiter offers *National Army Guard Presents*; there is *Hospivision* from the hospital, and every week the Downtown Retail Association presents *In Touch—Downtown Hutch*.

"I have to encourage people to use this," explains Janet, who taught broadcast-production courses in her high school. "I have to talk plainly and say, 'Of course you can do it.' " Even after eight years, the citizens of Hutchinson react to local-access programming rather like a tribe being presented with photography for the first time. Their response is part delight, part aversion, and a fair amount of indifference. The delight shows when a young woman, just off her shift at the 3M plant, tires of the Royal Wedding and flips the channels to find Mary Kay Cosmetics getting trounced in Youth Girl's softball. Aversion becomes evident when a merchant on Main Street refuses to be on *In Touch—Downtown Hutch*, even though it amounts to little more than a half-hour of free advertising. As for indifference, Janet suspects that more people see her lugging her equipment than actually watch the programming on local access—although, with no ratings to go by, the station can't know just which of its 1,000 subscribers watch the access channel, or what they think of it if they do.

As Janet sees it, her job is to help interested citizens exercise their rights to cable. That often means interviewing a parade of personages from all parts of Hutchinson life: the cheerful, balding president of the safety council; a woman from Planned Parenthood; two women from anti-abortion groups, who want equal time after seeing the woman from Planned Parenthood. The historical society sends over the resident amateur historian with an hour-long film containing footage of Hutch in the first third of the century. A woman from the Minnesota

IN ARNOLD ROTH'S VIEW



Egg Council makes an omelette.

Most of them are stiff, awkward, uncomfortable in front of the camera. Some try to talk with fake casualness or the forced joviality they've seen on a thousand talk shows. ("Well, Dave, I understand you've got some new lines of lawn mowers here." "Yes, Dennis, I sure have.") They can rarely just be themselves. John Ball, a farmer elected to the school board, appears on *School Board Update*. His large hands fidget, his brow gleams with sweat. "My family's not from here," he says, staring uncertainly into the camera. "We came over from near LaCrosse in 1940, just after the Armistice Day blizzard. Some of you may remember that." When the taping is over, the farmer sinks into his chair with relief. "Boy," he says to the other school-board member, a dentist who has a patient waiting back at the office, "I tell you. I always thought that Johnny Carson was a real ding-a-ling. But he can't be any dummy to sit up there and talk like he does. This is *hard*."

To folks in Hutch, Channel 7 isn't local access, local origination, or public access. ("Public access?" one person asked. "Isn't that how you get your boat to the lake?") Channel 7 is being "on TV." No matter that the television audience plummets from several millions to whatever fraction of Crow River's cable subscribers feel like tuning in to Channel 7. "When your own hometown is on television," says a salesclerk at the Krazy Days sale, "well, that's pretty exciting."

NOT SURPRISINGLY, then, the best viewing on local access comes when Hutchinson dwellers are taped doing the things they'd be doing anyway: Krazy Days, the graduation at the high school, the Water Carnival (in this land of 10,000 lakes, towns make a habit of celebrating water), the bowling tournament, the school plays. The tapes on Hutch's local-access channel, like home movies, are watched and enjoyed more by the people who were there than by anyone else. Seeing the event "on television" repeats, confirms, elevates the original experience.

When the summer-school production of *The Jungle Book* was taped, its airing became a major local event. David Joop, Janet's wisecracking, seventeen-year-old assistant, reports that his neighbors pestered him about when the tape would be played. (His girlfriend's sister, he adds, had a part.) The mother of the leading actress invited guests over for a party the night of the showing. Another mom set up the home movie camera—no home video center here, at least not yet—and, if the kids stayed quiet, hoped to film the tape for posterity. And though only about a third of Hutchinson's households have cable, everyone seems to know a subscriber on whom he can impose when there's something important on.

Softball, dear to the heart of Minnesotans, is a vital part of Channel 7's programming. Most of us have forgotten, in this age of instant replay and multiple cameras, that a single camera strategically placed between first base and home plate can adequately, if inelegantly, cover the essentials of a ball game. That is especially true when the cameraperson herself is an avid softball player who loudly urges on the losing team from behind the camera, and has been known, on occasion, to tape a game and play in it as well. Bruce Erickson, the city's recreation director, provides most of the play-by-play and color commentary. (John McGrath, an assistant, helps.) Erickson has done so many games by now that he pesters Janet to buy him a special sports coat. "Howard has one," he argues. "I want one, too."

Twice a month, cable covers the city council meeting, from the opening prayer to the mayor's stifled yawn upon adjournment. Though few things can be as dull as a city council meeting taped in its entirety, even this will occasionally provide some lively viewing, as when the mayor and council, for example, had to defend their proposal for a new airport to a throng of heckling farmers. One farmwife, whose land would become runway under the proposed plan, came to the Crow River Cable office just to watch the broadcast of the meeting (the adjacent countryside is not hooked up to cable). "We're watching the *Mickey Mouse Show*," the ample woman announced to passersby, thoroughly enjoying herself while she hurled insults at the mayor from a safe distance.

A motley assemblage of volunteers helps Janet with the perpetual chores of packing, loading, setting up, shooting, and editing. Last summer, the crew members ranged from a gum-chewing fifteen-year-old from nearby Dassel to the seven-months-pregnant secretary at the chamber of commerce. Professionalism is not the point; getting people to use the equipment is. "Part of what I have to offer," Janet notes, "is a free education." In fact, Janet wouldn't object if she worked herself out of a job. Ideally, local-access programming will someday see Hutchinson citizens taking over her work.

But no matter how adept the people of Hutch become at the craft of television, no one is likely to confuse Channel 7 with network television. For example, the chamber of commerce secretary, Mary Kappan, shoots the goodwill visits the group regularly makes to new businesses. On Mary's second taping, Janet neglected to tell her about the color filter. In the bright July sun, the subjects—an owner of a new gas station, a woman who opened a fitness shop—come out in ragged, intense blues and maroons. The result looks like something that belongs on the screen of a New York rock club.

Janet doesn't mind. "It doesn't need to be perfect," she says. "If you want people to write a letter, you don't ask them to be grammatically perfect, you want them to communicate. You have to expect swooping pans and a glimpse of the concrete every once in a while."

One July afternoon, a 3M worker trotted in off the street to suggest that Janet tape the Demolition Derby at next month's county fair. The man had only just learned of local access while reading the television listings in a recent issue of the local paper. "But I think all this local-interest stuff is a good deal," he said. Seeing how receptive Janet was, he added a plug for taping the upcoming Pork Chop Feed.

To Janet's delight, people are gradually catching on. That seemingly unbridgeable distance between network television and "homegrown video," as she calls it, has begun to lessen. Certainly something is happening when a local recreation director and a farmer on the school board suddenly feel they have something in common with Howard Cosell and Johnny Carson.

Back at the Wally Pikal (that's pronounced "pickle," by the way) concert, the pastor of Our Savior's Lutheran Church commented on local access. "Something is entertaining," he said, "when it's meaningful. And that's what makes local programming *so* entertaining—because it's so meaningful to the people who watch it." Tune in next week for the Pork Chop Feed. ■

Lining Up for Low Power

All right, you videophobic grouch. Enough of your whining that nothing on television is worth watching and that you could provide better programing than the big boys. Thanks to a revolutionary new plan of the Federal Communications Commission, anyone with the price of a modest beach house (say, as little as $50,000) may soon be able to open his very own TV station. True, such bargain-basement stations come with a relatively limited broadcasting range (about 10 to 20 miles). Nevertheless, the chance to become a backyard Bill Paley has set off a licensing stampede that could well reshape the face of America's telecommunications industry.

Just last weekend broadcasting history was made when the nation's first "low-power" station went on the air in tiny Bemidji, Minn. The station's owner, a 73-year-old retired broadcasting executive named John Boler, won an interim low-power license—the only one awarded by the FCC so far—because no one else applied for the Bemidji channel. To establish what the isolated farming community wanted from its first commercial-TV station, Boler dispatched his daughter and a college chum on a door-to-door survey. They discovered a hunger for local newscasts, high-school sports and country-and-western programs—all of which Boler has incorporated in his sixteen-hour-a-day schedule. Come next month he will also begin offering a pay-TV movie service plucked off an orbiting satellite by a $6,500 earth station. "I'm really going to make something of this," says Boler, who has filed applications for low-power licenses in two other Minnesota communities. "Low-power TV is going to be a very important development."

Lester Sloan—Newsweek

Boler with earth station: Making mini-TV history

New Voices: The technology behind the mini-station movement is not new. For decades low-power transmitters have been used to amplify and rebroadcast the faint signals of distant big-city stations to viewers in remote rural areas. Until recently, however, FCC regulations prohibited such transmission stations from originating their own programing. In September 1980 the FCC proposed lifting that ban as part of its drive to open the commercial airwaves to new voices—particularly those of minorities and women.

The result has been a gold rush every bit as frenzied as the frantic bidding war for cable-TV franchises. Swamped with more than 5,000 applications for low-power licenses, the FCC has slapped a temporary freeze on further filings until it can unclog the bureaucratic logjam. Last month the commission proposed a lottery system to choose among competing applicants for licenses. The lottery, which may be structured to give preference to underrepresented groups, could begin next summer.

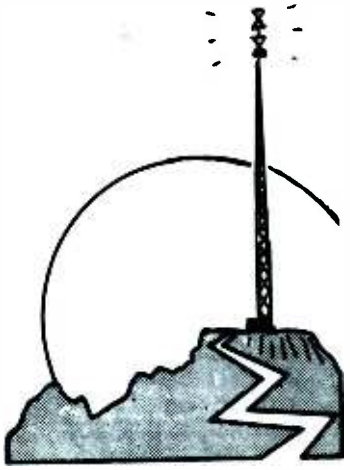
Many of the applicants are low rollers with high hopes. "I will probably be a millionaire after the first year," declares Michael Ice, a young black entrepreneur who wants to set up a low-power station in a Chicago apartment. Ice has proposed a programing menu aimed at the city's black, Chinese, Mexican, Asian and Polish populations—all of which have been largely ignored by network TV. To reach a nationwide black audience, three former FCC attorneys have applied for low-power licenses in enough of TV's major markets to launch a full-scale, black-oriented network. Other applicants include women who view low power as an opportunity to break down sex barriers in the industry's command structure. "There are fewer women in the ownership side of TV than any other minority," says Constance Wodlinger, a successful businesswoman who has filed for a low-power license in Houston. In addition, special-interest groups such as the United Auto Workers, the Southern Baptist Convention and Florida's Seminole Indians are eager to acquire mini-stations of their own.

At the same time corporate giants are leaping aboard the bandwagon—in the process raising fears that they might shove everyone else off. Sears, Roebuck & Co., the Gannett newspaper chain and Ted Turner's Atlanta-based broadcasting empire have all filed low-power applications, as have the ABC and NBC television networks. Through its Allstate Insurance Co. subsidiary, Sears owns nearly 50 percent of the Arizona-based Neighborhood TV Co., which has applied for 141 low-power licenses across the country. Neighborhood TV's plans call for satellite distribution of country-and-western programs to a nationwide network. "We will show what is great about small-town life on a national scale," says Neighborhood TV executive William Sauro.

Networks: Critics argue that such far-reaching, corporate-financed operations are exactly the opposite of what the FCC had in mind when it decided to issue low-power licenses. As they see it, low-power TV was supposed to provide an outlet for individuals and minority groups who traditionally have been priced out of the video marketplace. "If you tolerate 141 stations in the hands of one big owner, you're defeating the whole purpose of the concept," says Barry Carroll, an executive with a small company seeking low-power licenses in Chicago. The problem is that multi-station networks may be the only economically viable approach to low-power TV. "I don't think it's feasible for one low-power station in one community to financially sustain unique programing," says former FCC chairman Charles Ferris, who pushed the low-power concept. "So I think you have to permit the chain outlets to join in."

In the long run, the FCC hopes there will be enough room in the low-power pond for all sizes of fish. It envisions a situation similar to that in radio today, in which big networks feed the mass-entertainment appetite, while thousands of small local stations tailor their programing to specialized tastes. It is still far too early to forecast whether that sort of diversity will in fact develop; the FCC must first adopt the plan and then decide who can own how many stations and through what selection process. But for all the unanswered questions, low-power television has generated almost as much entrepreneurial excitement as the invention of the cathode-ray tube itself. "It's a free-for-all opportunity," says Chicago's Michael Ice. "Ninety percent of us probably won't be here when it's over. But I don't think there's ever been anything like this in the history of broadcasting."

HARRY F. WATERS with LUCY HOWARD in Washington and DONNA FOOTE in Chicago



INFORMATION YOU NEED TO SUCCEED IN LOW POWER TELEVISION

LO POWER Crash Course
Washington DC
Saturday and Sunday
February 6—7

IMPROVE YOUR ODDS

GETTING A LOW POWER TELEVISION LICENSE

☐ WHAT's happening with the FCC and LPTV? New rules and how they may affect you.

☐ WHERE should you get ready to file? When the freeze thaws, you may miss out in the rush.

THE MOST VALUABLE "REAL ESTATE IN TELEVISION

That's how some engineers characterize the black bar that shows up between pictures on your television screen when the Vertical Hold needs adjusting. The black bar, known as the "vertical blanking interval" can carry loads of textual material that your viewers can summon up on their screen in the form of a daily informational "magazine." It represents a valuable new service to viewers and businesses, and an important new source of income for Low Power Television

HOW TO DOUBLE YOUR INCOME USING AND SELLING YOUR VERTICAL BLANKING INTERVAL

WHAT IS GOING TO BE ON YOUR LPTV BIG PICTURE?

Option 1. How to let the LPTV Satellite Networks do the work, you collect the rent.
Option 2. Be a TV Broadcast Landlord, wholesaling your broadcast time; let others do all the work locally.
Option 3. ALL Commercials, $50 an hour—up, easy, proven method used successfully by a cable access operator. No competition, no other programming.
Option 4. Hotel and MS apartment program supplier, underbid the cable system, even in wired towns.
Option 5. How to make big bucks on all-religious stations. They do all the work.
Option 6. Become the local NBC, ABC or CBS outlet in areas where they now have no Grade B station affiliated.
Option 7. Full-time, Big-City narrow, narrow casting; Teleconferencing and specialized paid seminars.
Option 8. Tourist LPTV stations operation; where all that income comes from with such a low overhead.
Option 9. Local area LPTV Networks, Local Sports, etc., and how they will work.
Option 10. Combine the best of all the other 9 in the right time slots, for maximum income.

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THIS CRASH COURSE WILL PROVIDE ANSWERS.

LO-POWER COMMUNITY TV
BROADCASTING CRASH COURSE

HOW YOU MAKE A BUCK WITH LOW POWER TV
'How To' Crash Course Feb. 6-7

Opportunities in getting a Local Power TV license

WHO IS ON THE PROGRAM?

Satellite-supplied programmers, three engineers, syndicated program experts, three experienced small market programmers and station operators, Washington FCC Licensing Expert, Washington FCC Policy Expert, and two Television Magazine staffers.

Crash Course Hotel:

THE SHOREHAM HOTEL

Calvert & Connecticut Ave. N.W.
Washington, D.C. 20008 (202) 234-0700

The Shoreham is located one block from the Sheraton, where the National Religious Broadcasters Convention exhibitions are open to all, Feb. 7, 8 & 9. It is the only Washington show that includes exhibits by all of the major LPTV transmitter and antenna manufacturers and studio production exhibitors.

WHO SHOULD ATTEND?

Low power applicants, would-be applicants, professionals dealing with applicants, suppliers of equipment for LPTV, program suppliers, educators, potential LPTV network executives, auxiliary businesses which can use vertical blanking intervals, teleconferencing personnel, satellite reception entrepreneurs, translator operators considering low power and local programming, cable access programmers, newspapers considering leasing cable and LPTV channels.

REGISTRATION FEE: $100 per person, includes two lunches and material packet.
CANCELLATION POLICY: Full refund of fee if written cancellation is received by Feb. 1.
TAX DEDUCTION FOR EDUCATIONAL PURPOSES: Treasury regulation 1.162-5 permits deduction of educational expenses— registration fees, travel, meals and lodging.

LOW POWER COMMUNITY TELEVISION
CRASH COURSE

FOR FURTHER INFORMATION OR PHONE REGISTRATION, CONTACT: (602) 945-6746

Note: Please use separate sheet for additional registrants.
☐ I/we wish to register for the Crash Course. $100 is enclosed for each registration.
(Make checks payable to Lo Power Community Television)
☐ Please send me listing and prices of Video Tapes available of convention and crash course proceedings.
☐ Please add my subscription to **Lo Power Community TV Magazine. I enclose $50.**
☐ I/we wish to obtain more information or attend a crash course planned for early '82 in Ca.

To: Lo Power Community Television, 7432 E. Diamond, Scottsdale, AZ 85257:

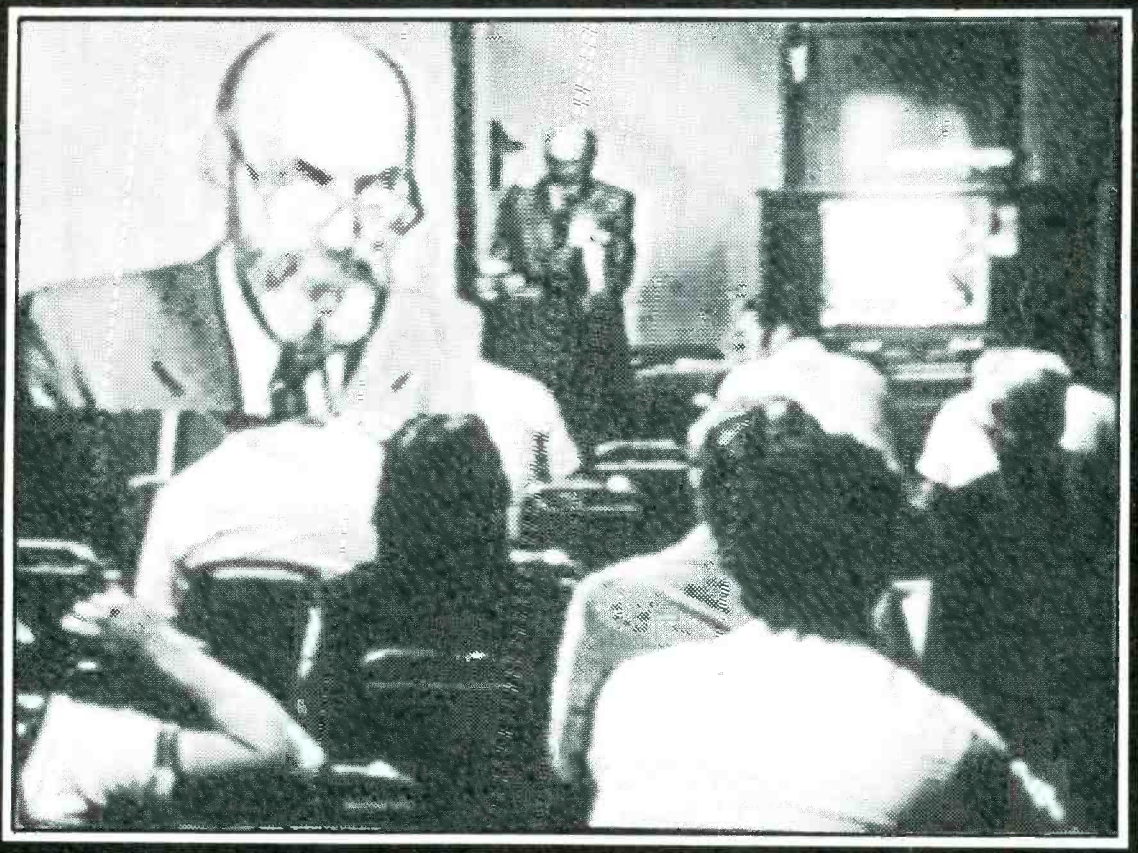
Name _____ **Title** _____

Organization _____

City/State/Zip _____ **Telephone** _____

1982 EDITION

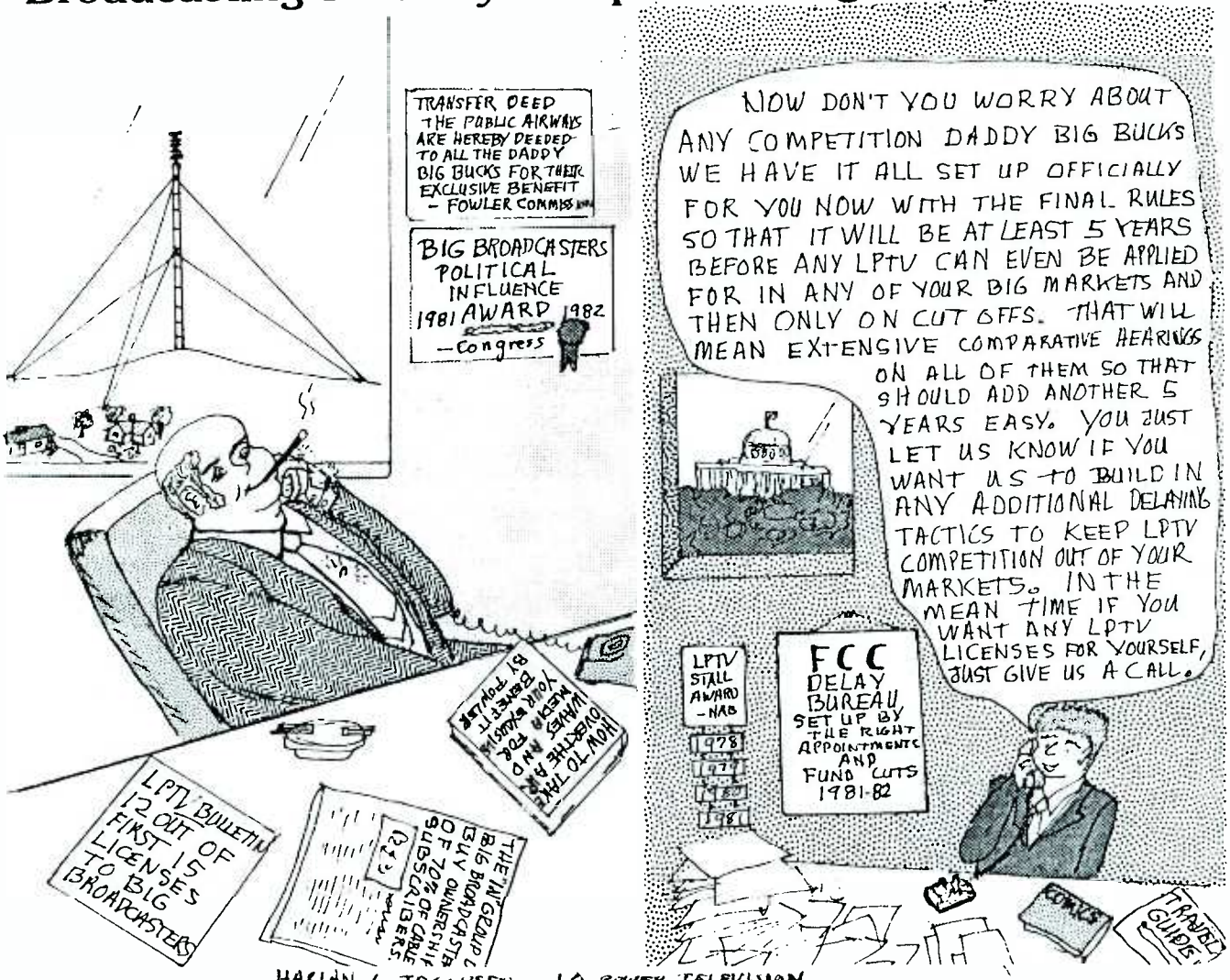
LO-POWER COMMUNITY TV



May

FINAL FCC RULES

Broadcasting Industry's Captive Unregulating Agency



HARLAN L. JACOBSEN LO-POWER TELEVISION

THE COMMISSION STILL REFUSES TO FACE REALITY

Press comments out of the commission are that they expect an eventual 4,000 low power stations to be licensed. We believe that there will be at least 40,000 and would all be on within five years with another 40,000 in the following five years.

This would all happen if the commission would get out of the way of denying the American public the television service that is possible through this inexpensive technical means of LPTV. If there are only 4,000, it will only be because the commission continues to protect the present fat cats now controlling television broadcasting from competition. They do this through developing continued ridiculous rules and frustrating applicants through dragging of feet in processing. There are no technical or economic reasons why 150,000 low power stations cannot be easily squeezed in and allowed in this country. It is only protectionist, political and archaic bureaucratic systems that deny the American public the full use of the television spectrum. Only if the public is made aware and political pressure from congress is brought to bear will this situation be corrected.

Cover photo taken of TV screen with playback of videotape made at the Dallas crash course with Dr. Byron St. Clair speaking. Lowcost LPTV setup demonstrated with mixing etc. Note second camera insert in left corner. Article on camera setup next issue.

NEW LPTV RULES ARE OUT

Since the LPTV rules have come out and you need those as soon as possible, we are rush printing them and mailing them first class mail. This postage bill alone cost us over $300 more than our normal mailing second class mail costs but will speed delivery to you by about a week. This cost is in addition to extra printing costs we have absorbed. In order for us to stay solvent, we are leaving out much of our regular magazine this issue and will have June out early (mailed in May) with our usual features, cutoffs, applications, etc., including a planned story on the second LPTV station to come on the air.

We are also holding off on comments or advise on the new rules in this issue, (as we write this they have not been released), and will only say that this will be printed in the Federal Register about one week to one month later and the rules will take affect 30 days after they are published in the Federal Register.

We understand the new rules change the freeze limitations. What is expected to happen is it will make it more difficult in the east but actually open up areas in the west that could not be fil ed under the previous freeze.

Lo-Power Community Television Magazine is published twelve times per year. Sample copies are $5, subscription $50 per year. Intended to supply needed information on Low Power Television at reasonable cost.

Postmaster, send address changes to **7432 E. Diamond, Scottsdale, AZ 85257.** Telephone, **(602) 945-6746.** Mailed at second class rates at the main post office at Scottsdale, AZ 85257. USPO # 0279-4152 Issue # 13

LETTER TO THE EDITOR

Dear Harlan:

Really enjoyed the crash course in Arlington and learned quite a bit. But I find some of my questions still unanswered and, on items you covered, either my notes are inadequate or my memory is faulty.

So I've prepared a list of questions and comments that I really would appreciate your addressing.

On another page, I have attached a copy of a narrative of what we hope to do with our two LPTV stations when they are granted, following our April 20 cutoff date. By seeing what we intend to do, I would appreciate any and all comments from you on how we accomplish our goals economically, including what equipment to use and where it may be acquired, and at what price.

I spent over 30 years in radio, but I'm 100% ignorant when it comes to television, even LPTV. So, any assistance you can provide will be enormously appreciated.

Although hard to know, what is your best guesstamation of when we might expect a grant, with a cutoff date of April 20? I'm probably asking a lot, but give it your best shot, will you? Thanks for everything.

Regarding your questions in the letter about time after cut off, it looks like they are personally calling and telling the applicants about a CP being granted about 45 to 60 days or so after cutoff, and public announcements follow about the same grant about 30 days later.

However, one Washington attorney at Dallas said that as much as 80% of the applicants in that first big cutoff had someone file on top of them, which of course may mean years before you get a grant if that happens to you. The FCC commissioner in attendance, nor no one else at the Dallas LPTV meeting I attended, could tell us when the first comparative hearing would be held (if ever) when you are stuck with another person filing on top of you during cutoff.

Now, about your statement page of what you want to do, you seem to think you need a study of your transmitter site for satellite reception.

Why don't you just go down to the telephone company and ask them to show you where their microwave paths are. If they have nothing near you nor nothing passing anywhere near you, it would seem a waste of time and money to do a study. Regarding the STL, you certainly should be able to observe any microwave unit anywhere near. They should be in a far different frequency there anyway so there seems a very small risk of not needing any study of that. You are in a remote area there. Only in the big cities do you normally have a big jam up microwave paths. If you are on the only peak around, it should be obvious what is already on the hill.

STL's are licensed simply in about 90 days. The supplier can practically do that form for you.

Your question about is it worth considering a ten watt UHF transmitter at the studio, the answer is yes to get you to the hill instead of expensive microwave. However, if you file that now, the granting of that may be 6 months or more behind the other.

I would suggest for most foolproof operation — considering you have the following — primarily satellite operations such as STV. Lower cost initially perhaps without microwave STL or your 10 watter in town and using phone line for control. You are going to operate on the same satellite all the time. In that case I would put the TVRO at the antenna site on the hill. If you use microwave or you 10 watt LPTV downtown to get to the hill you can then switch to the satellite by a tone control, and/or have an automatic circuit that, if your input from town fails, it automatically switches to the TVRO.

In your case, wanting to use 2 VCR's, one with commercials and the other with local taped programs, I would be sure to use industrial grade VCR's that have a second audio channel. Where the tape should be switched (ended), put one type of tone and when the tape continues after switching off of it and it continues to roll to the point where the next program should start, have a second tone which stops the VCR at the ready point, cued for the next start tone which arrives by telephone line. Lease a telephone line initially as a way to start (usually about $6 per month per mile). Use a $280 tone control unit as we showed at Dallas, with 6 tones that can turn off and on 6 functions by telephone line or internal tone on the tapes. You need one at your office and one at the tower. By pushing a button at the office tone machine or another one at home, etc., you can switch in either tape deck and you can switch it manually back to the satellite reception or to the other VCR, or the tone on the tape will switch it back to the satellite automatically at the right point, and then the tape will continue rolling off the air until is cued up, ready for the next insert which it determines by a previously inserted tone on the second channel on the industrial grade VCR. A different tone would turn on switching in the second tape deck and it could come either from your telephone line or the playback tone from the other deck. So your tower line tone machine listens to three sources, telephone line, and both tape decks. It can do six turn ons and offs depending on which of the six tones it hears. By using it with stepping relays you could double that to 12 functions which gets more complicated, so try to stay with the simple tone machine and six switch capability. Tone 1. Roll after ½ second roll in switch in video of tape deck A. Tone 2. Switch video off of a tape deck. Tone 3. Shut down tape deck A as ready for next start. Tone 4. Roll and after ½ second switch in video from tape deck B. Tone 5. Switch video off of tape deck B. Tone 6. Shut down tape deck B as ready for next start.

TVRO is switched on automatically when tape deck video is switched out. Now if you wanted to switch by telephone line tone to a different satellite transponder on the same satellite at the tower, you would need additional tone capacity either through more expensive machines with more switching tones and channels, or a stepping relay system which could double your capabilities with little additional expense but ups your error rate possibility.

At your site A, I would have used an antenna and specified cable that would have lowered in cost by about $1,500 but that would require amending. I'd start without the STL and apply and wait for a ten watt LPTV license downtown.

Site B, I'd say the same thing on your expensive antenna and cable but to change them would require modifying your CP. Using a simple translator here is a good move. Regarding studio, you likely do not need TVRO with rotation initially, nor do you need licensing or study because later when you have studio to tower link you'll probably move it downtown.

As far as VCR's you'll need initially two on the hill — maybe two downtown; one color camera OK but difficult; recommend two as labor saver (saves most editing).

BASED ON LOWEST COST POSSIBLE TO DO THE JOB, ACCEPTABLE TO VIEWERS — QUESTIONS AND COMMENTS:

1. Equipment needed, cost and source for local commercial insertion in satellite fed programming and local programs from VCR?

Now your question 1 — equipment needed for local commercial insertion. We are doing an article on that in a future issue so you are asking the question before I am fully ready to answer it, but basically you need, if you follow my leased telephone supplied control line (or two way type radio link) you will need two tone units. Two good VHS ½ inch tape decks, industrial grade and a stack of switching relays hooked in the right way and place. I hope to have one of these setups going in the next few weeks on a translator so you will be able to copy mine later because you undoubtedly still have some time before you are on the air.

2. Source and type and cost of color camera, microphone and VCR's, acceptable.

Regarding question two — source and type of color camera, microphone and VCR's — investigate all makes by writing to the individual companies and asking for information on their industrial grade ½ inch VCR's. I'll have that in a future article. In the studio I'd suggest at least one VCR that will do single frame advance and will do quasi editing (only a hundred or two more expensive but available only on the very latest models).

Regarding camera setup — see our story this June of the unit you saw at Dallas with two color and one B & W keying camera. You could start with one camera at about $1,100 wholesale ICTV member price or retail $1,400, and add the rest ($4,500 more) later. Then when you're in the bl ck solidly later buy a broadcast quality camera as a master camera (available $3,500 up) and use one of the CCOll as a spare and for doing out of studio work, knocking around on the street, etc.

3. Any sources for installation or financing?

Question 3 — Installation and financing — are again set as future magazine articles in research stage and will try to have them by the time you need them.

4. Didn't quite get your explanation. How are pre-prepared VCR cassettes of commercials adapted or used for local commercials and where in Calif., Arizona or Nevada do I get them? What is the cost?

Question 4 — Who in California, Arizona or Nevada is currently doing pre-prepared VCR cassettes of commercials adapted for local commercials and where can I get them and what is the cost? Lots of places make them now, but they are 3/4 inch, and EXPENSIVE. You cannot afford to pay $500 for a commercial so we are trying to find people that will go in for quantity of ½ inch at low prices. You can already buy prepared slides for $5 each. Hang in there and we will try to dig these sources up for you in time. Remember, there has been no low power ½ inch market for commercial production until now and it's still a very small market.

Regarding cost, we are going to hang in there until we can get them produced for $25 and transported to you for under $35.

5. Did you say ½ inch or 3/4 inch tape is the preferred cassette? And why?

Question 5. Did you say ½ inch or 3/4 inch tape is the preferred cassette? Right now practically no broadcaster uses ½ inch, they all use 3/4 inch, but then again there have not been any LPTV stations, either. I am convinced ½ inch will be the standard for LPTV for 3 or 4 years and then ¼ inch. Today ½ inch is as good as 3/4 was three years ago. One-quarter inch is as good as ½ inch was three years ago. One-half inch has some advantages and some deficiencies. Most of the deficiency can be corrected by a TBC (time base corrector), which you actually need regardless, and can add later when solvent.

The ½"advantages are: 1. Far less cost. 2. Far less storage space. 3. Far easier and less expensive shipping. 4. Local people can tape and produce local programs and bring them to you for playing on your station. If you want local programs, let people in the community produce some shows with good home type equipment.

6. Do you know who I can contact for religious programming from satellite and what will they pay? How about other programmers?

Question 6. Some of them I already know but will be doing an article on which ones pay soon. For now, pre-sell your local churches on taping and running their church services and other programs on your channel at so much a week on a regular basis. They may consider getting a low power station of their own. They do not need one. They can get on your station for far less expense.

7. Explain again, the use of subcarrier for music, and how it's received in the home. Could it carry commercials and could you simulate your own FM station in this fashion?

Question 7. Well, the subcarrier thing needs to be gone into in depth again (see future issues), however maybe this will be good enough for now. Let us say you are going STV (subscription TV) at night and the scrambling (encoding) system you choose takes the sound off the regular TV set sound channel and hides it away (actually on a subcarrier) so only people who pay you for decoders that tune this sound back in for them. In that case your regular (4.5 Mh) sound channel is unused. You can then sell it to an AM station that goes off the air at night for night programming, program an audio channel yourself for people that just want music, etc., while they are ironing, washing dishes, etc., and instead of shutting the TV off tune over there for your audio.

Others use this regular audio channel for what is known as a barker, a voice repeating a commercial over and over about what a super movie you would be watching if you'd only spring for $20 a month and subscribe to this premium channel of TV and get your decoder.

8. Who sells that 20 milliwatt STL equipment, and how much?

Question 8 — Future article. Try Microwave Associates, Motorola and Hughes for now.

9. You mentioned if you obtain, for example, CBS affiliation, CBS would probably drop cable coverage in my market. What if your local cable system currently re-broadcasts Los Angeles CBS station. Is CBS going to stop the local cable system from carrying the CBS station from L.A.? Is that what you meant?

Question 9. You misunderstand some points. Let us say your LPTV station is in Utah 200 miles from the nearest CBS outlet. CBS gives you an affiliation agreement, you carry their programming off the satellite (service on the AT & T satellite is starting in June) and you abide by all network agreements and run without inserting commercials except where they say you can, etc. You get nothing in $ from them but you do get viewers. Nearly 80% of viewing even on cable systems is still the 3 networks. The satellite reception you rebroadcast will be near perfect. The cable system may be paying $1,000 a month or more to bring in the CBS station from 200 miles away and the quality will not be as good as the CBS you are running because it deteriorates on the way, whereas satellite reception does not. So your local cable system may decide, why are we paying all this money to bring in CBS when we can get it better for our subscribers from this new local low power station which runs CBS off the satellite and also runs local news instead of Salt Lake City news. So CBS has nothing to say about what off the air station the cable system carries, the cable system decides that. CBS would not likely allow the cable system to pick up and run it off the satellite direct when it comes on the AT & T bird in June, however; they would, I believe, legally have to pick it up only from the affiliate, and of course would carry the one giving them the best picture (that's you).

10. How do you put a tone on your own local commercials and what equipment is needed?

We have an engineering firm in Phoenix developing a tone system that responds to tones you generate with a touchtone phone. That same touchtone coding system is taped on the stereo channel of your VCR and will control any functions you want controlled. Their system, they estimate, should come in around $300.00 and you can control it without any additional expense or investment when using a phone line.

11. Do we have to use lights for anything local we might want to record on VCR tape? If so, what's your recommendation?

Question 11. The better the lighting the more professional the results. If you have a limited budget we will be showing you how to do lighting inexpensively. A low cost camera can put out very good pictures with the correct lighting.

12. STV seems a good way to go, but it sounds quite expensive. Are you aware of a low-cost system (what about Blonder-Tongue) and what cost? Where would you obtain the manpower for installation & maintenance?

Question12. See our article last issue and this issue on subscription and wireless TV. Yes B . T is working as an inexpensive system for LPTV. Mr. Blonder said they are shooting for a $2,000 studio encoder and $100 home decoder units fully addressable (can turn them off and on from the studio). They may have it on the market, he hoped, within one year.

Re: Manpower, I'd subcontract to some local trustworthy person. Let's say you use the inexpensive systems we mention or suggest this issue at a cost of $9 per house. You get a $25 deposit, pay $9 for the unit, $10 to the installers and put the rest out at interest. The deposit merely helps assure they will turn it in for a refund if they move out of the area, skip to another area and keep them from giving it to a friend, etc.

13. Does an LPTV station have to sign up with ASCAP, BMI & SESAC?

Question 13. Answer is yes but don't rush it.

14. What type microphone should be used with VCR and/or camera and does the VCR also record audio at the same time when it's recording video?

Question 14. A reasonably good $35 to $50 mike will probably work just fine and yes, it does tape both at the same time

15. Is it necessary to choose satellite programmer who puts tones, for local commercial insertion, on his programming — or do they all do it?

Question 15. No — you can do your own control tones but those that have it on already save you some labor. No, they do not all do it.

16. Had a long talk with the Bell System, at NAB, they will install all the earth station equipment you need and maintain it. You pay a monthly lease charge (like $800). Have you heard of this and do you consider it preferable to buying and maintaining your own TVRO?

Question 16. Bell TVRO's are fine but will break you up in business. You can do far better than that price wise, even on a lease maintenance.

The longer you wait the easier and better answers you will get on questions like program suppliers, etc. If you get down to the wire and we still have not given you enough program suppliers' names, call me.

Remember, there is no law you have to run certain hours. Yes, there are programs on now you can rebroadcast 24 hours a day free. But wait, there are more new ones coming on in the next few months and attitudes about supplying low power are changing rapidly. So I really wouldn't concern myself with some of these questions until 30 days before you go on the air because the answers will change and get better and better each month.

Believe me, programming is not going to be your problem in the long run. Getting on and covering lots of people is your most immediate problem, and hold off crossing the other bridges until you come to them for now.

You can get some really good video tapes free on barter, which means you get 'em free for the built in commercials, but I wouldn't consider anything I had to man all the time and ship back and forth. Go for satellite supplied programming. Turn it on and go out and spend your time selling commercials, and selling local news, weather and sports program along with some special event local programming, etc. You cannot afford to be labor intensive in the operation of a small town LPTV station. Quality off the satellites is usually far better than your tape reproduced or film programs and satellite fed programming requires no labor investment on your part. If you are cherry picking off the satellite (taking the best of different transponders at different times) you can get time controlled switching equipment which is preset; it then does the switching for you.

LO-POWER FM

FILING FOR LOW POWER F.M.

Those ICTV members considering filing for a low power FM station can now obtain from the Alliance the book on one week loan that you need to look up channel usage and figure availabilities. Ask for the FM book. One week free loan.

The Commission has granted one low power FM permit so far. The current FCC regime is committed to "less government" (but not more competition with present big broadcasters) so if you are considering setting up out in the middle of nowhere with little or no FM service there is no real reason why you shouldn't be allowed to rebroadcast satellite programming and do some local radio originations as well. By operating both one of these FM low power originating broadcast systems as well as low power TV you should be able to make both more economically feasible. Present rules are 1 wart east of the Mississippi and 10 watts west. Application is made on the same blank FCC form 346 with waiver requests, same as LPTV.

Last issue we reported on subscription systems and listed names of those approved by the FCC for broadcast use plus information on the new Maast system which we noted had not yet been sent in to be accepted by the FCC.

This issue we will explore another system that may be of interest to those of you particularly who have just gotten CP's (construction permits).

The question is, should you go for a large investment for the most secure (not easily stealable by cheaters) system now and take a chance that the rush for better engineering, less piratable systems nationally will soon produce far less expensive systems that are almost totally theft proof.

Then with your huge investment you are locked into the obsolete system.

An alternative in these presently being licensed rural areas may be a relatively simple system now at low cost. When theft of services becomes a problem, then later switch to a more expensive, more secure system that may be out and available by then. Remember, electronic prices are coming down constantly, not going up. What you save by waiting, may more than pay for the entire cost of the inexpensive system. You will then have the inexpensive system on hand for use in another station you own, or you can probably sell it to some other new LPTV small operator and get your money back. It may well turn out in rural areas that theft of services is not a problem. In areas that have MDS you can go around a neighborhood and see who has the special MDS receiving antennas on their roof and get a good idea of how many are stealing premium television if you know which addresses are paying subscribers.So how do you know who is stealing when you broadcast on a standard TV channel and they all have standard TV antennas?

Easy: You get a truck, put an antenna on it and drive around at prime time (night). By pointing the truck's antenna at the home's antenna, you can read out what channel they are watching on special test equipment.The local oscillator

reradiates a small level back out their receiving antenna and by detecting what frequency it is, you can tell which channel they are watching. If they are tuned into your scrambled channel and are not a paying subscriber, you can then post a brochure package, including literature on court actions against pirating, and about the benefits your service on their door and later go on from there if necessary.

With all that in mind, let us tell you about a scrambling system widely used in cable systems. It is called TEST, a registered trade name by Tanner Electronics Systems Technology, Inc., 16/30 Stagg Street, Van Nuys CA 91409 — phone 213-989-4535. This system is reported to be selling for $300 for the studio encoder, and $8.50 for home decoders on channel 2 to 6, and $9.50 on channels 7 to 12. No other broadcast channels are available. If you buy in quantities of 1000 or more you can reduce that price by 50¢ each. This system has a reported interference carrier inserted between the sound and picture. The decoders remove it. The main disadvantage is this interfering carrier reduces your program transmission by 3 db. (50%).

Reducing your power 50% does not lower your coverage by 50%. A rule of thumb that is close is that increasing your power 10 times will double the distance. So conversely, reducing your power 50% does not mean you cut the distance 50%. If you are greatly concerned about that loss, it may pay you to put a translator out a ways and use full power on it to extend your range. The translator can cost you under $5,000 (no $2,000 modulator required).

Another alternative is that you might want to request a second output of the same amount of power, say 10 watts, to be directed to a rural area or wherever, such as another town or area. You can request the additional output even if you have a C.P.

Then use the full original 10 watts that was going to go several directions in the original plan, to concentrate that full 10 watts in another area.

The additional outputs are under $2,000 each. Then when or if you go to a more sophisticated (expensive) addressable system you could still enjoy the increased benefit of the extra ten watts.

Next issue: More on subscription TV.

THE GREAT PAPER MILL RIP-OFF

OR THE GREENING OF LPTV HUCKSTERS' POCKETS

In the past, filing a full service television station license application was a major production that often required an investment of several thousand dollars to file. Meanwhile, filing a translator application, a microwave application, or two-way radio application was relatively simple and the manufacturer or their salesman helped you fill out the application and get it filed.

Then along came low power television and the structure set up for filing full power applications thought they had a new source of revenue here and since they were getting inquiries about LPTV from some of the same big broadcasters, they settled on a $3,000 or $4,000 price on filing an application of what was just a translator application with a few words requesting a waiver of the translator rules prohibiting local origination.

Now the big broadcasters were used to paying lawyers and the new people thought that was what you had to do to get a translator license. Now some of these Washington attorneys were including getting your application through comparative hearings if necessary and others would charge extra if there was a comparative hearing. Mostly the naive didn't know what they were getting.

Meanwhile, the manufacturers of translator low power equipment and their dealers continued to help their regular translator customers get applications filed but didn't want to be swamped with helping thousands of LPTV newcomer applicants file something that may never materialize since low power was a 'maybe' thing at that time.

So enter the paper mill huckster. Recognize low power has already generated something near 10 million dollars worth of business for application paper shufflers and it has hardly even gotten started yet. So here we have a major industry (remember, lawyers as a whole last year did more business than the U.S. steel industry).

The paper huckster appeared, who merely files anything and everything, and advertises extensively to different segments of the economy to invest in filing an application for LPTV. Price for this mass produced application mill starts at $4,000 and goes down to $2,000 each if you spend $50,000 or more.

How does the applicant know he is getting a good application filed? Well he is sold with dance studio type huckster techniques which include long distance phone calls nearly every day and convincing sales pitches on what a huge number they have filed, therefore, they must be experts.

Little do most of these applicants, paying $4,000 an application, know is that the majority of the 4,000 translators on the air paid little or nothing to file applications that became licensed and yet were likely far better engineered.

Take a look at some of these applications filed for $4,000. In a heavily wooded area, they file for a UHF channel at 1,000 watts when 3 VHF channels are available. The population lies at 4 distant points and they file for an omni antenna arrangement. They tell the FCC on the application and the applicant that it will cost under $60,000 to build the station when the specified antenna and transmitter alone sell for over $90,000.

A VHF at the same location with three or four 10 watt outputs with high gain VHF antennas would cover through those heavily wooded hills as well or better thanthe 1000 watt UHF. The cost of the VHF would be under $15,000 Did this applicant get $4,000 worth of professional service?

Take another application filed under the freeze and you'll notice it says it can be filed under the freeze because it is outside the grade B and then encloses maps showing it is inside two grade B's. What does it matter? They got their $4,000.

Take some that were filed that made the cutoff--out of 6--2 had petitions to deny filed against them because they had failed to look up what translators were in the area and filed on channels used by neighboring translators. The third had a full service application granted but not built that filed an objection on the remaining application.

So what recourse does the applicant have? Practically zilch. He could sue for malpractice maybe? Every person doing applications makes mistakes and overlooks something sometimes. However, for $4,000 bucks an application ought to be done at least reasonably well and if you'll check around the industry with the manufacturers and translators long time people will tell you, these are the worst applications filed. I am sure that when the FCC staff sees them, they are automatically suspect. Yet many think they are getting FCC expedited application processing by this so called professional 'application' firm. Actually they are probably getting automatic derail at the commission because of the reputation.

Why don't you check reputations with the manufacturers and dealers and installers before you pay big bucks for what is merely a $100 typing job, when they do their mass production standard form, everybody gets UHF 1,000 watts omni pattern(because that's easiest to file).

Washington attorneys can, and many do, follow your application up.

Other out-of-state firms convince you they have a Washington representative because they have a Washington phone number when it is actually one of those tricky telephone gimmicks that rings the Washington phone number in a state hundreds of miles away.

We don't intend to upset alot of people who paid a lot of money to have applications filed, but maybe some who haven't filed yet will check around the industry for reputation of what you get for your money. Others will discover you can do a better job yourself and just get a little professional help when you get hung up in doing the application.

CABLE TV WIRELESS!

The wireless cable concept of offering several channels on the air on VHF will only be feasible in the most rural areas, and those will go fast. Others will be filing for channels in the big markets and the Commission will not give you two and give some other applicant none when there are not enough channels to go around. In the medium populated areas, you will probably be able to go with a multiple channel wireless cable system on UHF, which will be three times as expensive to construct. In the major markets, which will be two or three years down the road until the Commission gets caught up enough to get to those, you will be lucky to get one channel.

So speed may be of the essence in getting applications in for the rural areas.

There are several misconceptions about running an advertiser supported channel. Some will, of course, be operating ad supported during the day and subscription at night.

Now most applicants think they have to allocate a lot of money for constructing a studio. Of course you can do that but if you want to just be in the money business you want to do as many stations (channels and cities) as possible now. You want to use every dime you can raise to get as many channels in as many places as you can have many more in the licensing or license process. That way you can keep building. Stay away from anything that ties up money or energy unnecessarily now. Many figure they only have enough energy and money to put one station on the air.

Here is an example of what you can do: let us say I get a license for a station in Smallsville. Smallsville has a radio station and a weekly newspaper.

Now, the local Smallsville newspaper and radio station are going to be in great fear of my TV station or stations. They're going to be afraid I'm going to take all of their advertising income away and they are going to be in dire straits to stay in business. They are ready to put up a big fight when I start operation, and they will cut their ad rates way down when I start to compete.

So I don't want to spend money (now, at least) on setting up production facilities, a local news crew, ad sales crew or whatever. So I go to the radio station and say, how would you like to take over all news, weather and sports. You tell them, you pay me $30 a day (or whatever your size coverage warrants). They sell the commercials, produce the programs, promote people watching, etc. They buy the camera or whatever they need and they figure out how to get it to your transmitter.

Now they are immediately promoting your station instead of trying to kill it. You have $900 a month income and you didn't do a thing. The radio station will be able to produce news, weather and sports for little additional staff.

Now you offer them another 30 minutes a day for other shows at $15 a day. They already have the facilities. They can even simulcast some regular radio show and get enough extra from advertisers. If that flies, then you have another $450 a month income.

Now you go to the newspaper and offer them an hour a day of classified time at $15 a day. They sell it along with their newspaper classifieds. It works because some people do not want to wait for several days for their ad to come out and this way they can get it in right away. They can throw in some news and public announcements. They buy a character generator which has a memory. They connect it to your transmitter via telephone line. Now you have another $450 a month income and you have someone else promoting the watching of your channel.

Next you go to all your church people in town and offer Sunday morning broadcast time at $35 an hour of the first choice time, $25 each for the next most desirable times and $20 for any other time on a regular basis. During the week regular weekly broadcasts are $15 an hour.

This should net you $100 a week. They use their own camera equipment, figure out their own problem of getting it to your transmitter.

Now there are a lot of other budding TV producers in your town including the local high school. Let them produce, sell the commercials, etc., of high school programs and buy or rent their own production equipment. Broadcast time on a random demand basis at $25 per hour. Every week basis $15 an hour. They get their own ads and sponsors.

Your investment in Smallsville is $6500 for VHF transmitter and antenna on the water tower, and $5000 for a good TVRO, a total of $11,500. You run a satellite channel that supplies programming to you free in exchange for commercial exposure. They also allow you to insert four commercials per hour which you can contract out to someone else. Sell these for $15 for a 30 second spot in prime time, and $7 in daylight hours.

If you do all this, arranging deals before you get on the air, you can have $3000 a month income or more right off on an $11,500 investment. No work on your part. Electric bill is about $8 a month tops. Rental on the city water tower is $25 a month. Maintenance is $65 a month, for a total of under $100.

You have given the entire community access to television programming and good reception to all. You are not controlling who or what gets said on your TV station other than prohibited obscenities, lotteries, etc.

When you own the cable system you put this channel not only on the air but you put it on a good spot on the cable. Then you use a second channel for a subscription channel, perhaps running local classifieds all day on that channel. Again, you can contract that out. Sign up with one of the program (movie) suppliers coming on that offers scrambled (encoded) on the satellite with an addressable system that allows them to do all the billing, turning on and off those subscribers who don't pay, etc. You contract with someone local to sell new subscribers, deliver encoders, etc. The programmer in this case does the billing and collecting and turning on and off, and pays you monthly off the top.

The other method, scramble your own, is for a presently operating cable system to just treat this and bill just as another subscriber. If you offer a third or a fourth channel, then of course you are getting into tiered encoding systems at the transmitters which can be expensive. Names of the FCC approved broadcast encoding systems appear in previous listings.

As for financing, many potential wireless cable systems or low power operators erroneously believe they are going to:

1. Be too busy to operate more than one low power station.
2. Have only enough financing for one station.

Go ahead, file for as many as you like.

A. You won't be licensed on all probably for one reason or another.

B. You do not have to build them all the same day or even the same year.

By the time you get one in successful operation ($3000 or more a month profit with none of your time) you will have a much greater net worth and additional financing will appear magically. Your net worth just improved over $150,000. The monthly magazine carries items on how you finance low power broadcasting systems.

In your single channel subscription system, plan on dividing your income of $20 per month per subscriber something like this: $5 to program supplier, $5 to decoder box leasing system, $5 to paying off encoding system and $5 to you. After 3 years you will only have the $5 payout to the program supplier and the extra $10 per month becomes yours. Your total overhead is still $100 a month, similar to the previously stated figures.

Billing and collection costs will run around $1 per subscriber if you contract. Repair, maintenance and replacement of boxes will probably run around 50¢ per month per subscriber if you can contract that. The first three years would leave you about $3.50 per subscriber; 900 subscribers would give you $3150 minus your $100 overhead would leave you the $3,050 equivalent of the ad supported station.

After three years the $10 per month leasing fee would have paid off your encoding and decoding systems. Your income would then increase by $9,000 per month or $12,500 per month. This exceeds the ad stations.

To expect the 900 subscribers within a reasonable time, you would need 2700 homes not covered or coverable by the regular cable system or established MDS.

You would have considerable investment in "selling" your service, to get the 900 subscribers, and should be looked on as an investment just as equipment is an investment. When and if you sell a subscription station it will not be priced at how much equipment or assets you have; it will be priced at how many subscribers you have.

The value of your wireless cable system "movie" station for resale would be $300 or more per subscriber.

The advertising supported stations should sell for about six or seven times yearly profit.

The ad supported stations may well be the least difficult and least expensive to get off the ground. However, the subscription system has the best prospect for long runs providing you do not have several low power competitors or MDS systems come on before you do. If you apply for several channels and "use up" or "tie up" all the VHF channels and you get on first, you make it almost impossible for an MDS or other UHF low power station to come in on top of you later and succeed in this small a market.

You will be able to offer two or three channels eventually at no additional charge if necessary to compete, so file for them now. At UHF investment prices they will not be able to come on later and compete in small markets of the size we are talking about here.

Many rural cable systems pick up stations which in turn pick up their network programming off the air from another station and then come through a several repeater microwave system, all of which degrades the quality of the picture so that those the farthest out in the most isolated areas have the poorest picture at the head end. Going through a long cascade of amplifiers adds additional noise and degradation which means even at optimum most rural systems rarely deliver the quality of picture of the network stations that they would like. Regardless of how many channels a cable system adds, 70% to 80% of the viewing are still those major networks.

A wireless cable system broadcasting free TV at least on one channel may be able to put out far superior quality to local residents of one or more of the three networks because he can go to the networks and say, I have a broadcast license and I want to be your local outlet and rebroadcast your network feed off the A.T. & T. satellite starting in June of '82.

The cable system operator will be forced to add the local low power station, particularly if the picture is superior to the long distance pick up of a regular full service network station. If the cable system owns the low power stations they may of course be able to stop paying for a long distance microwave feed of those network feeds.

It seems doubtful at this time that the networks would allow the cable systems to bypass their affiliates and pick up the satellite network feeds direct..

Therefore, merely putting a low power channel on the air and becoming eligible to be an affiliate, may save even thousands of dollars monthly in common carrier microwave service for a network land line terrestrial feed that many cable systems presently have.

If you put in a low power station and wireless system and you are not the wired cable system operator and you pick up a network affiliation, whether you will be able to scramble a network station or not will be something you will have to work out between you and the network. You would of course make it available free of charge to the land wired cable system so that you would pick up additional viewers (unscrambled) from the homes connected to the conventional cable system, thereby making advertising you carry more valuable.

There seems to be little doubt that a wireless cable system can succeed in a much smaller, less densely populated area than a wired cable system.

Start-up costs should be less than 20%, and often as little as 5% of the cost of starting a wired system. Cost comparisons with VHF channels, compared to MDS would be about 1/3 or less of the cost of a multiple channel MDS system.

Cost at each subscriber's house is about $50 or more per home less than MDS since no downconverter or special antenna are needed.

Another advantage of this new wireless cable system broadcast on standard channels is that it is not nearly as affected by leaves, trees and buildings as MDS.

MDS has kinky rules in that the transmitter owner must be a different entity than the programmer. Dummy companies are set up and other ruses are used. This is not necessary with the new service authorized by the FCC on March 4 on standard TV channels. The owner of these stations and the programmer can be one and the same.

When you lay out a wired system, you map out a system with amplifiers to cover a section of the city with adequate levels to deliver a good picture to every subscriber.

When you lay out a wireless cable system you can get by with just a head end and cover a 15 mile circle if you have a high point. If you have good line of sight and a very rural viewer wants to get you with the right antenna and preamplifier well up in the air outdoors, you can probably have paying subscribers up to 60 miles away.

In fact, some of these far out rural viewers may even put up the money to put in translators (donations basis) or even donate to you to put up translators you install to spread your coverage out to them. Some full service stations have promoted satellite booster stations on their original stations that came in poorly way out and asked for donations to build a Booster (full service repeater) out in the sticks to improve reception for these rural residents. TV neglected as they were they sometimes donated as much as $300,000 in aid of construction. Other areas have put in tax supported translators to extend the signal out, and this

may be possible for you to swing, at least on your "ad supported" free channel.

Cities and counties have both financed translator stations in hundreds of communities. In fact, in one recent cut off list of several dozen translators, nearly ⅔ were tax supported applications. There is no reason they won't switch over one of their present translators or pick up and extend your signal if you become a network affiliate with a better picture than the stations they are now carrying. Therefore you can often get extended cover even for up to 200 miles with repeaters, with many of those relay links at no or little cost to you. So when you get a construction permit you might immediately go out to the edges of your expected coverage and start fires of enthusiasm for translators to extend your signal to be sponsored in these local communities by donations and/or taxes.

When you have a whole row of translators covering several towns down the road, you may want to put commercials in individual towns but not on all of them and not on the originating unit.To downstream commercials you send full screen text during the vertical blanking interval on only one line. The vertical blanking interval is the space between frames when you roll the picture up. The information carried there does not interfere with the normal picture. Information is put on just one line digitally and is reconstructed on the other end to a full screen picture of text (includes some crude artwork). Cost right now (expected to be down by $2500 within a year) is about $5000 for the transmit end and $2,000 for each receive end. This can send individual viewed text convertible to dozens of transmitters and appear only on the individual translators you address.

Therefore you can go to an advertiser and sell them whichever towns or combinations they want at different rates. This is like the newspapers that sell regional ads and the advertiser pays only for the geographic area they want to cover. Your ad revenue can be exceptionally good because you can offer very reasonable rates. The ads are generated by character generator (typed in) and stored for automatic release at the predetermined time on the predetermined repeater station. The local advertiser pays only for his area at very reasonable rates and can get the ad on with very short notice. You would go to this method after you had competing advertisers want the same time spot in different towns and by then you would of course already be generating sufficient ad revenues to more than justify expenditures to be able to sell the same time spot on several different translators, to several different advertisers.

The same vertical blanking interval can be used to send electronic mail downstream, or connect intelligent word processors for companies, banks and other potential users and you can sell this communication link for a monthly fee.

You can also sell subcarrier audio service (with Commission approval) for background music systems and many digital information systems at a good price per month.

As you may or may not know, the income from the potential 20 subcarrier audio channels, and the vertical blanking interval 25 lines, can exceed the income from the picture. Sears Roebuck, Federal Express and others are filing hundreds of applications because they are interested in carrying catalog data, electronic mail and computer data, etc.

Cable systems have considerable data carrying capacity also but cannot cover and 100% blanket an area like a wireless low power system can. So one of your major sources of income in future years will be VBI and subcarrier.

Also unknown to many is the feasability of using the standard audio channels on television channels during subscription periods when an encoding system is used that moves the audio channel over to a special frequency not reproducible on an ordinary TV set.

Then the regular audio channel becomes available for other services and can be used for running repeating audio public service announcements, the TV program for the night, the local weather forecast, time and temperature automatically, etc., or it can be programmed with a live announcer and music, much as a local radio station. In fact you may sell it to a local AM station that has to go off the air at sundown.Many people would leave the TV on while reading, washing dishes, etc., if it can be used as a radio and merely switch to a scrambled channel and use it as an audio channel temporarily, between watching regular TV.

If you are a wireless cable system and use the type of encoding system that moves the sound over, then you have this standard TV sound channel available on several channels and could use the same audio on all channels that could be picked up by all non-subscribers and subscribers in the non-decoded mode.

Photo above is taken direct from a TV set and is in full color. Information was carried during the vertical blanking interval while the regular picture was being carried as usual. on translators downstream that the commercial was wanted on but not on the originating station. The dollar bills started out small, multiplied and came forward on the screen, and George winked at you, so these do have motion.

The middle photo was in full color with the paint brush starting in the top corner of the little box and actively painting the square in bright blue while the audio commercial was telling about remodeling. This was also vertical blanking interval carried — but it could also be sent to a translator by telephone line and a modem since this is a computer generated picture. In other words, you could insert this type of computer generated and stored commercial on any low power station or repeater anywhere in the country by calling it up on an ordinary phone line.

The text on the right about dogs is also in several bright colors and the dog's tongue moves back and forth. A hardware commercial had a saw going up and down.

TABLE I

FREE SPACE PATH, SIGNAL RECEPTION DISTANCE

	VHF		VHF		UHF					
	10W Lowband Ch 2-6		10W Highband Ch 7-13		100W			1000W		
Horizontal Angle	Omni 20W ERP	90 80W ERP	Omni 40W ERP	90 160W ERP	Omni 710W ERP	220 1000W ERP	80 2450W ERP	Omni 7100W ERP	220 10,000W ERP	80 2450W ERP
Rabbit ears or loop indoors	3	6	3.5	7	3	4	5.5	9.5	12.5	17
Small outdoor	12	24	10	21	9	11	16.5	28	35	52
Large outdoor	17	34	15	30	15	18	28	47	56	88
Large outdoor w/ preamp	20	40	21	42	30	36	56	95	114	177

Low band in particular and to a lesser extent high band reception may be inhibited by man made noise and long distance co-channel interference.

Heavy foliage will reduce usuable distance of UHF signal to about 1/4 of above distances. Reception at distances in excess of 40 miles will frequently be limited by earth's curvature.

ERP (Effective Radiated Power) is typical practical value for transmitter power shown. Distances in this chart are based upon distances only and assume "free space" propagation path exists to receiving antenna.

REGARDING COVERAGE CHART LEFT.

The chart on the preceding page was assembled by the experienced translator and low power engineers at Television Technology in Arvada, Colorado.

These figures are based on being high enough to have line of sight, or as they say at the heading, "free space" path.

The Horizontal Angle column on right, for example, says "Omni — 20W ERP, which translated, means: Omni — equal all directions, with 20 watts of Effective Radiated Power (ERP).

The next example is 90—80W ERP, which means another antenna pattern covering a pie shape only 90 degrees wide which, with a good antenna, will give you 80 watts Effective Radiated Power only that direction. They show higher gain antennas on hi-band VHF — primarily because to get that much gain on low band (2 to 6) the antennas become overly large. That should help you understand the rest of the chart. You can obtain higher antenna gain with UHF because the antennas are smaller and can be more readily stacked (multiplied).

First figure height necessary to get the free space coverage you want. How you get that height is unimportant: hills, mountains, grain elevators, leased space on microwave towers, etc.

COVERAGE IS DEPENDENT ON GOOD RECEIVING ANTENNAS

The most important thing in how large a coverage you will have is height above average terrain, not power. Also, perhaps even more important than the amount of power your transmitter puts out is the amount of antenna gain your antenna array (antenna focus of radiation would be more correct) delivers.

More important even than the other two is what your customer is willing to do to get your picture. If you are in an area that gets little or no reception without large towers in the yard with elaborate antennas on top, then they are used to going to a lot of trouble to get television and they work and spend money to get your picture. This will have more to do with how many people receive and watch your programming than perhaps anything further you can do at your end.

So when you get on, since you are getting on with such a small investment, be sure and set some money aside to spend in getting to people out there aways, to inform them that, by working at it and spending a little money on good reception equipment, they too can get your new programming well.

Promoting the viewing of your programming and getting people to spend money to get you, is a big part of your original investment in getting your picture out to people. It will probably have more to do with your success than spending another $30,000 to raise your tower another 150 feet.

When you are in subscription TV, if you deliver the encoder you may wish to deliver along with it a cut channel 10 or 12 element yagi made just for your premium channel. Bought in quantity, you can obtain these for about 40% of the usual retail price. If you absorb ½ of the remaining cost, this will do more to add additional receivers than spending your money on transmission equipment.

If you have tied up all the VHF channels and are broadcasting on several for wireless TV cable, you could furnish the "fringe" people with broad band exceptionally good antennas at 20 or 25% of the usual retail price with you absorbing part of the cost and delivering it with your decoder. The customer pays for a high roof mast or tower and you pay part of the cost of the antenna (buying wholesale and selling below cost) and maybe even helping or paying for all or part of the installation. This is of course for the people way out that you normally would not get.

If you are operating only on one channel, by delivering or furnishing only cut channel yagis you have an antenna, then, that responds well on your channel but is not much good on other channels. Therefore, if you get a low power competitor come on another channel, the fringe people will get poor reception on any channel other than yours. They will say it must be that other station that isn't any good; it couldn't be the antenna, because it works great on that first station we got it from.

Yagis are made and tuned to individual measurements to respond very well to one specific channel. An additional advantage of VHF is that there is relatively little loss in the downlead from a tall tower or mast. With UHF and a tall receiving tower or long run to the set you need a low noise amplifier so that you do not lose all of the signal on the run to the set. In low power, you will need to do a lot of promotion to get people in the area to know that your signal actually goes out a long ways if they are willing to put up the right antenna system to receive it. This promotion cost should be considered as part of the building cost in starting not only a free channel, advertising supported but also in subscription wireless cable television. It is foolish to put all of your money in expensive equipment and not allow a good budget for getting people to put in good receiving installations. So when you plan start up costs, add money for getting viewers.

In full power they merely overwhelm a poor antenna installation to make it work. In low power, the right receiving installation will be absolutely crucial to obtain 60% of your potential coverage. If you fail to get people to put in the right antenna, then you will miss getting and keeping the outer area viewers you need to succeed.

THE LAST GREAT BROADCASTING OPPORTUNITY IS KNOCKING ON YOUR DOOR

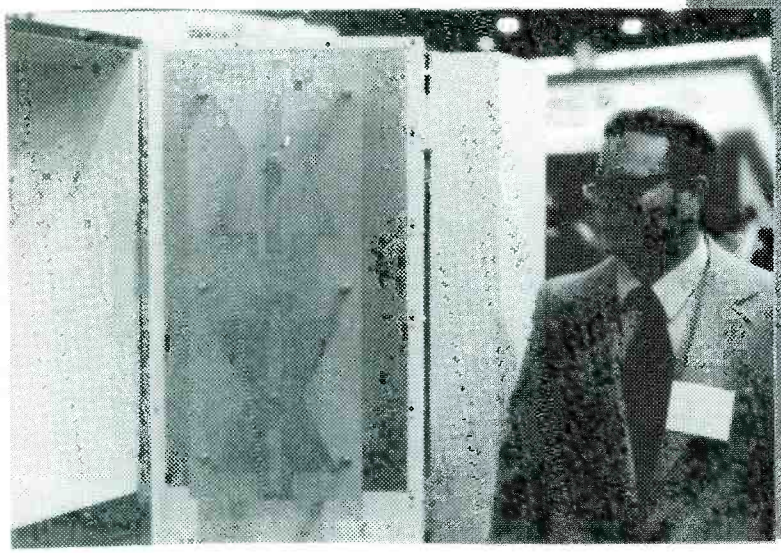
Your license will become more and more valuable over time. This has been the history of broadcasting over the years. Low-power is the first new service opportunity in 20 years. Also, the history of broadcasting has been that a new service allowed by the FCC to be licensed starts out at lower power and eventually it becomes apparent there is no logical reason why they couldn't have higher power, so the rules are changed to allow higher power. This will almost certainly come true again in the west, particularly in low power TV, which will evolve to medium power TV. It poses more of a problem regarding this power increase later when you are close to the Canadian or Mexican border because of communications treaties. When low power stations get on by the thousands, they will eventually have the political clout to get these unreasonably low limitations on power raised considerably.

Wireless cable TV will also be wireless data delivery, wireless audio channel delivery, wireless electronic mail and wireless banking, catalog ordering, etc., etc.

Very few businesses started today make a profit the first year. By installing equipment that will sit and run unattended at low overhead and maintenance, a low powered ad supported and/or subscription and wireless cable can all be profitable from the day you start. You do not have to start with a big overhead. You can start with such a low overhead it will be impossible to fail.

The low power concept is indeed the opportunity of a lifetime. The question is, are you alert enough to open the door, now that the low power opportunity is knocking at your door.

One of the main disadvantages of UHF Television Low Power broadcasting is that with a very high tower, the cable transmission loss in going up a tall tower is so severe at UHF that in some cases going higher may actually result in less coverage due to less actual power arriving at the antenna than you gain in coverage by the increase in height.

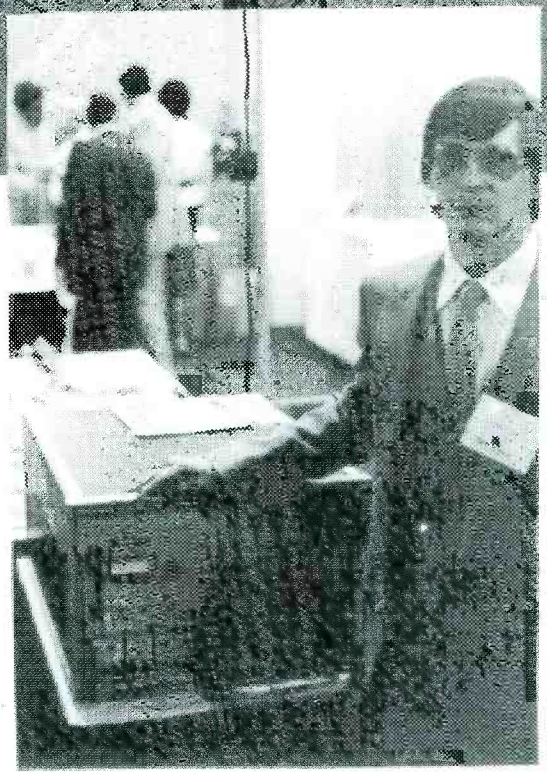


Townsend Industries has just come out with a UHF 'Final Stage' transmitter built right in a steel case on the tower in back of the antenna. Transmission power is 100 watts but is all solid state. Units can be stacked with 10 units to get a full 1,000 watts. This unit may be used with any type of UHF transmitting antenna. Middle photo shows a panel antenna on the back side with a fiberglass radome cover opened to the left.

The modulator and basic transmission unit that stays on the ground is shown in the lower right photo. Regardless of tower height each steel enclosed unit on the tower broadcasts a full 100 watts (or stacked a full 1000 watts) with no up cable transmission loss cutting power.

Townsend Associates
Box 1122 Mainline Drive
Industrial Park
Westfield, Massachusetts 01085

Top right photo is a tall tower showing methods of mounting yagi antennas on a large steel tower that is perhaps also serving other uses. Shown here are receiving antennas which are often stacked horizontally whereas transmission yagis are normally stacked vertically.



FINAL FCC

LOW POWER

TELEVISION

RULES

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FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

FCC 82-107
30997

In the Matter of)
)
An Inquiry into the Future Role of) BC Docket No. 78-253
Low Power Television Broadcasting)
and Television Translators in the)
National Telecommunications System.)

REPORT AND ORDER
(Proceeding Terminated)

Adopted: March 4, 1982 ; Released: April 26, 1982

By the Commission: Chairman Fowler dissenting in part and issuing a statement in which Commissioner Dawson joins; Commissioner Washburn dissenting in part and issuing a statement; Commissioners Fogarty and Rivera issuing separate statements

FINAL FCC

LOW POWER

TELEVISION

RULES

TABLE OF CONTENTS

1. We have before us a document that culminates a lengthy proceeding in which we have considered authorization of a low power television service. This service in many ways is the logical extension of the existing translator service, which was authorized as a rebroadcast service in 1956. 1/ However, our decision today to permit far greater program flexibility than we ever have permitted on translators also may be viewed as inaugurating a new broadcast service. In today's telecommunications environment, we are witnessing the rapid development of a multitude of new and competitive technologies designed to deliver entertainment and information services to the public. The low power service will permit fuller utilization of the broadcast spectrum in service to those ends. It is fitting that we engage in initiatives that will allow broadcasting to maximize its potential to meet the needs of consumers as we also open the regulatory doors to purveyors of alternative technologies that will attempt competitively to meet similar needs.

I. History of BC Docket No. 78-253

2. A television translator is a broadcast station, operating at relatively low power, that receives a television signal on one channel, amplifies it and retransmits it on another channel. Over 3,000 translators are licensed today, under Subpart G of Part 74 of the Commission's Rules. 47 C.F.R. 74.701 et seq. The development of the present translator service previously has been detailed in several places in this docket, most notably in Appendix B of the Notice of Inquiry, 2/ in the Report and Recommendations in the Low Power Television Inquiry ("Staff Report"), 3/ paragraphs 11 through 46, and briefly, in the Notice of Proposed Rule Making ("Notice"), 4/ paragraphs 9 through 21. Therefore, we shall not reiterate this history here, but instead direct interested persons to the above-referenced documents for more detailed information. We do note that in the annals of the translator service one may find several examples of waivers authorizing program origination (via video cassette) and subscription service, the principal modes of operation that the Commission has proposed to permit generally via rule change, in the instant proceeding. 5/ These instances have illustrated the viability of a low power service substantially as proposed, though on a limited scale, and, as such, may be considered significant elements in the record of this proceeding.

3. This proceeding was initiated with a Notice of Inquiry in 1978. Citing various recent study reports, petitions and suggestions urging an expanded role for television translators, the inquiry posed the fundamental question: "what role may low power television stations and translator stations play in delivering programming to the public." 6/ Comments were requested on six "decision criteria" as the framework for initial policy development:

1. Public need for program diversity;
2. Spectrum requirements;
3. Interference to communications services;
4. Media competition and economic impact;
5. Low power/translator economic viability and ownership; and
6. Impact on Commission resources and service implementation delays.

68 F.C.C. 2d at 1536. These areas continue to be the major concerns in this proceeding. Resolution of these basic issues, which the rule making record provides, informs our determination of whether there should be a low power service and what it should look like.

4. The inquiry was concluded two years after its commencement, with the introduction into the record of the Staff Report and adoption of the Notice. The Staff Report documents the approximately 100 comments and reply comments filed in response to the Notice of Inquiry and also contains detailed staff analysis of the present television translator service and the potential for its expanded use as an originating broadcast service. The Report addresses and recommends an approach toward numerous aspects of the proposed low power service, within the framework of the six decision criteria. It also contains a report prepared under a Commission contract that describes the development of prototype low-powered television operations in the United States and Canada.

5. The Staff Report served as a backdrop for the contemporaneous Notice of Proposed Rule Making, which sought comment on a series of fairly explicit proposals for a new low power service. 7/ The Notice proposed generally that translators be permitted to originate programming and/or operate subscription service to any degree. It proposed that low power stations be permitted to operate on any available VHF or UHF channel on a secondary, noninterfering basis to full-service stations, at powers of up to 100 watts VHF (in certain instances) and 1,000 watts UHF. It proposed relaxation of Commission rules relating to program content and would tailor program-related statutory requirements to the limited technical capacity of

the station. Finally, the Commission proposed to continue authorizing translator stations, including applications for translators seeking low power features on a waiver basis, during the pendency of the rule making. Interim grants would be conditioned upon the outcome of the rule making. Where the outcome of an application would depend upon an issue to be resolved in the rule making, such as comparative criteria, action would be deferred until the conclusion of the rule making. The rationale for this was that to stop processing applications in the conventional translator service, whose merit already was amply proved, would disserve the public, but that to refuse to consider applications seeking low power features would encourage disingenuous translator applications from parties whose real interest was low power operation.

6. The interim processing policy cannot be deemed successful in facilitating prompt implementation of the service. 8/ Nevertheless, it highlighted the importance of the sixth decision criterion, in paragraph 3, supra, providing an invaluable indication of the potential demand for the service and an object lesson regarding the necessity for additional administrative and technical refinements in the proposals that could not have been anticipated without practical experience. The notion of interim processing itself was controversial, spawning two lawsuits. In Little Rock Television Company, et al. v. FCC, 646 F. 2d 1271 (8th Cir. 1981) per curiam, the court dismissed, on grounds of jurisdiction and ripeness, a challenge to the Commission's extension of a cut-off date. 9/ In Corporation for Public Broadcasting v. FCC, No. 81-1075, the United States Court of Appeals for the District of Columbia Circuit was asked to adjudicate the claim that interim allocation of spectrum for low power stations prejudices noncommercial applicants, who require more time to secure funding for applications than do their commercial counterparts. The suit was dismissed at the request of the petitioner in October, 1981.

7. In addition to the court challenges, the unexpectedly large number of interim applications filed brought to the Commission's attention a technical inadequacy in the low power proposal. The existing rules, amendment of which was not proposed, prohibit translator-to-translator interference, but essentially leave the judgment as to whether a proposed translator is mutually exclusive with existing translators or other applications to engineering

1/ Report and Order, Docket No. 11611, FCC 56-44 (1956).

2/ 68 F.C.C. 2d 1525 (1978).

3/ Couzens, M., et al., U.S. Government Printing Office No. 721-146/134 (September 9, 1980).

4/ 45 Fed. Reg. 69178 (published October 17, 1980).

5/ See, e.g., Unalaska School District (BPTTV-4857) and City of St. Paul (BPTTV-4858), Report No. 11887, October 25, 1973; Leeco TV, Inc., 9 F.C.C. 2d 1028 (1967).

6/ 68 F.C.C. 2d 1525, 1527 (1978).

7/ The proposals will be addressed specifically below.

8/ To date, approximately sixty-five interim translator grants have been made in the continental United States, eight including a waiver for low power features. Over one hundred additional interim grants have been made for low power operations in the State of Alaska.

9/ A cut-off date is the deadline for filing petitions to deny and competing applications with respect to applications previously published on a cut-off list of applications ready and available for processing.

discretion. 10/ This approach was sufficient for the largely rural translator service, where mutually exclusive applications were unusual and the relatively low volume of applications permitted extensive manual analysis. However, during the pendency of the rule making, over 7,000 applications were filed. 11/ Many of these were in major markets and were obviously mutually exclusive with each other, but without precise translator-to-translator exclusivity standards that permit automated analysis, it was impossible formally to determine mutual exclusivity. To remedy this, a Further Notice of Proposed Rule Making was issued, augmenting the technical proposals in the Notice with a prohibited contour overlap mode of processing that can be substantially automated. 12/

8. The United States Congress also involved itself with the administrative dilemma posed by the great number of applications filed. The Omnibus Budget Reconciliation Act of 1981 amended Section 309 of the Communications Act to permit random selection among competing telecommunications facilities applicants. 13/ This was intended as an alternative to time-consuming comparative hearings:

> The conferees are particularly concerned with the delay that will result if comparative proceedings are used to award licenses for low power television service. The Commission has already received over 5,000 applications, most of which are, or will be mutually exclusive with other applications. Unless alternate procedures are devised, the Commission will have a geometric increase in comparative hearings and many years of delay in action on these applications. The conferees note that a matter such as this is ideally suited for the application of random selection procedures. By authorizing the Commission to apply random selection to any license application already submitted, but not yet designated for hearing, it will be possible to process low power television applications rapidly on a random selection basis.

10/ Each translator application is examined on a case-by-case basis; separate calculations are performed regarding other authorized spectrum users to which the proposed facility could cause interference. Fixed coordination distances or protected contours are not utilized between translators; rather, engineering assessment of each particular case is relied upon.

11/ When it became clear that the existing method of processing was inadequate to deal with this magnitude, the Commission stopped accepting additional applications, except in areas where the need for service outweighed the administrative burdens. See, Memorandum Opinion and Order, 46 Fed. Reg. 26062 (published May 11, 1981).

12/ 46 Fed. Reg. 42478 (published August 21, 1981).

13/ Public Law No. 97-35, 95 Stat. 736 (August 13, 1981).

Omnibus Budget Reconciliation Act of 1981, Conference Report, H.R. Rep. No. 97-208, 97th Cong. 1st Sess. (July 29, 1981), at 898. In accordance with the Congressional authorization, we commenced rule making seeking public comment upon general proposals for implementation of a random selection system with preferences for underrepresented groups or individuals. 14/ The proceeding was terminated on February 8, 1982, with the Commission's conclusion that, on the basis of the record adduced, it would not be feasible to implement a system of random selection within the constraints of the legislative provisions. 15/

9. We have received numerous comments and reply comments on both the Notice and the Further Notice, as well as comments in the lottery proceeding relating to low power application processing. 16/ From the voluminous record developed to date and the practical experience we have gleaned via the interim processing policy, we have been able to distill the following regulations for a low power television service. We believe the rules set out below will fulfill the multiple goals of satisfying public demand, protecting the rights of other broadcasters and affected telecommunications services, not prohibitively burdening Commission administrative resources and generally furthering our current regulatory policies and those established by Congress.

II. Overview

10. The basic issue presented in this proceeding simply is: should there be a low power service? This question must be addressed in several levels, both theoretical and practical. As the recent past has shown, we also must consider the relatively great administrative resource impact that implementation of the low power service will have upon the Commission. This is a particularly significant consideration, in light of present budgetary constraints that mandate austerity at the Commission. Nevertheless, weighing all the factors, we are convinced that the benefits of the low power service will outweigh its costs to the public. The most persuasive evidence for this conclusion are the pleadings comprising the record. The comments overwhelmingly favor institution of the low power service. As the comment summary reveals, a variety of modifications to our initial proposal are suggested. Among them are some proposals with which we are in accord; these are reflected in the rules and policies promulgated herein, which, it will be noted, do not in every instance track our initial proposals. Other comments propose changes in our proposals that, on consideration, we find unrealistic or impracticable, or simply not in accord with our policy goals. Nevertheless, the record adduced in response to the Notice airs thoroughly the major issues in this rule making and contains commentary representing a variety of interests. What is most noteworthy is the paucity of direct opposition to the concept of a low power television service.

11. Our first decision criterion was "public need for program diversity." It is self-evident that additional stations will provide additional programming. How "different" this additional programming will be is not readily determinable; however, the analysis in our Radio Deregulation proceeding provides a basis for the inference that provision of additional outlets can act as an incentive for licensees to provide program diversity. Report and Order, Deregulation of Radio, 84 F.C.C. 2d 968, 1981. In addition, we believe that the record evidences a public desire for additional television service, as well as a belief that low power stations can provide diverse programming. We have concluded, however, that the specific nature of the programming is properly left to the licensees' discretion, based upon the mandates of the marketplace.

12. Local programming usually has been an important service objective in the broadcast services (see, Sixth Report and Order, Docket Nos. 8736, 8975, 9175 and 8976, 41 F.C.C. 148 (1952)), an objective that the low power service is particularly suited to carry out. The comments are in accord on this issue; however, they differ in their recommendations as to how we might achieve this objective. In our deliberations, the issue becomes: acknowledging the public desire for additional television stations with the potential to provide diverse or local program service, what should be the Commission's role in determining the precise nature of the program service?

13. In general, we are reluctant to mandate that particular kinds and amounts of programming be aired, substituting our decision for market mechanisms. First and foremost, to do so would run afoul of the discretion we must afford to the program decisions of licensees, under the First Amendment to the Constitution and our long line of precedent upholding that discretion. See, e.g., Columbia Broadcasting System v. Democratic National Committee, 412 U.S. 94 (1976). Second, even where we perceive a need to adopt a hands-on policy toward low power program content, we historically have found less intrusive means of effectuating that policy. The law constrains us to choose the least drastic means of achieving even a legitimate governmental purpose that has the incidental effect of intruding upon protected freedoms. See, Shelton v. Tucker, 364 U.S. 479 (1960); U.S. v. O'Brien, 391 U.S. 367 (1968). In the past, we have sought to achieve programming objectives by means of more or less content-related regulations, such as ascertainment. See, Report and Order, Primer on Ascertainment of Community Problems by Broadcast Applicants, 27 F.C.C. 2d 650 (1971). As the radio service became more directly responsive to consumer demands, however, we found it unnecessary to continue to impose this obligation on licensees. See, Deregulation of Radio, 84 FCC 2d 968 (1981); reconsid. denied, 87 FCC 2d 797 (1981).

14. In our deliberations, we remain mindful of the fact that, while low power television indeed is a broadcast service, its technical and operational differences from full service television inform different sets of regulatory decisions. Title III of the Communications Act sets out the basic precepts of broadcast regulation, but affords the Commission considerable latitude in their interpretation and application. 17/ Generally, our broadcast rules and policies proceed from the assumption that broadcast stations serve the public interest when they meet the programming needs and interests of all elements of the community. The Commission has attempted to achieve its regulatory objectives regarding programming by both content and structural rules. However, in light of the nature of the low power service, particularly the small and undefined coverage areas of low power stations, a concern that all elements of the larger community be provided with program service is not present. In addition, it is likely that low power stations will have to be very directly responsive to the interests of local consumers, to assure economic viability. In light of these factors, it is our judgment that minimal regulation of low power television is in the public interest notwithstanding the fact that it is a broadcast service.

15. We carefully have considered the option of imposing no regulatory mechanisms, direct or indirect, and instead relying exclusively upon market forces to achieve diversity of programming. (This approach seems suited to the low power service, in which we have proposed, and will apply, only minimal restrictions upon the free transferability of stations.) Further, low power stations may be constructed, and presumably transferred, at relatively low costs, and their small coverage areas lend themselves to programming to suit discrete groups in a community. In this environment, where licensees are likely to be directly responsive to audience desires, we believe there lies a very good possibility of consumer sovereignty. Thus, if the market works to establish consumer preferences, we must ask if anything is to be gained by imposing regulations designed to achieve those same ends. The Commission need engage in this sort of intervention only when factors exist that significantly impede consumers from influencing program fare. On the basis of the rule making record in this proceeding, we find no likelihood that such a market failure will occur. In addition, we are reluctant to burden an untried service with regulations that could prove unnecessary. Accordingly,

14/ Notice of Proposed Rule Making, In the Matter of Amendment of Part 1 of the Commission's Rules to Allow the Selection from Among Mutually Exclusive Competing Applications Using Random Selection or Lotteries Instead of Comparative Hearings, Gen. Docket No. 81-768, FCC 81-524, 46 Fed. Reg. 58110 (published November 30, 1981).

15/ Report and Order, Gen. Docket No. 81-768, adopted February 8, 1982, 47 Fed. Reg. 11886 (published March 19, 1982).

16/ A summary of comments is attached hereto as Appendix D.

17/ For example, subscription radio operation using an FM subcarrier has been treated as a hybrid broadcast service and, on that basis, been exempted from statutory provisions otherwise applicable to broadcast services. See, KMLA Broadcasting Corp. v. Twentieth Century Cigarette Vendors Corp., 264 F. Supp. 35 (C.D. Cal. 1967); Greater Washington Educational Telecommunications Association, Inc., 49 FCC 2d 948 (1974). And the legal appendix to the staff report Policies for Regulation of Direct Broadcast Satellites (DBS), F. Setzer, et al., FCC, Office of Plans and Policy (October, 1980), raises the question of whether subscription television is properly considered a broadcast service.

we resolve our first decision criterion with the conclusion that the low power service, as authorized herein, is likely to provide program service that is responsive to public demand without the necessity of regulatory intervention by the Commission. 18/

16. Another issue that is critical to our conclusions is what might be considered the opportunity cost of low power, in terms of utilization of spectrum. That is, what are the legitmate, competing claims to the spectrum we have proposed for low power stations, and to what extent will they be precluded by the authorization of the low power service? Our second and third decision criteria, spectrum requirements and interference to communications services, focus upon this issue. A good deal of commentary was devoted to these questions, primarily from other users or would-be users of the frequencies that would be used by low power licensees. Full service television stations are the primary users of the radio frequencies at issue. Many voice the concern that low power stations will be permitted to encroach upon their primary status. Land mobile services share some of the channels at issue with television stations. Their representatives also fear encroachment by low power users. Another concern, raised in the Notice, is the possible use of auxiliary broadcast services by low power licensees, and the possible scarcity of television microwave spectrum that could result. The availability of frequencies for television microwave uses may be essential to continued local coverage, both for full service and originating low power stations. Although we received little commentary on this issue, we believe it warrants consideration as a primary spectrum management concern arising from the low power proposal. Finally, cable systems, at various points in the distribution system, and multipoint distribution services, at the converters that provide the TV input signals, make use of TV broadcast frequencies. Because this use of spectrum does not require radiation of signals on frequencies allocated for broadcast use and operates on a nonpreclusion basis to broadcast stations, it has not been necessary to license it. Although cable and microwave operators generally have been able to use available television channels without interference to the primary users, they have evinced concern that authorization of low power stations will preclude them from spectrum that heretofore has been available for their use.

17. Our evaluation of the record and the technical questions involved in these issues has convinced us that we are not faced with an either/or situation, in terms of spectrum utilization. First and foremost, we intend to maintain the secondary spectrum priority of low power stations, a policy that assures protection from interference to full service stations. Secondary spectrum priority has two aspects: low power stations may not cause objectionable interference to existing full service stations, and low power stations must yield to facilities increases of existing full service stations or to new full service stations where interference occurs. A similar policy holds true where land mobile services currently share primary use of some UHF spectrum with full service television. In paragraphs 24 through 46, infra, we have defined the parameters under which we will authorize low power stations in relation to land mobile and full service stations, and thereby have defined criteria for predicting objectionable interference. We also have come to believe that auxiliary services used by low power stations and the other auxiliary broadcast services can coexist, as discussed in paragraph 47, infra. Finally, we believe that cable and MDS systems will be able to adapt to an environment in which low power stations use the radio spectrum. These services' use of broadcast frequencies is subject to nonpreclusion of all other authorized broadcast users. We are convinced, though, that the likelihood of interference problems arising warrants a minor change in the policy proposed in the Notice with respect to cable systems. See, paragraph 45, infra.

18. In brief, we have concluded that the competing uses for television spectrum all may be accommodated, in varying degrees. However, we also recognize that this spectrum is becoming crowded, and, with the exception of full service stations, whose primary use of this spectrum is assured, no one set of interests can receive all they have sought. We believe that this is a situation in which it is feasible and indeed desirable to attempt to partially satisfy all competing claims, and it is well within our discretion to do so. See, Goodwill Stations, Inc. v. FCC, 325 F. 2d 637 (D.C. Cir. 1963); Coastal Bend Television Co. v. FCC, 234 F. 2d 686, 690 (D.C. Cir. 1956); Loyola University, et al v. FCC, Nos. 80-1824 and 80-2018, slip op. (D.C. Cir., January 26, 1982).

19. Our fourth and fifth decision criteria, media competition and economic impact and low power/translator economic viability and ownership, are interrelated to a large degree, and are amenable only to speculation until the service is operational. The record does not contain convincing evidence that the low power service could have a competitively destructive impact on existing broadcast, cable or microwave stations. Nor does it contain convincing assurance of the viability of the low power service. Indeed, whether low power will be viable at all appears more uncertain than whether it will pose an undesirable competitive threat to existing facilities. For this reason, we have structured our ownership criteria to permit existing licensees to engage in low power ventures within the limits imposed by the comparative criterion favoring diversification of broadcast interests. To the extent that this may preclude new entrants later, the value to be gained from permitting experienced broadcasters to develop the service initially is believed to outweigh the possible loss of new entrants. In sum, we believe that the balance we have struck will foster a low power service that can grow to provide program alternatives to full service stations and cable systems in a manner that increases competition in the marketplace and thus enhances the telecommunications service available to the public.

20. We already have alluded to our sixth decision criterion, impact upon Commission resources and service implementation delays. This has proved to be the most critical and troublesome element of all. Throughout this proceeding, we have struggled to solve the dilemma posed by the early deluge of applications. Indeed, our experience with interim applications has been invaluable in informing our deliberations regarding the administrative tools required for implementation of the low power service. Our solution to this dilemma is detailed in paragraphs 51 through 74, infra. Briefly, we are not now proposing to lift the freeze on new applications that was imposed on April 9, 1981. 19/ Before considering termination of the freeze, we shall identify applications that are mutually exclusive with applications that already have been cut off, 20/ place them on a "B" cut-off list, process those applications and either grant or designate them for hearing, as circumstances dictate. This processing will occur in several phases, beginning with the most rural applications. See, Appendix E. The cases will be set for hearings as our resources permit. When the processing of the currently cut-off applications is completed, the Commission will publish cut-off lists of applications on file that were neither mutually exclusive with applications on the existing cut-off lists nor cut off at the time of the freeze. The freeze will be lifted for acceptance of applications in competition with those on cut-off lists, and processing will continue in the manner described above.

21. The hearing process obviously will be time-consuming. When and if a system of random selection is instituted for choosing among competing broadcast applications, it, of course, will be applied to low power. Until such time, it would behoove competing applicants to settle their conflicts privately and resolve mutual exclusivities prior to hearing. We strongly encourage plans that involve time-sharing and pooling resources, which could be especially beneficial in light of the fact that low power is a new service whose viability is as yet undetermined. We shall make every effort to rule promptly on all settlements among competing applicants, under Section 311(c) or (d) of the Communications Act of 1934, as amended, and Sections 73.3525 and 73.3568 of our Rules. The use of largely paper hearings should shorten the time until authorization considerably. We are reallocating our staff resources to the extent possible to process the backlog and new applications expeditiously, within existing budgetary limitations.

22. We recognize that the hearing process can be needlessly cumbersome, particularly in a secondary service. However, we have not been able to develop acceptable alternative procedures within current legislative constraints. We have attempted to devise somewhat streamlined comparative hearing procedures. Furthermore, we intend to restrict the types of pleadings and issues we shall entertain during this abbreviated hearing process, to a degree consistent with the nature of the low power service. See, paragraphs 65 through 68, infra. We continue to believe that both a lottery and modification of the hearing process may be essential to improving our efficiency with reduced staff; however, we do not believe this proceeding is the appropriate vehicle in which to modify all our practices and procedures that may affect other broadcast services, particularly in light of the functional differences between full service and low power stations. 21/ As we have indicated, we are making every effort to expedite the processing of low power applications, both with increased staff resources and computer capacity. However, some of this burden quite properly falls upon the applicants. If, given the strong incentive to settle privately or opt for paper hearings, we still are confronted with thousands of competing applicants insistent on hearings, we cannot promise prompt authorizations. The Commission is committed to elimination of the backlog; but we have discovered no magic formula for this.

23. Our conclusion that low power applications should be processed similarly to other broadcast applications is related to a broader policy issue: to what extent should the rules for low power stations diverge from the analogous rules for other broadcast facilities? As stated above, this proceeding is not intended to set broadcast policy generally. In some instances, however, low power can provide a useful test case for more general deregulatory initiatives. On the other hand, there are other areas where we believe it is more sensible to decide a particular issue in a separate proceeding designed to air all aspects of that issue alone. For example, it has come to our attention that some low power applications propose a teletext service. Because we are looking into the advisability of teletext-related service generally, (see, Notice of Proposed Rule Making, Amendment of Part 73 to Authorize Transmission of Teletext by TV Stations, BC Docket No. 81-741, 46 Fed. Reg. 60851 (published December 14, 1981)), the issue of whether the same or different rules for teletext should apply to low power stations, on account of their singular service capability, will be resolved in our separate proceeding on teletext. Finally, while we have several "unregulatory" initiatives underway, and a number of additional ones are contemplated, we do not intend to dispense with rule making and enact them in the low power context, rather than awaiting the results of the separate proceedings in question. We do intend, however, to resume acceptance of applications for experimental stations that propose novel uses of low power technology, at such time as we have eliminated the present processing backlog and otherwise lifted the freeze on acceptance of new applications. 22/

18/ We recognize, of course, that the Commission's ownership rules also are intended to influence programming content because a paramount purpose of structural regulations is to assure a variety of viewpoints in any informational programming provided by licensees. Public interest considerations relating to the imposition of ownership rules in the low power service are discussed separately at paragraphs 19 and 78 through 90, infra.

19/ Because we are deciding not to abrogate the freeze herein, the several pending petitions for reconsideration of the freeze will be dismissed, as will pending requests for waiver of the freeze that do not raise a novel and compelling public interest ground for waiver in a particular unique situation.

20/ The pre-freeze cut-off lists were published at 45 Fed. Reg. 70974 (October 17, 1980); 45 Fed. Reg. 8114 (December 9, 1980); and 46 Fed. Reg. 12852 (February 18, 1981).

21/ We are committed generally to reduction or elimination of unnecessary regulations, see, e.g., Report and Order, Deregulation of Radio, 84 F.C.C. 2d 968 (1981); reconsid. denied, 87 F.C.C. 2d 797 (1981); Revision of Application for Renewal of License of Commercial and Noncommercial AM, FM, and Television Licensees, 46 Fed. Reg. 26236 (published May 11, 1981). It goes without saying that any proceedings that accomplish this task with respect to relevant rules will apply to the low power service.

22/ We stopped accepting applications for such experimental stations on April 24, 1980. See, Public Notice, FCC 80-262, April 29, 1980.
cont.

III. Issues Relating to Channel Allocation

24. Spectrum Priority. Although some parties urge us to do otherwise, it is our firm intention that low power stations remain secondary, in terms of spectrum priority. While we agree with parties averring that low power stations can provide needed and meaningful service, we point out that the coverage obligations to which we subject full service stations specifically are designed to ensure maximum service to the public, beyond what we shall require of low power. This fact, we believe, constrains us to ensure the continued primacy of full service stations by emphasizing the secondary status of low power stations. We also emphasize, though, that while the rules for the low power service are intended to protect the public's expectation of service from full service stations, we do not intend to cater to full service licensees' unreasonable fears of competition from low power stations, and fetter the low power service for that reason. We believe low power can provide competition that stimulates the entire telecommunications marketplace.

25. The record indicates that not all parties share a common understanding of the concept of secondary spectrum priority. Under the Commission's present rules (Section 74.703) and the Notice of Proposed Rule Making, secondary status means (1) a low power station will not be authorized where there is a possibility of objectionable interference to an existing full service station, under the standards prescribed herein; (2) an authorized low power station that causes objectionable interference to an existing full service station is responsible for eliminating the interference, or the low power station must cease operation; (3) an existing low power station that would cause interference in connection with a proposed increase or modification of facilities of an existing full service station or in connection with a proposed new full service station is responsible for eliminating the interference, or the low power station must cease operation. These are the rules under which low power stations will operate. The notification and reporting provisions in Section 74.703(c) and (d) will continue to apply with the one modification proposed in the Notice and advocated by Citizens Communications Center, the National Telecommunications and Information Administration and the National Translator Association, to wit, that low power stations need not cease operation until they have been proved by the complaining party to be the cause of the interference complained of, but they must cooperate fully in tests to determine the cause of interference and remain willing to cease operation at the request of the Commission. 23/ "Interference" as it is used in this context is discussed in the following paragraphs, to facilitate a common understanding among all parties of when interference will be predicted to occur.

26. In agreement with parties urging that we develop more detailed interference prediction criteria, we proposed desired-to-undesired (D/U) signal ratios to define the relative signal strengths of the dominant and interfering signals, both in the low power-to-full service and low power-to-low power contexts. After evaluation of the comments received in response to the Further Notice, we remain convinced that a modified prohibited contour overlap standard is the preferable method of predicting interference, in order to promote spectral efficiency. We therefore delete from our rules the UHF spacing requirements of Section 74.702(c). We do note that, making a few conservative assumptions, a set of mileage requirements can be derived. While processing will be based on prohibited overlap criteria contained in the rules, detailed calculations are not required of the applicant and unless an unusually high power (greater than 20 kW UHF ERP or 100 watts VHF ERP) or antenna height (greater than 500 feet above average terrain) is anticipated, applications meeting the following full spacings should have no conflicts with full service stations:

	Full service station is:	
VHF	co-channel non-offset	210 miles
	co-channel offset	150 miles
	±1 channel	90 miles
UHF	co-channel non-offset	210 miles
	co-channel offset	150 miles
	±1 channel	75 miles
	±2, 3, 4, 5 channels	20 miles
	+7 channels	60 miles
	-14 channels	70 miles
	-15 channels	75 miles

In many cases, prohibited overlap processing will allow grant of applications at smaller mileage separations. However, applicants are reminded that applications not meeting the prohibited overlap standards will be returned, so, particularly in areas where low power demand exceeds available spectrum, the proposed technical facilities should be carefully selected. Because of uncertainties inherent in predicting propagation, variations in equipment characteristics and the fact that we are, in essence, attempting to add a significant number of additional stations to a long-established allocations scheme, instances of interference from, to and between low power stations may occur. Indeed, in certain circumstances, there may be a potential for significant interference. We have attempted to adopt criteria that strike a balance between concerns over interference and a desire to maximize the benefits of a new service. As low power stations are authorized, and cases of interference are called to our attention, it is our intent to identify categories where it may be appropriate to refine our criteria to take into account special circumstances, such as overwater paths or superrefraction and ducting, in which we would want to be more restrictive in low power authorizations. Intensified efforts also are underway by propagation scientists and engineers at the Commission, NTIA/ITS, other agencies and private organizations to improve the accuracy of propagation predictions in general and to develop practical criteria that can be incorporated into Commission deliberations and assignment decisions. For example, the Commission's Office of Science and Technology has an on-going project in cooperation with NTIA/ITS to collect propagation data in Southern California where superrefraction has created problems for a number of years. Data collection is scheduled to continue through October, 1982, leading to development of a more realistic propagation model for that area.

27. Distance Separations. Some parties asked that we retain the UHF separations, add VHF separations and/or adopt mileage separations to govern between low power stations, or that we promulgate a table of assignments for low power. We decline to do either, for several reasons. These approaches do not comport with the secondary nature of low power stations. They are less spectrally efficient than the prohibited contour overlap standards we have proposed. Finally, we believe a table of assignments would represent an unnecessarily rigid approach in a demand-driven service where we are fostering marketplace sovereignty. In the words of Gammon and Grange, "Communities need not rely on the Commission's clouded crystal ball for an access to spectrum space, but on market forces which will result in an efficient and quick allocation of spectrum space." 24/ Within the constraints necessarily imposed by our prohibitions upon objectionable interference, which will be strictly enforced, we believe the public interest best will be served by our permitting applicants to locate their stations and configure their service areas as market conditions dictate. The mandates of Section 307(b) of the Communications Act are fulfilled by virtue of the fact that most channel availabilities for low power exist outside the major markets. In addition, we shall process rural applications before urban, at least until the present backlog is significantly reduced. See, Appendix E. This will have the effect of providing service where it arguably is most needed. Beyond this, we do not believe that fair and efficient spectrum allocation can be furthered significantly by our engineering an elaborate allocation plan for stations that have no coverage requirements and whose continued existence is uncertain in light of their secondary status.

28. Noncommercial channel reservations. Similar reasoning applies to channel reservations for noncommercial low power stations, advocated by the Corporation for Public Broadcasting, the Public Broadcasting Service and the National Association of Public Television Stations, among others. Indeed, the entire notion of noncommercial operation is called into question in this service, as discussed in paragraphs 71 and 72, infra. The request for reserved channels is premised on the difficulty noncommercial applicants have in obtaining financing. The theory is based upon spectrum scarcity, that is, because it takes them longer to secure funding, there may be no more channels left by the time noncommercial applicants are ready to apply. However, there still are reserved channels available for full service stations in many markets, which, we believe, fulfills the overall plan for allocation of public stations embodied in the Sixth Report and Order, supra. Moreover, in recognition of the often disadvantaged financial status of all noncommercial stations, Congress directed the Commission to explore alternative funding sources for public stations. Public Broadcasting Amendments Act of 1981, Pub. L. No. 97-53, 95 Stat. 736, §§ 1221-1234 (August 13, 1981). In light of this initiative, and the fact that the Commission is not requiring public low power stations to operate without advertising, we believe it is unnecessary to reserve channels for noncommercial low power stations. Channel reservation comports with neither our overall approach to low power noncommercial operation nor with the secondary status of all low power stations. Indeed, we are herein adopting our proposal to eliminate the preference for educational rebroadcast on reserved channels, which gives noncommercial translators an absolute priority over commercial ones on reserved channels. See, 23 R.R. 2d 1504, 1508 (1971). 25/

29. Channel Selection. We have received comments from many parties asking that we preclude low power use of certain channels or bands, in order to secure that spectrum for a competing use. For example, the National Cable Television Association, representing cable interests, would have low power limited to UHF channels; various land mobile concerns want Channels 4, 5, 7 and 14 through 20 to be unavailable to low power stations. As we have stated, we are aware of the competing uses for the television spectrum. However, we do not intend to engage in spectrum reallocation in this proceeding. Low power is a broadcast use; as such, it is entitled to use the radio frequencies allocated for television broadcast use, subject to the constraints imposed by its secondary priority. We are confident that the desired-to-undesired frequency ratios we are adopting are adequate to protect the primary users of this spectrum. Therefore, we shall permit low power applicants to select any channel between 2 and 69, subject to our technical rules, including land mobile protection as discussed in paragraph 46, infra. 26/ We are not requiring certification that the channel selected is the one least likely to cause interference of the channels available. We do caution, however, that low power use of certain channels (principally 4, 5, 6, 7, 13, 14 through 21 and 69) may be subject to interference from authorized land mobile, point-to-point or FM stations; the rules we are adopting are not designed to protect low power stations from this. Prudence would suggest choosing a different channel where possible, but we shall not adopt a rule requiring this. Neither will we require an applicant filing a mutually exclusive application to certify that no other channel is available in the market, 27/ because we

23/ Several parties, including Citizens Communications Center and United Auto Workers, ask that the Commission give favorable consideration to the existence of a low power station that would be precluded by a full service application, where this situation arises. We are reluctant to do so. Where possible, the low power licensee on an allocated channel is free to propose to upgrade its service by filing a competing full service application; however, as it is integral to the concept of a secondary service that it yield to a mutually exclusive primary service, we shall not take low power stations into account in authorizing full service stations, and we urge low power applicants to consider this fact when they select channels.

24/ Gammon and Grange comments at 10.

25/ In the full service context, these channels continue to be reserved for the exclusive use of noncommercial stations. See, Section 73.606(a) of the Rules.

26/ To effectuate this policy, we are amending Section 74.702(c)(1) and (d) so as to eliminate priorities in UHF channel selection. Nevertheless, applications will not be accepted on channels where they cannot protect full service television stations, existing translators and land mobile allotments in the manner described in paragraphs 32 through 46.

27/ This has been advocated by Community Television Network.

recognize that other factors, such as site availability, may influence choice of channel, particularly in a service where stations have small coverage areas and where viability is uncertain. 28/

30. To provide maximum flexibility in channel selection, we are adopting our proposal to eliminate Section 74.732(d), which prohibits VHF translators from all-UHF markets and, Section 74.732(e)(1) and (2), which has the effect of prohibiting UHF stations from operating VHF translators on unassigned channels in distant markets. It is possible that the addition of a number of UHF low power stations will further the goal of UHF comparability; however, we do not see additional VHF low power stations generally as posing a significant enough competitive threat to UHF full service facilities to justify restricting VHF low power stations geographically. 29/ Finally, we are eliminating our current prohibition on use of the fifteen-mile rule, Section 73.607(b), embodied in Section 74.702(b)(2) and (g), because elimination of the preference in Section 74.703 (a) for 1,000 watt UHF translators on assigned channels renders this prohibition meaningless.

31. Maximum Power Limits. We have reviewed the comments regarding the power limits proposed for low power stations. A number of parties urge the Commission to permit higher power on low power stations, either across the board or on a waiver basis. Others advise against this, on the grounds that the likelihood of interference, both to full service stations and other low power stations, will increase with increased power. We are inclined to agree with this view. With one exception, it is our opinion that the power limits proposed in the Notice are adequate to ensure viable coverage areas for low power stations while restrictive enough to preclude undue interference under the technical standards adopted. We initially proposed to allow 100 watts VHF power in situations where both co-channel and adjacent channel mileage separations are met. Full service adjacent channel mileage separations allow substantial amounts of predicted interference, on the theory that viewers losing service will gain a replacement primary service, generally one closer to them and therefore more attuned to their local needs. We do not believe that secondary low power stations can provide an equivalent replacement service. Therefore, the power limit for low power stations will continue to be 10 watts VHF, except where a 100-watt station is proposed on an assigned channel 30/; and 1,000 watts UHF. We currently anticipate that we only would find it in the public interest to waive the power limits in extraordinary circumstances.

32. Full Service Protected Contour. The Further Notice indicated the Commission's intention to use the Grade B contour as the full service protected contour, but sought comment on the desirability and feasibility of attempting to protect service received from full service stations outside their Grade B contour. We received a good deal of thoughtful commentary on this matter. It is discussed in detail in the comment summary, Appendix D. Among parties advocating protection of all service received outside the full service Grade B contour are the Association of Maximum Service Telecasters, NAB, ABC and Storer. Cox suggests that one way of accomplishing this is to establish a full service contour seven dBu below the Grade B and require low power stations to protect that contour. This is the policy that the Commission adopted in Docket No. 20735, establishing that Channel 200 educational FM stations must protect the 40 dBu contour of Channel 6 television stations. See, Second Report and Order, Noncommercial Educational FM Broadcast Stations, 43 Fed. Reg. 39704, 39712, 39713 (1978); but see, Second Further Notice of Proposed Rule Making, to be issued at a subsequent date. Others contend that service received outside the full service Grade B contour should be protected, but on a more flexible basis, giving the Commission room to evaluate the circumstances. Communications Investment Corporation suggests that the Commission prohibit low power stations from causing "significant degradation" of service beyond the full service Grade B contour, in terms of the number of households affected. American Christian Television Stations would have low power stations protect full service stations beyond the Grade B contour where they are "significantly viewed," as defined in Section 76.54 of the Rules. AGK asks that the Commission not license a low power station on possibly interfering channels in any community outside the Grade B contour of a full service station in cases where the community is within the area of dominant influence (ADI) of the full service station. CBS advocates requiring low power applicants to select the channel least likely to cause interference, and then protecting service beyond the full service Grade B contour on a complaint basis.

33. Other parties, including Spectra, Attaway and Community Media Network, aver that it is appropriate for low power stations to protect the Grade B contours of full service stations but no further. The National Translator Association agrees with this, except that NTA believes it is arbitrary to prohibit low power signals in areas where terrain prevents actual reception of a full service station within its Grade B contour. The Corporation for Public Broadcasting contends that it is unreasonable for low power stations to be required to protect the full service Grade B, because the Commission's present rules do not require full service stations to protect each other to their Grade B contours. Adding that low power stations are more likely to provide truly local service than are full service stations at the outer reaches of their field strength contours, CPB proposes the following full service contours to be protected by low power stations:

Frequency	Protected Contour
Low band VHF	62 dBu
High band VHF	68 dBu
UHF	80 dBu

34. We have considered the various alternatives and believe that the following approach is the one that will best accommodate the competing interests and ensure maximum television service to the public. We agree that existing service from full service television stations should not be impaired. Notwithstanding inferences that may have been derived from paragraph 9 of the Further Notice, we do not intend to deviate from the basic thrust of our present translator interference rule, which states:

> "An application for a new television broadcast translator station or for changes in the facilities of an authorized station will not be granted where it is apparent that interference will be caused. . .Interference will be considered to occur whenever reception of a regularly used signal is impaired by signals radiated by the translator, regardless of the quality of such reception or the strength of the signal so used." (Emphasis supplied.)

Section 74.703(a) and (b) of the Rules. This means that any service from a full service station is to be protected from interference by a translator even beyond where the full service station provides reliable service or would be predicted to be received. However, as we stated in the Further Notice, because we are unable to process the great volume of applications manually, and in the interest of certainty among both applicants and the Commission, it is necessary that we use an objective standard for where we consider that it is "apparent that interference will be caused." We acknowledge that inherent in the definition of the Grade B contour is the fact that some locations outside the Grade B contour receive an acceptable signal, although the majority of locations do not. Conversely, inside the Grade B contour there are locations that do not receive an acceptable signal, although the majority of locations do. Because of the characteristics of TV frequency propagation and the unaccounted-for effects of terrain, this contour value and this procedure are not particularly useful for predicting service at particular locations. This also would be true of any other predicted contour we might choose to protect, a higher contour, as proposed by CPB, or a more conservative, lower contour, which Cox advocates. It is self-evident that, were we to protect full service to the 40 dBu contour, for example, we would provide somewhat greater assurance of continued reception of full service signals where they actually are received by listeners beyond the Grade B contour. However, this undoubtedly also would preclude low power from areas that are not able to receive even attenuated full service signals beyond the Grade B contour and that may not receive any off-air service at all without low power. We cannot generalize with any expectation of accuracy whether fewer or more people would receive fewer or more signals, as a result of our choosing a different protected contour for full service stations. We continue to believe that the Grade B contour offers the most realistic approximation of service received, and therefore is an appropriate standard to use in automating application processing. 31/

35. However, we shall continue our present policy to protect full service reception from impairment of the signal by translators. 32/ If we receive a well-documented complaint that an authorized low power station impairs regular reception of a full service signal outside the full service Grade B contour, this could be a ground for corrective action against the low power licensee, depending upon an evaluation of the situation. This approach does not differ significantly from what we previously have done, under our

28/ Indeed, it is possible to envision a situation in which a channel might be particularly desirable to an applicant on the basis of its unlikelihood of being affected by future full service stations. On the other hand, even in markets with a large number of low power channels available, a few particular channels might be attractive because they offer an opportunity for future upgrading to full service operation.

29/ Our belief is based upon the secondary status and limited coverage potential of low power stations. For similar reasons, we believe that only in rare instances will a party alleging adverse impact on a UHF station be able to make an initial showing warranting consideration of the issue in a hearing prior to the award of a low power construction permit. See, WFMY Television Corp., 59 F.C.C. 2d 1010 (1976) (limiting the applicability of the policy enunciated in Triangle Publications, Inc., 29 F.C.C. 315 (1960), aff'd sub. nom. Triangle Publications v. FCC, 291 F. 2d 342 (D.C. Cir. 1961)); and see, paragraph 63, infra.

30/ This provision is in the current translator rules and has little or no negative impact on the coverage of full service stations. Continuing it is not expected to present significant problems, because there are few vacant VHF assignments and they tend to be in relatively isolated locations.

31/ It is within our discretion to adopt this contour as a processing standard, and even as an absolute protection standard. As we have said, "There is no rule of law or section of the Communications Act which affords broadcast stations protection against 'interference,' as that term is defined in the abstract without reference to the Commission's Rules and Regulations. Section 303(f) of the Act provides in pertinent part that the Commission shall 'make such regulations not inconsistent with law as it may deem necessary to prevent interference between stations.' In this Section Congress has delegated to the Commission the authority to determine to what extent interference between broadcast and other radio stations shall be permitted to exist. The delegation is broad and leaves within the Commission's discretion, subject to the criterion of the public interest, convenience and necessity, not only the determination of what degree of interference between stations shall be considered excessive but also the methods by which such excessive interference shall be avoided." Memorandum Opinion and Order, Roy Hofheinz (KSOX), Harlingen, Texas, 9 R.R. 784c (1953).

32/ This raises an issue addressed by several parties, including the Association of Maximum Service Telecasters and General Electric Broadcasting Company. They suggest that we require low power applicants specially to notify nearby full service licensees of the filing of the application. We agree with the National Translator Association that the public notice the Commission gives by statute of the acceptance of all broadcast applications is sufficient to notify all possibly affected full service stations of the pendency of a low power application. We also will not require low power facilities to conduct field tests prior to final authorization; we believe that the entailment of secondary spectrum priority, that interfering stations cease operations on the Commission's request, will fulfill the same goal, and therefore a field test requirement is unnecessary and duplicative.

existing rules. 33/ Nor does it differ significantly from the approach we would take in the case of low power/full service interference anywhere. That is, we shall not knowingly authorize a low power station that would impair the reception of a full service station. Our mode of processing gives us a reasonable degree of certainty that this normally will not occur within the full service Grade B contour, and if it does, it will be the sole responsibility of the low power operator to correct the situation. On the other hand, because we have no record of where service is received outside the full service Grade B contour, we cannot take this into account in processing. As CBS recommends, we shall deal with such interference on a complaint basis, should the need arise. 34/ We do not believe it is feasible to adopt CBS's other suggestion, that we require low power applicants to select the channel least likely to cause interference, essentially because this may be difficult to determine; furthermore, it should not be necessary, because our processing procedure will eliminate applications on channels where excessive interference is likely to be caused. However, our strict adherence to the secondary priority policy should be an incentive for low power applicants to endeavor to select channels with a minimal chance of future interference problems, the primary onus of which would fall upon themselves. 35/

36. Low Power Protected Contour. The comments focused primarily on the proposed UHF Zone 1 protected contour of 84 dBu. Almost universally, this value was viewed as too high, protecting an area too limited to allow a station to be viable. It also is argued that many translators provide acceptable service to their communities, even where they do not provide a predicted 84 dBu signal. In addition, comments claim that many low power applications specifying existing TV towers as their transmitting site would not provide an 84 dBu signal to their city of license. Values of 70 dBu and 74 dBu most often are suggested as substitutes for the 84 dBu value. We believe that use of a 74 dBu protected contour is a reasonable compromise. A protected contour value of 74 dBu was proposed in the Further Notice for those parts of the country not in TV Zone 1 or FM Zone 1A. A couple of comments supported a zone system and suggested that the proposed UHF protected contour values in all parts of the country should be reduced by similar amounts. We are not convinced that the low power protected contour for UHF stations located outside of Zones 1 and 1A should be reduced below 74 dBu. In areas of scarce spectrum the effect of reducing the protected contour would be to lower the number of possible low power stations. This would be a restraint on the marketplace that we believe is unnecessary because the protected contour is part of a minimum protection standard. An applicant, except in most of the northeast and some urban areas, often can choose to exceed the minimum standard significantly. In areas where translators have flourished, these standards should prevent a newcomer from causing severe disruption of existing service. However, we expect that the vast majority of applicants in these areas will coordinate with each other and with existing operators and will take local factors (including terrain) into account in determining how close to a minimum standard they should apply to operate. In view of this, we believe that the 74 dBu protected contour is a reasonable minimum standard. By adopting it for UHF stations in all parts of the country we are slightly simplifying the processing and conforming the UHF and VHF procedures. Based upon the comment record, we also are adopting the VHF protected contours as proposed.

37. Terrain Shielding. In our Notice, we proposed consideration of terrain shielding on a case-by-case basis. Although several comments contend that consideration of terrain is essential for a realistic authorization process, we believe that the overwhelming argument is presented by our experience with the interim applications. It is far beyond our staff capacity to evaluate individually thousands of terrain shielding claims. Also, we do not have in this proceeding sufficient information to adopt any standard method for computing a low power terrain correction factor. As indicated elsewhere in this document, we do not intend this proceeding to be the source of sweeping changes in broadcasting regulation. Therefore, the proper forum for considering a standard method of terrain correction is in a proceeding designed to deal with that subject. 36/

38. Receiving Antenna Front-to-Back Ratio. Some comments support consideration of front-to-back ratios in determining desired-to-undesired interference ratios. A larger number of comments oppose it and their arguments are persuasive. For example, the average antenna front-to-back ratios listed in the Further Notice were based on test range measurements and, particularly in rough terrain, it is unlikely that they would be equalled under normal reception conditions. Further, it was indicated that front-to-back ratios for individual antennas varied significantly from channel to channel and there is no reasonable procedure by which a consumer can identify the antenna that will perform best in their specific situation. In addition, a possible scenario is described where the undesired station is in the same direction as the desired low power station so there is no benefit from receiving antenna front-to-back ratio. Finally, at the low power protected contours we are adopting herein (see, paragraph 36, supra) acceptable reception will often be possible without an outside receiving antenna. For each of these reasons we feel that the traditional role of front-to-back ratios as a "safety factor" is appropriate in the low power service. By "safety factor" we mean it is a characteristic of receiving antennas that permits interference or ghosting to be eliminated in some instances, but we will not rely on it in determining where it is "apparent that interference will be caused."

39. Offset Operation and Frequency Tolerances. We are convinced by comments that carrier frequency offsets should be a permitted means of limiting or eliminating co-channel interference. To assure uniform, and we believe fair, treatment of applicants and licensees, we are adopting standards for low power offset operation. If an application proposes offset operation, an offset must be specified. The possible offsets are the same as those at which full service TV stations are authorized: zero, at the standard carrier frequencies for the channel; plus, with carrier frequencies 10 kHz above the zero offset carriers; and minus, with carrier frequencies 10 kHz below the zero offset carriers. The frequency tolerance of a low power station operating with a specified offset will be ±1 kHz, the same as the full service TV station frequency tolerance. The frequency tolerance for stations without a specified offset will be the same as the current translator requirements. When two stations (both low power or one low power and one full service) are to operate with different offsets (zero and plus, zero and minus, or plus and minus) the co-channel offset D/U ratio applies. When two stations are to operate with the same offset, or one or both stations do not specify an offset, the co-channel non-offset D/U ratio applies. See, paragraph 40, infra. Comments indicate that manufacturers are capable of producing equipment meeting the ±1 kHz frequency tolerance. Comments also convince us that even if only a small increase in equipment cost is involved, it is not justified for the vast majority of existing stations (and a significant number of proposed stations) that are located in rural areas where little or nothing would be gained by a tighter frequency tolerance.

40. D/U Ratios. We are adopting the desired-to-undesired ratios proposed in the Notice for UHF and in the Further Notice for VHF. No comments raised objections to the proposed values for VHF or the proposed co-channel values for UHF. In addition, no comments addressed the possibility raised in the Further Notice that low power to low power ratios could be different from low power to full service ratios. Lacking support or opposition, we are adopting the same ratios for predicting interference to either a low power or a full service station. Several parties note that the D/U ratios proposed in the Notice for adjacent channel and taboo channel relationships are mean receiver values from the 1974 Commission staff study 37/ and they argue for a more conservative approach where the D/U ratios would represent a level of performance exceeded by 90% of the tested receivers. The Electronics Industries Association, Consumer Electronics Group, representing receiver manufacturers, suggests that more conservative ratios be used for a period of five years. EIA indicates that receivers have improved noticeably since the 1974 tests and that they will continue to improve. However, EIA argues that additional time is required for the newer, better receivers to represent a larger percentage of the sets being used. Because of the industry representative's comments on receiver improvements, and the eight years that have passed since the tests were completed, we are of the opinion that use of

33/ E.g., Tri-State Television Translators, Inc., Docket No. 17654, and Wellersburg TV, Inc., Docket No. 17655, 15 RR 2d 1300 (1969). In this case, VHF translator systems in the Cumberland, Maryland, area were causing interference to the off-air reception of Washington, Baltimore and Pennsylvania stations. Several local residents outside the Grade B contour of these stations were able to receive the signals. The expense of modifying the translators to non-interfering UHF channels would have been prohibitive for the community-supported systems. In weighing the equities, it was concluded that protection of the distant signal reception of a small minority who had similar programming available from other distant full service stations would not justify the resultant service loss to the greater number of translator homes, many of which would not otherwise receive television service, because they could not afford CATV

34/ The individual circumstances of interference to a full service station beyond the Grade B contour vary so widely as to preclude any attempt to state hard and fast rules. In many circumstances, while reception may be possible, this service is relatively unimportant to viewers themselves because alternative signals are available to them--perhaps other full service television stations, translator service or cable service. While the varying circumstances require an ad hoc approach of case-by-case decision making, it may be useful to specify some of the factors that would influence our decision. We would view destruction of a viewer's only television service by a translator/low power station as extremely serious. Elimination of viewers' opportunity to view a particular television network signal also would be serious. As the service impaired becomes more redundant we would feel obligated to give more attention to the benefits obtained by the translator/low power service. We also would give less attention to interference received by viewers in special circumstances receiving a full service station that their neighbors do not receive, for example, reception caused by a viewer's location on the top of a hill or the installation of a receiving system far more sophisticated than that used by the viewer's neighbors. As our past precedents show, we also shall consider the value of the translator/low power service in terms of both the numbers served and the importance of this service to the viewers. Having discussed some of the factors we would consider in whether to terminate service by a translator/low power station we must emphasize that we expect to have to deal with very few situations of this nature. The translator service has a long history of operators successfully resolving interference problems by cooperative efforts with the viewers. We expect low power operators to continue this tradition. Translator and low power stations are secondary to full service stations, and we expect operators to engage in good faith efforts to resolve all complaints of interference to full service stations.

35/ This applies also to low power applicants that cause interference to existing translators. As we have indicated, we shall not authorize low power stations that do not meet our protection criteria to existing translators or low power stations. We have modified our low power protected contour to values that the record in this proceeding generally supports. If interference inside these protected contours results from a subsequent low power authorization and the stations involved cannot resolve the problem among themselves, the burden to correct the interference will be on the later entrant. We, of course, would expect the licensees to cooperate in resolving the problem; however, in view of the increasingly competitive nature of this service, we believe that a significant number of unresolved cases could reach the Commission. Therefore, we wish to establish now that, absent exceptional circumstances, we shall rely upon a "seniority system" for both VHF and UHF low power stations and translators. If both parties agree, we would permit two translator or low power stations to accept interference from each other, if there is no other way to authorize both and they create no additional interference to other authorized broadcast facilities. We shall not, however, permit a subsequent translator or low power station to cause interference to a currently existing translator, because this would result in destruction of existing service to the public, which is not in the public interest.

36/ For example, see, Report and Order, Docket Nos. 16004 and 18052, adopted May 29, 1975, which incorporated a terrain "roughness factor" into the FM and TV rules. However, see also, Stay, adopted April 28, 1977, 42 Fed. Reg. 25736 (May 19, 1977), where the Commission stayed indefinitely the effectiveness of the terrain roughness rules. We would expect that any general terrain correction factor that might be adopted would explicitly be extended to the low power service.

37/ W.K. Roberts and L.C. Middlekamp, A Study of the Characteristics of Typical Receivers Relative to the UHF Taboos, NITS PB-235 057 (June, 1974).

the proposed mean values is justified. Essentially, there are two reasons for this conclusion. On the basis of the above, we are convinced that most receivers currently in use actually perform better than the ratios indicate. In addition, we expect that, over the next few years, most new low power stations will exceed the protection criteria by a comfortable margin so there will be few, if any, problems of actual interference. Thus, some additional time will exist during which the average receiver is expected to improve. Finally, we do not wish to reduce the manufacturers' incentive to continue to improve those receiver characteristics that affect interference. Inferior receivers, at some point, will be exposed to undesired signals that will produce interference. We believe that this is preferable to adopting standards that protect inferior receivers, at a cost of reducing the number of low power stations that can exist.

41. Circular Polarization. In comments discussing transmitter output power, General Electric Company proposes that transmitters with twice the normally permitted power be allowed to feed a circularly polarized transmitting antenna. Circular polarization is a recognized means of improving reception within a station's service area. It commonly is achieved by transmitting both a horizontally polarized and a vertically polarized component of the signal with a fixed phase relationship between the components. The addition of a vertical component does not increase the distances at which a station provides service or causes interference. Full service stations are permitted to transmit a vertically polarized component as long as it does not exceed the horizontal component in any direction. In the past, through a waiver process, translators have been allowed to transmit a circularly polarized signal. However, they have been required to use two transmitters or a transmitter with multiple final amplifier stages, and two transmission lines connecting the transmitters to the antennas. We believe that it is both reasonable and appropriate for us to amend our rules herein to permit low power circular polarization and to permit a higher transmitter power output when a circularly polarized antenna is used.

42. Canadian and Mexican Notification. A translator notification procedure has evolved for stations in the Canadian border area. Canada is notified of 1 watt VHF translators within 10 miles of the border, and 10 watt VHF translators and 100 watt UHF translators within 20 miles of the border. Because 100 watt VHF translators and 1,000 watt UHF translators have required a channel in the Table of Assignments, they have been coordinated if they were in the area covered by the full service TV Agreement, within 250 miles of the U.S.-Canada border. There is no established protocol for notifying Mexico of translators in the border area. The full service TV Agreements with Mexico require coordination of VHF stations within 250 miles of the border and UHF stations within 199 miles. We currently are formulating a procedure for both Mexican and Canadian notifications. Until new agreements are reached, low power authorizations in the border areas (except those that would not require notification under the above standards) will be conditioned on Canadian or Mexican concurrence.

43. Cable Protection. The National Cable Television Association, with Spectradyne, has voiced concern that low power stations could cause interference to cable systems at the headend antenna where TV rebroadcast signals are received, cable distribution systems and at subscribers' receivers. To protect cable, NCTA would have the Commission license low power stations only on UHF channels and put the burden of frequency coordination and correction of interference on the low power operator. The Association of Maximum Service Telecasters, the Corporation for Public Broadcasting, the National Translator Association and others oppose NCTA, arguing that the potential for interference to cable is not as serious as NCTA fears and that, in any case, cable's unregulated use of radio frequencies is predicated on its nonpreclusion of broadcast uses of the band. NTIA supports a scheme substantially similar to that proposed in the Notice, whereby the Commission would consider well-documented objections to low power applications based on potential headend interference, but that other low power/cable interference is to be solved between the parties, with primary responsibility for correction of cable-related problems on the cable operator. In the interest of spectral efficiency, we have decided not to limit low power to the UHF spectrum. We are aware that, on occasion, interference problems have arisen between cable and full service stations on VHF channels. However, we believe that it would be spectrally inefficient to preclude low power stations from the VHF band altogether, when there are many locations where this will not occur. We do not feel it necessary to restrict the low power operator's range of choice between VHF and UHF frequencies, which may depend on factors such as cost differential, channel availability and coverage potential.

44. We believe that, with one minor modification, the cable/low power interference rules originally proposed generally will be adequate to control potential interference problems with minimal disruption to existing service. The rules are as follows:

> 1. The low power station operator is strictly responsible for taking immediate corrective action when an interfering condition to any other service results from operation in violation of the Commission's technical standards, or from improper maintenance. 38/
>
> 2. The cable operator generally is responsible for correcting interference in the cable distribution system and at subscribers' sets. 39/
>
> 3. The Commission will not knowingly authorize a low power station that is likely to cause serious interference to reception at an existing cable television headend. If this does occur, the parties will be encouraged to settle the matter between themselves, in light of the Commission's first-come, first-served policy, that will favor the pre-existing service.

Because the Commission has no computer data base of cable headend locations and stations received, or of channels used elsewhere in the cable distribution system, we have no means of considering cable systems in our automated processing procedures. Where we receive documented submissions raising a substantial and material question that a proposed low power station will cause serious interference to a cable system, we shall designate the application for hearing, pursuant to Section 309 of the Communications Act. 40/ However, as we have said, where an operational low power station causes interference to a pre-existing cable headend, we expect the parties to settle the dispute among themselves and come to the Commission only as a last resort. We would afford the earlier entrant, whether it be the cable system or the low power station, favorable consideration over the later one, and we would expect this to be a factor in their negotiations.

45. With respect to other interference problems, e.g., "local pick-up" interference at the television receiver, we do not find a sound basis for affording formal protection to cable systems in general. 41/ Cable's use of radio frequencies is based on its nonpreclusion of broadcast uses; therefore there is no basis for affording cable such formal protection. 42/ On the other hand, we find merit in NCTA's contention that some interference problems may occur frequently and be expensive for cable operators to correct. Various means to alleviate interference from broadcast stations may be available to cable operators. In some instances, the cost of correction would not be prohibitive, and would more easily be borne by the cable operator. See, Oregon Broadcasting Company, 20 F.C.C. 2d 246 (1969). We also note that our decision to restrict VHF translators and low power stations to 10 watts except where a station is proposed on an assigned channel further will reduce the magnitude of the problem. In the Notice we proposed to allow 100 watt operation in any situation where the co-channel and adjacent channel full service mileage separations were met. As a result of our decision not to extend 100 watt operation beyond assigned channels, cable operators will no longer have to accept the consequences of 100 watt VHF translators or low power stations except in locations where they already were aware of the possibility of a VHF full service station. The comments have persuaded us that one additional circumstance, however, does require special consideration. Where a new translator or low power station will cause interference to the output channel of an existing cable converter, we believe that the cable system may deserve some protection. In view of the minimal preclusive impact this will have (foreclosing at most one VHF channel from local use by translators or low power stations), we find this a reasonable accommodation to make to a cable operator who already has gone to considerable effort to minimize the system's use of broadcast spectrum by using a converter. We believe that this possibility warrants extension of the "first in time, first in right" policy we are adopting with respect to headend interference. Not only will this achieve equity between the parties, more importantly, we believe that in this circumstance it best serves the public interest to protect an expectation of continued service that may have arisen over time, instead of permitting its degradation by a later entrant. Given the small number of cases in which this should occur, we believe that the best way to handle the situation is via documented objections filed by the cable operator operators to applications of translators or low power stations that will be both co-channel to the output channel of existing converters and close enough to generate local pick-up problems. 43/ We continue to encourage private resolution of all cable/low power interference problems, informed by our policy to favor the earlier spectrum user in the headend or converter situations. Therefore, we are amending our rules explicitly to state that, in the event of cable/low power interference, the first user of the frequency, whether cable or low power, will have priority when interference precludes joint use in these two circumstances, and the later entrant will be responsible to correct the interfering condition. The cable operator will be responsible to correct all other interfering situations. See, Appendix A, §74.703(d).

46. Land mobile service. The 1979 World Administrative Radio Conference recognized the potential for shared Land Mobile/Broadcast use of the frequencies between 512 and 806 MHz (TV channels 21 through 69). Assuming the WARC agreement is ratified by the U.S. Senate, the Commission will be permitted, if it wishes, to authorize both land mobile and broadcast stations in this spectrum. In this regard, we intend to implement procedures for the processing of LPTV applications that take into account the potential for such sharing in and near major urban areas where the greatest long-term needs for land mobile channels exist. Specifically, we shall examine all low power TV applications within at least a 100-mile radius of the ten largest U.S. metropolitan areas to determine what accommodation, if any, is possible if we decide to provide some land mobile spectrum, while, at the same time, not unduly diminishing the spectrum available for low power television. (We are most concerned with: Boston, Chicago, Dallas, Detroit, Houston, Los Angeles, New York, Philadelphia, San Francisco, and Washington, D.C.) In effect, we shall attempt, through a staff study and our application processing

38/ This provision applies not only to cable, but to all services.

39/ As discussed in paragraph 45, infra, we are persuaded that the special case of co-channel interference to the output of a set-top converter requires a different approach.

40/ See, H & B Communications Corporation v. FCC, 420 F. 2d 638 (D.C. Cir. 1969). However, as noted above, pre-grant hearings on cable/low power interference issues will be authorized only where CATV systems are able to show the potential for interference with sufficient certainty and specificity to warrant designation of the issue for hearing. See, Washoe County School District, File No. BPTTV-6096, FCC 81-533, released December 3, 1981; Capital Communications, Inc., File Nos. BPTTV-800311IC and BPTTV-800312IB, FCC 81-534, released December 4, 1981.

41/ Microband makes an argument for protection of Multipoint Distribution Service down-converters that operate on Channels 12 and 13. We believe the same rationale applies to MDS use of radio frequencies as to cable and, accordingly, we are not extending such protection, but expect the parties to any such disputes to settle them privately.

42/ See, e.g., Memorandum Opinion and Order, Heart of Texas TV, 25 F.C.C. 2d 754 (1970); reconsid. denied, 27 F.C.C. 2d 205 (1971). While this case holds that cable systems must alter facilities to permit VHF translators, the text evinces the Commission's flexible approach, mandated in H & B Communications Corporation, supra, n. 39, of attempting to accommodate as many competing interests as possible in such situations. Accord, San Juan Nonprofit TV Association, 22 F.C.C. 2d 371 (1970).

43/ Unlike consumer electronics products such as TV games and VCRs, cable converters normally do not come with a switch to change the output between two adjacent channels. If they did, then the cable problem could be solved simply by switching to the channel unused by the translator or low power station.

procedures, to determine what impact additional land mobile sharing with low power TV has in these cities. Also with respect to land mobile operations, we note that a number of parties have decried the protection standards we proposed for land mobile systems now sharing VHF frequencies with broadcast users. The UHF taboos, however, still are a matter of study. Pending final resolution of this issue, we are inclined to adopt the standards proposed in the Notice for the protection of land mobile stations, with a few modifications urged in comments. We do not believe that these standards normally will result in interference, and we conclude that they are practicable, at least on a short-term basis. However, to the extent that interference does result, low power stations are being authorized on a secondary basis to all stations in existing primary allocations and must both correct whatever interference they cause or cease operation and accept whatever interference they receive from stations in the primary allocations. Also, to protect the Offshore Radio Telecommunications Service operations on Channel 17, we are adopting somewhat more restrictive standards for low power stations in the Gulf of Mexico. We believe that this is possible without significantly reducing the area within which Channels 16, 17 and 18 can be used, because existing full service stations on related channels and the Channel 17 Houston land mobile allocation leave little of the Gulf area with these channels available. Further, the area where Channels 16, 17 and 18 otherwise might have been used are for the most part sparsely populated with a large number of other UHF channels available for low power use. Therefore, we are adopting rules prohibiting Channel 16, 17 and 18 low power stations in the following areas: (1) Channel 17 will not be available in the area south of 31° 30' North Latitude, west of 86° 30' West Longitude and east of 95° 30' West Longitude; (2) Channels 16 and 18 will not be available in the area south of 30° 00' North Latitude, west of 87° 00' West Longitude and east of 95° 00' West Longitude. A computer review of translator stations and applications and pending low power and translator applications disclosed only two on these channels within these areas, both for Channel 16 at Galveston, Texas. Because Galveston is 40 miles from Houston, within the Channel 17 land mobile protected contour, these applications cannot be granted, regardless of the ORTS protection standards. The Commission also is aware of two petitions for rulemaking, one filed by the Offshore Telephone Company (RM-3924) and the other by the Sheriff's Department of Los Angeles County (RM-3975), both requesting nonbroadcast use of portions of the UHF-TV broadcasting spectrum. Our action today could have a negative impact upon the possibility of a favorable outcome on either of these petitions. Based upon our initial analysis, it appears that some degree of sharing between the Offshore Telephone Company use of channels 15 and 16 and low power TV may be possible. On the other hand, the mutual accommodation of the Sheriff's petition and low power TV seems to be considerably more difficult, if not impossible. Again this expectation is based on very preliminary analysis, and some possibilities for land mobile sharing still may exist even with significant development of low power TV. However, due to the strong public support and demand for low power TV, we do not consider it to be in the public interest to delay this proceeding to review further these two petitions, particularly because the Commission has not yet even determined whether petitioners have made a threshhold showing warranting rulemaking. After further analysis has been completed, these petitions will be accommodated through separate proceedings and to the extent the Commission determines appropriate.

47. Auxiliary Services. The Notice proposed that low power stations have access to auxiliary broadcast frequencies, where available, for studio-to-transmitter links and remote broadcast pickups. Subparts D, E, F and H of Part 74 of the Rules cover these uses. Low power licensees are eligible for remote pickup broadcast station licenses, under Subpart D. Because in BC Docket No. 81-793 we are proposing to delete Section 74.603(b), to eliminate use of aural microwave spectrum in connection with television transmissions, we shall not license this spectrum to low power licensees, until and unless resolution of Docket 81-793 permits. The present rules governing television translator microwave relays in Subpart F permit their use in connection with translators only to obtain permissible TV programming; the frequencies may not be used in connection with program origination. Television translator relays are accorded the lowest priority in use of the microwave frequencies under our present rules, see, Section 74.602(h). As part of an originating broadcast service, low power stations should be directly eligible for television microwave assignments for STLs, intercity relay and/or TV pickups, and Section 74.632(a) will be amended accordingly. The Commission recently initiated a proceeding to establish new licensing policies for television broadcast auxiliary stations, BC Docket No. 81-794. 44/ The Notice of Proposed Rule Making in that docket encourages private frequency coordination in the assignment of television auxiliary microwave frequencies and proposes the establishment of priorities for such assignments. The Notice seeks comment on the proper place for low power stations in the hierarchy. Because there was little commentary on this issue in the instant proceeding, and because BC Docket No. 81-794 is intended to encompass the entire panoply of users of this spectrum, we shall defer any possible modification of the present priority afforded to television translator relays, and leave resolution of the priority of low power stations to BC Docket 81-794. Finally, we are amending Section 74.832, Subpart H of the Rules to make low power television licensees eligible for low power auxiliary stations 45/, as well as Section 74.432(a), audio remote pickup stations.

IV. Technical and Engineering Requirements

48. The Notice addressed a number of technical issues not strictly related to spectrum priority. See, Notice, paragraphs 63 through 67, 45 Fed. Reg. at 69188, 69189. We did not receive a great deal of commentary on this subject, possibly because we are maintaining rather than changing most of our current regulations in this area. Nevertheless, it remains our belief that the technical aspects of low power operation are critical to its success as a new broadcast service and to its coexistence with existing services. We emphasize that we shall require strict adherence to the technical standards, both interference-related and others, adopted herein for low power stations.

44/ FCC 81-537, released November 25, 1981.

45/ In this connection, we shall state here that we do not see the necessity of changing the name of the low power television service, as some parties have suggested, either because the term "low power" itself has a negative connotation or to avoid confusion with low power auxiliary stations. We believe a greater amount of confusion is likely to result from changing the name of the low power television service at this point.

49. Transmitter and Other Equipment Standards. We are retaining Section 74.750, which requires type acceptance of low power transmitters. Low power STV operations must use a Commission-approved encoding system. Section 74.736, which governs out-of-band emissions, will remain in force. Section 74.761, requiring frequency tolerance maintenance, will continue to be enforced. Where offset operation is proposed, transmitting equipment with the stability needed to meet a stricter frequency tolerance will be required. See, paragraph 39, supra. While we are amending Section 74.734 to require an operator in attendance under some conditions (see, paragraph 95, infra), we shall continue to enforce Section 74.734(a)(6), which requires observation for ten continuous minutes per day of the off-air signal of translators employing modulators. We shall require the transmitting equipment used by low power stations to comply with those existing provisions of Section 74.750 that relate to the prevention of interference. However, we are not adopting technical operating standards for the transmitted sync pulse and blanking wave forms, color burst or audio distortion. Our concern in regard to low power technical standards is primarily avoidance of objectionable interference. We would hope that marketplace considerations will provide additional incentive for low power licensees to maintain high quality signals for viewers.

V. Applications

50. Form 346, as revised for use by both translator and low power applicants, continues to seek information regarding the citizenship, character and financial qualifications of the applicant, as well as technical aspects of the proposal, as enumerated in Section 308(b) of the Communications Act and our rules and regulations. 46/ Without opining on their continued vitality, we shall continue to enforce the minimum qualifications to hold a broadcast license in the low power service, leaving the possible modification or curtailment of such qualifications to proceedings designed for that purpose, e.g., Notice of Inquiry, Gen Docket No. 81-500, 47 Fed. Reg. 40899 (August 13, 1981). 47/ It goes without saying that we believe that the low power service is an ideal candidate for any modifications of qualifications that are accomplished in other proceedings. However, because the Commission intends to examine these issues in separate proceedings in the future, we shall not make changes at this time.

51. We also envision several simplifications in application processing procedures for low power applications. It is consistent with the spirit of Gen. Docket No. 79-137, Revised Procedures for the Processing of Contested Broadcast Applications, 72 F.C.C. 2d 202 (1979), and with the secondary nature of the low power service, that low power processing procedures be streamlined to the extent practicably possible. We emphasize, however, that we intend to maintain strict standards for acceptance of applications. A low power application must be complete and sufficient to be accepted for filing. Applications with blatant defects will be returned. This policy represents a departure from the standard set out in Section 73.3564(a) of our Rules, under which "substantially complete" applications are acceptable for filing. It resembles, rather, the acceptance criteria of Part 22 of our Rules, which requires complete applications, and return of blatantly defective applications. See, e.g., Sections 22.31(b)(2) and 22.32(b)(1) of the Rules. Under our present broadcast rules, an application that is not grantable because it is incomplete still may be acceptable for filing, because it is not "patently defective" and it is "substantially complete." See, James River Broadcasting Corp. v. FCC, 399 F. 2d 585 (1968). On the other hand, clearly deficient applications may be returned. Henry M. Lesher, 41 R.R. 2d 1593 (1977). The Commission and the courts, in applying this standard, have emphasized that administrative fairness requires full notice to parties whose rights may be affected by our rules regarding what is required of them to comply. Where such notice is afforded, the Commission may require strict compliance. Ranger v. FCC, 297 F. 2d 240 (1961). It is open to us to modify our acceptability standards as they apply to low power and translator applications, so long as we do so explicitly and with good reason:

> There is also an interest in procedures and administrative techniques that enable the Commission to handle its work load efficiently, and with optimum use of limited administrative resources. Perhaps the Commission can accommodate the various interests by adopting administrative expedients that, for example, explicitly require all applications to be letter-perfect when filed.

Radio Athens, Inc. (WATH) v. FCC, 401 F. 2d 398 (D.C. Cir. 1968). We now do so, for the following reason. The Commission's limited resources and the large number of low power applications to be processed simply will not permit the staff to coach applicants in correcting defects or omissions in applications that have been filed, as sometimes has been the case in the past. Defective low power applications will be returned summarily, and if they are resubmitted with perfecting amendments, they will be placed at the end of the processing line, unless passage of a cut-off date precludes consideration altogether, in which case the resubmission will be returned. Because explicit notice of change in policy was not afforded in the Notice of Proposed Rule Making in this proceeding, pending applicants will have the opportunity to perfect their applications without loss of rights that arguably may have accrued during the ninety day amendment period discussed in paragraph 56, infra.

52. Once an application has been accepted for filing, it will be placed on a cut-off list, which will set the deadline for the filing of competing applications and petitions to deny. Applications received by the cut-off date that are accepted for filing will be examined for exclusivity,

46/ The information that will be required on revised Form 346 is attached as Appendix B. OMB approval must be obtained. Forms 347 and 348, the license and renewal forms, also will be revised to reflect the rule changes contained herein. Until the computer to be used in processing is operational, we shall continue processing rural, freeze-exempt applications manually. In order to facilitate these efforts, we have appended a request for a topographical exhibit to the application form. As indicated, this additional information may be supplied at the option of the applicant. However, it could considerably expedite the processing of the application.

47/ We are, however, simplifying the showing required to demonstrate financial ability to a certification requirement, in conformity with our practice with other broadcast applications.

and those determined to be mutually exclusive with applications that appeared on the "A" cut-off list will be placed on a "B" cut-off list, that sets a deadline for petitions to deny; no competing applications may be filed to "B" list applications.

VI. Comparative Procedures and Criteria

53. The Notice of Proposed Rule Making proposes the following system of comparative evaluation, to enable the Commission expeditiously to decide among competing applicants:

(1) Notification of mutual exclusivity to applicants;
(2) Thirty days for amendments to remove mutual exclusivity;
(3) Pre-designation conference among applicants and staff;
(4) Designation of mutual exclusivity and paper hearing concerning:
  (a) qualification issues;
  (b) technical aspects of the applications; and
  (c) claims to preference points.
(5) If no single applicant emerges victorious from the paper hearing, random selection among qualified applicants.

The Notice proposes the following comparative preference points:

(1) First applicant to file a complete and sufficient application; 48/
(2) Over fifty percent minority ownership; and
(3) Noncommercial applicant proposing noncommercial service to the general public.

The preferences would be cumulative and be worth one point each, so that a first-filed minority applicant would have two points and would win the frequency over a competing noncommercial applicant, for example. This comparative system contains three departures from our customary method of comparing mutually exclusive applications: a paper hearing would be held on designated issues instead of a hearing with oral testimony; there are only three comparative criteria, and they have yes-or-no answers; and a lottery would be used to decide among applications that are equal in comparative points. These modifications were intended to "avoid head-to-head competition among applicants, with its profound drain upon the resources of the parties and the administrative agency." Notice, 45 Fed. Reg. at 69189.

54. These comparative criteria and procedures explicitly were proposed as a "first draft" in the Notice, and we promised to consider comments advancing other approaches. The comments addressing the comparative process are voluminous, with many opposing the notion of curtailed comparative procedures and others proposing much more elaborate preference systems, while applauding the basic concept. Among the many factors favoring abbreviated comparative procedures for low power applications are that low power is a secondary service; that prolonged and elaborate comparative proceedings may impose serious financial barriers for new entrants into the industry; that for a new service it is difficult to predict which comparative factors ultimately will be the most significant or desirable; that, without a prohibition on trafficking, stations may change hands soon after construction, mooting an elaborate preference system; and that the Commission simply does not have the resources promptly to handle the volume of comparative hearings required to resolve the plethora of mutually exclusive low power applications. We find these arguments convincing, and we think the solution is to have largely paper hearings among competing applications, as detailed below. We believe the modifications in our original proposals discussed in paragraphs 65 through 68, infra, take into account the somewhat contradictory goals of prompt authorizations and a time-consuming, comprehensive examination of all relevant information. In discussing the steps in the process, we shall address each of the proposals from the Notice in the order listed in paragraph 53 above.

55. Notice of Exclusivity. Applicants will be notified that their applications are mutually exclusive with a (or several) application(s) by their inclusion on a "B" cut-off list. Mutually exclusive applications will be designated for hearing. However, mutually exclusive applicants may, and are encouraged to, cooperate in private settlement endeavors to remove mutual exclusivity. Applicants should explore various options, such as buying out a competing applicant or agreeing to a time sharing arrangement, keeping in mind that settlement agreements must be submitted for Commission approval, pursuant to Section 311 of the Communications Act, and that we are committed to expeditious processing of all settlement agreements that eliminate the necessity for comparative hearings. It will facilitate such efforts that the Commission does not consider changes in ownership or control of low power television applications to constitute a major change entailing competing applications, although these are subject to petitions to deny. See, paragraph 77, infra. Accordingly, applicants can alter their ownership structure via amendment without losing cut-off protection. We point out, however, that our policy prohibiting amendments affecting ownership that would result in comparative advantage after the "B" cut-of date has passed will apply in the low power context.

56. Ninety Day Amendment Period. All present applicants will be afforded a specific ninety day period during which they can amend to bring their applications into conformance with the final low power rules. On account of the large number of applications, we may, as resources permit, stagger our requests for amendments. This will be announced via public notice following the effective date of this Report and Order. 49/ We have devised a phased approach to the processing of pending applications. See, Appendix E.

48/ This preference would only be operative for applications filed after the close of the rule making.

49/ As part of this process, we wish applicants to ensure that they have provided appropriate antennas, with model numbers, a correct polar diagram, including the total polar plot, accurate overall height above ground of the antenna and altitude of ground above mean sea level figures and accurate coordinates for the site proposed, which must reasonably be believed to be available for their use. Inaccurate information on applications delays the entire processing endeavor, and, under our newly-adopted strict acceptance standards, will result in nonacceptance of future low power applications.

57. General Processing Procedures. Applications that are mutually exclusive with applications already on published "A" lists will be placed on "B" lists. These "B" lists will be published, and will afford applicants notice of their mutual exclusivity. After the deadline specified in the "B" list for filing amendments and petitions to deny has passed, the mutually exclusive applications will be processed. If the applicants are able to resolve their mutual exclusivity in a manner acceptable to the Commission, the resulting application can be processed to grant. However, if the parties are unable to resolve their exclusivity, the applications will be designated for hearing. After these mutually exclusive applications have been designated for hearing, the Commission will begin processing the remaining applications.

58. Predesignation Conference. We are not making the initially-proposed predesignation conference with staff a formal part of the comparative process, because we believe settlements and accommodations can be accomplished expeditiously without Commission intervention, and our limited staff resources better can be utilized elsewhere. In light of the delays that, to some extent, will be unavoidable, should competing applicants be unable to resolve their differences via private negotiation, we strongly encourage all groups of mutually exclusive applicants to cooperate in private settlement endeavors and particularly to explore the possibility of time-sharing arrangements. 50/ As we have said, the Commission will attempt to consider settlement agreements submitted pursuant to Section 311(c) and (d) of the Communications Act and Sections 73.3525 and 73.3568 of the Rules in as expeditious a manner as possible. Indeed, such settlements will be given our highest priority and will be processed and granted before other pending applications, in the order in which the settlement agreements are received.

59. Designation. The designation orders will include issues raised in petitions to deny that raise substantial and material questions of fact that are in dispute and require a hearing for resolution. See, Section 309(e) of the Communications Act. These issues may include qualifications to hold a broadcast license under Section 308(b) of the Communications Act, as well as relevant comparative issues.

60. Issues not appropriate for designation. Because of the many differences between the low power television service and the existing full service television broadcast service, especially the secondary status of low power stations and their small service areas, we intend to limit the number of issues considered in low power comparative hearings to only those truly relevant to the situation at hand. One of the perennial technical issues considered in traditional hearings among mutually exclusive television applicants has arisen under the aegis of Section 307(b). 51/ When two competing applicants propose service areas that are to any degree different, the Commission traditionally has considered evidence on the amount of area and the population served by the competing applicants. This inquiry, undertaken in the interest of ensuring that the applicant proposing the most fair, efficient and equitable distribution of new service will predominate in the selection contest, 52/ has been one of the most time consuming and litigated issues addressed in the hearing context. 53/

61. We shall not consider arguments directed to Section 307(b) of the Communications Act 54/ in designating issues for low power applications, for several reasons. In the first place, the tiered processing program we are implementing (see, Appendix E) embodies a general Section 307(b) judgment that, of the 6,000 pending applications, those which fall within the most rural markets should be given priority over those proposing to serve more urban, and well-served, areas. We recognize that the rural authorizations may have a preclusive effect in more urban areas, and we believe that this is justified by the fact that the areas to which we are giving priority are more in need of service and that it represents fair and equitable spectrum allocation to favor them. Second, today's broadcast services may be considered quite mature, in a Section 307(b) sense. The Tables of Assignments for FM and television stations, Sections 73.202(b) and 73.606(b), and the allocation scheme for wide-area AM stations memorialized in Section 73.22, are intended to fulfill the Commission's Section 307(b) mandate. See, Logansport Broadcasting Corporation v. FCC, 210 F. 2d 24 (D.C. Cir. 1954); also see, Loyola University, et al. v. FCC, Nos. 80-1824 and 80-2018, slip op. (D.C. Cir., January 26, 1982). Finally, the existing array of television channel utilization will force low power into less well-served areas. The Television Table of Assignments distributed the available television allotments between large cities and less populated areas in a manner that balanced the natural gravitation of stations to large urban areas with high population densities with the need to reserve some spectrum capacity to serve the less profitable, low population density areas of the country. One result of this balanced distribution pattern is that in approximately the 50 largest markets no additional full-spaced television stations can be accommodated. Although the lower maximum transmitter power of low power stations will permit somewhat shorter coordination distances, this existing concentration of full service stations in and around the top 50 markets on every available channel will result in very few opportunities to add low power stations to locations that can serve the largest markets. Conversely, most of the locations where new low power stations can be spectrally accommodated will be outside of the top 50 markets, where the television band is not saturated. This is fortuitous in two respects. First, the lower construction and operation costs that will characterize low power stations promise to make their operation economically viable in areas with population insufficient to support a full service station. Second, and relevant to this discussion, this existing station

50/ See, Notice of Inquiry on Part-time Programming, 55 R.R. 2d 81 (1978); but see, Cosmopolitan Broadcasting Corp. v. FCC, ___ F. 2d ___ (D.C. Cir. 1982).

51/ 47 U.S.C. §307(b) provides that "[i]n considering applications for licenses, and modifications. . .thereof. . .the Commission shall make such distribution of licenses. . .among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same."

52/ We note that at its meeting on September 17, 1981, the Commission directed its staff to include in its upcoming legislative amendments a proposal to delete Section 307(b) from the Communications Act "since fair and equitable distribution of radio and television service generally had been established nationwide." See, F.C.C. News, Report No. 5068, Mimeo 003451 (September 17, 1981).

53/ This may well be because a "Section 307(b)" preference is considered dispositive over applicants who do not receive this preference. See, e.g., FCC v. Allentown Broadcasting Corp., 349 U.S. 348, 12 R.R. 2019, 2021 (1955).

distribution pattern, coupled with our requirement that low power stations protect the Grade B contours of all full service stations will result in the vast majority of low power authorizations being granted outside the top 50 markets. Thus, the assignment policies we are adopting for the low power service automatically will accomplish the concern we formerly addressed in our Section 307(b) hearing contests.

62. Second, the basic regulatory structure of this new service makes the application of our full service station Section 307(b) practices inappropriate. As discussed above, we are not requiring low power licensees to serve a particular community, to maintain any specified programming format, or to retain ownership of the initial license for a fixed length of time. Furthermore, because of their secondary status, what service they do provide may be preempted by the addition of a full service station too close to permit simultaneous operation. Given these characteristics, the added delay in authorizing new low power stations, and the great cost of an expanded or otherwise unnecessary hearing to the applicant, the Commission, and ultimately the public, cannot be justified.

63. The courts have held that neither Section 307(b) nor our particular past applications express rigid and inflexible standards. The Commission has a great deal of discretion in solving problems attendant to its responsibilities for providing a "fair, efficient, and equitable distribution of radio services." Television Corporation of Michigan v. FCC, 294 F. 2d 730 (D.C. Cir. 1961); 21 R.R. 2107; Logansport Broadcasting Corp. v. United States, 210 F. 2d 24 (D.C. Cir. 1954), 10 R.R. 2008; Federal Radio Commission v. Nelson Brothers Broadcasting Bond and Mortgage Co., 289 U.S. 266 (1933); WBEN, Inc. v. United States, 396 F. 2d 60 (2nd Cir., 1968), cert. denied, 393 U.S. 914 (1968). For instance, the Court affirmed the Commission in its determination that every initial licensing proceeding in which mutually exclusive applicants propose different communities need not present a Section 307(b) issue. Huntington Broadcasting Co. v. FCC, 192 F. 2d 33 (D.C. Cir. 1951), 7 R.R. 2030. In the new service before us today, we believe the inevitable allocation of the majority of low power stations to locations away from the top 50 markets, coupled with the secondary nature of the service these licensees will provide, creates a situation where none of the mutual exclusivities created by competing low power and translator applicants present a meaningful Section 307(b) issue. Therefore, consideration of Section 307(b) issues are not, in this instance, in the public interest. We do not intend this to constitute a relaxation of our concern for the Section 307(b) mandate. We remain committed to Section 307(b) determinations in the primary broadcast services. However, we believe that implementation of the low power proposal takes cognizance of the existing distribution of services. We further believe that the allocation procedures in this Report and Order will reduce the costs to all parties--society generally, the applicants, and the Commission--while allowing for greater flexibility for the market to fine-tune allocations. In accordance with this policy, we also shall not consider Berwick or suburban community issues. See, Berwick Broadcasting Corp. v. FCC, 20 FCC 2d 393 (1969).

64. UHF Impact. We find it difficult to envision a situation in which a VHF low power station will cause a substantial economic threat to a full service UHF station. Because their spectrum priority is secondary, low power stations always remain vulnerable to new full service entrants or existing full service modifications on interfering channels. In addition, our limit on maximum output power and our contour overlap prohibitions both place limitations on the coverage potential of low power stations. The coverage area of a full service UHF station inevitably will be many times greater than that of a low power VHF station. Under these circumstances, we see little point in extending our UHF impact policy to the low power service. This is particularly true at a time when, as a result of Congressional and Commission efforts, as well as the workings of the marketplace, the increasing vitality of the UHF service generally is making our policies designed to protect UHF stations from competition less appropriate. See, e.g., All-Channel Receiver Law, 47 U.S.C. §303(s); Report and Order, 21 F.C.C. 2d 245 (1970); Report and Order, 62 F.C.C. 2d 164 (1976); Final Report, UHF Comparability Task Force, Gen. Docket No. 78-391, P. Gieseler, et al., FCC, Office of Plans and Policy (September, 1980), available from NTIS, Springfield, Virginia. Neither do we anticipate designating low power/CATV interference issues in many cases. See, notes 39 and 41, supra. We also foresee few instances in which an allegation of harmful economic impact, made pursuant to Carroll Broadcasting Co. v. FCC, 258 F. 2d 440 (D.C. Cir. 1956), will meet the test of Section 309(e) and require designation for hearing, particularly in light of the secondary status and limited coverage potential of low power stations. Low power stations will have smaller coverage areas than full service stations. Therefore, their ability to garner advertising revenues on the basis of audience size will be less great. Similarly, their ability to divert revenues from existing full service stations will be limited. Finally, their secondary status, which makes their continued existence uncertain, could hinder their ability to sustain audience and advertisers. In light of these facts, we do not see a likelihood of many full service stations being able to document a prima facie case that a low power station will so impair their ability to maintain its revenues that a net loss of public service programming will result. Today, where several full service television stations exist in many major markets, it is even less likely that a low power entrant will have an economic effect so severe as to result in loss of public service programming on all the full service stations. Our holding in Monroe County Board of Commissioners, 42 F.C.C 2d 683 (1979), that the "Carroll" doctrine should not apply to cable systems, is consistent with this belief and with the record adduced in the instant proceeding. Also see, Wrangell Radio Group, et al., 75 F.C.C. 2d 404, 407 (1980). 55/

65. Hearing. It is our intention to minimize the expense of establishing low power stations. This goal requires that we not subject applicants to long and costly comparative hearings. Moreover, if we flood the hearing process with numerous low power proceedings, we shall further delay the resolution of all other hearing proceedings including those involving construction permits for full service facilities. Therefore, it remains our intention to utilize a random selection process when and if that becomes practicable. Applicants for licenses in this service, therefore, are advised that their applications, if mutually exclusive with other applications, may be subject to revised processing procedures, standards and qualifications in connection with implementation of a system of random selection. At this point, however, we must utilize most of our existing hearing procedures. Nevertheless, we shall make certain modifications in those procedures in order to reduce or eliminate the number of days low power applicants will have to spend in the hearing room.

66. The Comparative hearing process can be expensive and time-consuming. 56/ For these reasons, we have studied steps that could be taken to minimize the expense and long delays normally inherent in comparative proceedings involving broadcast applicants. Our goal has been twofold: first, to assure that applicants are given an opportunity adequately and fairly to present their cases and, thus, to demonstrate why they are the "best" applicant within the context of the criteria established by the Commission; and second, to conclude the administrative process and provide service to the public as expeditiously as possible. We believe that we have identified several procedural actions that can facilitate this goal.

67. Based upon our review of our application processing and hearing procedures, we believe that it may be possible to shorten both the evidentiary and appellate aspects of the process through the use of a modified paper proceeding directly administered by the Commission. 57/ Under the modified procedure set forth herein, the Commission en banc will receive the evidence and issue the final decision as to which applicant should be awarded the license. 58/ Also, unlike in traditional hearings, the Broadcast Bureau will not appear as a party, unless otherwise ordered by the Commission. Instead, the Bureau will serve as advisors and staff support to the Commission with responsibility for reviewing and analyzing the pleadings and preparation of a draft of the final decision.

68. The Commission's low power application processing procedures call for the issuance of two cutoff lists: the "A" list invites competing 59/ applications and the "B" list invites only petitions to deny. We shall begin the low power television comparative process upon issuance of a modified "B" list. This notice will include the hearing designation order and will set forth the standard comparative issues and the pleading schedule to be followed by applicants and other interested parties to the proceeding.

69. Specifically, the "B" list will specify that each applicant must submit in writing its direct case 60/ within the approximately 30 day

55/ In addition, the operational differences between the low power service and full service television stations should make it unnecessary to investigate in hearing many of the issues raised in petitions to deny that we have designated in full service hearings in the past. For example, issues related to ascertainment and programming will not be relevant. Also, it rarely will be necessary to explore economic or financial issues, in light of the self-certification format of the application form. In addition, the fact that strict enforcement of the twelve-month period for construction will provide conclusive demonstration of whether an applicant's finances were sufficient makes it less important to consider this issue in hearing. Our general policy in favor of permitting free transferability of stations to some extent reduces the general efficacy of painstaking scrutiny of applications in the hearing process. Finally, as we have indicated, we believe that one principal way to expedite the hearing process is to discourage the filing of pleadings on issues that, taken alone, would be less than dispositive of the challenged application. We envision relatively simple designation orders, including only unresolved substantial and material issues of fact necessary to the disposition of the applications and the comparative criteria.

56/ Pursuant to Section 309(e) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(e), mutually exclusive applications for the same frequency are entitled to simultaneous consideration before a grant of any of the applications. See, Ashbacker Radio Corp v. FCC, 326 U.S. 327 (1945). The Commission traditionally has afforded mutually exclusive applicants a "trial-type" evidentiary hearing and has established an elaborate set of procedural rules governing the process. See, 47 C.F.R. §§ 1.201-1.364.

57/ See, 5 U.S.C. § 556(d); 47 C.F.R. § 1.248(d).

58/ See, 5 U.S.C. § 556(b); 47 C.F.R. §1.241(a). It is within the Commission's discretion to implement largely paper hearings pursuant to Section 309(e) with the Commission presiding, under the Administrative Procedure Act. Also see, WJR v. FCC, 337 U.S. 265, 275 (1949); Bell Telephone Company of Pennsylvania v. FCC, 503 F.2d 1250 (3d Cir. 1974); cert. denied AT&T v. FCC, 422 U.S.1026, reh. denied 423 U.S. 886 (1975); RCA Global Communications, Inc. v. FCC 559 F.2d 881 (2d Cir. 1977), reh. 563 F.2d 1, appeal after remand 574 F.2d 727 (1978). Indeed, it virtually is essential that we utilize the abbreviated hearing procedures outlined herein, with only a limited right for oral testimony, at the discretion of the Commission, in light of the concomitant savings of time and resources, both for applicants and the Commission itself.

59/ Under our current procedures, the "A" list invites both petitions to deny and competing applications. Pursuant to the modified procedures set forth herein, filing of all petitions to deny will be delayed until issuance of the "B" list, which will identify all non-mutually exclusive applications, as well as mutually exclusive groups.

60/ The direct case is to be limited to 50 pages in length including any index to subject matter, argument, appendices, and other attachments. An original and one (1) copy of the pleading should be filed. The pleading must be typewritten, double-spaced, on 8 1/2 by 11 inch paper.

54/ In the Table services, TV and FM, the fairness of the allocation is dealt with primarily in conjunction with the rule making that amends the Table to reflect the frequency assignment. Applications filed under Sections 73.203(b) and 73.607(b), which permit construction of a radio or television station within ten or fifteen miles of the community of assignment, represent the only instances in which Section 307(b) issues generally arise in the application process. In AM radio, where there is no table of assignments, Section 307(b) issues more frequently arise in connection with competing applications. Clear resolution of the Section 307(b) issue in favor of one qualified applicant over another is dispositive, and no further comparison of applications is made. Low power resembles AM, in that there is no table of assignments, although AM is a primary service, unlike low power.

time period set forth therein. In addition to spelling out those facts and characteristics of its proposed operation that the applicant wishes the Commission to consider, the direct case also should include any matters that normally would be raised in a petition to deny against another applicant. Within twenty (20) days after the filing of the direct case, each applicant must submit its written rebuttal case, 61/ including oppositions to any matters raised in any petitions to deny filed against its application. Twenty (20) days thereafter each applicant may submit its written surrebuttal case, 62/ including any replies to oppositions to matters raised in its petitions to deny filed against other applicants. With its surrebuttal case, each applicant also may submit any request it has for oral hearings and cross-examination, the subject matter of the desired cross-examination, and the basis therefor. Any request for oral hearing must state specifically the evidence that would be presented, the reason why the evidence is material to determine the merits of the proceeding, why oral hearing with cross-examination is necessary to bring it out, and what evidence already in the record would be contravened (with specific identification of the pleading and the page number). All material statements contained in any pleading must be verified by the person offering the statement--i.e., the facts must be sworn to as true and within the specific knowledge of the person offering the statement.

70. Within 30 days after the filing of the surrebuttal case, each applicant must file a proposed decision. 63/ This decision must set forth such information as the Commission would find necessary to make its decision, including a brief summary of the facts, proposed findings (including findings on all allegations raised in any petition to deny), and ultimate conclusions.

71. The Commission will attempt to dispose of virtually all low power comparative cases under the paper hearing procedure set forth herein. The Commission, of course, will review requests for oral testimony at the same time the staff recommended decision is submitted for consideration. However, oral testimony will be ordered only where it is shown that the paper proceeding alone will prejudice a party; 64/ where a substantial and material issue of decisional significance cannot adequately be resolved without oral hearing; 65/ or where designation of the matter for oral testimony would be [illegible] 66/ Denial of an oral [illegible] request will not be made in a separate decision. The request will be deemed denied where the Commission decides the case on the basis of all the pleadings submitted.

72. Should the Commission determine that oral testimony is necessary, it will order that the particular issue or issues be heard by an Administrative Law Judge. The issue or issues to be tried will be set forth in an interlocutory order, which also will set a pre-hearing conference, to establish a discovery and trial schedule. At this stage, the applicants may avail themselves of the discovery procedures normally available in adjudication cases, but not before. After the Administrative Law Judge issues the initial decision on the issue[s] being tried, it may be appealed directly to the Commission.

73. With these procedures and the cooperation of applicants, we believe that most low power proceedings will be resolved on the basis of entirely written submissions within reasonable time frames. With this goal in mind, we shall require strict compliance with procedural dates. Applicants that fail to adhere to established procedural dates or that, in any way, seek to delay resolution of these hearings are subject to having their applications dismissed for failure to prosecute. See, Section 73.3568(b) of the Rules. We encourage expedition, and we are concentrating staff resources with an eye to facilitating low power application processing; nevertheless, mutually exclusive applications that require hearings inevitably will suffer delay. We anticipate that this knowledge itself will act as an incentive to private settlements.

74. Comparative Factors. In the interest of administrative simplicity and efficiency, as well as to promote particular service objectives, the Notice proposed three tentative comparative criteria, for which an applicant either qualifies or does not, without more. In order to refine these proposals, we explicitly sought comments in this area. We take the wide range of commentary received to be an indication of the controversial nature of our proposal. Some parties praise the comparative factors as proposed. Others suggest various refinements on the up-or-down nature of the preferences themselves, e.g., consideration of factors such as participation of ownership in management, program proposals, past broadcast record and civic involvement, as part of the minority ownership preference. Still others suggest preference systems more elaborate than the traditional comparative hearing criteria. See, Policy Statement on Comparative Broadcast Hearings, 1 F.C.C. 2d 393 (1965). Finally, there are those who advocate that nothing short of traditional hearings using traditional comparative criteria are permitted under the Communications Act.

75. The commenters raise problems with two of the preferences proposed. Commenters generally disapprove the preference to be afforded to the first-filed complete and sufficient application. They argue that this preference has little relevance to the quality of service that may be expected from an applicant. The first come, first served preference initially was proposed for two reasons: we wished to encourage complete and sufficient applications; and we believed that in a new, uncharted service there might be a need to provide an incentive for parties to use the previously fallow spectrum. The avalanche of interim applications belied the necessity of a measure to this end, however. We still wish to encourage complete and sufficient applications. However, we are convinced that we can better do this via strict adherence to our policy of returning deficient applications, without regard to any cut-off protection that might be considered to have vested. We shall adopt the single standard for acceptance of low power applications set out in Sections 22.31(b)(2) and 22.32(b)(1) of the Rules and we shall require all applicants to meet that standard. We therefore shall not accord any preferential treatment to first-filed applications. 67/

76. On examination of the record, we perceive confusion about the notion of noncommercial or public low power stations. Noncommercial low power service is defined only in the context of the preference proposed for applicants that are nonprofit entities proposing noncommercial service for the public. There are no other rules proposed that would distinguish the character or operation of a noncommercial low power station from its commercial counterparts. Among the commenters, contradictory assumptions regarding noncommercial or public low power stations appear to be operative. 68/

77. This issue previously has not arisen in the translator service, because the rules limit translators to rebroadcast only, and they therefore fully track the mode of operation of the primary, full service station, whether noncommercial under Section 73.621 or commercial. 69/ We perceive several reasons for not imposing strict regulations regarding noncommercial operation of low power stations. With respect to all aspects except technical ones, we envision the low power service as an essentially unregulated service. The Notice specifically stated that the mode of support, including free and pay programming in any proportions, would be left to the licensees' judgment of what the marketplace requires. In light of the secondary status, the absence of a prohibition upon the free transfer of stations and the as yet undetermined viability of low power stations, we believe that the decision whether or not to air commercials, and in what amounts, should be left to the licensee's discretion. 70/ The Commission will not concern itself with this matter, nor with the corporate or organizational structure of an applicant. Whether a low power applicant or licensee is noncommercial or not-for-profit is a decision properly made by the licensee on the basis of applicable corporate and tax law, pertinent requirements of the Corporation for Public Broadcasting and perceived characteristics of the market in which it proposes to operate. Therefore, Section 73.621 will not apply to low power stations.

78. In light of the above, we are not going to adopt the three preferences proposed. 71/ We are encouraged by many commenters to expand the comparative criteria proposed in the Notice of Proposed Rule Making, to include for example, female ownership, free versus pay service, local ownership, hours of operation, rebroadcast versus origination, financial capacity, integration of ownership and management, locally-oriented programming and/or local program production. While some of these characteristics of service might be a basis for preference in particular cases or in particular areas, it is not clear that they generally should be dispositive in every case, as they would be if they operated as preference points. In many cases, the nature of the particular market proposed to be served should dictate the characteristics of service that might be considered

61/ The rebuttal case is to be limited to 40 pages in length, including any index to subject matter, argument, appendices, and other attachments. An original and one (1) copy of the pleading should be filed. The pleading must be typewritten, double-spaced, on 8 1/2 by 11 inch paper.

62/ The surrebuttal case must be limited to 30 pages in length, including any index to subject matter, argument, appendices, and other attachments. An original and one (1) copy of the pleading should be filed. The pleading must be typewritten, double-spaced, on 8 1/2 by 11 inch paper.

63/ The proposed decision must be limited to 30 pages in length. An original and one (1) copy of the decision must be filed. The decision must be typewritten on 8 1/2 by 11 inch paper. However, it may be single-spaced.

64/ See, Section 556(d) of the Administrative Procedure Act, 5 U.S.C. 556(d).

65/ See, Section 309(e) of the Communications Act, 47 U.S.C. § 309(e).

66/ Id.

67/ Elimination of this proposed preference will not prejudice current applicants, because it was not to be effective for applications filed during the pendency of the rule making. See, note 48, supra.

68/ To receive funding from the Corporation for Public Broadcasting, a station must be both nonprofit and noncommercial, as defined in Section 397(b) of the Communications Act. A noncommercial, educational television station licensee, under Section 73.621 of the Commission's Rules, likewise must be nonprofit, noncommercial and have an educational or cultural purpose, or be a municipality with no independently constituted educational entity. In the FM and TV services, compliance with this rule is a condition of operation on a channel reserved for noncommercial use. In the AM service, where there is no table of assignments, a station may be noncommercial, educational and comply with the above definition, but there also may be stations operated by nonprofit entities that are not educational in nature.

69/ Under a 1971 policy, any applicant, noncommercial or otherwise, proposing rebroadcast of noncommercial, educational programming, has priority over a commercial translator operating on a reserved channel in the Television Table of Assignments. See, 23 RR 2d 1504, 1508 (1971). We are eliminating this policy as part of our removal of all distinctions in translator or low power status arising from operation on channels in the Table. See, paragraph 28, supra.

70/ The Public Broadcasting Amendments Act of 1981, Pub. L. No. 97-35, supra, mandated the establishment of the Temporary Commission on Alternative Financing for Public Telecommunications, whose mission it is to identify additional sources of funding to maintain and enhance public telecommunication services. The Temporary Commission was given specific authorization to conduct an Advertising Demonstration Project to test the desirability and revenue potential of advertising on public stations. In addition, other amendments to the Public Broadcasting Act (see, e.g., Section 399) specifically authorize commercial and commercial-like activities by public stations. In light of these amendments and other factors that are forcing public stations to become increasingly self-sufficient financially, we believe that those broadcasting entities that choose to operate on a non-profit basis should be given the greatest possible flexibility in raising operating revenue.

71/ We do, however, reaffirm the continuing vitality and usefulness of our minority ownership policy, as its intent was expressed in the comparative preference proposed for minority low power applicants. We shall continue to award a comparative merit on this basis in the comparative hearing. See also, Policy Statement on Minority Ownership of Broadcasting Facilities, 68 F.C.C. 2d 979 (1978).

desirable. In a secondary service, particularly one where no prohibition on "trafficking" will be imposed, (see, paragraphs 93 and 94, infra), meticulous comparative evaluation on the basis of an elaborate system of preferences easily could turn out to be a pointless, though time-consuming, exercise. Additionally, in an untested service, we cannot reliably predict what characteristics ultimately will prove desirable in a license proposal, and therefore should receive comparative preference.

79. We believe that the better course is to distill the issues that currently may be considered in broadcast application hearings to a modicum that should prove relevant for the low power service and manageable in a largely paper hearing. These include issues relating to basic qualifications as well as comparison of competing applicants. As stated above (see, paragraphs 60 through 62) we do not believe that Section 307(b) comparisons among competing low power applications is a worthwhile endeavor, because the goal of fair and efficient spectrum allocation already has been anticipated via the Tables of Assignments, and we can expect to accomplish little more by applying such analysis to a secondary service that has no required coverage area nor local programming requirement. As indicated in note 47, above, the application form has been amended to provide for certification of financial qualification, to conform to our practice with other broadcast applications. See, Appendix B. The citizenship requirement is straightforward enough. Because the Commission currently has the character requirement under scrutiny in Gen. Docket No. 81-500 (see, Notice of Inquiry, 47 Fed. Reg. 40899 (August 13, 1981)), we are not modifying this qualification for low power applications, but shall await the outcome of that Inquiry.

80. Of the comparative issues, we shall retain the criterion enunciated in our 1965 Policy Statement, supra, that we consider most relevant in the low power context, diversification of control of the media of mass communications. Along with this, we shall afford merit to applicants that are over 50 percent minority owned. We shall not consider full-time participation in station operation by owners because, in many instances, the functional characteristics of low power stations will not require such extensive involvement in the operations of a particular station by any individual, whether owner or owner's employee. Nor shall we consider program proposals, because we believe low power licensees should be fully responsive to marketplace considerations, without the Commission second-guessing their decisions. These issues are designated in full service comparative hearings only on a special showing, and they rarely are dispositive of the case. See, Chapman Radio and Television Co., et al., 7 F.C.C. 2d 213, 215 (1967); Flint Family Radio, Inc., et al., 69 F.C.C. 2d 38, 42-46 (1977), George E. Cameron, Jr. Communications, 71 F.C.C. 2d 460, 464-466 (1979). Additionally, comparative advantage generally is afforded to program proposals on the basis of local or public service programming. We are not requiring local programming by low power licensees, because we cannot determine across the board that this would be in the public interest in every market. Therefore, we would not want to afford across-the-board comparative preference for this. We are not going to consider comparative coverage, for reasons similar to those on which we base our decision not to make Section 307(b) considerations dispositive in individual cases. See, paragraphs 60 through 63, supra. We are not considering character in the comparative context, beyond the initial qualification determination (see, paragraph 74, supra). We also are not going to consider past broadcast record comparatively; because so many applicants are new entrants to the telecommunications industry, a result that we do not discourage, it could disadvantage them to accord merit or demerit that only could be garnered by applicants with previous broadcast experience. Both to facilitate expedition in the hearing process and, more importantly, because we believe that low power stations will be very directly responsive to audience needs and interests, we find it in the public interest to limit the comparative issues to diversification and minority ownership. Moreover, we believe that this combination of criteria can further a primary objective for the low power service, facilitating entry by groups and individuals that are new to the broadcast industry.

81. Low Power License Renewal. As proposed in the Notice, we are not now modifying the standards governing contested and comparative renewals. See, Notice, 45 Fed. Reg. at 69189 n. 60. Contested renewals will be handled in the manner that full service stations are at present. The license term for translators and low power stations will be five years, in accordance with the amendment to Section 73.1020(a) contained in the Order, FCC 81-497 (adopted October 30, 1981; released November 2, 1981). An abbreviated renewal form will be used, in conformity with the Commission's practice for full service stations. See, Revision of Application for Renewal of License of Commercial and Noncommercial AM, FM and Television Licensee, 46 Fed. Reg. 26236 (published May 11, 1981).

82. Modifications to the License. Sections 73.3572(a) and 74.751 currently require formal application for various equipment changes, channel changes, power changes, transmitter location changes and/or change in the primary station being rebroadcast. We are modifying this rule to include facilities or other modifications that would have a significantly greater or different preclusive effect than the existing authorization, including power or frequency change, certain equipment or other engineering modification and change in transmitter location (present Section 74.751(b) (1-5), (f) and (c)). Applications for such modifications will be treated as applications for major modification and be placed on "A" cut-off lists, subject to competing applications and petitions to deny. Transfer of ownership or control will not be considered a major modification, but applications for transfer will be subject to petitions to deny. Present or future translator licensees wishing to include low power features must notify the Commission in a manner that indicates an understanding of the additional rules with which they must comply, e.g., the operator requirements. Those wishing to change the primary station being retransmitted (present Section 74.751(b)(6)) will be subject only to a notification requirement.

VII. Low Power Station Operation

83. The Commission's ownership rules are informed by two related policies. The prohibitions upon multiple ownership at once are designed to encourage diversity of voices in the marketplace of ideas and to foster competition by preventing undue concentration of control of telecommunications facilities. The present rules are structured as barriers to entry imposed on proscribed entities in proscribed markets. 72/ In a new service, whose viability is unknown and probable competitive impact on other telecommunications services is believed not to be significant cannot yet accurately be predicted, we must exercise no less care to assure that we do not create entry barriers that fetter the development of the service. Ideally, the service effectively will compete with other video services and thus stimulate their responsiveness to market forces, and low power stations will compete with each other in a manner that promotes superior service within the low power service itself.

84. Ownership of translators did not raise the issue of diversity of voices, translators being repeater stations only. In the present ownership regulations, translators are regarded as mere extensions of the primary station and not as new voices. The present rules regarding translator ownership are:

(1) Commercial television stations may not own or financially support VHF translators in distant markets not operating on assigned channels. Section 74.732(e)(1) and (2).

(2) Cable systems may not own translators licensed to the community in which the cable system is franchised. Section 76.501(a)(3).

(3) No VHF translators may be licensed in areas receiving satisfactory service from UHF television stations or UHF translators, except where particular circumstances warrant. Section 74.732(d).

(4) Translators operating at maximum power on assigned channels may be authorized only to existing licensees of television stations, unless non-licensee applicants demonstrate the technical capability to operate them. Section 74.732(i).

The Notice proposed deletion of the first, third and fourth rules cited above. It also proposed that cable systems be permitted to own translators, but no originating or subscription low power stations, within their franchise areas. Few commenters take issue with deletion of Sections 74.732(e)(1) and (2), 74.732(d) and 74.732(i), affirming our belief that it is in the public interest to do so. Cable/low power cross ownership is discussed in greater detail, infra.

85. Several additional ownership restrictions were proposed for low power stations, but not translators, on the theory that low power stations should be treated as "voices" in the first amendment sense:

(1) A duopoly rule, which prohibits commonly-owned stations in the same service with overlapping contours.

(2) A one-to-a-market rule, which prohibits commonly-owned stations in different services with overlapping contours.

(3) The three national networks (see, Section 73.658(l)(1)(v)) would not be permitted to own any low power stations.

The duopoly and one-to-a-market rules would apply to noncommercial, as well as commercial, low power stations. No newspaper/low power cross ownership rule was proposed. Nor was a limit proposed on the maximum number of low power stations permitted in common ownership. 73/ No rule restricting regional concentration of control was proposed.

86. As the comment summary reveals, there are comments virtually on all sides of the ownership issues, with public interest groups generally supporting restrictions and broadcasters generally opposing restrictions. Citizens and consumer groups and other proponents of ownership restrictions tend to characterize the proposed ownership restrictions as devices designed to promote diversity and competition. Those opposing restrictions consider them unnecessary barriers to entry into the low power service. We find that in today's telecommunicstions environment in which there are an increasing number of avenues on which to communicate, there may be less need for structural restrictions designed to facilitate diverse entrants. That is, the increasing availability of other technologies for telecommunications itself is providing additional modes of access that reduce the efficacy of the scarcity rationale. These general arguments may be applied to each of the rules proposed.

87. Duopoly rule. The proposed duopoly rule is opposed particularly by those wishing to operate multiple-channel subscription systems via low power. They argue that STV may be distinguished from true origination on low power STV systems that merely retransmit terrestrial microwave or satellite feed; therefore, low power STV need not be considered a separate "voice" for multiple ownership purposes. Also, they contend that only with multiple channel capacity can low power STV compete effectively with cable.

72/ It is our intention presently to re-examine in a separate proceeding the efficacy of the Commission's ownership rules and policies in light of the conditions that prevail in today's telecommunications marketplace. Until such time as that is accomplished with respect to all broadcast services, we shall endeavor to enact flexible ownership policies for the low power service that are sensitive to the environment in which the service will develop. The low power rules of course would be subject to modification, should they deviate significantly from future revisions in our overall ownership policy.

73/ A limit of 15 stations in common ownership was imposed during the pendency of the rule making only. See, Memorandum Opinion and Order, 46 Fed. Reg. 10728 (published February 4, 1981).

74/ We perceive a difficulty in justifying a different ownership rule for STV low power stations. It is unlikely that they will operate on a subscription basis during all their hours of operation, although we are not adopting rules prohibiting this. When STV low power stations are operating in a free mode, they are indistinguishable from other low power stations, and we encourage some local origination on each station with the authority to do so.

74/ A number of comments advocate waiver of the duopoly restriction in rural areas, at least for low power STV, on the grounds that spectrum is less scarce in rural areas and viability also is less certain.

88. The Justice Department is among those who believe that a duopoly rule promotes competition. 75/ The worst-case scenario is that, in the absence of a duopoly prohibition, one entity will gain control of all available low power outlets in a community, when there are others who would, if they could obtain licenses, provide greater diversity. On the other hand, it is possible to envision more or less rural markets where only one entrepreneur would be willing to operate, using more than one channel, on a subscription basis or otherwise; if he is permitted to operate on only one channel, the other availabilities may lie fallow into the indefinite future, or he will choose not to initiate a single-channel operation, and the public will be deprived of service altogether. The irony of this situation is that it is precisely in markets that currently have the least service, where the viability of low power is the least certain, that have the greatest need for low power. On balance, we believe the public best may be served if we do not impose a duopoly restriction in the low power service. Therefore, we shall not do so.

89. One-to-a-market rule. Many commenters oppose a one-to-a-market rule, especially in the radio/low power context. Convincing arguments are made that local radio licensees already have broadcast expertise, already may have access to local and or national news services, already are familiar with the local community and may have the financial wherewithal to cross subsidize a low power operation with revenues from other broadcast properties. We agree that ownership rules that effectively restrict the entry of those with prior expertise or financial capacity can work to the detriment of a new service. Also, there may be significant economies in same-market ownership of a low power station and a broadcast station in another service. We note that the full service television/low power cross ownership situation closely resembles a duopoly situation, depending upon the nature of the low power operation, i.e., a free full service station and STV low power station that merely broadcasts satellite feed actually may be quite different and appeal to different audiences. While the proponents of a one-to-a-market rule argue that it will have the effect of promoting diversity and competition, we find the countervailing arguments in favor of free entry persuasive, especially in the context of a new service whose viability is undetermined. Moreover, where there are competing applicants, the comparative process will favor diversification. In a comparative situation new entrants will be favored, while current licensees will not be precluded from areas where new entrants may not wish to propose service.

90. Network ownership of low power stations. The three commercial networks express opposition to the prohibition on their ownership of low power stations that was proposed. They argue that their expertise can be put to good use in ensuring the viability of the fledgling service and that they are in a favorable position to develop and introduce new technological advances via low power. They dispute the contention of the Justice Department that network ownership of low power stations is highly anticompetitive and will preclude new entrants from the field. The networks cite in support of their position the Network Inquiry Staff Report's conclusion that group owners have an incentive to air diverse programming on co-owned stations, to maximize audience, rather than airing similar programming that could have the effect of fragmenting audience among several co-owned stations. We do not have sufficient evidence of the magnitude of the anticompetitive potential of network ownership of low power stations to justify implementing the rule proposed at this time. Both for this reason, and because we believe that the networks can, as they claim, contribute to the development of the fledgling low power service, we shall not prohibit network ownership of low power stations.

91. Multiple ownership of low power stations. A number of commenters advocate a limit on the number of low power stations, on diversity and competition grounds. We are encouraged to impose limits of between five and 25 on the number of stations the Commission would permit to a common owner; however, we are afforded no convincing reason, other than general administrative efficiency in application processing, for the choice of any particular number. Others point out that there are economies of scale in multiple ownership that may be essential to viability in the low power service. As stated in paragraph 78, above, the Commission's ownership rules have a dual purpose: prevention of undue concentration and promotion of diversity. The over 6,000 applications currently on file evince an array of diverse kinds of applicants and program proposals. And, as we stated in the Notice: "The concern for anticompetitive effects is lessened where the stations are both secondary and inherently limited in their coverage potential." 45 Fed. Reg. at 69184. The comments do not persuade us to the contrary. That is, we regard low power as neither a signficant and general enough competitive threat to other broadcast services nor sufficiently distinct as a market in itself that monopolization should be considered a serious or dangerous enough possibility to warrant structural restraints on ownership. Should a real threat of inappropriate economic concentration arise as the service develops, it can be addressed via antitrust enforcement or by the Commission in appropriate proceedings.

87. We are told by some commenters that a ceiling on multiple ownership would prevent low power network formation. We believe, however, that program-oriented networking of stations can occur other than via common ownership of numerous stations. Affiliation for program distribution or syndication is an alternative. Also, a series of satellite or terrestrial microwave interconnected translators may be used to relay programming originated by one low power station. This suggests that common ownership of a number of low power stations is not necessary to the provision of common programming. However, with a network consisting of commonly-owned low power stations, as opposed to translators, the potential exists for each station to originate some programming targeted to discrete local or regional interests. This is a result that we would encourage. Additionally, there may be economies of scale in common ownership of a number of low power stations other than those related to program acquisition or distribution. It is our present belief that the potential economic savings of multiple ownership far outweigh a remote potential of undue concentration. For this reason, we are not imposing a ceiling on the number of low power stations that may be owned in common. We also shall not impose a rule relating to regional concentration of control.

93. Low power/cable cross ownership. The cable/low power cross ownership issue is treated similarly in the comments to cross ownership of low power and other broadcast services. The Justice Department is among those that believe that a cable system owning a low power station in its franchise area has an incentive not to maximize the potential of the low power station, because it would compete with the cable system. Other commenters argue that there may be rural areas where the cable operator is the sole potential low power licensee, and that in such cases diversity will be enhanced, not inhibited by cable/low power cross ownership. 76/ We note that issues affecting cable cross ownership are under separate consideration. 77/ Without prejudging any subsequent proceeding involving the full service/cable cross ownership rules, we believe that in the low power service, the possible economies of scale, including those relating to program distribution, favor our permitting cable/low power cross ownership. Therefore, we believe that there should be no restraints on cable/translator cross ownership.

94. Summary. As the preceding discussion indicates, the primary considerations that inform our deliberations on all aspects of the owership policy are that low power may provide an opportunity for new entrants into the telecommunications industry at lower cost than would be incurred in starting full service stations or cable systems. Because of both the low cost and the comparative criterion favoring diversification, even absent ownership restrictions, it is unlikely that new entrants will be precluded by existing broadcasters. Additionally, in some areas, the development of the service itself might be fettered irretrievably, were we to impose inviolable rules that eliminate experienced broadcasters with the potential to make the service viable. This is so particularly in markets where an owner of other broadcast properties might be the sole potential entrant. Furthermore, NTIA points out in comments that an alternative to imposition of ownership rules that accommodate the latter concern is the adoption of policies that apply in the comparative situation. That is, ownership of other local or distant outlets would not be considered when no one but a sole applicant is applying for the frequency; but only when there are competing applications. NTIA suggests that in such cases a comparative demerit or disadvantage be given to applicants that already own facilities, in local or distant markets. This approach resembles that taken in the traditional comparative hearing context, where diversification of ownership is part of the standard comparative issue among competing applicants, and we are continuing to apply that criterion in the low power service.

95. In summary, we are adopting no ownership restrictions per se for the low power service. This approach is in accord with our general belief that free entry into and out of the low power industry will best serve potential applicants and also the public. Low power stations have limited coverage potential, which effectively limits the area from which advertising support may be garnered; their secondary status poses the possibility that they might be required to alter facilities or cease operation at any time; the majority of channel availabilities are in rural areas, where viability generally is less certain than in urbanized areas. We believe these factors augur in favor of permitting experienced participants in the market to pioneer the low power service and outweigh our traditional concerns regarding multiple and cross-ownership. We do not wish to discourage new entrants, and we note again that the comparative criterion favoring diversification will inure to their benefit. However, we also recognize the important role those with proven track records may play in the development of the service, particularly in localities that individuals inexperienced in the market may perceive as posing too great an economic risk to warrant entry.

VIII. Low Power Station Operation

96. Construction Permit. Section 73.3598(b) will be applied to low power, and the Commission will strictly enforce the requirement that construction must be completed and the station be operational within twelve months of issuance of the authorization, or the construction permit must be turned back to the Commission. We envision no extensions of time with regard to this rule, the only possible exception being documented evidence of unforeseen and unavoidable delay in delivery of equipment that was contracted for properly. We do not believe this rule is overly stringent, in light of the relatively minimal burdens of construction of low power stations, as compared with full service stations. Section 73.3597(e) and (f), which prohibits payments upon assignment or transfer of a construction permit from exceeding reimbursement of the transferor's expenses and limits the equity interest that a transferor or assignor may retain in the permittee to a proportion equal to the transferor's capital contribution, until the station commences program test operations, also will be strictly applied in the low power context, as with the other broadcast services. This appears to be an

75/ The comments afford two contradictory economic theories that predict the behavior of common owners of stations in the same service in the same market. There may be an incentive not to actualize fully the potential of one commonly-owned facility, in order not to draw from the audience of the other. On the other hand, in a more formated service, an owner might attempt to attract different audiences with different kinds of programming on each commonly-owned station, and to add to the total audience without fragmenting the audience of either station. The Commission's Network Inquiry Staff Report, New Television Networks: Entry, Jurisdiction, Ownership and Regulation, October, 1980, describes such a result. The nature of the particular market would seem to be essential to realistic prediction of whether in fact this will occur.

76/ We believe that this would depend on the nature of the particular market: where a cable operator has little hope of garnering additional subscribers, there may be an incentive to maximize total audience with a low power operation. On the other hand, where there is head-to-head competition between cable and low power for audience, the service affording the lowest marginal cost per viewer, or greatest profit margin per viewer, may be favored by a common owner.

77/ See, Staff Report, FCC Policy on Cable Cross Ownership, November, 1981. We believe that permitting cable/low power cross ownership could provide valuable data for any proceeding that is initiated regarding cable cross ownership, in general. We received little commentary regarding the proposed deletion of Section 76.501(a)(3), which prohibits cable/translator cross ownership. We note that, where there are competing applicants for a translator, one a cable operator and one unaffiliated, the comparative criteria would favor the unaffiliated applicant. As the Staff Report pointed out in paragraph 362, this is the only area of real concern.

area in which Sections 301 and 304 of the Communications Act, as well as general public interest concerns, dictate that regulation should be continued. Sections 301 and 304 provide, inter alia, that licenses issued by the Commission convey no property interest. Allowing profit to be obtained upon transfer of a construction permit prior to commencement of program test operations appears to violate this prohibition. The permittee would appear to have nothing to convey for profit beyond the mere expectation of future profits that appends to the permit itself. Also, implicit in the filing of an application is an intent to construct a station and commence service. To maintain the integrity of the Commission's processes and to encourage the expeditious introduction of new service in an environment in which free transferability of stations is permitted, we believe it is in the public interest that Section 73.3597(e) and (f) be maintained for the low power service.

97. License. We received one comment seeking that the format for the call sign for low power stations be changed to a five-letter one resembling the four-letter call signs assigned to full service stations. We believe that the confusion that is likely to result from such a change, as well as the administrative inconvenience of carrying it out, are not justified by the result. Therefore, we shall continue to assign low power call signs as we assign translator call signs.

98. We proposed in the Notice that Section 73.3597(a) through (d), the "three year rule" not apply to low power stations. We opined that permitting free transferability of stations would encourage entrants into the industry, as well as provide a useful example for reference in other contexts. Indeed, we recently have sought comments on a proposal to do away with the "trafficking" issue altogether, on the grounds that the rule no longer serves a useful purpose in the present telecommunications environment. See, Notice of Proposed Rule Making, Amendment of Section 73.3597 of the Commission's Rules, supra.

99. The comments on the proposal not to impose an anti-"trafficking" rule in the low power service were divided. The Justice Department supports a policy facilitating ready entry into and exit from the market. The principal objection to the absence of a "trafficking" prohibition is voiced by groups that would hope to garner preference in the competition for licenses. They complain that the preference system easily can be defeated, unless the Commission imposes either a required holding period for the original licensee, or a condition that the station be transferred only to another preferred entity. We do not gainsay the cogency of this argument. However, it rests on an incorrect assumption about the purpose of a system of preferences. It is the statutory duty of the Commission to allocate the use of broadcast spectrum in a manner that best serves the public interest. This may be accomplished via comparative hearing, comparative preferences or lottery. However, requiring an unwilling licensee to retain an unwanted broadcast property hardly can result in the best service to the public. The Commission ought not to second guess private decisions that are made in response to marketplace forces, but should permit stations to be put to the highest valued use in the marketplace. Therefore, we shall not impose a "three year rule" in the low power service. We shall, however, impose a one-year holding period on new low power licenses in order to maintain the integrity of the Commission's comparative processes in situations where the construction permit was awarded by virtue of a comparative preference.

100. Station Management. The Commission's rules and policies governing Equal Opportunity in Employment will apply to all low power stations. Reporting requirements will apply to those with sufficient employment levels to trigger the requirements. See, Section 73.2080 of the Rules, which imposes a reporting requirement on all stations with five or more full-time employees. While some commenters argued forcefully to the contrary, we continue to believe that Sections 318 and 325(a) of the Communications Act require that all originating low power stations have an operator holding at least a Restricted Radio Telephone Operator's Permit in continuous attendance during local originations. It appears that some parties misunderstood the nature of the requirements proposed, for a number of comments argue that a low power station merely retransmitting terrestrial microwave or satellite feed should not require a full-time operator. We proposed that, during microwave-fed retransmissions, the statutory operator requirement would be fulfilled in the same manner as the current requirement for all translators employing modulators: observation of the off-air signal for ten continuous minutes each day on a conventional television receiver. In cases of local origination, the operator must be in continuous attendance at the transmitter site, at a remote control point or at the program source. These operator requirements are neither extraordinary nor overly burdensome, and we shall maintain them until and unless they are made unnecessary by legislative change.

101. Low Power Station Maintenance. We shall require translator and low power licensees to comply with Sections 74.752(c), (d) and (e) and also to measure the carrier frequencies of their output channels at least once a year, and as often as necessary to assure compliance with the frequency tolerance standards. See, paragraph 39, supra. The aural carrier frequency of stations employing modulators also must be measured, but we would permit factory measurement of the modulation characteristics. Proof of performance may be certified by a holder of a General Operator's permit. 78/ Maintenance logs must be kept by all translator and low power station licensees. See, Section 74.781.

IX. Programming

102. Station Identification. We shall require low power stations, during periods of program origination, to comply with the station identification requirements of full service broadcast stations. See, Section 73.1201. However, we shall continue to allow translators, and low power stations operating in a rebroadcast mode, to be identified in accordance with the current provisions of Section 74.783.

78/ The General Radiotelephone Operator's license now is issued in place of both First and Second Class licenses. See, Report and Order, Docket No. 20817, Radio Operator Licensing Program, 46 Fed. Reg. 35450 (published July 8, 1981).

103. We believe that low power stations should be subject to a minimum of program-related regulations, so that they might be fully responsive to marketplace conditions. We received comments urging a panoply of programming rules, some even more stringent than those governing full service stations. We do believe this kind of governmental surveillance is neither necessary nor appropriate. In many instances, particularly in rural or remote areas, low power stations will be set up specifically to fill local needs. In areas where the marketplace demands coverage of local events of common interest, licensees can be expected to provide it. In some urban markets, unserved ethnic enclaves may be targeted for low power service. But in a major market that already receives adequate local coverage from several full service stations, a low power licensee may discover and attempt to fill a need for additional national news, sports or entertainment programming. Such judgments properly are left to licensees; it is in their interest, and the public's, to garner audience by attempting to serve unmet needs.

104. The principal structural limit we shall impose on low power stations with respect to programming is that the programming aired must comply with the definition of "broadcast" in the Communications Act and Section 73.641(b) of the Commission's Rules. Where a potential use of radio frequencies has not yet been authorized for broadcast use, it will not be permitted via low power. See, e.g., Notice of Proposed Rule Making, Amendment of Part 73 to Authorize Transmission of Teletext by TV Stations, BC Docket No. 81-741, 46 Fed. Reg. 60851 (published December 14, 1981). Nor may low power stations be used for private communications, a service provided more suitably by point-to-point private and common carrier services. See, e.g., Report and Order, Docket No. 19493, Amendment of Parts 1, 2, 21 and 43 of the Commission's Rules and Regulations to Provide for Licensing and Regulation of Common Carrier Radio Stations in the Multipoint Distribution Service, 45 F.C.C. 2d 616 (1974). Finally, while we repeatedly have acknowledged the difficulty of adhering strictly to any definition by which translators and low power stations may be distinguished, we continue to believe that the distinction is best framed in terms of rebroadcast versus origination. Under Section 74.784 of the Commission's Rules, rebroadcast is simultaneous retransmission of the signal of an existing TV broadcast station. Anything other than this is, by definition, origination, for which a low power license is required. Whether or not the low power licensee engages in any local origination, broadcasts a network feed, offers a subscription service, etc., the potential to do so defines the station.

105. Statutory requirements. As we have indicated, the statutory prohibitions on the broadcast of obscene material, plugola, payola and lotteries apply to the low power service. See, 18 U.S.C. 1304, 1464, Section 303(m)(n) of the Communications Act of 1934, as amended, and Section 73.1211 of the Commission's Rules. 47 C.F.R. §73.1211 (1980). Our rule requiring fairness in licensee-conducted contests also will apply. We also shall continue to impose Fairness Doctrine obligations in the low power service only to an extent consonant with a station's origination capacity. If the Commission receives a complaint related to Part I of the Fairness Doctrine, the station may meet it by showing that it aired responsive issue-oriented programming submitted in a mode compatible with the station's origination equipment. Likewise, to meet its obligation under Part II of the Fairness Doctrine, the station must make time available, with or without sponsorship, to responsive issue-oriented programming submitted in a format compatible with the station's origination equipment. The Fairness obligation would be on a sliding scale, depending upon the direct involvement of the station management in program production and decisions. Similarly, Sections 312(a)(7) and (f) and 315 will apply to low power stations, to the extent that their origination capacity permits. See, Alaska Public Broadcasting Commission, 82 F.C.C. 2d 220 (1980). The reasonable requests of legally qualified candidates for federal elective office who seek to purchase reasonable amounts of time or respond to their opponents' messages must be acceded to, so long as they provide program material that is compatible with the station's origination equipment. See, Public Notice, Acceptance of Political Advertising by UHF Translator Licensees, 62 F.C.C. 2d 896 (1976). Without prejudging issues in our pending rule making on DBS, we note that the hybrid nature of subscription television, which suggests that statutory provisions for broadcast stations properly may not apply to STV stations, has been raised in the DBS proceeding. See, note 17, supra. In light of the fact that numerous low power applicants envision subscription service, the resolution of that issue in the DBS proceeding may have a direct bearing on our present conclusions regarding the applicability of these statutory provision to low power STV stations.

106. We are not imposing a formal ascertainment obligation on low power stations. It is in the nature of low power stations to be familiar with and responsive to the needs of the viewers they serve. Formalizing this would be needless. To be viable in the highly competitive telecommunications marketplace, these small stations will have to react with sensitivity to the needs and desires of their markets. Similarly, we are leaving decisions regarding commercialization and nonentertainment programming to the licensees' discretion. Such regulations also would have little public interest value. Indeed, at a time when the continuing vitality of such content-oriented regulations increasingly has been called into question even with respect to full service stations, it would be unreasonable to apply them to low power. See, e.g., Report and Order, Deregulation of Radio, 84 F.C.C. 2d 968 (1981), reconsid. denied, 87 F.C.C. 2d 797 (1981). Consonant with this view, we are requiring no minimum hours of operation in the low power service, nor the maintenance of program logs, but only maintenance logs.

107. Applicability of Copyright Law to Low Power Service. As we have recognized, the copyright laws apply fully to translators and low power stations. Under the General Revision of the copyright law, Pub. L. No. 94-553, 17 U.S.C. 101 et seq. (1976), translator and low power operations are subject to full copyright liability, with an exception for secondary transmissions made by local governments or non-profit organizations. See, 17 U.S.C. §111(a)(4). Section 325(a) of the Communications Act requires the consent of the originating station for rebroadcast of programming. Also see, Sections 73.1207 and 74.784(b) of the Rules. Retransmission consent may not unreasonably be refused. See, e.g., Memorandum Opinion and Order, Docket No. 9808, 17 Fed. Reg. 10309 (1952). We believe that this standard is appropriate to govern the negotiations of low power operators for program services, until and unless legislative change preempts it. Presumption of rebroadcast consent, sought by National Translator Association, could amount to a

substantive modification of the initial bargaining positions of the parties, one for which we do not see a necessity. Likewise, the specific standards for refusal of consent and terms for consent agreement, sought by the Washington State Association of Broadcasters, if enacted by this agency via rule making, would amount to a substantial intervention of the government in what properly should be left to private negotiations between parties at arm's length. We also believe that commercial substitution should be permitted, with consent, subject to the negotiations of the parties. Although the Washington State Association of Broadcasters opposes this, it is possible to envision a situation in which the primary station may benefit from allowing commercial substitution, and we believe the issue is best left to the parties.

108. Low Power Subscription Service. As we proposed, we are permitting STV via low power, at the licensees' discretion, and not subject to a "complement-of-four" restriction. 79/ STV may be particularly suited to formated programming on low power stations; indeed, in some markets it may be essential to the viability of the service. We believe that STV and low power share the potential to accelerate utilization of unused channels, provide viable financial support for specialized programming and small market stations and respond to the interests of the audience. We are not requiring a separate STV authorization, although proposed subscription operation must be indicated on the application form, and existing low power licensees that are providing free service wishing to change to subscription service must so notify the Commission via an application for minor modification. We also will not require low power STV stations to file their franchise agreements with the Commission, although we shall require that such agreements be consistent with the rules applicable to full service STV agreements, Section 73.642(e). Licensees, however, must provide a copy of the franchise agreement for public inspection at the station office. Consonant with the First Report and Order in Docket No. 21502, adopted September 25, 1979, FCC 79-535, 45 Fed. Reg. 60091, published October 18, 1979, we are not setting technical compatability standards for low power STV equipment. We also are not requiring any minimum hours of free programming, because this requirement could prove overly burdensome to low power operators, and would not be consonant with the absence of minimum required hours of operation. See, paragraph 101, supra.

109. We note that several of the issues relating to STV are under separate consideration in Docket No. 21502. See, Further Notice of Proposed Rule Making, FCC 81-449, adopted September 30, 1981, released November 13, 1981. That document explicitly leaves resolution of STV issues related to low power to the instant proceeding. There is one area, however, where we believe the issues are more appropriately addressed in the context of the separate proceeding on STV. That area is the sale of decoders. The Notice in the instant case proposed that decoders could be sold or leased, at the low power licensee's discretion. We received some comments on both sides of this issue, including a petition seeking consolidation of the STV and low power proceedings, filed by the Subscription Television Association. While that petition was denied (see, Further Notice, Docket No. 21502, supra, paragraph 58), we believe this particular issue would be the subject of more narrowly focused debate in the proceeding focused exclusively on subscription television service, particularly because we have sought comments on a proposal to permit the sale of decoders generally in that proceeding. Therefore, we shall defer resolution of the issue of the sale of decoders in this docket, pending its resolution in Docket No. 21502. 80/ Except in this respect, we believe that the functional differences between low power and full service stations, as well as the secondary nature of the low power service, and its inherently limited coverage potential, justify a distinction in regulatory treatment between full service and low power stations. Again, we note that the structuring of subscription on a broadcast model has been called into question in the DBS proceeding. See, note 17, supra. Without prejudging issues in our separate STV or DBS proceedings, we believe it is appropriate to acknowledge the possibly hybrid nature of subscription service in our treatment of low power STV stations, particularly in light of the fact that low power is something of a hybrid service itself.

110. Network Affiliation. In the interest of ensuring even-handed treatment of all network affilites, full service or low power, we are requiring that any affiliation agreements between low power stations and networks will be subject to the same regulations as full service station affiliation agreements, see, Sections 73.658 and 73.3613 of the Commission's Rules.

111. Mandatory Carriage. We proposed no mandatory carriage requirement of low power stations by cable systems. See, Notice, 45 Fed. Reg. at 69183 n. 31. 81/ This issue was hotly contested in the comments. A number of parties, including ABC, NTA and the National Association of Low Power Broadcasters, advocate mandatory carriage, on the grounds that "may carry" status could put low power stations at a serious competitive disadvantage, especially in markets where cable penetration is high. The National Cable Television Association, on the other hand, resists "must carry" rules for low power, on the grounds that they violate the first amendment rights of cable operators to choose the programming they carry and are anticompetitive. Field adds that, without a local public sevice requirement, low power stations do not fulfill the intent of the "must carry" rules: maintenance of local broadcast coverage within a market.

112. We carefully have considered both sides of the dispute. We believe that the decision whether a low power station will be carried on a local cable system is one best left to the private parties. Noting that the mandatory carriage issue is under consideration in connection with pending copyright legislation, and may well be considered by the Commission in the near future, we do not wish to prejudge or preempt forthcoming developments in this area. While we are not here questioning the continuing usefulness of our rules that require carriage of local full service stations by cable systems, we believe that it is not in the public interest to extend this rule to low power stations. Low power stations are not subject to the programming obligations with regard to the community of license that form the basis for our requiring carriage of full service stations. Additionally, it will not further our goal of fostering a fully competitive telecommunications marketplace if the Commission, by regulation, injects itself between the parties to what should be a private decision-making process. The cable operator, on the basis of his own assessment of marketplace conditions, not the FCC, should decide what programming a cable system will carry, beyond that required by our present carriage rules. Indeed, it is reasonable to assume that, if a cable system has excess channel capacity, it will carry low power programming. Where there is no excess channel capacity, the cable operator should not be required to make the hard choice beteween the low power signal and other programming for which his subscribers may indicate demand via pay mechanisms, when he already carries the local full service stations. And where low power must compete with other program sources for cable carriage, absence of "must carry" protection could be a spur to low power's provision of creative, innovative programming. This also may encourage low power applicants to seek out remote, unserved areas where cable is thought not to be viable economically, and thereby to fill gaps in existing television coverage, a function for which low power stations are uniquely suited. It is not inconceivable that provision of a high isolation switch, so that both cable and broadcast may be received alternately on the subscriber's set, may be negotiated, at the expense of one, or both, parties in situations where a cable system truly is unwilling or unable to carry a low power station. Finally, until and unless it becomes clear that low power stations are not being carried on cable systems, we have no reason to believe that a "must carry" rule for low power will be useful or necessary.

113. Alaska. The Alaska Public Broadcasting Commission evinces concern that several of the technical rules proposed in the Notice (and adopted herein) for the low power service would be overly burdensome, as well as unnecessary. For example, on-site measurement of frequency tolerance and on-site proof-of-performance certification would be prohibitively expensive, as well as unnecessary. APBC also avers that the operator requirement is unnecessary, as the Alaskan stations primarily engage in rebroadcast. We acknowledge that Alaska is a "special case," because the low power concept long has been in use there, on a waiver basis, and it is the only means by which much of the State may receive television service. See, e.g., Wrangell Radio Group, supra. We agree that the present maintenance program that the state carries out is adequate, and we shall not impose additional requirements in that area. Also, to the extent that we are adding other rules, such as the full-time operator requirement for local originations, that exceed the requirements to which the Alaskan low power facilities previously have been subjected and would be particularly burdensome in that unique environment, we shall continue to authorize waivers where appropriate.

114. Emergency Broadcast System Participation. Translator stations normally would carry any Emergency Action Notification alert messages originated by the full service TV broadcast station being retransmitted. However, low power stations, during periods of program origination, would have the obligation, similar to other broadcast stations, promptly to inform viewers of an Emergency Action Notification under the established Emergency Broadcast System procedures. Low power stations therefore will be expected to comply with the EBS procedures set forth in Subpart G of Part 73 of the rules with one exception because of the expected limited coverage area and unspecified operating schedule. Although encouraged to do so, low power stations will be exempted from the requirement to install the encoding device for generating the two-tone EBS attention signal. This exemption is similar to that afforded 10 watt noncommercial FM stations. Subpart G is being amended to accommodate this exemption.

X. Conclusion.

115. The rules promulgated herein represent, we believe, judicious balancing of competing concerns, for spectrum, for broadcast licenses, for overall maintenance of a healthily competitive telecommunications environment. The record adduced in this proceeding proffered opinion from all sectors on all aspects of the Commission's original proposals. With the comments as a basis, we have resolved the six decision criteria with which we commenced this proceeding in 1978. In light of the comments, and the Commission's intervening experience, it will be noted, we modified, to some extent, the proposals of the Notice. The one sentiment that has remained unshaken by the controversy surrounding this proceeding is that the low power service can provide additional television service, particularly in areas where there currently is little or none.

116. The existence of so many pending applications, filed by so many eager applicants, may belie, to some degree, the uncertainties to which the fledgling service will be subjected as it becomes operational. As the public has been reminded, a low power license may not be a license to print money. It certainly is, however, a license to serve the public. It is in this spirit that we authorize the low power service today. The Commission has every hope that low power will succeed in the marketplace, adding to the mix of competitive technologies in today's telecommunications environment and acting as a bellwether for "unregulation" of the broadcast services generally.

79/ This rule restricts STV operations to communities within the Grade A contour of at least five commercial television stations, including that of the STV operator.

80/ Interim low power grantees proposing STV have been informed that they may not sell decoders until the Commission finally has resolved this issue.

81/ Under the present rules, cable systems must carry, as well as full service stations, commercial translators over 100 watts and educational translators over 5 watts within a 35-mile radius of the cable system, except where this would result in substantial duplication or the cable system already carries the primary station. See, Sections 73.55(c)(1) and (2); 76.57(a)(2); 76.59(a)(5); and 76.61(a)(3).

112. Regulatory Flexibility Act - Final Analysis 82/

a. Need for and Purpose of Rules. The rule amendments promulgated herein are necessary to achieve the goal of additional low-powered television stations, for which the record indicates an overwhelming public demand. While the Commission intends the low power service to be a largely unregulated service, it nevertheless is essential that the technical aspects of the service, from application processing to operating specifications, be strictly maintained, to ensure that low power stations do not cause destructive interference to full service stations or to each other.

In view of the unexpectedly great numbers of TV translator and low power applications filed since the initiation of the rule making, as well as additional applications anticipated upon the lifting of the present moratorium, additional technical standards were proposed in the Further Notice to facilitate more fully automated application processing. The Commission's rules for TV translators did not contain precise standards for determining mutual exclusivity between proposed stations. A mode of processing that left much to engineering judgment was believed not to be feasible for use with large numbers of competing applications. The Commission herein adopts standards of prohibited contour overlap that will facilitate automated processing.

b. Comments. We received little commentary directly in response to the Initial Regulatory Flexibility Analysis. Several parties took issue with our prediction that the proposed technical standards would not significantly increase the burdens attendant upon preparation of the engineering section of the application. They evince particular concern about the burden of calculating antenna radiation center height above average terrain (HAAT). 83/ The Commission acknowledges the possible validity of this position. However, it is our belief that the two major competing considerations, expeditious reduction of the application backlog and spectral efficiency, override the possibly increased burdens on applicants. In the long run, it is our position that the increased opportunity in broadcasting provided for small entrepreneurs by authorization of the low power service is a much more significant overall benefit of the rule changes than the details required in making an application.

c. Alternatives Considered. The alternatives to the mode of processing are: (1) a table of assignments for low power stations, which was ruled out as too great an administrative burden on the Commission, as well as spectrally inefficient; (2) processing using assumed antenna heights, which also is spectrally inefficient; (3) processing taking actual, instead of average terrain factors into account, which also is too cumbersome administratively and may create too great a risk of interference; and (4) not authorizing the service at all, a result not supported by the record. The technical rules adopted herein, represent an optimal compromise between factors of spectral efficiency, prevention of undue interference, administrative efficiency and cost to both applicants and the Commission. As stated above, the overall effect of the rule changes is to create additional opportunities for small entrepreneurs to own and operate new broadcast facilities by using spectrum where full service stations would cause and sustain interference. The low power service is subject to a minimum of regulations; however, certain technical requirements are essential to national spectrum management and compliance with these bears a cost that must be sustained by applicants and station operators.

d. The Secretary shall cause a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to be sent to the Chief Counsel for Advocacy of the Small Business Administration in accordance with Section 603(a) of the Regulatory Flexibility Act (Pub. L. No. 96-354, 94 Stat. 1164, 50 U.S.C. et seq.).

118. In light of the foregoing and pursuant to authority contained in Sections 1, 4(i) and 303 of the Communications Act of 1934, as amended, IT IS ORDERED, That the rule amendments set out in Appendix A ARE ADOPTED; and

119. IT IS FURTHER ORDERED, That the petitions for reconsideration of the April 9, 1981, Order, FCC 81-173, filed by the Association of Maximum Service Telecasters, Bogner Broadcast Equipment Corp., the National Association of Broadcasters and the National Translator Association, ARE DISMISSED; and

120. IT IS FURTHER ORDERED, That this proceeding IS TERMINATED.

121. For further information concerning this proceeding, the contact person is Edythe Wise, Broadcast Bureau, (202) 632-7792.

FEDERAL COMMUNICATIONS COMMISSION *

William J. Tricarico
Secretary

Attachment: Appendices

*Statements of Commissioners Fowler, Chairman; Dawson, Washburn, Fogarty and Rivera attached.

82/ The Notice of Proposed Rule Making in this proceeding was promulgated prior to the effective date of the Regulatory Reform Act of 1980, so that no comments on the particular impact on small businesses were elicted therein. The Further Notice of Proposed Rule Making, however, was subject to the Act. This Final Analysis addresses issues raised in the Initial Analysis, at paragraph 29, of the Further Notice.

83/ Applicants are not required to compute this figure as part of the application process. Indeed, in most cases of UHF low power applications, conformance with the "UHF" taboos, formerly in Section 74.702(c)(2), will ensure a noninterfering application. However, because the Commission will make the calculation and use it in processing, it may be presumed that most, if not all, applicants will base their own engineering calculations upon HAAT.

A P P E N D I X A

1. Section 73.601 is revised in its entirety to read as follows:

§73.601 Scope of subpart.

This subpart contains the rules and regulations (including engineering standards) governing TV broadcast stations, including noncommercial educational TV broadcast stations and, where indicated, low power TV and TV translator stations in the United States, its Territories and possessions. TV broadcast, low power TV, and TV translator stations are assigned channels 6 MHz wide, designated as set forth in §73.603(a).

2. Section 73.903 is revised in it entirety to read as follows:

§73.903 Emergency Broadcast System (EBS).

The EBS is composed of AM, FM, and TV broadcast stations; low power TV stations; and non-government industry entities operating on a voluntary, organized basis during emergencies at National, State, or Operational (Local) Area Levels.

3. Section 73.904 is revised in its entirety to read as follows:

§73.904 Licensee.

The term "licensee" as used in this Subpart means the holder of a broadcast station license granted or continuing in force under authority of the Communications Act of 1934, as amended. Such licensee includes any AM, FM, TV, or low power TV station holding a valid license, program test authorization, or other authorization permitting regular programming operation.

4. SECTION 73.932 AMENDED:

The second sentence of paragraph (b) in Section 73.932 is revised to read:

All broadcast station licensees except noncommercial educational FM stations authorized to operate with transmitter output powers of 0.010 kW or less and low power TV stations, must install, operate, and maintain equipment capable of generating the Attention Signal (see §73.906) to modulate the transmitter so that the signal may be broadcast to other stations.

5. SECTION 73.961 AMENDED:

The last sentence of paragraph (c) of Section 73.961 is revised to read:

These tests will be conducted in accordance with the procedures set forth in the EBS checklist furnished to all broadcast stations. However, Class D noncommercial educational FM stations authorized to operate with transmitter output powers of 0.01 kW or less and low power TV stations need not transmit the two-tone EBS Attention Signal.

6. Section 73.1001 is amended by revising paragraph (c) to read as follows:

§73.1001 Scope.

* * * * *

(c) Certain provisions of this Subpart apply to International Broadcast Stations (Subpart F, Part 73), TV translator stations, and low power TV stations (Subpart G, Part 74) where the rules for those services so provide.

* * * * *

7. Section 73.1010 is amended by revising paragraph (e) to read as follows:

§73.1010 Cross reference to rules in other Parts.

* * * * *

(e) Part 74 (Volume III), "Experimental, Auxiliary and Special Broadcast, and Other Program Distributional Services" including Subparts on the following stations: A, "Experimental Television--," B, "Experimental Fascimile--," C, "Developmental--", Instructional TV Fixed Service--," L, "FM Translator and Booster--."

8. Section 73.3500 is amended by revising the titles for FCC Forms 346, 347, and 348 as follows:

* * * * *

346 ..... Application for Authority to Construct or Make Changes in a Low Power TV, TV Translator, or FM Translator Station.

347 ..... Application for a Low Power TV, TV Translator, or FM Translator Station License.

348 ..... Application for Renewal of a Low Power TV, TV Translator, or FM Translator Station License.

* * * * *

9. Section 73.3516 is amended by revising paragraph (a) to read as follows:

§73.3516 Specification of facilities.

(a) An application for facilities in the AM, FM, or TV broadcast services or low power TV service shall be limited to one frequency, or channel assignment, and no application will be accepted for filing if it requests alternate frequency or channel assignments.

* * * * *

10. Section 73.3533 is amended by revising paragraph (a)(7) to read as follows:

§73.3533 Application for construction permit.

(a) * * *

* * * * *

(7) FCC Form 346, "Application for Authority to Construct or Make Changes in a Low Power TV, TV Translator, or FM Translator Station."

* * * * *

11. Section 73.3536 is amended by revising paragraph (a)(7) to read as follows:

§73.3536 Application for license to cover construction permit.

(a) * * *

* * * * *

(7) FCC Form 347, "Application for a Low Power TV, TV Translator, or FM Translator Station License."

* * * * *

12. Section 73.3539 is amended by revising paragraph (d)(8) to read as follows:

§73.3539 Application for renewal of license.

* * * * *

(d) * * *

* * * * *

(8) FCC Form 348, "Application for Renewal of Low Power TV, TV Translator, or FM Translator Station License."

* * * * *

13. Section 73.3564 is amended by revising paragraph (a) to read as follows:

§73.3564 Acceptance of applications.

(a) Applications tendered for filing are dated upon receipt and then forwarded to the Broadcast Bureau, where an administrative examination is made to ascertain whether the applications are complete. Except for low power TV and TV translator ppplications, those found to be complete or substantially complete are accepted for filing and are given file numbers. In the case of minor defects as to completeness, the applicant will be required to supply the missing information. Applications that are not substantially complete will be returned to the applicant. In the case of low power TV and TV translator applications, those found to be complete are accepted for filing and are given file numbers. Low power TV and TV translator applications that are not complete will be returned to the applicant.

14. Section 73.3572 is amended by revising the headnote and paragraph (a)(1) to read as follows:

§73.3572 Processing of TV broadcast, low power TV, and TV translator station applications.

(a) * * *

(1) In the first group are applications for new stations or major changes in the facilities of authorized stations. A major change for TV broadcast stations authorized under this Part is any change in frequency or station location, or any change in the power or antenna location or height above average terrain (or combination thereof) that would result in a change of 50% or more of the area within the Grade B contour of the station. (A change in area is defined as the sum of the area gained and the area lost as a percentage of the original area.) In the case of low power TV and TV translator stations authorized under Part 74, it is any change in:

(i) frequency (output channel) assignment;

(ii) transmitting antenna system including the direction of the radiation, directive antenna pattern or transmission line;

(iii) antenna height;

(iv) antenna location exceeding 200 meters;

(v) authorized operating power; or

(vi) community or area to be served.

However, the FCC may, within 15 days after the acceptance of any other application for modification of facilities, advise the applicant that such application is considered to be one for a major change and therefore subject to the provisions of §§73.3580 and 1.1111 pertaining to major changes.

* * * * *

15. Section 73.3580 is amended by revising paragraphs (c) [introducation], (d)(3) [introduction], and (g) [introduction] to read as follows:

§73.3580 Local public notice of filing of broadcast applications.

* * * * *

(c) An applicant who files an application or amendment thereto which is subject to the provision of this Section, must give a notice of this filing in a newspaper. Exceptions to this requirement are applications for renewal of AM, FM, TV, and International broadcast stations; low power TV stations; TV and FM translator stations; FM booster stations; and applications subject to paragraph (e) of this Section. The filing notice shall be given in a newspaper either immediately following the tendering for filing of the application or amendment, or immediately following notification to the applicant by the FCC that a major change is involved requiring the applicant to give public notice pursuant to §§ 73.3571, 73.3572, 73.3573, or 73.3578.

(1) * * *

(d) * * * * * * * *

* * * * *

(3) An applicant who files for modification, assignment or transfer of a broadcast station license (except for International brnadcast, low power TV, TV translator, FM translator, and FM booster stations) shall give notice of the filing in a newspaper as described in paragraph (c) above, and also broadcast the same notice over the station as follows:

(i) * * *

* * * * *

(g) An applicant who files an application or amendment thereto for a low power TV, TV translator, FM translator, or FM booster station must give notice of this filing in a daily, weekly, or biweekly newspaper of general circulation in the community or area to be served. The filing notice will be given immediately following the tendering for filing of the application or amendment or immediately following notification to the applicant by the FCC that public notice is required pursuant to §§ 73.3571, 73.3572, 73.3573, or 73.3578.

(1) * * *

* * * * *

16. Section 73.3594 is amended by revising paragraphs (a) [introduction, (b) [introduction], (f) [introduction] and (f)(2) to read as follows:

§73.3594 Local public notice of designation for hearing.

(a) Except as otherwise provided in paragraph (c) of this Section when an application subject to the provisions of §73.3580 (except for applications for International broadcast, low power TV, TV translator, FM translator, and FM booster stations) is designated for hearing, the applicant shall give notice of such designation as follows: Notice shall be given at least twice a week, for 2 consecutive weeks within the 3-week period immediately following release of the FCC's order, specifying the time and place of the commencement of the hearing, in a daily newspaper of general circulation published in the community in which the station is located or proposed to be located.

(1) * * *

* * * * *

(b) When an application which is subject to the provisions of §73.3580 and which seeks modification, assignment, transfer, or renewal of an operating broadcast station is designated for hearing (except for applications for an International broadcast, low power TV, TV translator, FM translator, or FM booster stations), the applicant shall, in addition to giving notice of such designation as provided in paragraph (a) of this Section, cause the same notice to be broadcast over that station at least once daily on 4 days in the second week immediately following the release of the FCC's order, specifying the time and place of the commencement of the hearing. In the case of both commercial and noncommercial TV broadcast stations such notice shall be broadcast orally with the camera focused on the announcer. The notice required by this paragraph shall be broadcast during the following periods:

(1) * * *

* * * * *

(f) When an application for a low power TV, TV translator, FM translator, or FM booster station which is subject to the provisions of §73.3580 is designated for hearing, the applicant shall give notice of such designation as follows: Notice shall be given at least once during the 2-week period immediately

following release of the FCC's order, specifying the time and place of the commencement of the hearing in a daily, weekly or biweekly publication having general circulation in the community or area to be served. However, if there is no publication of general circulation in the community or area to be served, the applicant shall determine an appropriate means of providing the rive notice of such designation as follows: Notice shall he given at least once during the 2-week period immediately following release of the FCC's order, specifying the time and place of the commencement of the hearing in a daily, weekly or biweekly publication having general circulation in the community or area to be served. However, if there is no publication of general circulation in the community or area to be served, the applicant shall determine an appropriate means of providing the required notice to the general public, such as posting in the local post office or other public place. The notice shall state:

(1) * * *

(2) The call letters, if any, of the station or stations involved, the output channel or channels of such stations, and, for any rebroadcasting, the call letters, channel and location of the station or stations being or proposed to he rebroadcast.

* * * * *

17. Section 73.3597 is amended by revising paragraphs (a)(1) and (e)(1)(i) to read as follows:

§73.3597 Procedures on transfer and assignment applications.

(a) * * *

(1) The application involves a low power TV, TV translator, FM translator, or FM booster station only;

* * * *

(e) * * *

(1) * * *

(i) "Unbuilt station" refers to an AM, FM, or TV broadcast station or a low power TV station for which a construction permit is outstanding, and, regardless of the stage of physical completion, for which program tests have not commencedor, if required, been authorized.

* * * * *

18. Section 73.3598 is amended by revising paragraph (b) to read as follows:

§73.3598 Period of construction.

* * * * *

(b) Other broadcast, auxiliary and Instructional TV Fixed Stations. Each original permit for the construction of a new AM, FM, or International broadcast; low power TV; TV translator, FM translator; FM booster; broadcast auxiliary; or Instructional TV Fixed station, or to make changes in such existing stations, shall specify a period of 12 months within which construction shall be completed and application for license be filed.

19. Section 73.3613 is amended by revising paragraph (a)(1) to read as follows:

§73.3613 Filing of contracts.

(a) * * *

* * * * *

(1) All network affiliation contracts, agreements, or understandings between a TV broadcast or low power TV station and a national, regional, or other network.

* * * * *

20. Section 74.15 is amended by revising paragraph (d) [introduction] to read as follows:

§74.15 License period.

* * * * *

(d) Initial licenses for low power TV, TV translator, and FM translator stations will ordinarily be issued for a period running until the date specified in this Section for the State or territory in which the station is located or, if issued after such date, to the next renewal date determined in accordance with this Section. When renewed, low power TV amd TV translator station licenses will ordinarily be renewed for 5 years and FM translator station licenses be renewed for 7 years. However, if the FCC finds that the public interest, convenience, or necessity will be served, it may issue either an initial license or a renewal thereof for a lesser term. The time of expiration of all licenses will be 3.a.m., local time, on the following dates, and, thereafter, at 5-year intervals for low power TV and TV translator stations and at 7-year intervals for FM translator stations:

(1) * * *

* * * * *

21. Section 74.432 is amended by revising paragraph (a) to read as follows:

§74.432 Licensing requirements and procedures.

(a) A license for a broadcast remote pickup station or system will be issued only to the licensee of an AM, FM, noncommercial educational FM, TV, or International broadcast station; low power TV station; or to an elgible network entity. To be eligible, a network entity must provide a program service for simultaneous transmission by 10 or more stations through circuit facilities available for program distribution to each affiliated station at least 12 hours of each day.

* * * * *

22. Section 74.601 in its entirety t› read as follows:

§74.601 Classes of TV broadcast auxiliary stations.

(a) TV pickup station A land mobile station used for the transmission of television program material and related communications from the scenes of events occurring at points removed from the station studios to TV broadcast and low power TV stations.

(b) TV STL station (studio-transmitter link). A fixed station used for the transmission of television program material and related communications from the studio to the transmitter of a TV broadcast or low power TV station.

(c) TV intercity relay station. A fixed station used for intercity transmission of television program material and related communications for use by TV broadcast and low power TV stations.

(d) TV translator relay station. A fixed station used for relaying programs and signals of TV broadcast stations to LPTV, TV translator, and other communications facilities that the FCC may authorize.

(e) TV broadcast licensee. Licensees and permittees of both TV broadcast and low power TV stations, unless specifically otherwise indicated.

23. Section 74.602 is amended by revising paragraph (h) and deleting reserved paragraph (i) as follows:

§74.602 Frequency assignment.

* * * * *

(h) TV auxiliary stations licensed to low power TV stations and translator relay stations will be assigned on a secondary basis, i.e., subject to the condition that no harmful interference is caused to other TV auxiliary stations assigned to TV broadcast stations, or to community antenna relay stations (CARS) operating between 12,700 and 13,200 MHz. Auxiliary stations licensed to low power TV stations and translator relay stations must accept any interference caused by stations having primary use of TV auxiliary frequencies.

24. The undesignated title of Subpart G of Part 74 is amended to read as follows:

SUBPART G - LOW POWER TV AND TV TRANSLATOR STATIONS.

25. Section 74.701 is amended by adding new paragraphs (f) and (g) to read as follows:

§74.701 Definitions.

(f) Low power TV station. A station authorized under the provisions of this Subpart that may retransmit the programs and signals of a TV broadcast station and that may originate programming in any amount greater then 30 second per hour and/or operates a subscription service. (See §73.641 of Part 73.)

(g) Program origination. For purposes of this Part, program origination shall be any transmissiods other than the simultaneous retransmission of the programs and signals of a TV broadcast station. Origination shall include locally generated television program signals and program signals obtained via video recordings (tapes and discs), microwave, common carrier circuits, or other sources.

26. Section 74.702 is revised in its entirety to read as follows:

§74.702 Channel assignments.

(a) An applicant for a new low power TV or TV translator station or for changes in the facilities of an authorized station shall endeavor to select a channel on which its operation is not likely to cause interference. The applications must be specific with regard to the channel requested. Only one channel will be assigned to each station.

(1) Any one of the 12 standard VHF Channels (2 to 13, inclusive) may be assigned to a VHF low power TV or TV translator station. Channels 5 and 6 are allocated for nonbroadcast use in Alaska, and will not be assigned to a VHF low power TV or TV translator station in that State.

(2) Any one of the UHF Channels from 14 to 69, inclusive, may be assigned to a UHF low power TV or TV translator station. In accordance with §73.603(c) of Part 73, Channel 37 will not be assigned to such stations.

(3) Application for new low power TV or TV translator stations or for changes in existing stations, specifying operation on output Channels from 70 through 83 will not be accepted for filing. License renewals for TV translator stations operating on those channels will be granted only on a secondary basis to land mobile radio operations.

(b) Changes in the TV Table of Assignments (§73.606(b) of Part 73), authorizations to construct new TV broadcast stations or to change facilities of existing ones, may be made without regard to existing or proposed low power TV or TV translator stations. Where such a change results in a low power TV or TV

translator station causing actual interference to reception of the TV broadcast station, the licensee of the low power TV or TV translator station shall eliminate the interference or file an application for a change in channel assignment.

27. Section 74.703 is revised in its entirety to read as follows:

§74.703 Interference.

(a) An application for a new low power TV or TV translator station or for changes in the facilities of an authorized station will not be granted when it is apparent that interference will be caused. The licensee of a new low power TV or TV translator station shall protect existing low power TV and TV translator stations from interference within the protected contour defined in §74.707 of this Part.

(b) It shall be the responsibility of the licensee of a low power TV or TV translator station to correct at its expense any condition of interference to the direct reception of the signals of a TV broadcast station operating on the same channel as that used by the low power TV or TV translator station or on an adjacent channel, which occurs as the result of the operation of the low power TV or TV translator station. Interference will be considered to occur whenever reception of a regularly used signal is impaired by the signals radiated by the low power TV or TV translator station, regardless of the quality of such reception or the strength of the signal so used. If the interference cannot be promptly eliminated by the application of suitable techniques, operation of the offending low power TV or TV translator stations shall be suspended and shall not be resumed until the interference has been eliminated. If the complainant refuses to permit the low power TV or TV translator licensee to apply remedial techniques that demonstrably will eliminate the interference without impairment of the original reception, the licensee of the low power TV or TV translator station is absolved of further responsibility.

(c) It shall be the responsibility of the licensee of a low power TV or TV translator station to correct any condition of interference which results from the radiation of radio frequency energy outside its assigned channel. Upon notice by the FCC to the station licensee or operator that such interference is caused by the spurious emissions of the station, operation of the station shall be immediately suspended and not resumed until the interference has been eliminated. However, short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures.

(d) When a low power TV or TV translator station causes interference to a CATV system by radiations within its assigned channel at the cable headend or on the output channel of any system converter located at a receiver, the earlier user, whether cable system or low power TV or TV translator station, will be given priority on the channel, and the later user will be responsible for correction of the interference.

(e) Low power TV and TV translator stations are being authorized on a secondary basis to existing land mobile uses and must correct whatever interference they cause to land mobile stations or cease operation.

(f) In each instance where suspension of operation is required, the licensee shall submit a full report to the FCC in Washington, D.C., after operation is resumed, containing details of the nature of the interference, the source of the interfering signals, and the remedial steps taken to eliminate the interference.

28. New Section 74.705 is added to read as follows:

§74.705 TV broadcast station protection.

(a) The TV broadcast station protected contour shall be its Grade B contour as defined in §73.683 of Part 73.

(b)(1) An application to construct a new low power TV or TV translator station or change the facilities of an existing station will not be accepted if it specifies a site which is within the protected contour of a co-channel or first adjacent channel TV broadcast station.

(2) Due to the frequency spacing which exists between TV Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, adjacent channel protection standards shall not be applicable to these pairs of channels. (See §73.603(a) of Part 73.)

(3) A UHF low power TV or TV translator construction permit application will not be accepted if it specifies a site within the UHF TV broadcast station's protected contour and proposes operation on a channel either 14 or 15 channels above the channel in use by the TV broadcast station.

(4) A UHF low power TV or TV translator construction permit application will not be accepted if it specifies a site less than 100 kilometers from the transmitter site of a UHF TV broadcast station operating on a channel which is the seventh channel above the requested channel.

(5) A UHF low power TV or TV translator construction permit application will not be accepted if it specifies a site less than 32 kilometers from the transmitter site of a UHF TV broadcast station operating on a channel which is the second, third, fourth, or fifth channel above or below the requested channel.

(c) The low power TV or TV translator station field strength is calculated from the proposed effective radiated power (ERP) and the antenna height above average terrain (HAAT) in pertinent directions.

(1) For co-channel protection, the field strength is calculated using Figure 9a, 10a, or 10c of §73.699 (F(50,10) charts) of Part 73.

(2) For low power TV or TV translator applications that do not specify the same channel as the TV broadcast station to be protected, the field strength is calculated using Figure 9, 10, or 10b of §73.699 (F(50,50) charts) of Part 73.

(d) A low power TV or TV translator station application will not be accepted if the ratio in dB of its field strength to that of the TV broadcast station at its protected contour fails to meet the following:

(1) -45 dB for co-channel operations without offset carrier frequency operation or -28 dB for offset carrier frequency operation. An application requesting offset carrier frequency operation must include the following:

(i) A requested offset designation (zero, plus, or minus) identifying the proposed direction of the 10 kHz offset from the standard carrier frequencies of the requested channel. If the offset designation is not different from that of the station being protected, the -45 dB ratio must be used.

(ii) A description of the means by which the low power TV or TV translator station's frequencies will be maintained within the tolerances specified in §74.761 of this Part for offset operation.

(2) 6 dB when the protected TV broadcast station operates on a VHF channel that is one channel above the requested channel.

(3) 12 dB when the protected TV broadcast station operates on a VHF channel that is one channel below the requested channel.

(4) 15 dB when the protected TV broadcast station operates on a UHF channel that is one channel above or below the requested channel.

(5) 23 dB when the protected TV broadcast station operates on a UHF channel that is fourteen channels below the requested channel.

(6) 6 dB when the protected TV broadcast station operates a UHF channel that is fifteen channels below the requested channel.

29. New Section 74.707 is added to read as follows:

§74.707 Low power TV and TV translator station protection.

(a)(1) A low power TV or TV translator will be protected from interference from other low power TV and TV translator stations within the following predicted contours:

(i) 62 dBu for stations on Channels 2 through 6;

(ii) 68 dBu for stations on Channels 7 through 13; and

(iii) 74 dBu for stations on Channels 14 through 76.

(2) The low power TV or TV translator station protected contour is calculated from the authorized effective radiated power and antenna height above average terrain, using Figure 9, 10, or 10b of §73.699 (F(50,50) charts) of Part 73.

(b)(1) An application to construct a new low power TV or TV translator station or change the facilities of an existing station will not be accepted if it specifies a site which is within the protected contour of a co-channel or first adjacent channel low power TV or TV translator station.

(2) Due to the frequency spacing which exists between TV Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, adjacent channel protection standards shall not be applicable to these pairs of channels. (See §73.603(a) of Part 73.)

(3) A UHF low power TV or TV translator construction permit application will not be accepted if it specifies a site within the UHF low power TV or TV translator station's protected contour and proposes operation on a channel either 7 channels below or 14 or 15 channels above the channel in use by the low power TV or TV translator station.

(c) The low power TV or TV translator construction permit application field strength is calculated from the proposed effective radiated power (ERP) and the antenna height above average terrain (HAAT) in pertinent directions.

(1) For co-channel protection, the field strength is calculated using Figure 9a, 10a, or 10c of §73.699 (F(50,10) charts) of Part 73.

(2) For low power TV or TV translator applications that do not specify the same channel as the low power TV or TV translator station to be protected, the field strength is calculated using Figure 9, 10, or 10b of §73.699 (F(50,50) charts) of Part 73.

(d) A low power TV or TV translator station application will not be accepted if the ratio in dB of its field strength to that of the authorized low power TV or TV translator station at its protected contour fails to meet the following:

(1) -45 dB for co-channel operations without offset carrier frequency operation or -28 dB for offset carrier frequency operation. An application requesting offset carrier frequency operation must include the following:

(i) A requested offset designation (zero, plus, or minus) identifying the proposed direction of the 10 kHz offset from the standard carrier frequencies of the requested channel. If the offset designation is not different from that of the station being protected, or if the station being protected is not maintaining its frequencies within the tolerance specified in §74.761 of this Part for offset operation, the -45 dB ratio must be used.

(ii) A description of the means by which the low power TV or TV translator station's frequencies will be maintained within the tolerances specified in §74.761 of this Part for offset operation.

(2) 6 dB when the protected low power TV or TV translator station operates on a VHF channel that is one channel above the requested channel.

(3) 12 dB when the protected low power TV or TV translator station operates on a VHF channel that is one channel below the requested channel.

(4) 15 dB when the protected low power TV or TV translator station operates on a UHF channel that is one channel above or below the requested channel.

(5) 0 dB when the protected low power TV or TV translator station operates on a UHF channel that is seven channels above the requested channel.

(6) 23 dB when the protected low power TV or TV translator station operates on a UHF channel that is fourteen channels below the requested channel.

(7) 6 dB when the protected low power TV or TV translator station operates a UHF channel that is fifteen channels below the requested channel.

30. New Section 74.709 is added to read as follows:

§74.709 Land mobile station protection.

(a) Stations in the Land Mobile Radio Service, using the following channels in the indicated cities will be protected from interference caused by low power TV or TV translator stations, and low power TV and TV translator stations must accept any interference from stations in the land mobile service operating on the following channels:

CITY	CHANNELS	COORDINATES (LAT/LONG)
Boston, MA	14, 16	42-21-24/071-03-24
Chicago, IL	14, 15	41-52-28/087-38-22
Cleveland, OH	14, 15	41-29-51/081-41-50
Dallas, TX	16	32-47-09/096-47-37
Detroit, MI	15, 16	42-19-48/083-02-57
Houston, TX	17	29-45-26/095-21-37
Los Angeles, CA	14, 20	34-03-15/118-14-28
Miami, FL	14	25-46-37/080-11-32
New York, NY	14, 15	40-45-06/073-59-39
Philadelphia, PA	19, 20	39-56-58/075-09-21
Pittsburgh, PA	14, 18	40-26-19/080-00-00
San Francisco, CA	16, 17	37-46-39/122-24-40
Washington, DC	17, 18	38-53-51/077-00-33

(b) The protected contours for the land mobile radio service are 130 kilometers from the above coordinates, except where limited by the following:

(1) If the land mobile channel is the same as the channel in the following list, the land mobile protected contour excludes the area within 145 kilometers of the corresponding coordinates from list below. Except if the land mobile channel is 15 in New York or Cleveland or 16 in Detroit, the land mobile protected contour excludes the area within 95 kilometers of the corresponding coordinates from the list below.

(2) If the land mobile channel is one channel above or below the channel in the following list, the land mobile protected contour excludes the area within 95 kilometers of the corresponding coordinates from the list below.

CITY	CHANNEL	COORDINATES (LAT/LONG)
San Diego, CA	15	32-41-48/116-56-10
Waterbury, CT	20	41-31-02/073-01-00
Washington, DC	14	38-57-17/077-00-17
Washington, DC	20	38-57-49/077-06-18
Champaign, IL	15	40-04-11/087-54-45
Jacksonville, IL	14	39-45-52/090-30-29
Ft. Wayne, IN	15	41-05-35/085-10-42
South Bend, IN	16	41-36-20/086-12-44
Salisbury, MD	16	38-24-15/075-34-45
Mt. Pleasant, MI	14	43-34-24/084-46-21
Hanover, NH	15	43-42-30/072-09-16
Canton, OH	17	40-51-04/081-16-37
Cleveland, OH	19	41-21-19/081-44-24
Oxford, OH	14	39-30-26/084-44-09
Zanesville, OH	18	39-55-42/081-59-06
Elmira-Corning, NY	18	42-06-20/076-52-17
Harrisburg, PA	21	40-20-44/076-52-09
Johnstown, PA	19	40-19-47/078-53-45
Lancaster, PA	15	40-15-45/076-27-49
Philadelphia, PA	17	40-02-30/075-14-24
Pittsburgh, PA	16	40-26-46/079-57-51
Scranton, PA	16	41-10-58/075-52-21
Parkersburg, WV	15	39-20-50/081-33-56
Madison, WI	15	43-03-01/089-29-15

(c) A low power TV or TV translator station application will not be accepted if it specifies a site that is within the protected contour of a co-channel or first adjacent channel land mobile assignment.

(d) The low power TV or TV translator station field strength is calculated from the proposed effective radiated power (ERP) and the antenna height above average terrain (HAAT) in pertinent directions.

(1) The field strength is calculated using Figure 10c of §73.699 (F(50,10) charts) of Part 73.

(2) A low power TV or TV translator station application will not be accepted if it specifies the same channel as one of the land mobile assignments and its field strength at the land mobile protected contour exceeds 52 dBu.

(3) A low power TV or TV translator station application will not be accepted if it specifies a channel that is one channel above or below one of the land mobile assignments and its field strength at the land mobile protected contour exceeds 76 dBu.

(e) In order to protect stations in the Offshore Radio Telecommunications Service, a low power TV or TV translator station construction permit application specifying operation on Channel 17 will not be accepted if it specifies a latitude south of the line 31° 30' North, and between longitudes 86° 30' West and 95° 30' West. An application specifying operation on either Channel 16 or Channel 18 will not be accepted if it specifies a latitude south of the line 31° 00' North and between longitudes 87° 00' West and 95° 00' West.

31. Section 74.731 is amended by revising paragraphs (g), (h), (i), and (j) to read as follows:

§74.731 Purpose and permissible service.

* * * * *

(g) Low power TV stations may operate under the following modes of service:

(1) As a TV translator station, subject to the requirements of this Part;

(2) For origination of programming and commercial matter as defined in §74.701(f) of this Part;

(3) For the transmission of subscription television broadcast (STV) programs, intended to be received in intelligible form by members of the public for a fee or charge, subject to the provisions of §§73.642(e) and (f)(3), and 74.644.

(h) A low power TV station may not be operated solely for the purpose of relaying signals to one or more fixed receiving points for retransmission, distribution or relaying.

(i) Low power TV stations are subject to no minimum required hours of operation and may operate in any of the 3 modes described in paragraph (g) above for any number of hours.

(j) An applicant for a 1 kW UHF TV translator station to operate on a channel assigned to a TV broadcast station which is not in operation, shall notify the licensee or permitee of the TV broadcast station, in writing, of the filing of the application and shall certify to the FCC that such notice has been given.

32. Section 74.732 is revised in its entirety to read as follows:

§74.732 Eligibility and licensing requirements.

(a) Subject to the restrictions described in paragraph (e) of this Section, a license for a low power TV or TV translator station may be issued to any qualified individual, organized group of individuals, broadcast station licensee, or local civil governmental body.

(b) More than one low power TV or TV translator station may be licensed to the same applicant whether or not such stations serve substantially the same area. Low power TV and TV translator stations are not counted for purposes of §73.636 of Part 73, concerning multiple ownership.

(c) Only one channel will be assigned to each low power TV or TV translator station. Additional low power or translator stations may be authorized to provide additional reception. A separate application is required for each station and each application must be complete in all respects.

(d) The FCC will not act on applications for new low power TV or TV translator stations or for changes in facilities of existing stations when such changes will result in an increase in signal range in any horizontal direction until at least 30 days have elapsed since the date on which "Public Notice" is given by the FCC of acceptance for filing of such application, in order to afford interested parties opportunity to comment and afford opportunity for competing applications to be filed.

(e) A proposal to change the primary TV station being retransmitted or an application of a licensed translator station to include low power TV station operation, i.e., program origination or subscription service will be subject only to informal objections.

(f) Applications for transfer of ownership or control of a low power TV or TV translator station will be subject to petitions to deny.

33. Section 74.734 is revised in its entirety to read as follows:

§74.734 Attended and unattended operation.

(a) In all circumstances other than during local origination (see §74.701(g)), low power TV and TV translator stations may be operated without a licensed radio operator in attendance if the following requirements are met:

(1) If the transmitter site cannot be promptly reached at all hours and in all seasons, means shall be provided so that the transmitting apparatus can be turned on and off at will from a point that readily is accessible at all hours and in all seasons.

(2) The transmitter also shall be equipped with suitable automatic circuits that will place it in a nonradiating condition in the absence of a signal on the input channel or circuit.

(3) The transmitting and the ON/OFF control, if at a location other than the transmitter site, shall be adequately protected against tampering by unauthorized persons.

(4) The FCC shall be supplied with the name, address, and telephone number of a person or persons who may be called to secure suspension of operation of the transmitter promptly should such action be deemed necessary by the FCC. Such information shall be kept current by the licensee.

(5) In cases where the antenna and supporting structure are considered to be a hazard to air navigation and are required to be painted and lighted under the provisions of Part 17 of the Rules, the licensee shall made suitable arrangements for the daily observations, when required, and lighting equipment inspections required by §§17.37 and 17.38 of the FCC rules.

(6) In the case of a low power TV or TV translator station using modulating equipment, observation of the transmitted program signal on a suitable receiver shall be made for at least 10 continuous minutes each day by a person designated by the licensee, who shall institute measures sufficient to assure prompt correction of any condition of improper operation that is observed.

(b) An application for authority to construct a new low power TV station (when rebroadcasting the programs of another station) or TV translator station or to make changes in the facilities of an authorized station, and that proposes unattended operation, shall include an adequate showing as to the manner of compliance with this Section.

34. Section 74.735 is amended by revising paragraphs (a), (b) [introduction only], (c), (d), and (e); and adding new paragraph (f) to read as follows:

§74.735 Power limitation.

(a) The power output of the final radiofrequency amplifier of a VHF low power TV or TV translator station, except as provided for in paragraphs (d) and (f) of this Section shall not exceed 0.01 kW peak visual power. A UHF station shall be limited to a maximum of 1 kW peak visual power, except as provided for in paragraph (f) of this Section. In no event shall the transmitting apparatus be operated with a power output in excess of the manufacturer's rating.

(b) In individual cases, the FCC may authorize the use of more than one final radio frequency amplifier at a single VHF or UHF station under the following conditions:

(1) * * *

* * * * *

(c) No limit is placed upon the effective radiated power that may be obtained by the use of horizontally or vertically polarized directive transmitting antennas, provided the provisions of §§74.705, 74.707, and 74.709 are met.

(d) VHF low power TV and TV translator stations authorized on channels listed in the TV table of allocations (see §73.606(b) of Part 73) will be authorized a maximum output power of the radio frequency amplifier of 0.1 kW peak visual power.

(e) The power output of the final radio amplifier of a VHF or UHF transmitter may be fed into a single transmitting antenna, or may be divided between two or more transmitting antennas or antenna arrays in any manner found useful or desirable by the licensee.

(f) A station proposing to use antenna(s) designed for circularly polarized radiation may be authorized to use a type accepted transmitter or parallel connected of two type accepted translator amplifiers to operate at peak visual output power of twice that specified under the maximum transmitter power limitations given above in this Section.

35. Section 74.736 is amended by revising paragraph (a) to read as follows:

§74.736 Emissions and bandwidth.

(a) The license of a low power TV or TV translator station station authorizes the transmissions of the visual signal by amplitude modulation (A5) and the accompaning aural signal by frequency modulation (F3).

* * * * *

36. Section 74.737 is revised in its entirety to read as follows:

§74.737 Antenna location.

(a) An applicant for a new low power TV or TV translator station or for a change in the facilites of an authorized station shall endeavor to select a site that will provide a line-of-sight transmission path to the entire area intended to be served and at which there is available a suitable signal from the primary station, if any, that will be retransmitted.

(b) The transmitting antenna should be placed above growing vegitation and trees lying in the direction of the area intended to be served, to minimize the possibility of signal absorption by foliage.

(c) A site within 8 kilometers of the area intended to be served is to be preferred if the conditions in paragraph (a) of this Section can be met.

(d) Consideration should be given to the accessibility of the site at all seasons of the year and to the availability of facilities for the maintenance and operation of the transmitting equipment.

(e) The transmitting antenna should be located as near as is practical to the transmitter to avoid the use of long transmission lines and the associated power losses.

(f) Consideration should be given to the existence of strong radio frequency fields from other transmitters at the site of the transmitting equipment and the possibility that such fields may result in the retransmissions of signals originating on frequencies other than that of the primary station being rebroadcast.

37. Section 74.750 is amended by revising the headnote and paragraphs (a), (b), (c) [introduction], (c)(3)(iii), (c)(7), (d) [introduction], (d)(1), (e)(1), (e)(2), (e)(3), and (g) to read as follows:

§74.750 Transmission system facilities.

* * * * *

(d) Low power TV and TV translator transmitting equipment using a modulation process for either program origination or rebroadcasting must meet the following requirements:

(1) The equipment shall meet the requiirements of paragraphs (1)(1), (a)(2), (a)(3), (b)(1), and (b)(7) of §73.687.

* * * * *

(e) * * *

(1) Any manufacturer of apparatus intended for use at low power TV or TV translator stations may request type acceptance by following the procedures set for in Part 2, Subpart J, of this Chapter. Equipment found to be acceptable by the FCC will be listed in the "Radio Equipment List" published by the FCC. These lists are available for inspection at the FCC headquarters in Washington, D.C. or at any of its field offices.

(2) Low power TV and TV translator transmitting apparatus that has been type accepted by the FCC will normally be authorized without additional measurements from the applicant or licensee.

(3) Applications for type acceptance of modulators to be used with exisiting type accepted TV translator apparatus must include the specifications electrical and mechanical interconnecting requirements for the apparatus with which it is designed to be used.

* * * * *

(g) Low Power TV or TV translator stations installing new type accepted transmitting apparatus incorporating modulating equipment need not make equipment performance measurements and shall so indicate on the station license application. Stations adding new or replacing modulating equipment to existing low power TV or TV translator transmitting apparatus must have an operator holding a General Radiotelephone Operator License examine the transmitting system after installation. This operator must certify in the application for the station license that the transmitting equipment meets the requirement of paragraph (d)(1) of this Section. A report of the methods, measurements, and results must be kept in the station records. However, stations using modulating equipment solely for the limited local origination of signals permitted by §74.731 need not comply with the requirements of this paragraph.

The following rules are applicable to programs originated by low power TV stations:

(a) §73.658, "Affiliation agreements and network program practices; territorial exclusivity in non-network program arrangements."

(b) §73.1202, "Station identification."

(c) §73.1205, "Fraudulent billing practices."

(d) §73.1206, "Broadcast of telephone conversations."

(e) §73.1207, "Rebroadcasts."

(f) §73.1208, "Broadcast of taped, filmed, or recorded material."

(g) §73.1211, "Broadcast of lottery information."

(h) §73.1212, "Sponsorship identification; list retention; related requirements."

(i) §73.1216, "Licensee-conducted contests."

(j) §73.1940, "Broadcasts by candidates for public office."

(k) §73.2080, "Equal employment opportunities."

(l) Part 73, Subpart G, "Emergency Broadcast System."

48. Section 74.783 is amended by revising the introducation of paragraph (a) and paragraph (c) and adding new paragraph (d) to read as follows:

§74.783 Station identification.

(a) Each TV translator station over 0.001 kW peak visual power (0.002 kW when using circularly polarized antennas) must transmit its station identification as follows:

(1) * * *

* * * * *

(c) A low power TV station shall comply with the station identification procedures given in §73.1201 of Part 73 when originating programming (See Section 74.701(g)). The identification procedures given in paragraphs (a) and (b) are to be used when programs of another station are being rebroadcast.

(d) Call signs for low power TV and TV translator stations will be made up of the initial letter K or W followed by the channel number assigned to the station and two additional letters. The use of the initial letter generally will follow the pattern used in the broadcast service, i.e., stations west of the Mississippi River will be assigned an initial letter K and those east, the letter W. The two letter combinations following the channel number will be assigned in order and requests for the assignment of the particular combinations of letters will not be considered. The channel number designator for Channels 2 through 9 will be incorporated in the call sign as a 2-digit number, i.e., 02, 03,...., so as to avoid similarities with call signs assigned to amateur radio stations.

49. Section 74.784 is amended by revising paragraphs (b) and (c) and adding new paragraph (d) to read as follows:

§74.784 Rebroadcasts.

* * * * *

(b) The licenese of a low power TV or TV translator station shall not rebroadcast the programs of any other TV broadcast station or other station authorized under the provisions of this Subpart without obtaining prior consent of the station whose signals or programs are proposed to be retransmitted. The FCC shall be notified of the call letters of each station rebroadcast and the licensee of the low power TV or TV broadcast translator station shall certify that written consent has been obtained from the licensee of the station whose programs are retransmitted.

(c) A TV translator station may rebroadcast only programs and signals that are simultaneously transmitted by a TV broadcast station.

(d) The provisions of §73.1207 of Part 73 apply to low power TV stations in transmitting any material during periods of program origination obtained from the transmissions of any other type of station.

50. Section 74.832 is amended by revising paragraphs (a)(1) and (c) to read as follows:

§74.832 Licensing requirements and procedures:

(a) * * *

(1) A licensee of an AM, FM, TV, or International broadcast station or low power TV station. Low power auxiliary stations will be licensed for use with a specific broadcast or low power TV station or combination of stations licensed to the same licensee within the same community.

* * * *

(c) Licensees of AM, FM, TV, and International broadcast stations; low power TV stations; and eligible network entities may be authorized to operate low power auxiliary stations in the frequency bands set forth in §74.802(a).

51. Section 76.501 is amended by revising paragraph (a)(2) and deleting paragraph (a)(3) in its entirety as follows:

§76.501 Cross-ownership

(a) * * *

(1) * * *

(2) A TV broadcast station whose predicted Grade B contour, computed in accordance with §73.684 of Part 73, overlaps in whole or in part the service area of such system (i.e., the area within which the system is serving subscribers).

(3) [Deleted.]

52. Section 76.605 is amended by revising paragraph (a)(9)(iii) to read as follows:

§76.605 Technical standards.

(a) * * *

* * * * *

(9) * * *

* * * * *

(iii) Each signal that is first received by the cable television system by direct video feed from a TV broadcast station or a low power TV station.

* * * * *

53. Section 78.1 AMENDED;

The last sentence in Section 78.1 is revised to read as follows:

In addition CARS stations may be used to transmit television and related audio signals to TV translator and low power TV stations.

54. Section 78.11 AMENDED.

The first sentence of Section 78.11, paragraph (a) is revised to read as follows:

CARS stations are authorized to relay TV broadcast and low power TV and related audio signals, the signals of AM and FM broadcast stations, signals of instructional TV fixed stations, and cablecasting intended for use by one or more cable television systems.

APPENDIX B

Federal Communications Commission
Washington, D.C., 20554

Instructions for FCC 346
Application For Construction Permit For Auxiliary Broadcast Station

(FCC Form 346 attached)

GENERAL INSTRUCTIONS

A. This FCC form is to be used to apply for authority to construct a new auxiliary broadcast station, or to make changes in the existing facilities of such a station. It consists of the following sections:

I. GENERAL INFORMATION
II. LEGAL QUALIFICATIONS
III. FINANCIAL QUALIFICATIONS
IV. PROGRAM SERVICE STATEMENT
V. ENGINEERING DATA AND ANTENNA AND SITE INFORMATION
VI. EQUAL EMPLOYMENT OPPORTUNITY PROGRAM
VII. CERTIFICATION

An applicant for a change in facilities need not file Sections II, III, IV and VI.

B. Prepare and submit three copies of this form and all exhibits to: The Secretary
Federal Communications Commission
Washington, D.C. 20554

C. Many references to FCC Rules (47 CFR) are made in this application form. Before filling it out, the applicant should have on hand and be familiar with current broadcast rules in:

(1) Volume I: Parts 0 ("Commission Organization"), 1 ("Practice and Procedure"), and 17 ("Construction Marking and Lighting of Antenna Structures").

(2) Volume III: Part 73 ("Radio Broadcast Services").

FCC Rules may be obtained through the Government Printing Office, Washington, D.C. 20402. Orders should be sent directly to the Government Printing Office (not through the FCC). The printed rules are sold on a subscription basis, which entitles the purchaser to receive subsequent amendments to the rule part purchased until an overall revised edition is printed. You may telephone the Government Printing Office at (202) 783-3238.

D. Public Notice Requirement:

(1) Section 73.3580 of the Commission's Rules requires that applicants for construction permits for new broadcast stations and major changes in existing facilities (as defined in Section 73.3572(a)(1) or 73.3573(a)(1) of the Rules) give local notice in a newspaper of general circulation in the community to which the station is licensed. This publication requirement also applies with respect to major amendments thereto as defined in Sections 73.3572(b) and 73.3573(b) of the Rules.

(2) Completion of publication may occur within 30 days before or after tendering of the application. Compliance or intent to comply with the public notice requirement must be certified in Section VI of this application. The information that must be contained in the notice of filing is described in Paragraph (f) of Section 73.3580 of the Rules. Proof of publication need not be filed with this application.

E. A copy of this completed application and all related documents shall be made available for inspection by the public, pursuant to Section 73.3526 of the FCC Rules.

F. Replies to questions in this form and the applicant's statements constitute representations on which the FCC will rely in considering the application. Thus, time and care should be devoted to all replies, which should reflect accurately the applicant's responsible consideration of the questions asked. Include all information called for by this application. If any portions of the application are not applicable, so state. Defective or incomplete applications will be returned without consideration. Furthermore, inadvertently accepted applications are also subject to dismissal.

38. Section 74.751 is amended by revising paragraphs (b)(1), (b)(2), (b)(6), and (c), and adding new paragraph (d) to read as follows:

§74.751 Equipment changes.

(b) * * * * * * * * * *

(1) Replacement of the transmitter as a whole, except replacement with a transmitter of identical power rating which has been type accepted by the FCC for use by low power TV and TV translator stations, or any change which could result in a change in the electrical characteristics or performance of the station.

(a) Application for new low power TV and TV translator ions and for increased transmitter power for previously orized facilities will not be accepted unless the transmitter isted in the FCC's list of equipment type accepted for nsing under the provisions of this Subpart.

(2) Any change in the transmitting antenna system, including the direction of radiation, directive antenna pattern, antenna gain, transmission line loss characteristics, or height of antenna center of radiation.

* * * * *

(6) Any changes in the location of the transmitter except within the same building or upon the same pole or tower.

* * * * *

(c) Other equipment changes not specifically referred to in paragraph (a) or (b) above many be made at the discretion of the licensee, provided that the Engineer in Charge of the Radio District in which the low power TV or TV translator station is located and the FCC in Washington, D.C., are notified in writing upon completion of such changes, and that the changes are appropriately reflected in the next application for renewal of the station license.

(d) Upon installation of new or replacement transmitting equipment for which prior FCC authority is not required under the provisions of this Section, the licensee must place in the station records a certification that the new installation complies in all respects with the technical requirements of this part and the station authorization.

* * * * *

39. Section 74.761 is amended by revising the introduction and adding new paragraph (d) to read as follows:

§74.761 Frequency tolerance.

The licensee of a low power TV or TV translator station shall maintain the transmitter output frequencies as set forth below. The frequency tolerance of stations using direct frequency conversion of a received signal and not engaging in offset carrier operation as set forth in paragraph (d) of this Section will be referenced to the authorized plus or minus 10 kHz offset, if any, of the primary station.

(iii) plus or minus 1 kHz of its rated frequency for transmitters to be used at stations employing offset carrier frequency operation.

* * * * *

(5) The apparatus must be equipped with automatic controls that will place it in a non-radiating condition when no signal is being received on the input channel, either due to absence of a transmitted signal or failure of the receiving portion of the facilities used for rebroadcasting the signal of another station. The automatic control may include a time delay feature to prevent interruptions caused by fading or other momentary failures of the incoming signal.

(6) * * *

(7) The transmitters of over 0.001 kW peak visual power (0.002 kW when circularly polarized antennas are used) shall be equipped with an automatic keying device that will transmit the call sign of the station, in International Morse Code, at lease once each hour during the time the station is in operation when operating in the translator mode retransmitting the programming of a TV broadcast station. However, the identification by Morse Code is not required if the licensee of the low power TV or TV translator station has an agreement with the TV broadcast station being rebroadcast to transmit the aurally or visually the low power TV or TV translator station call as provided for in §74.783. Transmission of the call sign can be accomplished by:

(i) * * *

(b) Transmitting antennas, antennas used to receive the signals to be rebroadcast, and transmission lines are not type accepted by the FCC. External preamplifiers also may be used provided that they do not cause improper operation of the transmitting equipment, and use of such preamplifiers is not necessary to meet the provisions of paragraph (c) of this Section.

(c) The following requirements must be met before low power TV and TV translator transmitters will be type accepted by the FCC:

(1) * * *

* * * *

(d) The visual carrier shall be maintained to within 1 kHz of the assigned channel carrier frequency if the low power TV or TV translator station is authorized with a specified offset designation in order to provide protection under the provisions of §74.705 or §74.707 of this Part.

40. Section 74.762 is amended in its entirety to read as follows:

§74.762 Frequency measurements.

(a) The licensee of a low power TV or TV translator station is not required to provide a means for measuring the operating frequencies of the transmitter. However, only equipment having the required stability will be type accepted for use by low power TV or TV translator stations.

(b) In the event that a low power TV or TV translator station is found to be operating beyond the frequency tolerance prescribed in §74.761, the licensee promptly shall suspend operation of the transmitter and shall not resume operation until transmitter has been restored to its assigned frequencies. Adjustment of the frequency determining circuits of the transmitter shall be made only by a qualified person in accordance with §74.750(g).

41. Section 74.763 is revised by amending paragraphs (a) and (c) to read as follows:

§74.763 Time of operation.

(a) A low power TV or TV translator station is not required to adhere to any regular schedule of operation. However, the licensee of a TV translator station is expected to provide service to the extent that such is within its control and to avoid unwarranted interruptions in the service provided.

* * * * *

(c) Failure of a low power TV or TV translator station to operate for a period of 30 days or more, except for causes beyond the control of the licensee, shall be deemed evidence of discontinuation of operation and the license of the station may be cancelled at the discretion of the FCC.

* * * * *

42. Section 74.764 is revised in its entirety to read as follows:

§74,764 Station inspections.

The licensee of a low power TV or TV translator station shall make the station and the records required to be kept by the rules in this Part available for inspection by representatives of the FCC.

43. Section 74.765 is amended in its entirety to read as follows:

§74.765 Posting of station and operator licenses.

(a) The station license and any other instrument of authorization or individual order concerning the construction of the station or manner of operation shall be kept in the station record file so as to be available for inspection upon request of authorized representatives of the FCC.

(b) The licenses or permits of operators employed at low power TV stations originating programs shall be posted in accordance with the provisions of §73.1230(b) of Part 73.

(c) The call sign of the station, together with the name, address, and telephone number of the licensee or local representative of the licensee, if the licensee does not reside in the community served by the station, and the name and address of the person and place where the station records are maintained, shall be displayed at the transmitter site on the structure supporting the transmitting antenna, so as to be visible to a person standing on the ground. The display shall be maintained in legible condition by the licensee.

44. Section 74.766 is amended by revising the headnote and adding new paragraph (e) to read as follows:

§74.766 Low power TV and TV translator operator requirements.

* * * * *

(e) An operator holding any class of FCC operator license or permit, except the Marine Operator Permit, must be on duty in charge of the transmitting apparatus of a low power TV station during all periods of program origination as defined in Section 74.701(g).

G. In accordance with Section 1.65 of the Rules, the applicant has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in the information furnished.

SECTION I INSTRUCTIONS

A. The name of the applicant stated in Section I shall be:

(i) if a corporation, the EXACT corporate name;
(ii) if a partnership, the names of all partners, and the name under which the partnership does business;
(iii) if an association, the name of the individual(s) authorized to act on behalf of the association, and the name of the association;
(iv) if an individual applicant, the full legal name.

In all other sections of this form, the organization name alone will be sufficient for identification of the applicant.

B. In Section I use the following State abbreviations:

Alabama	AL	Kentucky	KY	Ohio	OH
Alaska	AK	Louisiana	LA	Oklahoma	OK
American Samoa	AS	Maine	ME	Oregon	OR
Arizona	AZ	Maryland	MD	Pennsylvania	PA
Arkansas	AR	Massachusetts	MA	Puerto Rico	PR
California	CA	Michigan	MI	Rhode Island	RI
Colorado	CO	Minnesota	MN	South Carolina	SC
Connecticut	CT	Mississippi	MS	South Dakota	SD
Delaware	DE	Missouri	MO	Tennessee	TN
District of Columbia	DC	Montana	MT	Texas	TX
Florida	FL	Nebraska	NB	Trust Territory Of The Pacific Islands	TT
Georgia	GA	Nevada	NV	Utah	UT
Guam	GU	New Hampshire	NH	Vermont	VT
Hawaii	HI	New Jersey	NJ	Virginia	VA
Idaho	ID	New Mexico	NM	Virgin Islands	VI
Illinois	IL	New York	NY	Washington	WA
Indiana	IN	North Carolina	NC	West Virginia	WV
Iowa	IA	North Dakota	ND	Wisconsin	WI
Kansas	KS	Northern Mariana Islands	CM	Wyoming	WY

SECTION II INSTRUCTIONS

A. As used in Section II, the words "party to this application" have the following meanings:

INDIVIDUAL APPLICANT: The applicant.

PARTNERSHIP APPLICANT: All partners, including limited partners. If any partner is a corporation or other entity, the definitions set forth below will apply.

CORPORATE APPLICANT: All officers and directors, and all persons or entities who are the beneficial or record owners or have the right to vote any capital stock, membership or owner interest, or subscribers to such interests, shall be considered parties to this application. If any corporation or other legal entity owns stock in the applicant, its officers, directors and persons or entities who are the beneficial or record owners or have the right to vote any capital stock, membership or owner interest, or subscribers to such interest, of that entity shall also be considered parties to this application.

In the event the applicant has more than 50 stockholders, only officers and directors and persons or entities who are the beneficial or record owners or have the right to vote 1% or more of the capital stock, membership or owner interest, or subscribers to such interest shall be considered parties to this application. However, if such entity is a bank, insurance company, or investment company (as defined by 15 U.S.C. §80a-3) which does not invest for purposes of control, the relevant stock, membership or owner interest is 5% or more. If any corporation or other legal entity owns 1% or more of an applicant with more than 50 stockholders, its officers, directors and all persons or entities who are the beneficial or record owners or have the right to vote 1% or more of the

capital stock, membership or owner interest, or subscribers to such interest in the entity, shall also be considered parties to this application. However, if such entity is a bank, insurance company or investment company (as defined by 15 U.S.C. §80-3) which does not invest for purposes of control, the relevant stock, membership or owner interest is 5% or more.

ANY OTHER APPLICANT: All executive officers, members of the governing board and owners or subscribers to any membership or ownership interest in the applicant.

B. All applicants must comply with Section 310 of the Communications Act of 1934, as amended. Specifically, Section 310 proscribes issuance of a construction permit to an alien, the representative of an alien, a foreign government or the representative thereof, or a corporation organized under the laws of a foreign government. This proscription also applies with respect to any corporation of which any officer or director is an alien or of which more than 20% of the capital stock is owned or voted by aliens, their representatives, a foreign government or its representative, or by a corporation organized under the laws of a foreign country. This proscription could likewise apply to any corporation directly or indirectly controlled by another corporation of which (a) any officer is, (b) more than 25% of the directors are, or (c) more than 25% of the capital stock is owned and voted by aliens, their representatives, a foreign government or its representative. The Commission may also deny a construction permit to a corporation controlled by another corporation organized under the laws of a foreign country.

C. The applicant must determine the citizenship of each officer and director. It must also determine the citizenship of each shareholder or else explain how it determined the relevant percentages. For large corporations, a sample survey using a recognized statistical method is acceptable for this purpose.

SECTION III INSTRUCTIONS

A. All applicants filing Form 346 must be financially qualified to effectuate their proposals. Certain applicants (i.e., for a new station, to reactivate a silent station, or if specifically requested by the Commission) must demonstrate their financial qualifications by filing Section III. DO NOT SUBMIT Section III if the application is for changes in operating or authorized facilities.

B. An applicant for a new station must attest it has sufficient net liquid assets on hand, or committed sources of funds to construct the proposed facility and operate for three months, without revenue. As used in Section III, "net liquid assets" means the lesser amount of the net current assets or of the liquid assets shown on a party's balance sheet, with net current assets being the excess of current assets over current liabilities.

C. Documentation supporting the attestation of financial qualification need not be submitted with this application but must be available to the Commission upon request. The Commission encourages that all financial statements used in the preparation of this application be prepared in accordance with generally accepted accounting principles.

D. It is Commission policy not to grant extension of time for construction on the basis of financial inability or unwillingness to construct.

SECTION VI INSTRUCTIONS

A. Applicants seeking authority to construct a new low power television (LPTV) broadcast station, applicants seeking authority to obtain assignment of the construction permit or license of such a station, and applicants seeking authority to acquire control of an entity holding such construction permit or license are required to afford equal employment opportunity to all qualified persons and to refrain from discriminating in employment and related benefits on the basis of race, color, religion, national origin or sex. See Section 73.2080 of the Commission's Rules. Pursuant to these requirements, an applicant who proposes to employ five or more full-time station employees must establish a program designed to assure equal employment opportunity for women and minority groups (that is, Blacks not of Hispanic origin, Asian or Pacific Islanders, American Indians or Alaskan Natives, and Hispanics). This is submitted to the Commission as the Model EEO Program Form. If minority group representation in the available labor force is less than five percent (in the aggregate), a program for minority group members is not required. However, a program must be filed for women since they comprise a significant percentage of virtually all area labor forces. If an applicant proposes to employ less than five full-time employees, no EEO program for women or minorities need be filed.

B. Guidelines for developing an Equal Employment Opportunity program are set forth as a separate Model EEO Program.

NOTE: This five-point Model EEO Program Form is to be utilized only by applicants for new construction permits, assignees and transferees.

SECTION I GENERAL INFORMATION FILE # _____

FCC FORM 346

1. _____
Name of Applicant

_____
Mailing Address

_____
City State Zip Code Telephone No.

2. This application is for: ___ FM Translator ___ LPTV ___ TV Translator

(a) Channel number: _____

(b) Community of license: _____
City State

(c) Check one:

____ New Station

____ Major change in existing station _____
Call Letters

____ Minor change in existing station _____
Call Letters

____ Amendment to pending application _____
Application Reference Number

____ Modification of Construction Permit _____
Construction Permit File Number

[NOTE] It is not necesary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information.

3. (a) Is this application mutually exclusive with a renewal application?

☐ YES ☐ NO

If Yes, state: Call letters: Community of license:

(b) To the applicant's knowledge, is this application mutually exclusive with any other application(s)?

☐ YES ☐ NO

If Yes, state: Call letters: Community of license:

4(a) Is translator applicant the licensee of primary station?

____ Yes; ____ No.

(b) If answer to 4(a) is no, has written authority been obtained from the licensee of the station whose programs are to be retransmitted?

_____ Yes; _____ No.

5. Station Identification.

Indicate how station identification will be made:

____ FSK ____ Live or tape

____ By primary station ____ Amplitude modulation of FM Aural Carrier

____ Not required

6. Is type approved broadcast equipment being specified?

____ Yes ____ No If no, please indicate date equipment submitted to FCC Lab for approval.

7. Would a Commission grant of your application be major action as defined by Section 1.1305 of the Commission's Rules?

____ Yes If yes, submit as Exhibit No. _____ the required statement in accordance with Section 1.1311 of the Rules.

____ No If no, explain briefly.

8. If this application is for a new FM translator, have any funds, legal or engineering services or anything else of value been furnished, directly or indirectly, by the licensee or permittee of any FM broadcast station or any person associated with such station? If the answer is "Yes", attach an explanation as Exhibit No. , identifying the source and nature of the financial support or assistance.

___ Yes __ No

LEGAL QUALIFICATIONS

Section II
Applicant's Name: _____

1. Applicant is: ☐ an individual; ☐ a general partnership;
☐ a limited partnership; ☐ a corporation ☐ other

2. If the applicant is an unincorporated association or a legal entity other than an individual, partnership or corporation, describe in Exhibit No. _____ the nature of the applicant.

CITIZENSHIP AND OTHER STATUTORY REQUIREMENTS

		YES	NO
3. (a)	Is the applicant in compliance with the provisions of Section 310 of the Communications Acts of 1934, as amended, relating to interests of aliens and foreign goverments?	☐	☐
(b)	Will any funds, credit, etc., for the construction, purchase or operation of the station(s) be provided by aliens foreign entities, domestic entities controlled by aliens, or their agents?	☐	☐
	If yes, provide particulars as Exhibit No._____.		
4. (a)	Has an adverse finding been made, adverse final action taken or consent decree approved by any court or administrative body as to the applicant or any party to the application in any civil or criminal proceeding brought under the provisions of any law related to the following: any felony, antitrust, unfair competition, fraud, unfair labor practices, or discrimination?	☐	☐
(b)	Is there now pending in any court or administrative body any proceeding involving any of ther matters referred to in (a)?	☐	☐

If the answer to (a) or (b) above is yes, submit as Exhibit No._____, a full disclosure concerning the persons and matters involved, identifying the court or administrative body and the proceeding (by dates and file numbers), stating the facts upon which the proceeding was based or the nature of the offense committed, and disposition or current status of the matter.

OTHER MEDIA INTERESTS

	YES	NO
5. Does the applicant or any party to this application have any interest in or connection with the following:		
(a) an AM, FM or TV broadcast station?	____	____
(b) a broadcast application pending before the FCC?	____	____
(c) other non-broadcast media of mass communications, e.g. cable television, theatres and printed publications.	____	____
6. Has the applicant or any party to this application had any interest in:		
(a) an application which has been dismissed with prejudice by the Commission?	____	____
(b) an application which has been denied by the Commission?	____	____
(c) a broadcast station, the license which has been revoked?	____	____
(d) an application in any Commission proceeding which left unresolved character issues against the applicant?	____	____

If the answer to any of the questions in 5 is yes, state in Exhibit No. _____ the following information:

(i) Name of party having such interest;
(ii) Nature of interest or connection, giving dates;
(iii) Call letters of stations or file number of application, or docket number;
(iv) Location

MINORITY OWNERSHIP

7. Is the applicant over 50 percent minority owned? ____ Yes ____ No

If the answer is yes, state in Exhibit No. _____ for each minority owner:

(i) Name, address and percentage of ownership;

(ii) Minority group (e.g., Black not of Hispanic origin, Asian or Pacific Islander, American Indian or Alaskan native, and Hispanic).

SECTION III

FINANCIAL QUALIFICATIONS

NOTE: If this application is for a change in an operating facility, do not fill out this section.

	YES	NO
1. The applicant certifies that sufficient net liquid assets are on hand or are available from committed sources to construct and operate the requested facilities for three months without revenue.	☐	☐
2. The applicant certifies that: (a) it has a reasonable assurance of a present firm intention for each agreement to furnish capital or purchase capital stock by parties to the application, each loan by banks, financial institutions or others and each purchase of equipment on credit; (b) it can and will meet all contractual requirements as to collateral, guarantees, and capital investment; (c) it has determined that a reasonable assurance exists that all such sources (excluding banks, financial institutions and equipment manufacturers) have sufficient net liquid assets to meet these commitments.	☐	☐

SECTION IV

Program Service Statement

For LPTV (Including STV applicants) only:

1. LPTV stations must offer a broadcast program service: a non-program broadcast service will not be permitted. Therefore, submit as Exhibit No. _____, a brief description, in narrative form, of your planned programming service. STV applicants should provide a complete description of your proposed STV system including the manner in which you intend to provide decoders to the public.

ENGINEERING DATA

1. Facilities requested:

a. Output Channel No.	Transmitter Output Power (watts)	Proposed Principal Community or Communities to be served: City: State:	Primary Station (station to be rebroadcast) (Translator only) Call: Channel No. City: State: Frequency: MHz
b. Offset (Low Power TV and TV Translator Stations only) ___ No offset ___ Plus offset ___ Zero offset ___ Minus offset			
c. Input Channel No.	If station is to operate via another translator station, indicate call sign and location of final intermediate translator:		

2. Proposed transmitter location:

City	County	State
Address or other description of location	Geographical coordinates of transmitting antenna to nearest second North Latitude ° ' "	West Longitude ° ' "

Attach as Exhibit No. a map or maps (preferably topographic, if obtainable, such as U. S. Geological Survey quadrangles) for the area of the proposed transmitter location and show drawn thereon the following data:

a. Scale of miles.
b. Proposed transmitter location accurately plotted.
c. Principal community to be served by the proposed TV or FM translator station, clearly identified and labeled.
d. Locations of all known radio stations (except amateur), such as AM, FM, TV, Translator, Police, Fire, Aeronautical, Public Utility, etc., and known commercial or government receiving sites, within the immediate vicinity of the proposed transmitter location.

3. Transmitter:

Make	Type No.	Rated output power (watts) P

4. Transmission line:

Make	Type No.	Length	Rated efficiency E for length given (decimal fraction)

5. Transmitting antenna

Manufacturer	Model No. 1/	Description 1/	Power gain G (multiplier) in lobe of maximum radiation relative to a half-wave dipole	

Orientation 2/	Height above ground 3/	Elevation of Site 4/	Elevation of Community 5/	Effective radiated power R (R = P × E × G) (kW)	Height of radiation center above mean sea level (ft)

1. Give basic type using general descriptive terms such as half-wave dipole, "bow-tie" with screen, corner reflector, 10 element Yagi, 4 element in-phase array, two stacked 5 element Yagis, etc.
2. Show the direction of the main radiation lobe in degrees with respect to true north in a 360 degree horizontal azimuth, numbered clockwise, with true north as zero azimuth.
3. Show height to topmost portion of structure, including highest top mounted antenna and beacon if any.
4. Show the ground elevation above mean sea level at the base of the transmitting antenna supporting structure.
5. Show the average elevation of the community above mean sea level, or in lieu thereof, the commonly used elevation figure for the community to be served.

6. Attach as Exhibit No. a vertical plan sketch for the proposed total structure(s) including supporting structure(s), giving height of center of radiation above ground, overall height of structure above ground, including lighting beacon (if any) and height above mean sea level in feet for all significant features for BOTH RECEIVING AND TRANSMITTING ANTENNAS. Also indicate any horizontal separation between receiving transmitting antennas.

7. Will the proposed antenna supporting structure be shared with another station or stations of any class? ☐ YES ☐ NO
If the answer is "Yes", list the call signs and class of such stations.

8. Attach as Exhibit No. a polar diagram of the radiation pattern (relative field) of the transmitting antenna, showing clearly the correct relationship between the major lobe or lobes and the minor lobes of radiation. If a non-directive transmitting antenna will be employed, i.e., an antenna with an approximately circular radiation pattern, check this ☐ and omit the polar diagram.

9. Has FAA been notified of proposed construction? ☐ YES ☐ NO
If yes, give date and office where notice was filed.
(Not necessary to file FCC Form 714, See Part 17 of the rules.)

10. Unattended operation:

a. Is unattended operation proposed? ☐ YES ☐ NO
If the answer is "Yes", and this application is for authority to construct a new station or to make changes in the facilities of an authorized station which proposes unattended operation for the first time, attach Exhibit No. , containing a full description of the means of compliance with the several requirements of Section 74.734 (TV Translators) or Section 74.1234 (FM Translators) of the Rules concerning unattended operation.

b. In space below state name, address and telephone number of a person or persons who may be contacted in an emergency to suspend operation of the translator should such action be deemed necessary by the Commission:

Name(s)

Address (street or other description)

City & State. ZIP Code

Telephone number(s) (include area code)

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Date _____ Signature _____
(check appropriate box below)

Telephone _____
(include area code)

☐ Technical Director ☐ Chief Operator
☐ Registered Professional Engineer ☐ Other (Specify)
☐ Consulting Engineer

Section VI Equal Employment Opportunity Program

1. Does the applicant propose to employ five or more fulltime employees? ☐ YES ☐ NO

If the answer is Yes, the applicant must include an EEO program called for in the separate 5 Point Model EEO Program.

Section VII Certification

1. Has or will the applicant comply with the public notice requirement of Section 73.3580 of the Commission's Rules? ☐ YES ☐ NO

A copy of the text and dates of publication is attached as Exhibit No. _____.

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. *(See Section 304 of the Communications Act of 1934, as amended.)*

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with Section 1.65 of the Commission's Rules, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT.
U.S. CODE, TITLE 18, Section 1001.

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signed and dated this _____ day of _____, 19____.

_____ Name of Applicant

_____ Signature

_____

_____ Title

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal purpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously of attorneys, accountants, engineers, and application examiners, will use the information to determine whether the application should be granted, denied, dismissed, or designated for hearing. If all the information requested is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide all necessary information. Your response is required to obtain the requested Permit.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3)

United States of America
Federal Communication Commission
Washington, D.C. 20554

MODEL EEO PROGRAM

1. Name of Applicant | Street Address

City | State | Zip Code | Telephone No. (Include Area Code)

2. This form is being submitted in conjunction with:

☐ Application for Construction Permit for New Station

☐ Application for Assignment of License

☐ Application for Transfer of Control

(a) Call letters (or channel number or frequency)

(b) Community of License

City | State

INSTRUCTIONS

Applicants seeking authority to construct a new low power television broadcast station, applicants seeking authority to obtain assignment of the construction permit or license of such a station, and applicants seeking authority to acquire control of an entity holding such construction permit or license are required to afford equal employment opportunity to all qualified persons and to refrain from discriminating in employment and related benefits on the basis of race, color, religion, national origin or sex. See Section 73.2080 of the Commission's Rules. Pursuant to these requirements, an applicant who proposes to employ five or more fulltime station employees must establish a program designed to assure equal employment opportunity for women and minority groups (that is, Blacks not of Hispanic origin, Asians or Pacific Islanders, American Indians or Alaskan Natives and Hispanics.) This is submitted to the Commission as the Model EEO Program. If minority group representation in the available labor force is less than five percent *(in the aggregate)*, a program for minority group members is not required. In such cases, a statement so indicating must be set forth in the EEO model program. However, a program must be filed for women since they comprise a significant percentage of virtually all area labor forces. If an applicant proposes to employ less than five fulltime employees, no EEO program for women or minorities need be filed.

Guidelines for a Model EEO Program and a Model EEO Program are attached.

NOTE: Check appropriate box, sign the certification below and return to FCC:

☐ Station will employ less than 5 fulltime employees; therefore no written program is being submitted.

☐ Station will employ 5 or more fulltime employees. Our 5 point program is attached.

CERTIFICATION

I certify that the statements made herein are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signed and dated this _____ day of _____, 19___.

_____

Signature

_____

Title

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT U.S. CODE, TITLE 18, SECTION 1001.

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal urpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously f attorneys, accountants, engineers and application examiners, will use the information to determine whether the application should be granted, denied, smissed, or designated for hearing. If all the information requested is not provided, the application may be returned without action having been taken on it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide l necessary information.

HE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3).

GUIDELINES TO THE MODEL EEO PROGRAM

The model EEO program adopted by the Commission for construction permit applicants contains five sections designed to assist the applicant in establishing an effective EEO program for its station. The specific elements which should be addressed are as follows:

I. General Policy

The first section of the program should contain a statement by the applicant that it will afford equal employment opportunity in all personnel actions without regard to race, color, religion, national origin or sex, and that it has adopted an EEO program which is designed to fully utilize the skills of minorities and women in the relevant available labor force.

II. Responsibility for Implementation

This section calls for the name (if known) and title of the official who will be designated by the applicant to have responsibility for implementing the station's program.

III. Policy Dissemination

The purpose of this section is to disclose the manner in which the station's EEO policy will be communicated to employees and prospective employees. The applicant's program should indicate whether it: (a) intends to utilize an employment application form which contains a notice informing job applicants that discrimination is prohibited and that persons who believe that they have been discriminated against may notify appropriate governmental agencies; (b) will post a notice which informs job applicants and employees that the applicant is an equal opportunity employer and that they may notify appropriate governmental authorities if they believe that they have been discriminated against; and (c) will seek the cooperation of labor unions, if represented at the station, in the implementation of its EEO program and in the inclusion of nondiscrimination provisions in union contracts. The applicant should also set forth any other methods it proposes to utilize in conveying its EEO policy (e.g., orientation materials, on-air announcements, station newsletter) to employees and prospective employees.

IV. Recruitment

The applicant should specify the recruitment sources and other techniques it propoees to use to attract minority and female job applicants. Not all of the categories of recruitment sources need be utilized. The purpose of the listing is to assist the applicant in developing specialized referral sources to establish a pool of minorities and women who can be contacted as job opportunities occur. Sources which subsequently prove to be nonproductive should not be relied on and new sources should be sought.

V. Training

Training programs are not mandatory. Each applicant is expected to decide, depending upon its own individual situation, whether a training program is feasible and would assist it in its effort to increase the pool of available minority and female applicants. Additionally, the applicant may set forth any other assistance it proposes to give to students, schools or colleges which is designed to be of benefit to minorities and women interested in entering the broadcasting field. The beneficiary of such assistance should be listed, as well as the form of assistance, such as contributions to scholarships, participation in work study programs, and the like.

( ) When we recruit prospective employees from educational institutions such recruitment efforts will include area schools and colleges with significant minority and female enrollments. Educational institutions to be contacted for recruitment purposes are:

_____

_____

_____

( ) When utilizing media for recruitment purposes, help-wanted advertisements will always include a notice that we are an Equal Opportunity Employer and will contain no indication, either explicit or implied, of a preference for one sex over another.

( ) When we place employment advertisements in printed media some of such advertisements will be placed in media which have significant circulation or are of particular interest to minorities and women. Examples of publications to be utilized are:

_____

_____

_____

( ) We will encourage employees, particularly minority and female employees, to refer minority and female candidates for existing and future job openings.

V. Training

( ) Station resources and/or needs will be such that we will be unable or do not choose to institute specific programs for upgrading the skills of employees.

( ) We will provide on-the-job training to upgrade the skills of employees.

( ) We will provide assistance to students, schools or colleges in programs designed to enable minorities and women to compete in the broadcast employment market on an equitable basis:

School or Other Beneficiary	Proposed Form of Assistance
_____	_____
_____	_____
_____	_____

( ) Other (Specify)

_____	_____
_____	_____
_____	_____

MODEL EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

I. General Policy

It will be our policy to provide equal employment opportunity to all qualified individuals without regard to their race, color, religion, national origin or sex in all personnel actions including recruitment, evaluation, selection, promotion, compensation, training and termination.

It will also be our policy to promote the realization of equal employment opportunity through a positive, continuing program of specific practices designed to ensure the full realization of equal employment opportunity without regard to race, color, religion, national origin or sex.

To make this policy effective, and to ensure conformance with the Rules and Regulations of the Federal Communications Commission, we have adopted an Equal Employment Opportunity Program which includes the following elements:

II. Responsibility for Implementation

(Name/Title) _____, will be responsible for the administration and implementation of our Equal Employment Opportunity Program. It will also be the responsibility of all persons making employment decisions with respect to recruitment, evaluation, selection, promotion, compensation, training and termination of employees to ensure that our policy and program is adhered to and that no person is discriminated against in employment because of race, color, religion, national origin or sex.

III. Policy Dissemination

To assure that all members of the staff are cognizant of our equal employment opportunity policy and their individual responsibilities in carrying out this policy, the following communication efforts will be made:

( ) The station's employment application form will contain a notice informing prospective employees that discrimination because of race, color, religion, national origin or sex is prohibited and that they may notify the appropriate local, State or Federal agency if they believe they have been the victims of discrimination.

( ) Appropriate notices will be posted informing applicants and employees that the station is an Equal Opportunity Employer and of their right to notify an appropriate local, State, or Federal agency if they believe they have been the victims of discrimination.

( ) We will seek the cooperation of unions, if represented at the station, to help implement our EEO program and all union contracts will contain a nondiscrimination clause.

( ) Other (specify)

IV. Recruitment

To ensure nondiscrimination in relation to minorities and women, and to foster their full consideration in filling job vacancies, we propose to utilize the following recruitment procedures:

( ) We will attempt to maintain systematic communication, both orally and in writing, with a variety of minority and women's organizations to encourage the referral of qualified minority and female applicants. Examples of organizations we intend to contact are:

_____ _____
_____ _____
_____ _____
_____ _____

( ) In addition to the organizations noted above, which specialize in minority and female candidates, we will deal only with employment services, including State employment agencies, which refer job candidates without regard to their race, color, religion, national origin or sex. Examples of these employment referral services are:

_____
_____
_____

Attachment 1 to FCC Form 346

The following information may be submitted at the option of applicants. However, applications containing the requested information will be processed at a faster rate than applications not containing such information. In the latter case, the Commission's limited staff will be required to compute the data manually and processing will, therefore, require substantially more time.

Attach as Exhibit No. _____ an allocation study utilizing topographic maps or an accurate full scale reproduction thereof and using pertinent field strength measurement data where available, a full scale exhibit of the entire pertinent area to show the following:

(a) Normally protected and the interfering contours for the proposed operation along all azimuths.

(b) Normally protected and interfering contours of existing stations and other proposed stations in pertinent areas with which prohibited overlap would result as well as those existing stations and other proposals which require study to clearly show absence of prohibited overlap.

(c) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers, and operating or proposed facilities.

(d) Properly labeled longitude and latitude degree lines, shown across entire exhibit.

APPENDIX E

Tiered Application Processing Procedures for Pending Applications

1. The Commission currently is confronted with an unprecedented processing backlog of more than 6,500 applications for television translators and low power stations. While herein we adopt channel allocation standards tailored to rapid computerized interference analysis, the full implementation of this capability cannot be realized for at least the next 12 months. During this period, the processing staff faces the enormous task of identifying mutually exclusive applications on an essentially manual basis. 1/ We also are confronted by a situation in which a sizeable majority of the applications propose service in the larger television markets. We estimate that approximately one half of the applications are associated with the top 50 television markets and 70 percent with the top 100 markets. In contrast, only 15 to 20 percent propose to locate outside of any ranked market, i.e., outside a market having at least one commercial television station. We recognize that these percentages do not reflect the extent to which numerous applicants compete for relatively few available channels in the largest markets. Nonetheless, we are concerned that this imbalanced demographic array of the pending applications could frustrate near-term attainment of one of our principal goals in this proceeding: to provide programming, including local outlets, in unserved and lesser-served rural areas. We believe the public interest would be served by our adopting a processing hierarchy that would facilitate the expeditious authorization of service to rural areas. In view of the circumstances, we believe the best vehicle for achieving this objective is a transitional "tiered" processing system, in which the application backlog is subdivided into a number of prioritized groups of applications on the basis of the extent of existing television diversity. Once the present backlog has been eliminated (in three phases), and only then, will we lift the freeze on the filing of television translator and low power applications.

2. In general terms, the tiered processing system will function in the following manner. We shall identify and make public lists of applications as either TIER I, TIER II or TIER III applications, classified on the basis of market location. We envision three stages of processing pending applications, including freeze-exempt applications. During the initial phase only TIER I and freeze-exempt applications will be processed. All pending freeze-exempt applications as of the effective date of this Report and Order will be treated as TIER I applications. During the second stage, only pending TIER II and freeze-exempt applications (as these are filed) will be considered. TIER I applications still awaiting grant or denial (some may be awaiting hearing) will be accorded "protected" status in terms of our contour overlap standards. During this second stage, newly-received freeze-exempt applications will be accorded equal protection status with pending TIER II applications. The freeze will be lifted only for competing TIER II filings. Finally, the Commission will enter into the third stage, in which the remaining pending TIER III applications will be considered. At this stage, TIER III applications must protect yet-undisposed TIER I and II applications. Freeze-exempt applications received during this stage will be treated as TIER III applications. The Commission will announce publicly the completion of each stage of processing.

1/ To this end, we are requesting additional topographical information from present applicants that could greatly facilitate our manual processing. See, note 25 of the Report and Order.

3. The three tier classifications will be defined in terms of the Commission's ranking of television size as contained in the Public Notice encaptioned "Television Channel Utilization" (Public Notice dated March 25, 1981, mimeo number 07820). This report ranks markets from one to 212. For purposes of tiered processing, we define the boundary of a market as a 55-mile circle centered about the reference coordinates of the principal market city or town (cities or towns in the case of hyphenated markets). 2/ The 55-mile radius is roughly equivalent to the predicted Grade B coverage area of a full service UHF television station operating at maximum power. Thus, TIER I will consist of those applications proposing to locate the transmitting antenna at a distance of more than 55 air miles from any FCC-ranked television market. TIER II will consist of those additional applications proposing a location within 55 miles from the reference coordinates of all ranked markets from 101 through 212. TIER III will comprise the remaining applications proposing location within 55 miles of the reference coordinates of all ranked markets from one through 100, inclusive. Hereinafter, we shall eliminate the freeze exemption pertaining to the number of television services received. In its place, we shall consider any prospective applicant meeting TIER I qualifications to be freeze exempt. The remaining two freeze exemptions will remain unchanged. 3/

4. We believe that this tiered processing approach is consistent with the public interest and represents the best means of addressing the application backlog until a fully automated system of processing can be implemented. During the initial stage, the staff will be required to make its determinations through analysis of only 15 to 20 percent of the pending applications. Upon commencement of the last stage, involving some 70 percent of the applications, we expect to have a fully automated processing capability. Second, and perhaps of greater significance, the tiered processing approach will provide greater opportunities for increased service, beginning with the least-served rural areas, a major goal of this proceeding. 4/

5. We recognize that, in affording priority to rural applicants, we may be precluding timely-filed non-rural applications that may be mutually exclusive with rural applications. To alleviate this situation and to preserve any rights that may be argued to have accrued on behalf of non-rural applicants, where a group of mutually exclusive applications includes applications that would fall into a tier to be processed later, the entire group will be deferred until we reach the later tier. That is, if an otherwise exclusively TIER I group contains one or more applications that do not meet the standard for processing during TIER I (more than 55 miles from any ranked market) but fall within TIER II or III, we will defer processing of the group until TIER II (or III) applications are to be processed. The same will hold true when TIER II groups contain TIER III applications. Only in this manner can we ensure that urban channel availabilities will not be precluded by tiered processing of rural applications. With this exception, we believe that tiered processing is fully justified, both on policy and administrative grounds. Provision of service to rural areas that currently are unserved or underserved is an objective that the low power service is particularly suited to carry out. The cost of constructing and operating a full service station often is prohibitive in sparsely-populated rural areas. The lower cost of a low power television may facilitate the introduction of local television service in such areas. However, saddling rural applicants with the costs and delays associated with hearings involving urban applicants as well would raise the entry costs considerably and could discourage applicants from attempting to provide service to rural areas. Additionally, giving priority to rural applicants comports with our mandate under Section 307 (b) of the Communications Act to allocate spectrum in an equitable, fair and efficient manner, and with the way we interpret Section 307(b) as it applies to the low power service. See, paragraph 61 of the Report and Order. Moreover, applications in TIERS II and III appear to contemplate additional television service to areas and populations already receiving multiple services, whereas TIER I applications would bring needed service to unserved or underserved rural areas and populations. Affording processing priority to the latter group would appear to comport with our Section 307(b) obligations. Finally, all interim applicants have been on notice from the outset of this proceeding that their applications and/or interim authorizations would be conditioned upon the outcome of the rule making, so that no inalterable rights can be argued to have accrued.

6. In the near term, between of adoption of the Report and Order and employment of fully computerized processing methods, the tier system will be of little assistance in expediting authorization of service due to the necessarily tedious nature of manual processing using complex engineering criteria. However, with the advent of the computer as a processing tool, the tier system will aid in increasing the number of authorizations because it will reduce the numbers of mutually exclusive applications that must be considered together in chain sequences. This also will expedite the hearing process.

2/ We shall utilize the reference coordinates for cities and towns specified in the publication "Airline Distances Between Cities and Towns in the United States," published by the U.S. Department of Commerce, Special Publication No. 238, available from the Superintendant of Documents, United States Government Printing Office, Washington, D.C. 20402. If this publication does not contain the reference coordinates, the coordinates given in the National Atalas Index of the main post office in the principal market city(ies) will be used.

3/ The other exceptions are applications for major amendments to change frequency from Channels 70 through 83 or to change frequency to resolve interference to or from full service stations.

STATEMENT OF
CHAIRMAN MARK S. FOWLER
IN WHICH COMMISSIONER MIMI WEYFORTH DAWSON
JOINS

Re: LOW POWER TELEVISION

Low power television may not have the transmission capabilities of full broadcast television, but its capacity to provide televised programming that is directly responsive to the interests of smaller audience segments makes it truly unique in its ability to expand consumer choices in video programming. From this perspective, the power of these stations may be low, but their potential is enormous.

I fear, however, that the majority may not realize how their vote to impose a one year trafficking limitation on low power facilities may undercut the potential for this service to provide an outlet for new broadcast entrepreneurs, particularly minorities and nonprofit groups, to enter the market. We cannot ignore the fact that the low power service will be inaugurated during a time when financing costs pose a significant barrier to capital investment. It will be difficult enough for these new entrants to obtain financial backing without the added burden that this limitation on the disposability of the facility will impose. Against this very real concern, the majority's speculations as to possible problems that might arise absent a rule seem all the less compelling as a pretext for a general proscription.

Absent a showing of need for government interference in the marketplace, the burden for imposing regulation should lie with those proposing regulation with the presumption in favor of non-interference. I find no argument of the majority overcoming the presumption in favor of non-interference and, therefore, dissent to this aspect of the order.

March 4, 1987

DISSENTING - IN PART - STATEMENT OF COMMISSIONER ABBOTT WASHBURN

RE: Low Power Television, BC Docket No. 78-253

The absence of any limitation on multiple ownership of this new low power service is inconsistent with the Commission's long-standing limitation on ownership of conventional television stations and of AM and FM stations. Currently, ownership of each of these three services is limited to seven stations per licensee. Such limits have proved valuable in preventing concentration (chain ownership) of these facilities and in encouraging diversity of voices of opinion. It would have been in the public interest to include a similar provision here for low power television. Therefore, I dissent to that portion of today's decision which permits unlimited ownership of low power stations.

I also dissent to the majority's abandonment of the proposed preference for noncommercial applicants. As both the Congress by statute and the Commission by our decisions have affirmed repeatedly: there is an important place for public broadcasting in our society. But the tremendous number of applications for LPTV, only 6% of which are noncommercial applicants, suggests that we cannot be sure that noncommercial licensees will occupy that place in low power television unless we award a comparative preference to noncommercial licensees. Similarly, the record before us does not persuade me that a completely open and unregulated market environment will assure diversity of programming. Specifically, programming which appeals to special or limited audiences will not survive in a commercial marketplace environment where success is largely determined by broad audience appeal.* The Commission recognizes this fact in preserving the comparative preference for minority low power applicants (see Footnote 62). I regret that my colleagues' desire to maximize diversity of programming for the public does not extend to awarding a preference to noncommercial applicants.

Finally, I caution the Commissioners to keep a close watch on the hearing procedures under which decisions in mutually exclusive low power cases are to be made by the Commission in the first instance. It may happen that contrary to our goal of expediting establishment of the new low power service, resolution of mutually exclusive cases by the Commission itself without the helpful assistance of an Administrative Law Judge's Initial Decision and review by the Review Board will prove to be too cumbersome and burdensome. It is possible that a total of 10,000 to 12,000 additional applications will be received. Our staff estimates that three quarters of these are likely to be mutually exclusive. Such a flood of LPTV paperwork could end up seriously impeding the other work of the Commissioners and their staffs.

* An example of this is children's television programming which today, in quality and quantity, is so well handled on public television.

SEPARATE STATEMENT

OF

COMMISSIONER JOSEPH R. FOGARTY

In Re: Low Power Television Broadcasting--Report and Order.

This Report and Order begins to clear the way for Low Power Televisio (LPTV) to have its chance in the telecommunications marketplace. The regulatory framework established by this decision gives LPTV the opportunity to prove its promise of enhanced program service diversity and increased minority ownership without jeopardizing the technical integrity or continued development of the full service television station system.

Because of the uncertain viability of this new and secondary LPTV service and the herculean administrative task of processing the 6,000 low power applications now pending before the Commission, this Report and Order wisely and appropriately prescribes a minimum of governing regulation. At the same time, however, I also believe that the tiered processing system and comparative criteria specified by this decision meet the Commission's important statutory responsibilities under Section 307(b) and 309(e) of the Communications Act. In particular, the tiered processing standards ensure first consideration of underserved rural area LPTV applications but also guarantee that where early grant of a rural application might preclude the availability of an LPTV frequency in an urban area, those rural and urban applications will be jointly processed and reviewed. In light of the fledgling and secondary status of this new LPTV service, I am convinced that this processing system meets the command of Section 307(b) that the Commissio "provide a fair, efficient, and equitable distribution" of service to each of the "several States and communities." As I emphasized in my Separate Statement on the Notice of Proposed Rulemaking in this proceeding, the statutory mandate of Section 307(b) is not a static, one-time requirement because the balance of demand for broadcast facilities and service is dynamic and changes over time.[1/] While the Commission has considerable discretion in implementing the Section 307(b) requirement, it may not ignor it. We have kept faith with Section 307(b) in this Report and Order.

Our decision to apply the 1965 Policy Statement on Comparative Broadcast Hearings[2/] to competing LPTV applications according to diversifica and minority ownership criteria also adheres to the statutory requirements of Section 309(e) of the Act while providing the flexibility and expedition necessary for the effective implementation of this untested, secondary service. While difficult ad hoc adjudicatory issues may be presented under these two criteria, I believe that the paramount public interest in "best practicable service"will be advanced and protected by this case-by-case process.

In terms of further protecting the public interest, I am especially pleased that the Commission has decided to apply a one-year anti-traffickin rule to LPTV license grants. Together with the strict requirement that LPTV stations be constructed and go on-air within one year of grant of construction permit, this action safeguards the integrity of the diversificat and minority ownership comparative criteria and provides critical assurance that only bona fide public interest applications will be prosecuted.

1/ Separate Statement of Commission Joseph R. Fogarty, Concurring in Part, 82 FCC 2d 82, 83-84 (1980), citing Pasadena Broadcasting Co. v. FCC, 555 F.2d 1046 (D.C. Cir. 1977).

2/ 1 FCC 2d 393 (1965).

Low Power Television offers exciting new ownership and public service opportunities in broadcasting, as the 6,000 applications filed during the pendency of this proceeding more than amply demonstrate. This Commission is doing its part to provide the fair chance for these dreams to become reality. Candor, as well as standards of truth in advertising, compels the final observation that there are no guarantees. As former Chairman Robert E. Lee perhaps presciently observed, an LPTV authorization "isn't going to be a license to print money."[3/] The fair opportunity, however, is afforded. This Commission should do no less and can do no more.

3/ Concurring Statement of Commissioner Robert E. Lee, 82 FCC 2d 81 (1980).

SEPARATE STATEMENT OF COMMISSIONER HENRY M. RIVERA

RE: Broadcast Docket No. 78-253

Low Power Television

Today's Report and Order is the first concrete step toward making the low power television service available to the American public. There are several impediments to substantial near-term development of this service. Among the most prominent obstacles to the low power service are: (i) the staggering number of pending applications and the resulting continuation of the existing processing freeze; and (ii) the possibility that low power grants may even be precluded in some large markets if the Commission reallocates television spectrum for land mobile use after reviewing the staff recommendations it has requested on the subject. In this context, truth in advertising requires that the public (especially members of minority groups) be advised to temper its optimism over the low power television service at this juncture.

Despite these implementation handicaps, I firmly support the decision to launch the first new broadcast service in decades. The Commission's initiative offers a rich, if distant, opportunity to promote diversity of ownership generally and to widen opportunities for minority ownership in particular; it also may serve as a testing ground for new regulatory approaches.

Our decision to impose minimum regulatory constraints upon low power television is appropriate for a service whose viability is so uncertain, and whose stations are of limited reach and easily preemptable by full-service stations. However, the framework adopted is not without risk. The failure to impose any ownership limitations, for instance, is said to be likely to induce experienced broadcasters to provide LPTV service and to allow parties to achieve economies of scale from multiple ownership -- thereby generally fostering the development of the low power service. It is also possible, on the other hand, that without restrictions on network ownership, cross-ownership or duopolies, a low power television landscape far different from that intended by the Commission will develop. I am persuaded by the Report and Order that the Commission does not now need to impose ownership limits but am prepared to reconsider if the absence of ownership rules seriously erodes the primary goals of the low power service.

The tiered processing system adopted to resolve the serious administrative problems caused by the ocean of pending LPTV applications is an unfortunate, but probably necessary, by-product of this proceeding. Most unfortunate is that under the scheme, LPTV authorizations in major urban centers -- where ethnic and minority groups with special needs are highly concentrated -- will be the last to be made. However, to its credit, the system is designed to protect urban LPTV service: it expressly defers action on all rural applications, which if granted, would foreclose a pending application to serve an urban area.

Not surprisingly, a sizeable number of applications filed by minorities are concentrated in urban markets. A processing hierarchy premised exclusively on geographic remoteness would have precluded many of these applications at the starting gate, and substantially undercut this proceeding's goals of encouraging minority ownership of broadcast facilities. The Commission's modified tier approach avoids that pitfall by according priority to underserved rural areas as a general matter but preserving the interests of those proposing service in urban areas where there are competing demands to provide LPTV.

The one-year holding period preserves the dignity of the comparative process. It gives some assurance that those who were deemed comparatively superior by the Commission will indeed serve the public and forestalls the creation of a low power "CP futures market" that could vitiate the essential goals of the comparative process. Contrary to assertions in some quarters, this restriction will not force parties to operate failing LPTV stations. Waivers of the holding period are always grantable upon a proper showing by the licensee. Moreover, if the restriction works an unintended hardship on the development of the service the Commission has the discretion to revisit the issue.

I sincerely hope that the Commission's decision to award priority to diversification of media control and minority ownership in comparative cases will go far in advancing the goals of this new service. 1/

1/ In view of the severe underrepresentation of minorities in broadcast ownership, see, e.g., Policy Statement on Minority Ownership of Broadcast Facilities, 68 FCC 2d 979 (1979), the decision to accord comparative priority to applicants proposing over fifty percent minority ownership in low power television licensing policies is eminently justified. That decision also follows the theme of prior agency actions designed to increase minority ownership of broadcast facilities. In the clear channel proceeding, for example, see Clear Channel Broadcasting in the AM Broadcast Band, 78 FCC 2d 1345 (1980), the Commission found that the public interest would be served (in awarding frequencies made available by the decision to allow limited sharing of clear channel frequencies), by giving precedence to applicants proposing a first or second local primary service, applicants with over fifty percent minority ownership and applicants proposing non-commercial operations. See 78 FCC 2d at 1368-70. The Commission classified as "paramount" among competing demands for spectrum the need to increase the number of minority-owned radio stations, citing the fact that just 200 of the over 8,000 radio stations were then owned by minorities. Id. at 1368. This

(footnote continued next page)

Applying these two comparative factors will surely be among the Commission's most challenging tasks. I frankly would have preferred a more precise discussion of the substantive elements of the comparative process, but on balance am satisfied to let the requisite detail emerge as we begin to process the myriad pending comparative cases.

The Commission may ultimately find that adoption of a policy statement to guide its application of the two primary comparative criteria -- diversification of ownership and minority ownership -- will facilitate speedier and surer resolution of comparative cases. Until that time, considerable gloss will have to be placed on these criteria in evaluating competing applications. The Commission has reconfigured its comparative licensing standards for the low power service, 2/ and its comparative analysis will have to be reconfigured as well. 3/

1/ (continuation)
decision was recently judicially affirmed. Loyala University v. FCC, No. 80-1824 (D.C. Cir. Jan. 26, 1982). The record regarding minority ownership of television outlets is even more discouraging, with just 16 of 1,050 licensees being minority owned, and thus, the case for awarding comparative priority in this new television service all the more compelling. See also Policy Statement on Minority Ownership, supra; Grayson Enterprises, Inc., FCC 80-175 (1980) (allowing approval of "distress sale" applications when it is shown that over fifty percent of the prospective licensee is minority-owned).

2/ As an initial matter, the focus of the Commission's comparative inquiry has been substantially narrowed. In addition, the Commission has altered the prerequisites for comparative recognition of minority ownership in two important particulars: integration of ownership and management is no longer required, but over fifty percent ownership by minorities must now be shown. The Commission, in my judgment, has the latitude to recast its comparative analysis in this manner, and the record in this proceeding furnishes a rational basis for doing so.

3/ For example, because the Commission has altered the circumstances under which it will consider minority ownership in the low power service, reference to the "merit" concept as it has evolved under TV 9, Inc. v. FCC, 495 F.2d 929 (D.C. Cir. 1973) and its progeny would be essentially inapposite here.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

In the Matter of	)	3660
	)	
An Inquiry into the Future Role of	)	
Low Power Television Broadcasting	)	BC Docket No. 78-253
and Television Translators in the	)	
National Telecommunications System.	)	

ERRATUM

Released: April 26, 1982

By the Commission:

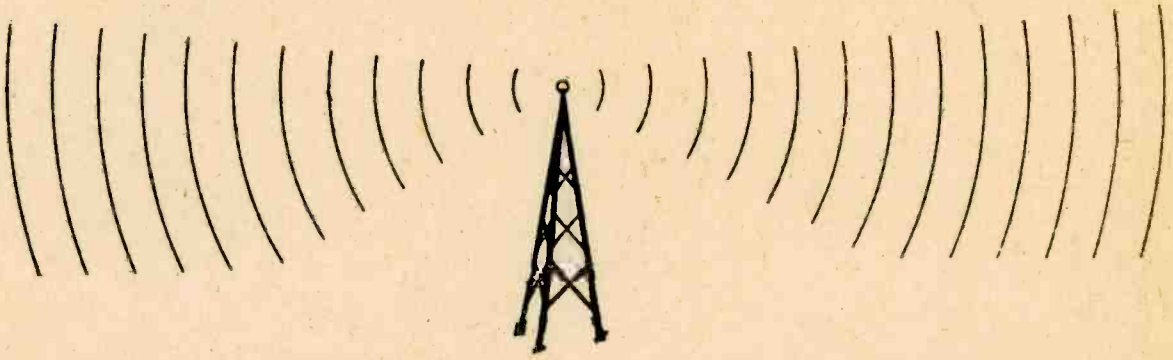
In paragraph 118 of the Report and Order in the aforementioned proceeding, FCC 82-107, adopted March 4, 1982, released April 26, 1982, the effective date was inadvertently omitted. Paragraph 118 should read as follows:

> 118. In light of the foregoing and pursuant to authority contained in Sections 1, 4(i) and 303 of the Communications Act of 1934, as amended, IT IS ORDERED, That the rule amendments set out in Appendix A ARE ADOPTED, EFFECTIVE June 7, 1982; and

FEDERAL COMMUNICATIONS COMMISSION

William J. Tricarico
Secretary

For the sake of space and cost limitations, we have not reproduced the dozens of pages regarding comments filed on the low power proposed rules. They will be published in the Federal Register if you should be interested in reading them in full.



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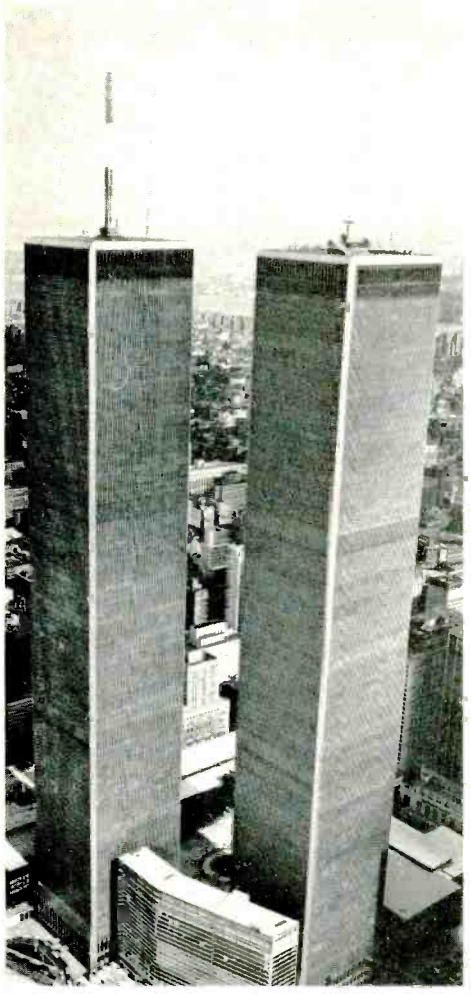
"LO-POWER COMMUNITY TELEVISION MONTHLY MAGAZINE $50 a year

Low Power TV Isn't New...in New York City



Since the September 9, 1980 FCC proposal to relax regulations on low power television, much speculation has been made as to the impact this will have on the broadcast industry.

But to WWHT-TV atop the World Trade Center in Manhattan, low power television is anything but new. The station, in its fourth year of service, was the first in the country to use low power transmission equipment to deliver commercial, over-the-air subscription television. The station was also the first to use a circular polarized antenna with a low power television translator, and the first to transmit from the World Trade Center.

The system consists of a pair of 1kW Model T-240 translators designed and installed by Acrodyne Industries. The translators provide 1000 Watts vertical and 1000 Watts horizontal to the circular polarized Bogner antenna. Programming—mostly recent motion pictures—originates from WWHT-TV in Newark, New Jersey, and is beamed to the Acrodyne translator in New York. Then the scrambled video and audio signals are amplified and transmitted throughout the metro area.

WWHT's 46,000 subscribers are able to pick up the station on Channel 60 through the use of commercial decoder boxes.

High atop the World Trade Center in New York City are two Acrodyne 1kW T-240 translators serving station WWHT-TV of Newark, NJ.

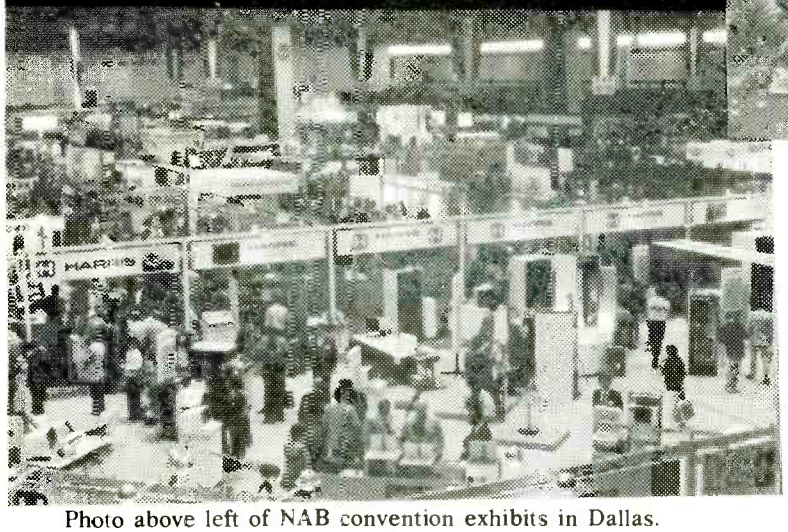


Photo above left of NAB convention exhibits in Dallas. Next issue we will give you details of new equipment etc. from Dallas NAB and from the National Cable Television Association convention in Las Vegas which we are attending May 2-5. Photo upper right is Acrodyne's new 1,000 LPTV UHFtransmitter being shown at the NAB. Photo lower right is the lunch break at the two day crash course at Dallas (Arlington).

ICTV ALLIANCE MOVING

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ICTV

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• How to Set Up a Video Tape Business	20 minutes
• Shooting Local Commercials for Cable or LPTV	20 minutes
• LPTV Crash Course	12 hours
• LPTV Crash Course "B"	10 hours
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Address _____

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FINAL FCC

LOW POWER

TELEVISION

RULES

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

FCC 82-107
30997

In the Matter of)
)
An Inquiry into the Future Role of) BC Docket No. 78-253
Low Power Television Broadcasting)
and Television Translators in the)
National Telecommunications System.)

REPORT AND ORDER
(Proceeding Terminated)

Adopted: March 4, 1982 ; Released: April 26, 1982

By the Commission: Chairman Fowler dissenting in part and issuing a statement in which Commissioner Dawson joins; Commissioner Washburn dissenting in part and issuing a statement; Commissioners Fogarty and Rivera issuing separate statements

FINAL FCC
LOW POWER
TELEVISION
RULES

TABLE OF CONTENTS

1. We have before us a document that culminates a lengthy proceeding in which we have considered authorization of a low power television service. This service in many ways is the logical extension of the existing translator service, which was authorized as a rebroadcast service in 1956. 1/ However, our decision today to permit far greater program flexibility than we ever have permitted on translators also may be viewed as inaugurating a new broadcast service. In today's telecommunications environment, we are witnessing the rapid development of a multitude of new and competitive technologies designed to deliver entertainment and information services to the public. The low power service will permit fuller utilization of the broadcast spectrum in service to those ends. It is fitting that we engage in initiatives that will allow broadcasting to maximize its potential to meet the needs of consumers as we also open the regulatory doors to purveyors of alternative technologies that will attempt competitively to meet similar needs.

I. History of BC Docket No. 78-253

2. A television translator is a broadcast station, operating at relatively low power, that receives a television signal on one channel, amplifies it and retransmits it on another channel. Over 3,000 translators are licensed today, under Subpart G of Part 74 of the Commission's Rules. 47 C.F.R. 74.701 et seq. The development of the present translator service previously has been detailed in several places in this docket, most notably in Appendix B of the Notice of Inquiry, 2/ in the Report and Recommendations in the Low Power Television Inquiry ("Staff Report"), 3/ paragraphs 11 through 46, and briefly, in the Notice of Proposed Rule Making ("Notice"), 4/ paragraphs 9 through 21. Therefore, we shall not reiterate this history here, but instead direct interested persons to the above-referenced documents for more detailed information. We do note that in the annals of the translator service one may find several examples of waivers authorizing program origination (via video cassette) and subscription service, the principal modes of operation that the Commission has proposed to permit generally via rule change, in the instant proceeding. 5/ These instances have illustrated the viability of a low power service substantially as proposed, though on a

1/ Report and Order, Docket No. 11611, FCC 56-44 (1956).

2/ 68 F.C.C. 2d 1525 (1978).

3/ Couzens, M., et al., U.S. Government Printing Office No. 721-146/134 (September 9, 1980).

4/ 45 Fed. Reg. 69178 (published October 17, 1980).

5/ See, e.g., Unalaska School District (BPTTV-4857) and City of St. Paul (BPTTV-4858), Report No. 11887, October 25, 1973; Leeco TV, Inc., 9 F.C.C. 2d 1028 (1967).

limited scale, and, as such, may be considered significant elements in the record of this proceeding.

3. This proceeding was initiated with a Notice of Inquiry in 1978. Citing various recent study reports, petitions and suggestions urging an expanded role for television translators, the inquiry posed the fundamental question: "what role may low power television stations and translator stations play in delivering programming to the public." 6/ Comments were requested on six "decision criteria" as the framework for initial policy development:

1. Public need for program diversity;
2. Spectrum requirements;
3. Interference to communications services;
4. Media competition and economic impact;
5. Low power/translator economic viability and ownership; and
6. Impact on Commission resources and service implementation delays.

68 F.C.C. 2d at 1536. These areas continue to be the major concerns in this proceeding. Resolution of these basic issues, which the rule making record provides, informs our determination of whether there should be a low power service and what it should look like.

4. The inquiry was concluded two years after its commencement, with the introduction into the record of the Staff Report and adoption of the Notice. The Staff Report documents the approximately 100 comments and reply comments filed in response to the Notice of Inquiry and also contains detailed staff analysis of the present television translator service and the potential for its expanded use as an originating broadcast service. The Report addresses and recommends an approach toward numerous aspects of the proposed low power service, within the framework of the six decision criteria. It also contains a report prepared under a Commission contract that describes the development of prototype low-powered television operations in the United States and Canada.

5. The Staff Report served as a backdrop for the contemporaneous Notice of Proposed Rule Making, which sought comment on a series of fairly explicit proposals for a new low power service. 7/ The Notice proposed generally that translators be permitted to originate programming and/or operate subscription service to any degree. It proposed that low power stations be permitted to operate on any available VHF or UHF channel on a secondary, noninterfering basis to full-service stations, at powers of up to 100 watts VHF (in certain instances) and 1,000 watts UHF. It proposed relaxation of Commission rules relating to program content and would tailor program-related statutory requirements to the limited technical capacity of

6/ 68 F.C.C. 2d 1525, 1527 (1978).

7/ The proposals will be addressed specifically below.

the station. Finally, the Commission proposed to continue authorizing translator stations, including applications for translators seeking low power features on a waiver basis, during the pendency of the rule making. Interim grants would be conditioned upon the outcome of the rule making. Where the outcome of an application would depend upon an issue to be resolved in the rule making, such as comparative criteria, action would be deferred until the conclusion of the rule making. The rationale for this was that to stop processing applications in the conventional translator service, whose merit already was amply proved, would disserve the public, but that to refuse to consider applications seeking low power features would encourage disingenuous translator applications from parties whose real interest was low power operation.

6. The interim processing policy cannot be deemed successful in facilitating prompt implementation of the service. 8/ Nevertheless, it highlighted the importance of the sixth decision criterion, in paragraph 3, supra, providing an invaluable indication of the potential demand for the service and an object lesson regarding the necessity for additional administrative and technical refinements in the proposals that could not have been anticipated without practical experience. The notion of interim processing itself was controversial, spawning two lawsuits. In Little Rock Television Company, et al. v. FCC, 646 F. 2d 1271 (8th Cir. 1981) per curiam, the court dismissed, on grounds of jurisdiction and ripeness, a challenge to the Commission's extension of a cut-off date. 9/ In Corporation for Public Broadcasting v. FCC, No. 81-1075, the United States Court of Appeals for the District of Columbia Circuit was asked to adjudicate the claim that interim allocation of spectrum for low power stations prejudices noncommercial applicants, who require more time to secure funding for applications than do their commercial counterparts. The suit was dismissed at the request of the petitioner in October, 1981.

7. In addition to the court challenges, the unexpectedly large number of interim applications filed brought to the Commission's attention a technical inadequacy in the low power proposal. The existing rules, amendment of which was not proposed, prohibit translator-to-translator interference, but essentially leave the judgment as to whether a proposed translator is mutually exclusive with existing translators or other applications to engineering

8/ To date, approximately sixty-five interim translator grants have been made in the continental United States, eight including a waiver for low power features. Over one hundred additional interim grants have been made for low power operations in the State of Alaska.

9/ A cut-off date is the deadline for filing petitions to deny and competing applications with respect to applications previously published on a cut-off list of applications ready and available for processing.

discretion. 10/ This approach was sufficient for the largely rural translator service, where mutually exclusive applications were unusual and the relatively low volume of applications permitted extensive manual analysis. However, during the pendency of the rule making, over 7,000 applications were filed. 11/ Many of these were in major markets and were obviously mutually exclusive with each other, but without precise translator-to-translator exclusivity standards that permit automated analysis, it was impossible formally to determine mutual exclusivity. To remedy this, a Further Notice of Proposed Rule Making was issued, augmenting the technical proposals in the Notice with a prohibited contour overlap mode of processing that can be substantially automated. 12/

8. The United States Congress also involved itself with the administrative dilemma posed by the great number of applications filed. The Omnibus Budget Reconciliation Act of 1981 amended Section 309 of the Communications Act to permit random selection among competing telecommunications facilities applicants. 13/ This was intended as an alternative to time-consuming comparative hearings:

> The conferees are particularly concerned with the delay that will result if comparative proceedings are used to award licenses for low power television service. The Commission has already received over 5,000 applications, most of which are, or will be mutually exclusive with other applications. Unless alternate procedures are devised, the Commission will have a geometric increase in comparative hearings and many years of delay in action on these applications. The conferees note that a matter such as this is ideally suited for the application of random selection procedures. By authorizing the Commission to apply random selection to any license application already submitted, but not yet designated for hearing, it will be possible to process low power television applications rapidly on a random selection basis.

10/ Each translator application is examined on a case-by-case basis; separate calculations are performed regarding other authorized spectrum users to which the proposed facility could cause interference. Fixed coordination distances or protected contours are not utilized between translators; rather, engineering assessment of each particular case is relied upon.

11/ When it became clear that the existing method of processing was inadequate to deal with this magnitude, the Commission stopped accepting additional applications, except in areas where the need for service outweighed the administrative burdens. See, Memorandum Opinion and Order, 46 Fed. Reg. 26062 (published May 11, 1981).

12/ 46 Fed. Reg. 42478 (published August 21, 1981).

13/ Public Law No. 97-35, 95 Stat. 736 (August 13, 1981).

Omnibus Budget Reconciliation Act of 1981, Conference Report, H.R. Rep. No. 97-208, 97th Cong. 1st Sess. (July 29, 1981), at 898. In accordance with the Congressional authorization, we commenced rule making seeking public comment upon general proposals for implementation of a random selection system with preferences for underrepresented groups or individuals. 14/ The proceeding was terminated on February 8, 1982, with the Commission's conclusion that, on the basis of the record adduced, it would not be feasible to implement a system of random selection within the constraints of the legislative provisions. 15/

9. We have received numerous comments and reply comments on both the Notice and the Further Notice, as well as comments in the lottery proceeding relating to low power application processing. 16/ From the voluminous record developed to date and the practical experience we have gleaned via the interim processing policy, we have been able to distill the following regulations for a low power television service. We believe the rules set out below will fulfill the multiple goals of satisfying public demand, protecting the rights of other broadcasters and affected telecommunications services, not prohibitively burdening Commission administrative resources and generally furthering our current regulatory policies and those established by Congress.

II. Overview

10. The basic issue presented in this proceeding simply is: should there be a low power service? This question must be addressed in several levels, both theoretical and practical. As the recent past has shown, we also must consider the relatively great administrative resource impact that implementation of the low power service will have upon the Commission. This is a particularly significant consideration, in light of present budgetary constraints that mandate austerity at the Commission. Nevertheless, weighing all the factors, we are convinced that the benefits of the low power service will outweigh its costs to the public. The most persuasive evidence for this conclusion are the pleadings comprising the record. The comments overwhelmingly favor institution of the low power service. As the comment summary reveals, a variety of modifications to our initial proposal are suggested. Among them are some proposals with which we are in accord; these are reflected in the rules and policies promulgated herein, which, it will be noted, do not in every instance track our initial proposals. Other comments propose changes in our proposals that, on consideration, we find unrealistic or impracticable, or simply not in accord with our policy goals. Nevertheless, the record adduced in response to the Notice airs thoroughly the major issues in this rule making and contains commentary representing a variety of interests. What is most noteworthy is the paucity of direct opposition to the concept of a low power television service.

11. Our first decision criterion was "public need for program diversity." It is self-evident that additional stations will provide additional programming. How "different" this additional programming will be is not readily determinable; however, the analysis in our Radio Deregulation proceeding provides a basis for the inference that provision of additional outlets can act as an incentive for licensees to provide program diversity. Report and Order, Deregulation of Radio, 84 F.C.C. 2d 968, 1981. In addition, we believe that the record evidences a public desire for additional television service, as well as a belief that low power stations can provide diverse programming. We have concluded, however, that the specific nature of the programming is properly left to the licensees' discretion, based upon the mandates of the marketplace.

12. Local programming usually has been an important service objective in the broadcast services (see, Sixth Report and Order, Docket Nos. 8736, 8975, 9175 and 8976, 41 F.C.C. 148 (1952)), an objective that the low power service is particularly suited to carry out. The comments are in accord on this issue; however, they differ in their recommendations as to how we might achieve this objective. In our deliberations, the issue becomes: acknowledging the public desire for additional television stations with the potential to provide diverse or local program service, what should be the Commission's role in determining the precise nature of the program service?

13. In general, we are reluctant to mandate that particular kinds and amounts of programming be aired, substituting our decision for market mechanisms. First and foremost, to do so would run afoul of the discretion we must afford to the program decisions of licensees, under the First Amendment to the Constitution and our long line of precedent upholding that discretion. See, e.g., Columbia Broadcasting System v. Democratic National Committee, 412 U.S. 94 (1976). Second, even where we perceive a need to adopt a hands-on policy toward low power program content, we historically have found less intrusive means of effectuating that policy. The law constrains us to choose the least drastic means of achieving even a legitimate governmental purpose that has the incidental effect of intruding upon protected freedoms. See, Shelton v. Tucker, 364 U.S. 479 (1960); U.S. v. O'Brien, 391 U.S. 367 (1968). In the past, we have sought to achieve programming objectives by means of more or less content-related regulations, such as ascertainment. See, Report and Order, Primer on Ascertainment of Community Problems by Broadcast Applicants, 27 F.C.C. 2d 650 (1971). As the radio service became more directly responsive to consumer demands, however, we found it unnecessary to continue to impose this obligation on licensees. See, Deregulation of Radio, 84 FCC 2d 968 (1981); reconsid. denied, 87 FCC 2d 797 (1981).

14. In our deliberations, we remain mindful of the fact that, while low power television indeed is a broadcast service, its technical and operational differences from full service television inform different sets of regulatory decisions. Title III of the Communications Act sets out the basic precepts of broadcast regulation, but affords the Commission considerable latitude in their interpretation and application. 17/ Generally, our broadcast rules and policies proceed from the assumption that broadcast stations serve the public interest when they meet the programming needs and interests of all elements of the community. The Commission has attempted to achieve its regulatory objectives regarding programming by both content and structural rules. However, in light of the nature of the low power service, particularly the small and undefined coverage areas of low power stations, a concern that all elements of the larger community be provided with program service is not present. In addition, it is likely that low power stations will have to be very directly responsive to the interests of local consumers, to assure economic viability. In light of these factors, it is our judgment that minimal regulation of low power television is in the public interest notwithstanding the fact that it is a broadcast service.

15. We carefully have considered the option of imposing no regulatory mechanisms, direct or indirect, and instead relying exclusively upon market forces to achieve diversity of programming. (This approach seems suited to the low power service, in which we have proposed, and will apply, only minimal restrictions upon the free transferability of stations.) Further, low power stations may be constructed, and presumably transferred, at relatively low costs, and their small coverage areas lend themselves to programming to suit discrete groups in a community. In this environment, where licensees are likely to be directly responsive to audience desires, we believe there lies a very good possibility of consumer sovereignty. Thus, if the market works to establish consumer preferences, we must ask if anything is to be gained by imposing regulations designed to achieve those same ends. The Commission need engage in this sort of intervention only when factors exist that significantly impede consumers from influencing program fare. On the basis of the rule making record in this proceeding, we find no likelihood that such a market failure will occur. In addition, we are reluctant to burden an untried service with regulations that could prove unnecessary. Accordingly,

14/ Notice of Proposed Rule Making, In the Matter of Amendment of Part 1 of the Commission's Rules to Allow the Selection from Among Mutually Exclusive Competing Applications Using Random Selection or Lotteries Instead of Comparative Hearings, Gen. Docket No. 81-768, FCC 81-524, 46 Fed. Reg. 58110 (published November 30, 1981).

15/ Report and Order, Gen. Docket No. 81-768, adopted February 8, 1982, 47 Fed. Reg. 11886 (published March 19, 1982).

16/ A summary of comments is attached hereto as Appendix D.

17/ For example, subscription radio operation using an FM subcarrier has been treated as a hybrid broadcast service and, on that basis, been exempted from statutory provisions otherwise applicable to broadcast services. See, KMLA Broadcasting Corp. v. Twentieth Century Cigarette Vendors Corp., 264 F. Supp. 35 (C.D. Cal. 1967); Greater Washington Educational Telecommunications Association, Inc., 49 FCC 2d 948 (1974). And the legal appendix to the staff report Policies for Regulation of Direct Broadcast Satellites (DBS), F. Setzer, et al., FCC, Office of Plans and Policy (October, 1980), raises the question of whether subscription television is properly considered a broadcast service.

we resolve our first decision criterion with the conclusion that the low power service, as authorized herein, is likely to provide program service that is responsive to public demand without the necessity of regulatory intervention by the Commission. 18/

16. Another issue that is critical to our conclusions is what might be considered the opportunity cost of low power, in terms of utilization of spectrum. That is, what are the legitmate, competing claims to the spectrum we have proposed for low power stations, and to what extent will they be precluded by the authorization of the low power service? Our second and third decision criteria, spectrum requirements and interference to communications services, focus upon this issue. A good deal of commentary was devoted to these questions, primarily from other users or would-be users of the frequencies that would be used by low power licensees. Full service television stations are the primary users of the radio frequencies at issue. Many voice the concern that low power stations will be permitted to encroach upon their primary status. Land mobile services share some of the channels at issue with television stations. Their representatives also fear encroachment by low power users. Another concern, raised in the Notice, is the possible use of auxiliary broadcast services by low power licensees, and the possible scarcity of television microwave spectrum that could result. The availability of frequencies for television microwave uses may be essential to continued local coverage, both for full service and originating low power stations. Although we received little commentary on this issue, we believe it warrants consideration as a primary spectrum management concern arising from the low power proposal. Finally, cable systems, at various points in the distribution system, and multipoint distribution services, at the converters that provide the TV input signals, make use of TV broadcast frequencies. Because this use of spectrum does not require radiation of signals on frequencies allocated for broadcast use and operates on a nonpreclusion basis to broadcast stations, it has not been necessary to license it. Although cable and microwave operators generally have been able to use available television channels without interference to the primary users, they have evinced concern that authorization of low power stations will preclude them from spectrum that heretofore has been available for their use.

17. Our evaluation of the record and the technical questions involved in these issues has convinced us that we are not faced with an either/or situation, in terms of spectrum utilization. First and foremost, we intend to maintain the secondary spectrum priority of low power stations, a policy that assures protection from interference to full service stations. Secondary spectrum priority has two aspects: low power stations may not cause objectionable interference to existing full service stations, and low power stations must yield to facilities increases of existing full service stations or to new full service stations where interference occurs. A similar policy holds true where land mobile services currently share primary use of some UHF spectrum with full service television. In paragraphs 24 through 46, infra, we have defined the parameters under which we will authorize low power stations in relation to land mobile and full service stations, and thereby have defined criteria for predicting objectionable interference. We also have come to believe that auxiliary services used by low power stations and the other auxiliary broadcast services can coexist, as discussed in paragraph 47, infra. Finally, we believe that cable and MDS systems will be able to adapt to an environment in which low power stations use the radio spectrum. These services' use of broadcast frequencies is subject to nonpreclusion of all other authorized broadcast users. We are convinced, though, that the likelihood of interference problems arising warrants a minor change in the policy proposed in the Notice with respect to cable systems. See, paragraph 45, infra.

18. In brief, we have concluded that the competing uses for television spectrum all may be accommodated, in varying degrees. However, we also recognize that this spectrum is becoming crowded, and, with the exception of full service stations, whose primary use of this spectrum is assured, no one set of interests can receive all they have sought. We believe that this is a situation in which it is feasible and indeed desirable to attempt to partially satisfy all competing claims, and it is well within our discretion to do so. See, Goodwill Stations, Inc. v. FCC, 325 F. 2d 637 (D.C. Cir. 1963); Coastal Bend Television Co. v. FCC, 234 F. 2d 686, 690 (D.C. Cir. 1956); Loyola University, et al v. FCC, Nos. 80-1824 and 80-2018, slip op. (D.C. Cir., January 26, 1982).

19. Our fourth and fifth decision criteria, media competition and economic impact and low power/translator economic viability and ownership, are interrelated to a large degree, and are amenable only to speculation until the service is operational. The record does not contain convincing evidence that the low power service could have a competitively destructive impact on existing broadcast, cable or microwave stations. Nor does it contain convincing assurance of the viability of the low power service. Indeed, whether low power will be viable at all appears more uncertain than whether it will pose an undesirable competitive threat to existing facilities. For this reason, we have structured our ownership criteria to permit existing licensees to engage in low power ventures within the limits imposed by the comparative criterion favoring diversification of broadcast interests. To the extent that this may preclude new entrants later, the value to be gained from permitting experienced broadcasters to develop the service initially is believed to outweigh the possible loss of new entrants. In sum, we believe that the balance we have struck will foster a low power service that can grow to provide program alternatives to full service stations and cable systems in a manner that increases competition in the marketplace and thus enhances the telecommunications service available to the public.

20. We already have alluded to our sixth decision criterion, impact upon Commission resources and service implementation delays. This has proved to be the most critical and troublesome element of all. Throughout this proceeding, we have struggled to solve the dilemma posed by the early deluge of applications. Indeed, our experience with interim applications has been invaluable in informing our deliberations regarding the administrative tools required for implementation of the low power service. Our solution to this dilemma is detailed in paragraphs 51 through 74, infra. Briefly, we are not now proposing to lift the freeze on new applications that was imposed on April 9, 1981. 19/ Before considering termination of the freeze, we shall identify applications that are mutually exclusive with applications that already have been cut off, 20/ place them on a "B" cut-off list, process those applications and either grant or designate them for hearing, as circumstances dictate. This processing will occur in several phases, beginning with the most rural applications. See, Appendix E. The cases will be set for hearings as our resources permit. When the processing of the currently cut-off applications is completed, the Commission will publish cut-off lists of applications on file that were neither mutually exclusive with applications on the existing cut-off lists nor cut off at the time of the freeze. The freeze will be lifted for acceptance of applications in competition with those on cut-off lists, and processing will continue in the manner described above.

21. The hearing process obviously will be time-consuming. When and if a system of random selection is instituted for choosing among competing broadcast applications, it, of course, will be applied to low power. Until such time, it would behoove competing applicants to settle their conflicts privately and resolve mutual exclusivities prior to hearing. We strongly encourage plans that involve time-sharing and pooling resources, which could be especially beneficial in light of the fact that low power is a new service whose viability is as yet undetermined. We shall make every effort to rule promptly on all settlements among competing applicants, under Section 311(c) or (d) of the Communications Act of 1934, as amended, and Sections 73.3525 and 73.3568 of our Rules. The use of largely paper hearings should shorten the time until authorization considerably. We are reallocating our staff resources to the extent possible to process the backlog and new applications expeditiously, within existing budgetary limitations.

22. We recognize that the hearing process can be needlessly cumbersome, particularly in a secondary service. However, we have not been able to develop acceptable alternative procedures within current legislative constraints. We have attempted to devise somewhat streamlined comparative hearing procedures. Furthermore, we intend to restrict the types of pleadings and issues we shall entertain during this abbreviated hearing process, to a degree consistent with the nature of the low power service. See, paragraphs 65 through 68, infra. We continue to believe that both a lottery and modification of the hearing process may be essential to improving our efficiency with reduced staff; however, we do not believe this proceeding is the appropriate vehicle in which to modify all our practices and procedures that may affect other broadcast services, particularly in light of the functional differences between full service and low power stations. 21/ As we have indicated, we are making every effort to expedite the processing of low power applications, both with increased staff resources and computer capacity. However, some of this burden quite properly falls upon the applicants. If, given the strong incentive to settle privately or opt for paper hearings, we still are confronted with thousands of competing applicants insistent on hearings, we cannot promise prompt authorizations. The Commission is committed to elimination of the backlog; but we have discovered no magic formula for this.

23. Our conclusion that low power applications should be processed similarly to other broadcast applications is related to a broader policy issue: to what extent should the rules for low power stations diverge from the analogous rules for other broadcast facilities? As stated above, this proceeding is not intended to set broadcast policy generally. In some instances, however, low power can provide a useful test case for more general deregulatory initiatives. On the other hand, there are other areas where we believe it is more sensible to decide a particular issue in a separate proceeding designed to air all aspects of that issue alone. For example, it has come to our attention that some low power applications propose a teletext service. Because we are looking into the advisability of teletext-related service generally, (see, Notice of Proposed Rule Making, Amendment of Part 73 to Authorize Transmission of Teletext by TV Stations, BC Docket No. 81-741, 46 Fed. Reg. 60851 (published December 14, 1981)), the issue of whether the same or different rules for teletext should apply to low power stations, on account of their singular service capability, will be resolved in our separate proceeding on teletext. Finally, while we have several "unregulatory" initiatives underway, and a number of additional ones are contemplated, we do not intend to dispense with rule making and enact them in the low power context, rather than awaiting the results of the separate proceedings in question. We do intend, however, to resume acceptance of applications for experimental stations that propose novel uses of low power technology, at such time as we have eliminated the present processing backlog and otherwise lifted the freeze on acceptance of new applications. 22/

18/ We recognize, of course, that the Commission's ownership rules also are intended to influence programming content because a paramount purpose of structural regulations is to assure a variety of viewpoints in any informational programming provided by licensees. Public interest considerations relating to the imposition of ownership rules in the low power service are discussed separately at paragraphs 19 and 78 through 90, infra.

19/ Because we are deciding not to abrogate the freeze herein, the several pending petitions for reconsideration of the freeze will be dismissed, as will pending requests for waiver of the freeze that do not raise a novel and compelling public interest ground for waiver in a particular unique situation.

20/ The pre-freeze cut-off lists were published at 45 Fed. Reg. 70974 (October 17, 1980); 45 Fed. Reg. 8114 (December 9, 1980); and 46 Fed. Reg. 12852 (February 18, 1981).

21/ We are committed generally to reduction or elimination of unnecessary regulations, see, e.g., Report and Order, Deregulation of Radio, 84 F.C.C. 2d 968 (1981); reconsid. denied, 87 F.C.C. 2d 797 (1981); Revision of Application for Renewal of License of Commercial and Noncommercial AM, FM, and Television Licensees, 46 Fed. Reg. 26236 (published May 11, 1981). It goes without saying that any proceedings that accomplish this task with respect to relevant rules will apply to the low power service.

22/ We stopped accepting applications for such experimental stations on April 24, 1980. See, Public Notice, FCC 80-262, April 29, 1980. cont.

III. Issues Relating to Channel Allocation

24. Spectrum Priority. Although some parties urge us to do otherwise, it is our firm intention that low power stations remain secondary, in terms of spectrum priority. While we agree with parties averring that low power stations can provide needed and meaningful service, we point out that the coverage obligations to which we subject full service stations specifically are designed to ensure maximum service to the public, beyond what we shall require of low power. This fact, we believe, constrains us to ensure the continued primacy of full service stations by emphasizing the secondary status of low power stations. We also emphasize, though, that while the rules for the low power service are intended to protect the public's expectation of service from full service stations, we do not intend to cater to full service licensees' unreasonable fears of competition from low power stations, and fetter the low power service for that reason. We believe low power can provide competition that stimulates the entire telecommunications marketplace.

25. The record indicates that not all parties share a common understanding of the concept of secondary spectrum priority. Under the Commission's present rules (Section 74.703) and the Notice of Proposed Rule Making, secondary status means (1) a low power station will not be authorized where there is a possibility of objectionable interference to an existing full service station, under the standards prescribed herein; (2) an authorized low power station that causes objectionable interference to an existing full service station is responsible for eliminating the interference, or the low power station must cease operation; (3) an existing low power station that would cause interference in connection with a proposed increase or modification of facilities of an existing full service station or in connection with a proposed new full service station is responsible for eliminating the interference, or the low power station must cease operation. These are the rules under which low power stations will operate. The notification and reporting provisions in Section 74.703(c) and (d) will continue to apply with the one modification proposed in the Notice and advocated by Citizens Communications Center, the National Telecommunications and Information Administration and the National Translator Association, to wit, that low power stations need not cease operation until they have been proved by the complaining party to be the cause of the interference complained of, but they must cooperate fully in tests to determine the cause of interference and remain willing to cease operation at the request of the Commission. 23/ "Interference" as it is used in this context is discussed in the following paragraphs, to facilitate a common understanding among all parties of when interference will be predicted to occur.

26. In agreement with parties urging that we develop more detailed interference prediction criteria, we proposed desired-to-undesired (D/U) signal ratios to define the relative signal strengths of the dominant and interfering signals, both in the low power-to-full service and low power-to-low power contexts. After evaluation of the comments received in response to the Further Notice, we remain convinced that a modified prohibited contour overlap standard is the preferable method of predicting interference, in order to promote spectral efficiency. We therefore delete from our rules the UHF spacing requirements of Section 74.702(c). We do note that, making a few conservative assumptions, a set of mileage requirements can be derived. While processing will be based on prohibited overlap criteria contained in the rules, detailed calculations are not required of the applicant and unless an unusually high power (greater than 20 kW UHF ERP or 100 watts VHF ERP) or antenna height (greater than 500 feet above average terrain) is anticipated, applications meeting the following full spacings should have no conflicts with full service stations:

	Full service station is:	
VHF	co-channel non-offset	210 miles
	co-channel offset	150 miles
	±1 channel	90 miles
UHF	co-channel non-offset	210 miles
	co-channel offset	150 miles
	±1 channel	75 miles
	±2, 3, 4, 5 channels	20 miles
	+7 channels	60 miles
	-14 channels	70 miles
	-15 channels	75 miles

In many cases, prohibited overlap processing will allow grant of applications at smaller mileage separations. However, applicants are reminded that applications not meeting the prohibited overlap standards will be returned, so, particularly in areas where low power demand exceeds available spectrum, the proposed technical facilities should be carefully selected. Because of uncertainties inherent in predicting propagation, variations in equipment characteristics and the fact that we are, in essence, attempting to add a significant number of additional stations to a long-established allocations scheme, instances of interference from, to and between low power stations may occur. Indeed, in certain circumstances, there may be a potential for significant interference. We have attempted to adopt criteria that strike a balance between concerns over interference and a desire to maximize the benefits of a new service. As low power stations are authorized, and cases of interference are called to our attention, it is our intent to identify categories where it may be appropriate to refine our criteria to take into account special circumstances, such as overwater paths or superrefraction and ducting, in which we would want to be more restrictive in low power authorizations. Intensified efforts also are underway by propagation scientists and engineers at the Commission, NTIA/ITS, other agencies and private organizations to improve the accuracy of propagation predictions in general and to develop practical criteria that can be incorporated into Commission deliberations and assignment decisions. For example, the Commission's Office of Science and Technology has an on-going project in cooperation with NTIA/ITS to collect propagation data in Southern California where superrefraction has created problems for a number of years. Data collection is scheduled to continue through October, 1982, leading to development of a more realistic propagation model for that area.

27. Distance Separations. Some parties asked that we retain the UHF separations, add VHF separations and/or adopt mileage separations to govern between low power stations, or that we promulgate a table of assignments for low power. We decline to do either, for several reasons. These approaches do not comport with the secondary nature of low power stations. They are less spectrally efficient than the prohibited contour overlap standards we have proposed. Finally, we believe a table of assignments would represent an unnecessarily rigid approach in a demand-driven service where we are fostering marketplace sovereignty. In the words of Gannon and Grange, "Communities need not rely on the Commission's clouded crystal ball for an access to spectrum space, but on market forces which will result in an efficient and quick allocation of spectrum space." 24/ Within the constraints necessarily imposed by our prohibitions upon objectionable interference, which will be strictly enforced, we believe the public interest best will be served by our permitting applicants to locate their stations and configure their service areas as market conditions dictate. The mandates of Section 307(b) of the Communications Act are fulfilled by virtue of the fact that most channel availabilities for low power exist outside the major markets. In addition, we shall process rural applications before urban, at least until the present backlog is significantly reduced. See, Appendix E. This will have the effect of providing service where it arguably is most needed. Beyond this, we do not believe that fair and efficient spectrum allocation can be furthered significantly by our engineering an elaborate allocation plan for stations that have no coverage requirements and whose continued existence is uncertain in light of their secondary status.

28. Noncommercial channel reservations. Similar reasoning applies to channel reservations for noncommercial low power stations, advocated by the Corporation for Public Broadcasting, the Public Broadcasting Service and the National Association of Public Television Stations, among others. Indeed, the entire notion of noncommercial operation is called into question in this service, as discussed in paragraphs 71 and 72, infra. The request for reserved channels is premised on the difficulty noncommercial applicants have in obtaining financing. The theory is based upon spectrum scarcity, that is, because it takes them longer to secure funding, there may be no more channels left by the time noncommercial applicants are ready to apply. However, there still are reserved channels available for full service stations in many markets, which, we believe, fulfills the overall plan for allocation of public stations embodied in the Sixth Report and Order, supra. Moreover, in recognition of the often disadvantaged financial status of all noncommercial stations, Congress directed the Commission to explore alternative funding sources for public stations. Public Broadcasting Amendments Act of 1981, Pub. L. No. 97-53, 95 Stat. 736, §§ 1221-1234 (August 13, 1981). In light of this initiative, and the fact that the Commission is not requiring public low power stations to operate without advertising, we believe it is unnecessary to reserve channels for noncommercial low power stations. Channel reservation comports with neither our overall approach to low power noncommercial operation nor with the secondary status of all low power stations. Indeed, we are herein adopting our proposal to eliminate the preference for educational rebroadcast on reserved channels, which gives noncommercial translators an absolute priority over commercial ones on reserved channels. See, 23 R.R. 2d 1504, 1508 (1971). 25/

29. Channel Selection. We have received comments from many parties asking that we preclude low power use of certain channels or bands, in order to secure that spectrum for a competing use. For example, the National Cable Television Association, representing cable interests, would have low power limited to UHF channels; various land mobile concerns want Channels 4, 5, 7 and 14 through 20 to be unavailable to low power stations. As we have stated, we are aware of the competing uses for the television spectrum. However, we do not intend to engage in spectrum reallocation in this proceeding. Low power is a broadcast use; as such, it is entitled to use the radio frequencies allocated for television broadcast use, subject to the constraints imposed by its secondary priority. We are confident that the desired-to-undesired frequency ratios we are adopting are adequate to protect the primary users of this spectrum. Therefore, we shall permit low power applicants to select any channel between 2 and 69, subject to our technical rules, including land mobile protection as discussed in paragraph 46, infra. 26/ We are not requiring certification that the channel selected is the one least likely to cause interference of the channels available. We do caution, however, that low power use of certain channels (principally 4, 5, 6, 7, 13, 14 through 21 and 69) may be subject to interference from authorized land mobile, point-to-point or FM stations; the rules we are adopting are not designed to protect low power stations from this. Prudence would suggest choosing a different channel where possible, but we shall not adopt a rule requiring this. Neither will we require an applicant filing a mutually exclusive application to certify that no other channel is available in the market, 27/ because we

23/ Several parties, including Citizens Communications Center and United Auto Workers, ask that the Commission give favorable consideration to the existence of a low power station that would be precluded by a full service application, where this situation arises. We are reluctant to do so. Where possible, the low power licensee on an allocated channel is free to propose to upgrade its service by filing a competing full service application; however, as it is integral to the concept of a secondary service that it yield to a mutually exclusive primary service, we shall not take low power stations into account in authorizing full service stations, and we urge low power applicants to consider this fact when they select channels.

24/ Gannon and Grange comments at 10.

25/ In the full service context, these channels continue to be reserved for the exclusive use of noncommercial stations. See, Section 73.606(a) of the Rules.

26/ To effectuate this policy, we are amending Section 74.702(c)(1) and (d) so as to eliminate priorities in UHF channel selection. Nevertheless, applications will not be accepted on channels where they cannot protect full service television stations, existing translators and land mobile allotments in the manner described in paragraphs 32 through 46.

27/ This has been advocated by Community Television Network.

recognize that other factors, such as site availability, may influence choice of channel, particularly in a service where stations have small coverage areas and where viability is uncertain. 28/

30. To provide maximum flexibility in channel selection, we are adopting our proposal to eliminate Section 74.732(d), which prohibits VHF translators from all-UHF markets and, Section 74.732(e)(1) and (2), which has the effect of prohibiting UHF stations from operating VHF translators on unassigned channels in distant markets. It is possible that the addition of a number of UHF low power stations will further the goal of UHF comparability; however, we do not see additional VHF low power stations generally as posing a significant enough competitive threat to UHF full service facilities to justify restricting VHF low power stations geographically. 29/ Finally, we are eliminating our current prohibition on use of the fifteen-mile rule, Section 73.607(b), embodied in Section 74.702(b)(2) and (g), because elimination of the preference in Section 74.703 (a) for 1,000 watt UHF translators on assigned channels renders this prohibition meaningless.

31. Maximum Power Limits. We have reviewed the comments regarding the power limits proposed for low power stations. A number of parties urge the Commission to permit higher power on low power stations, either across the board or on a waiver basis. Others advise against this, on the grounds that the likelihood of interference, both to full service stations and other low power stations, will increase with increased power. We are inclined to agree with this view. With one exception, it is our opinion that the power limits proposed in the Notice are adequate to ensure viable coverage areas for low power stations while restrictive enough to preclude undue interference under the technical standards adopted. We initially proposed to allow 100 watts VHF power in situations where both co-channel and adjacent channel mileage separations are met. Full service adjacent channel mileage separations allow substantial amounts of predicted interference, on the theory that viewers losing service will gain a replacement primary service, generally one closer to them and therefore more attuned to their local needs. We do not believe that secondary low power stations can provide an equivalent replacement service. Therefore, the power limit for low power stations will continue to be 10 watts VHF, except where a 100-watt station is proposed on an assigned channel 30/; and 1,000 watts UHF. We currently anticipate that we only would find it in the public interest to waive the power limits in extraordinary circumstances.

32. Full Service Protected Contour. The Further Notice indicated the Commission's intention to use the Grade B contour as the full service protected contour, but sought comment on the desirability and feasibility of attempting to protect service received from full service stations outside their Grade B contour. We received a good deal of thoughtful commentary on this matter. It is discussed in detail in the comment summary, Appendix D. Among parties advocating protection of all service received outside the full service Grade B contour are the Association of Maximum Service Telecasters, NAB, ABC and Storer. Cox suggests that one way of accomplishing this is to establish a full service contour seven dBu below the Grade B and require low power stations to protect that contour. This is the policy that the Commission adopted in Docket No. 20735, establishing that Channel 200 educational FM stations must protect the 40 dBu contour of Channel 6 television stations. See, Second Report and Order, Noncommercial Educational FM Broadcast Stations, 43 Fed. Reg. 39704, 39712, 39713 (1978); but see, Second Further Notice of Proposed Rule Making, to be issued at a subsequent date. Others contend that service received outside the full service Grade B contour should be protected, but on a more flexible basis, giving the Commission room to evaluate the circumstances. Communications Investment Corporation suggests that the Commission prohibit low power stations from causing "significant degradation" of service beyond the full service Grade B contour, in terms of the number of households affected. American Christian Television Stations would have low power stations protect full service stations beyond the Grade B contour where they are "significantly viewed," as defined in Section 76.54 of the Rules. AGK asks that the Commission not license a low power station on possibly interfering channels in any community outside the Grade B contour of a full service station in cases where the community is within the area of dominant influence (ADI) of the full service station. CBS advocates requiring low power applicants to select the channel least likely to cause interference, and then protecting service beyond the full service Grade B contour on a complaint basis.

33. Other parties, including Spectra, Attaway and Community Media Network, aver that it is appropriate for low power stations to protect the Grade B contours of full service stations but no further. The National Translator Association agrees with this, except that NTA believes it is arbitrary to prohibit low power signals in areas where terrain prevents actual reception of a full service station within its Grade B contour. The Corporation for Public Broadcasting contends that it is unreasonable for low power stations to be required to protect the full service Grade B, because the Commission's present rules do not require full service stations to protect each other to their Grade B contours. Adding that low power stations are more likely to provide truly local service than are full service stations at the outer reaches of their field strength contours, CPB proposes the following full service contours to be protected by low power stations:

Frequency	Protected Contour
Low band VHF	62 dBu
High band VHF	68 dBu
UHF	80 dBu

34. We have considered the various alternatives and believe that the following approach is the one that will best accommodate the competing interests and ensure maximum television service to the public. We agree that existing service from full service television stations should not be impaired. Notwithstanding inferences that may have been derived from paragraph 9 of the Further Notice, we do not intend to deviate from the basic thrust of our present translator interference rule, which states:

> "An application for a new television broadcast translator station or for changes in the facilities of an authorized station will not be granted where it is apparent that interference will be caused. . .Interference will be considered to occur whenever reception of a regularly used signal is impaired by signals radiated by the translator, regardless of the quality of such reception or the strength of the signal so used." (Emphasis supplied.)

Section 74.703(a) and (b) of the Rules. This means that any service from a full service station is to be protected from interference by a translator even beyond where the full service station provides reliable service or would be predicted to be received. However, as we stated in the Further Notice, because we are unable to process the great volume of applications manually, and in the interest of certainty among both applicants and the Commission, it is necessary that we use an objective standard for where we consider that it is "apparent that interference will be caused." We acknowledge that inherent in the definition of the Grade B contour is the fact that some locations outside the Grade B contour receive an acceptable signal, although the majority of locations do not. Conversely, inside the Grade B contour there are locations that do not receive an acceptable signal, although the majority of locations do. Because of the characteristics of TV frequency propagation and the unaccounted-for effects of terrain, this contour value and this procedure are not particularly useful for predicting service at particular locations. This also would be true of any other predicted contour we might choose to protect, a higher contour, as proposed by CPB, or a more conservative, lower contour, which Cox advocates. It is self-evident that, were we to protect full service to the 40 dBu contour, for example, we would provide somewhat greater assurance of continued reception of full service signals where they actually are received by listeners beyond the Grade B contour. However, this undoubtedly also would preclude low power from areas that are not able to receive even attenuated full service signals beyond the Grade B contour and that may not receive any off-air service at all without low power. We cannot generalize with any expectation of accuracy whether fewer or more people would receive fewer or more signals, as a result of our choosing a different protected contour for full service stations. We continue to believe that the Grade B contour offers the most realistic approximation of service received, and therefore is an appropriate standard to use in automating application processing. 31/

35. However, we shall continue our present policy to protect full service reception from impairment of the signal by translators. 32/ If we receive a well-documented complaint that an authorized low power station impairs regular reception of a full service signal outside the full service Grade B contour, this could be a ground for corrective action against the low power licensee, depending upon an evaluation of the situation. This approach does not differ significantly from what we previously have done, under our

28/ Indeed, it is possible to envision a situation in which a channel might be particularly desirable to an applicant on the basis of its unlikelihood of being affected by future full service stations. On the other hand, even in markets with a large number of low power channels available, a few particular channels might be attractive because they offer an opportunity for future upgrading to full service operation.

29/ Our belief is based upon the secondary status and limited coverage potential of low power stations. For similar reasons, we believe that only in rare instances will a party alleging adverse impact on a UHF station be able to make an initial showing warranting consideration of the issue in a hearing prior to the award of a low power construction permit. See, WFMY Television Corp., 59 F.C.C. 2d 1010 (1976) (limiting the applicability of the policy enunciated in Triangle Publications, Inc., 29 F.C.C. 315 (1960), aff'd sub. nom. Triangle Publications v. FCC, 291 F. 2d 342 (D.C. Cir. 1961)); and see, paragraph 63, infra.

30/ This provision is in the current translator rules and has little or no negative impact on the coverage of full service stations. Continuing it is not expected to present significant problems, because there are few vacant VHF assignments and they tend to be in relatively isolated locations.

31/ It is within our discretion to adopt this contour as a processing standard, and even as an absolute protection standard. As we have said, "There is no rule of law or section of the Communications Act which affords broadcast stations protection against 'interference,' as that term is defined in the abstract without reference to the Commission's Rules and Regulations. Section 303(f) of the Act provides in pertinent part that the Commission shall 'make such regulations not inconsistent with law as it may deem necessary to prevent interference between stations.' In this Section Congress has delegated to the Commission the authority to determine to what extent interference between broadcast and other radio stations shall be permitted to exist. The delegation is broad and leaves within the Commission's discretion, subject to the criterion of the public interest, convenience and necessity, not only the determination of what degree of interference between stations shall be considered excessive but also the methods by which such excessive interference shall be avoided." Memorandum Opinion and Order, Roy Hofheinz (KSOX), Harlingen, Texas, 9 R.R. 784c (1953).

32/ This raises an issue addressed by several parties, including the Association of Maximum Service Telecasters and General Electric Broadcasting Company. They suggest that we require low power applicants specially to notify nearby full service licensees of the filing of the application. We agree with the National Translator Association that the public notice the Commission gives by statute of the acceptance of all broadcast applications is sufficient to notify all possibly affected full service stations of the pendency of a low power application. We also will not require low power facilities to conduct field tests prior to final authorization; we believe that the entailment of secondary spectrum priority, that interfering stations cease operations on the Commission's request, will fulfill the same goal, and therefore a field test requirement is unnecessary and duplicative.

existing rules. 33/ Nor does it differ significantly from the approach we would take in the case of low power/full service interference anywhere. That is, we shall not knowingly authorize a low power station that would impair the reception of a full service station. Our mode of processing gives us a reasonable degree of certainty that this normally will not occur within the full service Grade B contour, and if it does, it will be the sole responsibility of the low power operator to correct the situation. On the other hand, because we have no record of where service is received outside the full service Grade B contour, we cannot take this into account in processing. As CBS recommends, we shall deal with such interference on a complaint basis, should the need arise. 34/ We do not believe it is feasible to adopt CBS's other suggestion, that we require low power applicants to select the channel least likely to cause interference, essentially because this may be difficult to determine; furthermore, it should not be necessary, because our processing procedure will eliminate applications on channels where excessive interference is likely to be caused. However, our strict adherence to the secondary priority policy should be an incentive for low power applicants to endeavor to select channels with a minimal chance of future interference problems, the primary onus of which would fall upon themselves. 35/

36. Low Power Protected Contour. The comments focused primarily on the proposed UHF Zone 1 protected contour of 84 dBu. Almost universally, this value was viewed as too high, protecting an area too limited to allow a station to be viable. It also is argued that many translators provide acceptable service to their communities, even where they do not provide a predicted 84 dBu signal. In addition, comments claim that many low power applications specifying existing TV towers as their transmitting site would not provide an 84 dBu signal to their city of license. Values of 70 dBu and 74 dBu most often are suggested as substitutes for the 84 dBu value. We believe that use of a 74 dBu protected contour is a reasonable compromise. A protected contour value of 74 dBu was proposed in the Further Notice for those parts of the country not in TV Zone 1 or FM Zone 1A. A couple of comments supported a zone system and suggested that the proposed UHF protected contour values in all parts of the country should be reduced by similar amounts. We are not convinced that the low power protected contour for UHF stations located outside of Zones 1 and 1A should be reduced below 74 dBu. In areas of scarce spectrum the effect of reducing the protected contour would be to lower the number of possible low power stations. This would be a restraint on the marketplace that we believe is unnecessary because the protected contour is part of a minimum protection standard. An applicant, except in most of the northeast and some urban areas, often can choose to exceed the minimum standard significantly. In areas where translators have flourished, these standards should prevent a newcomer from causing severe disruption of existing service. However, we expect that the vast majority of applicants in these areas will coordinate with each other and with existing operators and will take local factors (including terrain) into account in determining how close to a minimum standard they should apply to operate. In view of this, we believe that the 74 dBu protected contour is a reasonable minimum standard. By adopting it for UHF stations in all parts of the country we are slightly simplifying the processing and conforming the UHF and VHF procedures. Based upon the comment record, we also are adopting the VHF protected contours as proposed.

37. Terrain Shielding. In our Notice, we proposed consideration of terrain shielding on a case-by-case basis. Although several comments contend that consideration of terrain is essential for a realistic authorization process, we believe that the overwhelming argument is presented by our experience with the interim applications. It is far beyond our staff capacity to evaluate individually thousands of terrain shielding claims. Also, we do not have in this proceeding sufficient information to adopt any standard method for computing a low power terrain correction factor. As indicated elsewhere in this document, we do not intend this proceeding to be the source of sweeping changes in broadcasting regulation. Therefore, the proper forum for considering a standard method of terrain correction is in a proceeding designed to deal with that subject. 36/

38. Receiving Antenna Front-to-Back Ratio. Some comments support consideration of front-to-back ratios in determining desired-to-undesired interference ratios. A larger number of comments oppose it and their arguments are persuasive. For example, the average antenna front-to-back ratios listed in the Further Notice were based on test range measurements and, particularly in rough terrain, it is unlikely that they would be equalled under normal reception conditions. Further, it was indicated that front-to-back ratios for individual antennas varied significantly from channel to channel and there is no reasonable procedure by which a consumer can identify the antenna that will perform best in their specific situation. In addition, a possible scenario is described where the undesired station is in the same direction as the desired low power station so there is no benefit from receiving antenna front-to-back ratio. Finally, at the low power protected contours we are adopting herein (see, paragraph 36, supra) acceptable reception will often be possible without an outside receiving antenna. For each of these reasons we feel that the traditional role of front-to-back ratios as a "safety factor" is appropriate in the low power service. By "safety factor" we mean it is a characteristic of receiving antennas that permits interference or ghosting to be eliminated in some instances, but we will not rely on it in determining where it is "apparent that interference will be caused."

39. Offset Operation and Frequency Tolerances. We are convinced by comments that carrier frequency offsets should be a permitted means of limiting or eliminating co-channel interference. To assure uniform, and we believe fair, treatment of applicants and licensees, we are adopting standards for low power offset operation. If an application proposes offset operation, an offset must be specified. The possible offsets are the same as those at which full service TV stations are authorized: zero, at the standard carrier frequencies for the channel; plus, with carrier frequencies 10 kHz above the zero offset carriers; and minus, with carrier frequencies 10 kHz below the zero offset carriers. The frequency tolerance of a low power station operating with a specified offset will be ±1 kHz, the same as the full service TV station frequency tolerance. The frequency tolerance for stations without a specified offset will be the same as the current translator requirements. When two stations (both low power or one low power and one full service) are to operate with different offsets (zero and plus, zero and minus, or plus and minus) the co-channel offset D/U ratio applies. When two stations are to operate with the same offset, or one or both stations do not specify an offset, the co-channel non-offset D/U ratio applies. See, paragraph 40, infra. Comments indicate that manufacturers are capable of producing equipment meeting the ±1 kHz frequency tolerance. Comments also convince us that even if only a small increase in equipment cost is involved, it is not justified for the vast majority of existing stations (and a significant number of proposed stations) that are located in rural areas where little or nothing would be gained by a tighter frequency tolerance.

40. D/U Ratios. We are adopting the desired-to-undesired ratios proposed in the Notice for UHF and in the Further Notice for VHF. No comments raised objections to the proposed values for VHF or the proposed co-channel values for UHF. In addition, no comments addressed the possibility raised in the Further Notice that low power to low power ratios could be different from low power to full service ratios. Lacking support or opposition, we are adopting the same ratios for predicting interference to either a low power or a full service station. Several parties note that the D/U ratios proposed in the Notice for adjacent channel and taboo channel relationships are mean receiver values from the 1974 Commission staff study 37/ and they argue for a more conservative approach where the D/U ratios would represent a level of performance exceeded by 90% of the tested receivers. The Electronics Industries Association, Consumer Electronics Group, representing receiver manufacturers, suggests that more conservative ratios be used for a period of five years. EIA indicates that receivers have improved noticeably since the 1974 tests and that they will continue to improve. However, EIA argues that additional time is required for the newer, better receivers to represent a larger percentage of the sets being used. Because of the industry representative's comments on receiver improvements, and the eight years that have passed since the tests were completed, we are of the opinion that use of

33/ E.g., Tri-State Television Translators, Inc., Docket No. 17654, and Wellersburg TV, Inc., Docket No. 17655, 15 RR 2d 1300 (1969). In this case, VHF translator systems in the Cumberland, Maryland, area were causing interference to the off-air reception of Washington, Baltimore and Pennsylvania stations. Several local residents outside the Grade B contour of these stations were able to receive the signals. The expense of modifying the translators to non-interfering UHF channels would have been prohibitive for the community-supported systems. In weighing the equities, it was concluded that protection of the distant signal reception of a small minority who had similar programming available from other distant full service stations would not justify the resultant service loss to the greater number of translator homes, many of which would not otherwise receive television service, because they could not afford CATV

34/ The individual circumstances of interference to a full service station beyond the Grade B contour vary so widely as to preclude any attempt to state hard and fast rules. In many circumstances, while reception may be possible, this service is relatively unimportant to viewers themselves because alternative signals are available to them--perhaps other full service television stations, translator service or cable service. While the varying circumstances require an ad hoc approach of case-by-case decision making, it may be useful to specify some of the factors that would influence our decision. We would view destruction of a viewer's only television service by a translator/low power station as extremely serious. Elimination of viewers' opportunity to view a particular television network signal also would be serious. As the service impaired becomes more redundant we would feel obligated to give more attention to the benefits obtained by the translator/low power service. We also would give less attention to interference received by viewers in special circumstances receiving a full service station that their neighbors do not receive, for example, reception caused by a viewer's location on the top of a hill or the installation of a receiving system far more sophisticated than that used by the viewer's neighbors. As our past precedents show, we also shall consider the value of the translator/low power service in terms of both the numbers served and the importance of this service to the viewers. Having discussed some of the factors we would consider in whether to terminate service by a translator/low power station we must emphasize that we expect to have to deal with very few situations of this nature. The translator service has a long history of operators successfully resolving interference problems by cooperative efforts with the viewers. We expect low power operators to continue this tradition. Translator and low power stations are secondary to full service stations, and we expect operators to engage in good faith efforts to resolve all complaints of interference to full service stations.

35/ This applies also to low power applicants that cause interference to existing translators. As we have indicated, we shall not authorize low power stations that do not meet our protection criteria to existing translators or low power stations. We have modified our low power protected contour to values that the record in this proceeding generally supports. If interference inside these protected contours results from a subsequent low power authorization and the stations involved cannot resolve the problem among themselves, the burden to correct the interference will be on the later entrant. We, of course, would expect the licensees to cooperate in resolving the problem; however, in view of the increasingly competitive nature of this service, we believe that a significant number of unresolved cases could reach the Commission. Therefore, we wish to establish now that, absent exceptional circumstances, we shall rely upon a "seniority system" for both VHF and UHF low power stations and translators. If both parties agree, we would permit two translator or low power stations to accept interference from each other, if there is no other way to authorize both and they create no additional interference to other authorized broadcast facilities. We shall not, however, permit a subsequent translator or low power station to cause interference to a currently existing translator, because this would result in destruction of existing service to the public, which is not in the public interest.

36/ For example, see, Report and Order, Docket Nos. 16004 and 18052, adopted May 29, 1975, which incorporated a terrain "roughness factor" into the FM and TV rules. However, see also, Stay, adopted April 28, 1977, 42 Fed. Reg. 25736 (May 19, 1977), where the Commission stayed indefinitely the effectiveness of the terrain roughness rules. We would expect that any general terrain correction factor that might be adopted would explicitly be extended to the low power service.

37/ W.K. Roberts and L.C. Middlekamp, A Study of the Characteristics of Typical Receivers Relative to the UHF Taboos, NITS PB-235 057 (June, 1974).

the proposed mean values is justified. Essentially, there are two reasons for this conclusion. On the basis of the above, we are convinced that most receivers currently in use actually perform better than the ratios indicate. In addition, we expect that, over the next few years, most new low power stations will exceed the protection criteria by a comfortable margin so there will be few, if any, problems of actual interference. Thus, some additional time will exist during which the average receiver is expected to improve. Finally, we do not wish to reduce the manufacturers' incentive to continue to improve those receiver characteristics that affect interference. Inferior receivers, at some point, will be exposed to undesired signals that will produce interference. We believe that this is preferable to adopting standards that protect inferior receivers, at a cost of reducing the number of low power stations that can exist.

41. Circular Polarization. In comments discussing transmitter output power, General Electric Company proposes that transmitters with twice the normally permitted power be allowed to feed a circularly polarized transmitting antenna. Circular polarization is a recognized means of improving reception within a station's service area. It commonly is achieved by transmitting both a horizontally polarized and a vertically polarized component of the signal with a fixed phase relationship between the components. The addition of a vertical component does not increase the distances at which a station provides service or causes interference. Full service stations are permitted to transmit a vertically polarized component as long as it does not exceed the horizontal component in any direction. In the past, through a waiver process, translators have been allowed to transmit a circularly polarized signal. However, they have been required to use two transmitters or a transmitter with multiple final amplifier stages, and two transmission lines connecting the transmitters to the antennas. We believe that it is both reasonable and appropriate for us to amend our rules herein to permit low power circular polarization and to permit a higher transmitter power output when a circularly polarized antenna is used.

42. Canadian and Mexican Notification. A translator notification procedure has evolved for stations in the Canadian border area. Canada is notified of 1 watt VHF translators within 10 miles of the border, and 10 watt VHF translators and 100 watt UHF translators within 20 miles of the border. Because 100 watt VHF translators and 1,000 watt UHF translators have required a channel in the Table of Assignments, they have been coordinated if they were in the area covered by the full service TV Agreement, within 250 miles of the U.S.-Canada border. There is no established protocol for notifying Mexico of translators in the border area. The full service TV Agreements with Mexico require coordination of VHF stations within 250 miles of the border and UHF stations within 199 miles. We currently are formulating a procedure for both Mexican and Canadian notifications. Until new agreements are reached, low power authorizations in the border areas (except those that would not require notification under the above standards) will be conditioned on Canadian or Mexican concurrence.

43. Cable Protection. The National Cable Television Association, with Spectradyne, has voiced concern that low power stations could cause interference to cable systems at the headend antenna where TV rebroadcast signals are received, cable distribution systems and at subscribers' receivers. To protect cable, NCTA would have the Commission license low power stations only on UHF channels and put the burden of frequency coordination and correction of interference on the low power operator. The Association of Maximum Service Telecasters, the Corporation for Public Broadcasting, the National Translator Association and others oppose NCTA, arguing that the potential for interference to cable is not as serious as NCTA fears and that, in any case, cable's unregulated use of radio frequencies is predicated on its nonpreclusion of broadcast uses of the band. NTIA supports a scheme substantially similar to that proposed in the Notice, whereby the Commission would consider well-documented objections to low power applications based on potential headend interference, but that other low power/cable interference is to be solved between the parties, with primary responsibility for correction of cable-related problems on the cable operator. In the interest of spectral efficiency, we have decided not to limit low power to the UHF spectrum. We are aware that, on occasion, interference problems have arisen between cable and full service stations on VHF channels. However, we believe that it would be spectrally inefficient to preclude low power stations from the VHF band altogether, when there are many locations where this will not occur. We do not feel it necessary to restrict the low power operator's range of choice between VHF and UHF frequencies, which may depend on factors such as cost differential, channel availability and coverage potential.

44. We believe that, with one minor modification, the cable/low power interference rules originally proposed generally will be adequate to control potential interference problems with minimal disruption to existing service. The rules are as follows:

> 1. The low power station operator is strictly responsible for taking immediate corrective action when an interfering condition to any other service results from operation in violation of the Commission's technical standards, or from improper maintenance. 38/
>
> 2. The cable operator generally is responsible for correcting interference in the cable distribution system and at subscribers' sets. 39/
>
> 3. The Commission will not knowingly authorize a low power station that is likely to cause serious interference to reception at an existing cable television headend. If this does occur, the parties will be encouraged to settle the matter between themselves, in light of the Commission's first-come, first-served policy, that will favor the pre-existing service.

Because the Commission has no computer data base of cable headend locations and stations received, or of channels used elsewhere in the cable distribution system, we have no means of considering cable systems in our automated processing procedures. Where we receive documented submissions raising a substantial and material question that a proposed low power station will cause serious interference to a cable system, we shall designate the application for hearing, pursuant to Section 309 of the Communications Act. 40/ However, as we have said, where an operational low power station causes interference to a pre-existing cable headend, we expect the parties to settle the dispute among themselves and come to the Commission only as a last resort. We would afford the earlier entrant, whether it be the cable system or the low power station, favorable consideration over the later one, and we would expect this to be a factor in their negotiations.

45. With respect to other interference problems, e.g., "local pick-up" interference at the television receiver, we do not find a sound basis for affording formal protection to cable systems in general. 41/ Cable's use of radio frequencies is based on its nonpreclusion of broadcast uses; therefore there is no basis for affording cable such formal protection. 42/ On the other hand, we find merit in NCTA's contention that some interference problems may occur frequently and be expensive for cable operators to correct. Various means to alleviate interference from broadcast stations may be available to cable operators. In some instances, the cost of correction would not be prohibitive, and would more easily be borne by the cable operator. See, Oregon Broadcasting Company, 20 F.C.C. 2d 246 (1969). We also note that our decision to restrict VHF translators and low power stations to 10 watts except where a station is proposed on an assigned channel further will reduce the magnitude of the problem. In the Notice we proposed to allow 100 watt operation in any situation where the co-channel and adjacent channel full service mileage separations were met. As a result of our decision not to extend 100 watt operation beyond assigned channels, cable operators will no longer have to accept the consequences of 100 watt VHF translators or low power stations except in locations where they already were aware of the possibility of a VHF full service station. The comments have persuaded us that one additional circumstance, however, does require special consideration. Where a new translator or low power station will cause interference to the output channel of an existing cable converter, we believe that the cable system may deserve some protection. In view of the minimal preclusive impact this will have (foreclosing at most one VHF channel from local use by translators or low power stations), we find this a reasonable accommodation to make to a cable operator who already has gone to considerable effort to minimize the system's use of broadcast spectrum by using a converter. We believe that this possibility warrants extension of the "first in time, first in right" policy we are adopting with respect to headend interference. Not only will this achieve equity between the parties, more importantly, we believe that in this circumstance it best serves the public interest to protect an expectation of continued service that may have arisen over time, instead of permitting its degradation by a later entrant. Given the small number of cases in which this should occur, we believe that the best way to handle the situation is via documented objections filed by the cable operator operators to applications of translators or low power stations that will be both co-channel to the output channel of existing converters and close enough to generate local pick-up problems. 43/ We continue to encourage private resolution of all cable/low power interference problems, informed by our policy to favor the earlier spectrum user in the headend or converter situations. Therefore, we are amending our rules explicitly to state that, in the event of cable/low power interference, the first user of the frequency, whether cable or low power, will have priority when interference precludes joint use in these two circumstances, and the later entrant will be responsible to correct the interfering condition. The cable operator will be responsible to correct all other interfering situations. See, Appendix A, §74.703(d).

46. Land mobile service. The 1979 World Administrative Radio Conference recognized the potential for shared Land Mobile/Broadcast use of the frequencies between 512 and 806 MHz (TV channels 21 through 69). Assuming the WARC agreement is ratified by the U.S. Senate, the Commission will be permitted, if it wishes, to authorize both land mobile and broadcast stations in this spectrum. In this regard, we intend to implement procedures for the processing of LPTV applications that take into account the potential for such sharing in and near major urban areas where the greatest long-term needs for land mobile channels exist. Specifically, we shall examine all low power TV applications within at least a 100-mile radius of the ten largest U.S. metropolitan areas to determine what accommodation, if any, is possible if we decide to provide some land mobile spectrum, while, at the same time, not unduly diminishing the spectrum available for low power television. (We are most concerned with: Boston, Chicago, Dallas, Detroit, Houston, Los Angeles, New York, Philadelphia, San Francisco, and Washington, D.C.) In effect, we shall attempt, through a staff study and our application processing

38/ This provision applies not only to cable, but to all services.

39/ As discussed in paragraph 45, infra, we are persuaded that the special case of co-channel interference to the output of a set-top converter requires a different approach.

40/ See, H & B Communications Corporation v. FCC, 420 F. 2d 638 (D.C. Cir. 1969). However, as noted above, pre-grant hearings on cable/low power interference issues will be authorized only where CATV systems are able to show the potential for interference with sufficient certainty and specificity to warrant designation of the issue for hearing. See, Washoe County School District, File No. BPTTV-6096, FCC 81-533, released December 3, 1981; Capital Communications, Inc., File Nos. BPTTV-800311IC and BPTTV-800312IB, FCC 81-534, released December 4, 1981.

41/ Microband makes an argument for protection of Multipoint Distribution Service down-converters that operate on Channels 12 and 13. We believe the same rationale applies to MDS use of radio frequencies as to cable and, accordingly, we are not extending such protection, but expect the parties to any such disputes to settle them privately.

42/ See, e.g., Memorandum Opinion and Order, Heart of Texas TV, 25 F.C.C. 2d 754 (1970); reconsid. denied, 27 F.C.C. 2d 205 (1971). While this case holds that cable systems must alter facilities to permit VHF translators, the text evinces the Commission's flexible approach, mandated in H & B Communications Corporation, supra, n. 39, of attempting to accommodate as many competing interests as possible in such situations. Accord, San Juan Nonprofit TV Association, 22 F.C.C. 2d 371 (1970).

43/ Unlike consumer electronics products such as TV games and VCRs, cable converters normally do not come with a switch to change the output between two adjacent channels. If they did, then the cable problem could be solved simply be switching to the channel unused by the translator or low power station.

procedures, to determine what impact additional land mobile sharing with low power TV has in these cities. Also with respect to land mobile operations, we note that a number of parties have decried the protection standards we proposed for land mobile systems now sharing VHF frequencies with broadcast users. The UHF taboos, however, still are a matter of study. Pending final resolution of this issue, we are inclined to adopt the standards proposed in the Notice for the protection of land mobile stations, with a few modifications urged in comments. We do not believe that these standards normally will result in interference, and we conclude that they are practicable, at least on a short-term basis. However, to the extent that interference does result, low power stations are being authorized on a secondary basis to all stations in existing primary allocations and must both correct whatever interference they cause or cease operation and accept whatever interference they receive from stations in the primary allocations. Also, to protect the Offshore Radio Telecommunications Service operations on Channel 17, we are adopting somewhat more restrictive standards for low power stations in the Gulf of Mexico. We believe that this is possible without significantly reducing the area within which Channels 16, 17 and 18 can be used, because existing full service stations on related channels and the Channel 17 Houston land mobile allocation leave little of the Gulf area with these channels available. Further, the area where Channels 16, 17 and 18 otherwise might have been used are for the most part sparsely populated with a large number of other UHF channels available for low power use. Therefore, we are adopting rules prohibiting Channel 16, 17 and 18 low power stations in the following areas: (1) Channel 17 will not be available in the area south of 31° 30' North Latitude, west of 86° 30' West Longitude and east of 95° 30' West Longitude; (2) Channels 16 and 18 will not be available in the area south of 30° 00' North Latitude, west of 87° 00' West Longitude and east of 95° 00' West Longitude. A computer review of translator stations and applications and pending low power and translator applications disclosed only two on these channels within these areas, both for Channel 16 at Galveston, Texas. Because Galveston is 40 miles from Houston, within the Channel 17 land mobile protected contour, these applications cannot be granted, regardless of the ORTS protection standards. The Commission also is aware of two petitions for rulemaking, one filed by the Offshore Telephone Company (RM-3924) and the other by the Sheriff's Department of Los Angeles County (RM-3975), both requesting nonbroadcast use of portions of the UHF-TV broadcasting spectrum. Our action today could have a negative impact upon the possibility of a favorable outcome on either of these petitions. Based upon our initial analysis, it appears that some degree of sharing between the Offshore Telephone Company use of channels 15 and 16 and low power TV may be possible. On the other hand, the mutual accommodation of the Sheriff's petition and low power TV seems to be considerably more difficult, if not impossible. Again this expectation is based on very preliminary analysis, and some possibilities for land mobile sharing still may exist even with significant development of low power TV. However, due to the strong public support and demand for low power TV, we do not consider it to be in the public interest to delay this proceeding to review further these two petitions, particularly because the Commission has not yet even determined whether petitioners have made a threshhold showing warranting rulemaking. After further analysis has been completed, these petitions will be accommodated through separate proceedings and to the extent the Commission determines appropriate.

47. Auxiliary Services. The Notice proposed that low power stations have access to auxiliary broadcast frequencies, where available, for studio-to-transmitter links and remote broadcast pickups. Subparts D, E, F and H of Part 74 of the Rules cover these uses. Low power licensees are eligible for remote pickup broadcast station licenses, under Subpart D. Because in BC Docket No. 81-793 we are proposing to delete Section 74.603(b), to eliminate use of aural microwave spectrum in connection with television transmissions, we shall not license this spectrum to low power licensees, until and unless resolution of Docket 81-793 permits. The present rules governing television translator microwave relays in Subpart F permit their use in connection with translators only to obtain permissible TV programming; the frequencies may not be used in connection with program origination. Television translator relays are accorded the lowest priority in use of the microwave frequencies under our present rules, see, Section 74.602(h). As part of an originating broadcast service, low power stations should be directly eligible for television microwave assignments for STLs, intercity relay and/or TV pickups, and Section 74.632(a) will be amended accordingly. The Commission recently initiated a proceeding to establish new licensing policies for television broadcast auxiliary stations, BC Docket No. 81-794. 44/ The Notice of Proposed Rule Making in that docket encourages private frequency coordination in the assignment of television auxiliary microwave frequencies and proposes the establishment of priorities for such assignments. The Notice seeks comment on the proper place for low power stations in the hierarchy. Because there was little commentary on this issue in the instant proceeding, and because BC Docket No. 81-794 is intended to encompass the entire panoply of users of this spectrum, we shall defer any possible modification of the present priority afforded to television translator relays, and leave resolution of the priority of low power stations to BC Docket 81-794. Finally, we are amending Section 74.832, Subpart H of the Rules to make low power television licensees eligible for low power auxiliary stations 45/, as well as Section 74.432(a), audio remote pickup stations.

IV. Technical and Engineering Requirements

48. The Notice addressed a number of technical issues not strictly related to spectrum priority. See, Notice, paragraphs 63 through 67, 45 Fed. Reg. at 69188, 69189. We did not receive a great deal of commentary on this subject, possibly because we are maintaining rather than changing most of our current regulations in this area. Nevertheless, it remains our belief that the technical aspects of low power operation are critical to its success as a new broadcast service and to its coexistence with existing services. We emphasize that we shall require strict adherence to the technical standards, both interference-related and others, adopted herein for low power stations.

49. Transmitter and Other Equipment Standards. We are retaining Section 74.750, which requires type acceptance of low power transmitters. Low power STV operations must use a Commission-approved encoding system. Section 74.736, which governs out-of-band emissions, will remain in force. Section 74.761, requiring frequency tolerance maintenance, will continue to be enforced. Where offset operation is proposed, transmitting equipment with the stability needed to meet a stricter frequency tolerance will be required. See, paragraph 39, supra. While we are amending Section 74.734 to require an operator in attendance under some conditions (see, paragraph 95, infra), we shall continue to enforce Section 74.734(a)(6), which requires observation for ten continuous minutes per day of the off-air signal of translators employing modulators. We shall require the transmitting equipment used by low power stations to comply with those existing provisions of Section 74.750 that relate to the prevention of interference. However, we are not adopting technical operating standards for the transmitted sync pulse and blanking wave forms, color burst or audio distortion. Our concern in regard to low power technical standards is primarily avoidance of objectionable interference. We would hope that marketplace considerations will provide additional incentive for low power licensees to maintain high quality signals for viewers.

V. Applications

50. Form 346, as revised for use by both translator and low power applicants, continues to seek information regarding the citizenship, character and financial qualifications of the applicant, as well as technical aspects of the proposal, as enumerated in Section 308(b) of the Communications Act and our rules and regulations. 46/ Without opining on their continued vitality, we shall continue to enforce the minimum qualifications to hold a broadcast license in the low power service, leaving the possible modification or curtailment of such qualifications to proceedings designed for that purpose, e.g., Notice of Inquiry, Gen Docket No. 81-500, 47 Fed. Reg. 40899 (August 13, 1981). 47/ It goes without saying that we believe that the low power service is an ideal candidate for any modifications of qualifications that are accomplished in other proceedings. However, because the Commission intends to examine these issues in separate proceedings in the future, we shall not make changes at this time.

51. We also envision several simplifications in application processing procedures for low power applications. It is consistent with the spirit of Gen. Docket No. 79-137, Revised Procedures for the Processing of Contested Broadcast Applications, 72 F.C.C. 2d 202 (1979), and with the secondary nature of the low power service, that low power processing procedures be streamlined to the extent practicably possible. We emphasize, however, that we intend to maintain strict standards for acceptance of applications. A low power application must be complete and sufficient to be accepted for filing. Applications with blatant defects will be returned. This policy represents a departure from the standard set out in Section 73.3564(a) of our Rules, under which "substantially complete" applications are acceptable for filing. It resembles, rather, the acceptance criteria of Part 22 of our Rules, which requires complete applications, and return of blatantly defective applications. See, e.g., Sections 22.31(b)(2) and 22.32(b)(1) of the Rules. Under our present broadcast rules, an application that is not grantable because it is incomplete still may be acceptable for filing, because it is not "patently defective" and it is "substantially complete." See, James River Broadcasting Corp. v. FCC, 399 F. 2d 585 (1968). On the other hand, clearly deficient applications may be returned. Henry M. Lesher, 41 R.R. 2d 1593 (1977). The Commission and the courts, in applying this standard, have emphasized that administrative fairness requires full notice to parties whose rights may be affected by our rules regarding what is required of them to comply. Where such notice is afforded, the Commission may require strict compliance. Ranger v. FCC, 297 F. 2d 240 (1961). It is open to us to modify our acceptability standards as they apply to low power and translator applications, so long as we do so explicitly and with good reason:

> There is also an interest in procedures and administrative techniques that enable the Commission to handle its work load efficiently, and with optimum use of limited administrative resources. Perhaps the Commission can accommodate the various interests by adopting administrative expedients that, for example, explicitly require all applications to be letter-perfect when filed.

Radio Athens, Inc. (WATH) v. FCC, 401 F. 2d 398 (D.C. Cir. 1968). We now do so, for the following reason. The Commission's limited resources and the large number of low power applications to be processed simply will not permit the staff to coach applicants in correcting defects or omissions in applications that have been filed, as sometimes has been the case in the past. Defective low power applications will be returned summarily, and if they are resubmitted with perfecting amendments, they will be placed at the end of the processing line, unless passage of a cut-off date precludes consideration altogether, in which case the resubmission will be returned. Because explicit notice of change in policy was not afforded in the Notice of Proposed Rule Making in this proceeding, pending applicants will have the opportunity to perfect their applications without loss of rights that arguably may have accrued during the ninety day amendment period discussed in paragraph 56, infra.

52. Once an application has been accepted for filing, it will be placed on a cut-off list, which will set the deadline for the filing of competing applications and petitions to deny. Applications received by the cut-off date that are accepted for filing will be examined for exclusivity,

44/ FCC 81-537, released November 25, 1981.

45/ In this connection, we shall state here that we do not see the necessity of changing the name of the low power television service, as some parties have suggested, either because the term "low power" itself has a negative connotation or to avoid confusion with low power auxiliary stations. We believe a greater amount of confusion is likely to result from changing the name of the low power television service at this point.

46/ The information that will be required on revised Form 346 is attached as Appendix B. OMB approval must be obtained. Forms 347 and 348, the license and renewal forms, also will be revised to reflect the rule changes contained herein. Until the computer to be used in processing is operational, we shall continue processing rural, freeze-exempt applications manually. In order to facilitate these efforts, we have appended a request for a topographical exhibit to the application form. As indicated, this additional information may be supplied at the option of the applicant. However, it could considerably expedite the processing of the application.

47/ We are, however, simplifying the showing required to demonstrate financial ability to a certification requirement, in conformity with our practice with other broadcast applications.

and those determined to be mutually exclusive with applications that appeared on the "A" cut-off list will be placed on a "B" cut-off list, that sets a deadline for petitions to deny; no competing applications may be filed to "B" list applications.

VI. Comparative Procedures and Criteria

53. The Notice of Proposed Rule Making proposes the following system of comparative evaluation, to enable the Commission expeditiously to decide among competing applicants:

(1) Notification of mutual exclusivity to applicants;
(2) Thirty days for amendments to remove mutual exclusivity;
(3) Pre-designation conference among applicants and staff;
(4) Designation of mutual exclusivity and paper hearing concerning:
  (a) qualification issues;
  (b) technical aspects of the applications; and
  (c) claims to preference points.
(5) If no single applicant emerges victorious from the paper hearing, random selection among qualified applicants.

The Notice proposes the following comparative preference points:

(1) First applicant to file a complete and sufficient application; 48/
(2) Over fifty percent minority ownership; and
(3) Noncommercial applicant proposing noncommercial service to the general public.

The preferences would be cumulative and be worth one point each, so that a first-filed minority applicant would have two points and would win the frequency over a competing noncommercial applicant, for example. This comparative system contains three departures from our customary method of comparing mutually exclusive applications: a paper hearing would be held on designated issues instead of a hearing with oral testimony; there are only three comparative criteria, and they have yes-or-no answers; and a lottery would be used to decide among applications that are equal in comparative points. These modifications were intended to "avoid head-to-head competition among applicants, with its profound drain upon the resources of the parties and the administrative agency." Notice, 45 Fed. Reg. at 69189.

54. These comparative criteria and procedures explicitly were proposed as a "first draft" in the Notice, and we promised to consider comments advancing other approaches. The comments addressing the comparative process are voluminous, with many opposing the notion of curtailed comparative procedures and others proposing much more elaborate preference systems, while applauding the basic concept. Among the many factors favoring abbreviated comparative procedures for low power applications are that low power is a secondary service; that prolonged and elaborate comparative proceedings may impose serious financial barriers for new entrants into the industry; that for a new service it is difficult to predict which comparative factors ultimately will be the most significant or desirable; that, without a prohibition on trafficking, stations may change hands soon after construction, mooting an elaborate preference system; and that the Commission simply does not have the resources promptly to handle the volume of comparative hearings required to resolve the plethora of mutually exclusive low power applications. We find these arguments convincing, and we think the solution is to have largely paper hearings among competing applications, as detailed below. We believe the modifications in our original proposals discussed in paragraphs 65 through 68, infra, take into account the somewhat contradictory goals of prompt authorizations and a time-consuming, comprehensive examination of all relevant information. In discussing the steps in the process, we shall address each of the proposals from the Notice in the order listed in paragraph 53 above.

55. Notice of Exclusivity. Applicants will be notified that their applications are mutually exclusive with a (or several) application(s) by their inclusion on a "B" cut-off list. Mutually exclusive applications will be designated for hearing. However, mutually exclusive applicants may, and are encouraged to, cooperate in private settlement endeavors to remove mutual exclusivity. Applicants should explore various options, such as buying out a competing applicant or agreeing to a time sharing arrangement, keeping in mind that settlement agreements must be submitted for Commission approval, pursuant to Section 311 of the Communications Act, and that we are committed to expeditious processing of all settlement agreements that eliminate the necessity for comparative hearings. It will facilitate such efforts that the Commission does not consider changes in ownership or control of low power television applications to constitute a major change entailing competing applications, although these are subject to petitions to deny. See, paragraph 77, infra. Accordingly, applicants can alter their ownership structure via amendment without losing cut-off protection. We point out, however, that our policy prohibiting amendments affecting ownership that would result in comparative advantage after the "B" cut-of date has passed will apply in the low power context.

56. Ninety Day Amendment Period. All present applicants will be afforded a specific ninety day period during which they can amend to bring their applications into conformance with the final low power rules. On account of the large number of applications, we may, as resources permit, stagger our requests for amendments. This will be announced via public notice following the effective date of this Report and Order. 49/ We have devised a phased approach to the processing of pending applications. See, Appendix E.

48/ This preference would only be operative for applications filed after the close of the rule making.

49/ As part of this process, we wish applicants to ensure that they have provided appropriate antennas, with model numbers, a correct polar diagram, including the total polar plot, accurate overall height above ground of the antenna and altitude of ground above mean sea level figures and accurate coordinates for the site proposed, which must reasonably be believed to be available for their use. Inaccurate information on applications delays the entire processing endeavor, and, under our newly-adopted strict acceptance standards, will result in nonacceptance of future low power applications.

57. General Processing Procedures. Applications that are mutually exclusive with applications already on published "A" lists will be placed on "B" lists. These "B" lists will be published, and will afford applicants notice of their mutual exclusivity. After the deadline specified in the "B" list for filing amendments and petitions to deny has passed, the mutually exclusive applications will be processed. If the applicants are able to resolve their mutual exclusivity in a manner acceptable to the Commission, the resulting application can be processed to grant. However, if the parties are unable to resolve their exclusivity, the applications will be designated for hearing. After these mutually exclusive applications have been designated for hearing, the Commission will begin processing the remaining applications.

58. Predesignation Conference. We are not making the initially-proposed predesignation conference with staff a formal part of the comparative process, because we believe settlements and accommodations can be accomplished expeditiously without Commission intervention, and our limited staff resources better can be utilized elsewhere. In light of the delays that, to some extent, will be unavoidable, should competing applicants be unable to resolve their differences via private negotiation, we strongly encourage all groups of mutually exclusive applicants to cooperate in private settlement endeavors and particularly to explore the possibility of time-sharing arrangements. 50/ As we have said, the Commission will attempt to consider settlement agreements submitted pursuant to Section 311(c) and (d) of the Communications Act and Sections 73.3525 and 73.3568 of the Rules in as expeditious a manner as possible. Indeed, such settlements will be given our highest priority and will be processed and granted before other pending applications, in the order in which the settlement agreements are received.

59. Designation. The designation orders will include issues raised in petitions to deny that raise substantial and material questions of fact that are in dispute and require a hearing for resolution. See, Section 309(e) of the Communications Act. These issues may include qualifications to hold a broadcast license under Section 308(b) of the Communications Act, as well as relevant comparative issues.

60. Issues not appropriate for designation. Because of the many differences between the low power television service and the existing full service television broadcast service, especially the secondary status of low power stations and their small service areas, we intend to limit the number of issues considered in low power comparative hearings to only those truly relevant to the situation at hand. One of the perennial technical issues considered in traditional hearings among mutually exclusive television applicants has arisen under the aegis of Section 307(b). 51/ When two competing applicants propose service areas that are to any degree different, the Commission traditionally has considered evidence on the amount of area and the population served by the competing applicants. This inquiry, undertaken in the interest of ensuring that the applicant proposing the most fair, efficient and equitable distribution of new service will predominate in the selection contest, 52/ has been one of the most time consuming and litigated issues addressed in the hearing context. 53/

61. We shall not consider arguments directed to Section 307(b) of the Communications Act 54/ in designating issues for low power applications, for several reasons. In the first place, the tiered processing program we are implementing (see, Appendix E) embodies a general Section 307(b) judgment that, of the 6,000 pending applications, those which fall within the most rural markets should be given priority over those proposing to serve more urban, and well-served, areas. We recognize that the rural authorizations may have a preclusive effect in more urban areas, and we believe that this is justified by the fact that the areas to which we are giving priority are more in need of service and that it represents fair and equitable spectrum allocation to favor them. Second, today's broadcast services may be considered quite mature, in a Section 307(b) sense. The Tables of Assignments for FM and television stations, Sections 73.202(b) and 73.606(b), and the allocation scheme for wide-area AM stations memorialized in Section 73.22, are intended to fulfill the Commission's Section 307(b) mandate. See, Logansport Broadcasting Corporation v. FCC, 210 F. 2d 24 (D.C. Cir. 1954); also see, Loyola University, et al. v. FCC, Nos. 80-1824 and 80-2018, slip op. (D.C. Cir., January 26, 1982). Finally, the existing array of television channel utilization will force low power into less well-served areas. The Television Table of Assignments distributed the available television allotments between large cities and less populated areas in a manner that balanced the natural gravitation of stations to large urban areas with high population densities with the need to reserve some spectrum capacity to serve the less profitable, low population density areas of the country. One result of this balanced distribution pattern is that in approximately the 50 largest markets no additional full-spaced television stations can be accommodated. Although the lower maximum transmitter power of low power stations will permit somewhat shorter coordination distances, this existing concentration of full service stations in and around the top 50 markets on every available channel will result in very few opportunities to add low power stations to locations that can serve the largest markets. Conversely, most of the locations where new low power stations can be spectrally accommodated will be outside of the top 50 markets, where the television band is not saturated. This is fortuitous in two respects. First, the lower construction and operation costs that will characterize low power stations promise to make their operation economically viable in areas with population insufficient to support a full service station. Second, and relevant to this discussion, this existing station

50/ See, Notice of Inquiry on Part-time Programming, 55 R.R. 2d 81 (1978); but see, Cosmopolitan Broadcasting Corp. v. FCC, __ F. 2d ___ (D.C. Cir. 1982).

51/ 47 U.S.C. §307(b) provides that "[i]n considering applications for licenses, and modifications. . .thereof. . .the Commission shall make such distribution of licenses. . .among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same."

52/ We note that at its meeting on September 17, 1981, the Commission directed its staff to include in its upcoming legislative amendments a proposal to delete Section 307(b) from the Communications Act "since fair and equitable distribution of radio and television service generally had been established nationwide." See, F.C.C. News, Report No. 5068, Mimeo 003451 (September 17, 1981).

53/ This may well be because a "Section 307(b)" preference is considered dispositive over applicants who do not receive this preference. See, e.g., FCC v. Allentown Broadcasting Corp., 349 U.S. 348, 12 R.R. 2019, 2021 (1955).

distribution pattern, coupled with our requirement that low power stations protect the Grade B contours of all full service stations will result in the vast majority of low power authorizations being granted outside the top 50 markets. Thus, the assignment policies we are adopting for the low power service automatically will accomplish the concern we formerly addressed in our Section 307(b) hearing contests.

62. Second, the basic regulatory structure of this new service makes the application of our full service station Section 307(b) practices inappropriate. As discussed above, we are not requiring low power licensees to serve a particular community, to maintain any specified programming format, or to retain ownership of the initial license for a fixed length of time. Furthermore, because of their secondary status, what service they do provide may be preempted by the addition of a full service station too close to permit simultaneous operation. Given these characteristics, the added delay in authorizing new low power stations, and the great cost of an expanded or otherwise unnecessary hearing to the applicant, the Commission, and ultimately the public, cannot be justified.

63. The courts have held that neither Section 307(b) nor our particular past applications express rigid and inflexible standards. The Commission has a great deal of discretion in solving problems attendant to its responsibilities for providing a "fair, efficient, and equitable distribution of radio services." Television Corporation of Michigan v. FCC, 294 F. 2d 730 (D.C. Cir. 1961); 21 R.R. 2107; Logansport Broadcasting Corp. v. United States, 210 F. 2d 24 (D.C. Cir. 1954), 10 R.R. 2008; Federal Radio Commission v. Nelson Brothers Broadcasting Bond and Mortgage Co., 289 U.S. 266 (1933); WBEN, Inc. v. United States, 396 F. 2d 60 (2nd Cir., 1968), cert. denied, 393 U.S. 914 (1968). For instance, the Court affirmed the Commission in its determination that every initial licensing proceeding in which mutually exclusive applicants propose different communities need not present a Section 307(b) issue. Huntington Broadcasting Co. v. FCC, 192 F. 2d 33 (D.C. Cir. 1951), 7 R.R. 2030. In the new service before us today, we believe the inevitable allocation of the majority of low power stations to locations away from the top 50 markets, coupled with the secondary nature of the service these licensees will provide, creates a situation where none of the mutual exclusivities created by competing low power and translator applicants present a meaningful Section 307(b) issue. Therefore, consideration of Section 307(b) issues are not, in this instance, in the public interest. We do not intend this to constitute a relaxation of our concern for the Section 307(b) mandate. We remain committed to Section 307(b) determinations in the primary broadcast services. However, we believe that implementation of the low power proposal takes cognizance of the existing distribution of services. We further believe that the allocation procedures in this Report and Order will reduce the costs to all parties--society generally, the applicants, and the Commission--while allowing for greater flexibility for the market to fine-tune allocations. In accordance with this policy, we also shall not consider Berwick or suburban community issues. See, Berwick Broadcasting Corp. v. FCC, 20 FCC 2d 393 (1969).

64. UHF Impact. We find it difficult to envision a situation in which a VHF low power station will cause a substantial economic threat to a full service UHF station. Because their spectrum priority is secondary, low power stations always remain vulnerable to new full service entrants or existing full service modifications on interfering channels. In addition, our limit on maximum output power and our contour overlap prohibitions both place limitations on the coverage potential of low power stations. The coverage area of a full service UHF station inevitably will be many times greater than that of a low power VHF station. Under these circumstances, we see little point in extending our UHF impact policy to the low power service. This is particularly true at a time when, as a result of Congressional and Commission efforts, as well as the workings of the marketplace, the increasing vitality of the UHF service generally is making our policies designed to protect UHF stations from competition less appropriate. See, e.g., All-Channel Receiver Law, 47 U.S.C. §303(s); Report and Order, 21 F.C.C. 2d 245 (1970); Report and Order, 62 F.C.C. 2d 164 (1976); Final Report, UHF Comparability Task Force, Gen. Docket No. 78-391, P. Gieseler, et al., FCC, Office of Plans and Policy (September, 1980), available from NTIS, Springfield, Virginia. Neither do we anticipate designating low power/CATV interference issues in many cases. See, notes 39 and 41, supra. We also foresee few instances in which an allegation of harmful economic impact, made pursuant to Carroll Broadcasting Co. v. FCC, 258 F. 2d 440 (D.C. Cir. 1956), will meet the test of Section 309(e) and require designation for hearing, particularly in light of the secondary status and limited coverage potential of low power stations. Low power stations will have smaller coverage areas than full service stations. Therefore, their ability to garner advertising revenues on the basis of audience size will be less great. Similarly, their ability to divert revenues from existing full service stations will be limited. Finally, their secondary status, which makes their continued existence uncertain, could hinder their ability to sustain audience and advertisers. In light of these facts, we do not see a likelihood of many full service stations being able to document a prima facie case that a low power station will so impair their ability to maintain its revenues that a net loss of public service programming will result. Today, where several full service television stations exist in many major markets, it is even less likely that a low power entrant will have an economic effect so severe as to result in loss of public service programming on all the full service stations. Our holding in Monroe County Board of Commissioners, 42 F.C.C 2d 683 (1979), that the "Carroll" doctrine should not apply to cable systems, is consistent with this belief and with the record adduced in the instant proceeding. Also see, Wrangell Radio Group, et al., 75 F.C.C. 2d 404, 407 (1980). 55/

65. Hearing. It is our intention to minimize the expense of establishing low power stations. This goal requires that we not subject applicants to long and costly comparative hearings. Moreover, if we flood the hearing process with numerous low power proceedings, we shall further delay the resolution of all other hearing proceedings including those involving construction permits for full service facilities. Therefore, it remains our intention to utilize a random selection process when and if that becomes practicable. Applicants for licenses in this service, therefore, are advised that their applications, if mutually exclusive with other applications, may be subject to revised processing procedures, standards and qualifications in connection with implementation of a system of random selection. At this point, however, we must utilize most of our existing hearing procedures. Nevertheless, we shall make certain modifications in those procedures in order to reduce or eliminate the number of days low power applicants will have to spend in the hearing room.

66. The Comparative hearing process can be expensive and time-consuming. 56/ For these reasons, we have studied steps that could be taken to minimize the expense and long delays normally inherent in comparative proceedings involving broadcast applicants. Our goal has been twofold: first, to assure that applicants are given an opportunity adequately and fairly to present their cases and, thus, to demonstrate why they are the "best" applicant within the context of the criteria established by the Commission; and second, to conclude the administrative process and provide service to the public as expeditiously as possible. We believe that we have identified several procedural actions that can facilitate this goal.

67. Based upon our review of our application processing and hearing procedures, we believe that it may be possible to shorten both the evidentiary and appellate aspects of the process through the use of a modified paper proceeding directly administered by the Commission. 57/ Under the modified procedure set forth herein, the Commission en banc will receive the evidence and issue the final decision as to which applicant should be awarded the license. 58/ Also, unlike in traditional hearings, the Broadcast Bureau will not appear as a party, unless otherwise ordered by the Commission. Instead, the Bureau will serve as advisors and staff support to the Commission with responsibility for reviewing and analyzing the pleadings and preparation of a draft of the final decision.

68. The Commission's low power application processing procedures call for the issuance of two cutoff lists: the "A" list invites competing 59/ applications and the "B" list invites only petitions to deny. We shall begin the low power television comparative process upon issuance of a modified "B" list. This notice will include the hearing designation order and will set forth the standard comparative issues and the pleading schedule to be followed by applicants and other interested parties to the proceeding.

69. Specifically, the "B" list will specify that each applicant must submit in writing its direct case 60/ within the approximately 30 day

54/ In the Table services, TV and FM, the fairness of the allocation is dealt with primarily in conjunction with the rule making that amends the Table to reflect the frequency assignment. Applications filed under Sections 73.203(b) and 73.607(b), which permit construction of a radio or television station within ten or fifteen miles of the community of assignment, represent the only instances in which Section 307(b) issues generally arise in the application process. In AM radio, where there is no table of assignments, Section 307(b) issues more frequently arise in connection with competing applications. Clear resolution of the Section 307(b) issue in favor of one qualified applicant over another is dispositive, and no further comparison of applications is made. Low power resembles AM, in that there is no table of assignments, although AM is a primary service, unlike low power.

55/ In addition, the operational differences between the low power service and full service television stations should make it unnecessary to investigate in hearing many of the issues raised in petitions to deny that we have designated in full service hearings in the past. For example, issues related to ascertainment and programming will not be relevant. Also, it rarely will be necessary to explore economic or financial issues, in light of the self-certification format of the application form. In addition, the fact that strict enforcement of the twelve-month period for construction will provide conclusive demonstration of wherher an applicant's finances were sufficient makes it less important to consider this issue in hearing. Our general policy in favor of permitting free transferability of stations to some extent reduces the general efficacy of painstaking scrutiny of applications in the hearing process. Finally, as we have indicated, we believe that one principal way to expedite the hearing process is to discourage the filing of pleadings on issues that, taken alone, would be less than dispositive of the challenged application. We envision relatively simple designation orders, including only unresolved substantial and material issues of fact necessary to the disposition of the applications and the comparative criteria.

56/ Pursuant to Section 309(e) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(e), mutually exclusive applications for the same frequency are entitled to simultaneous consideration before a grant of any of the applications. See, Ashbacker Radio Corp v. FCC, 326 U.S. 327 (1945). The Commission traditionally has afforded mutually exclusive applicants a "trial-type" evidentiary hearing and has established an elaborate set of procedural rules governing the process. See, 47 C.F.R. §§ 1.201-1.364.

57/ See, 5 U.S.C. § 556(d); 47 C.F.R. § 1.248(d).

58/ See, 5 U.S.C. § 556(b); 47 C.F.R. §1.241(a). It is within the Commission's discretion to implement largely paper hearings pursuant to Section 309(e) with the Commission presiding, under the Administrative Procedure Act. Also see, WJR v. FCC, 337 U.S. 265, 275 (1949); Bell Telephone Company of Pennsylvania v. FCC, 503 F.2d 1250 (3d Cir. 1974); cert. denied AT&T v. FCC, 422 U.S.1026, reh. denied 423 U.S. 886 (1975); RCA Global Communications, Inc. v. FCC 559 F.2d 881 (2d Cir. 1977), reh. 563 F.2d 1, appeal after remand 574 F.2d 727 (1978). Indeed, it virtually is essential that we utilize the abbreviated hearing procedures outlined herein, with only a limited right for oral testimony, at the discretion of the Commission, in light of the concomitant savings of time and resources, both for applicants and the Commission itself.

59/ Under our current procedures, the "A" list invites both petitions to deny and competing applications. Pursuant to the modified procedures set forth herein, filing of all petitions to deny will be delayed until issuance of the "B" list, which will identify all non-mutually exclusive applications, as well as mutually exclusive groups.

60/ The direct case is to be limited to 50 pages in length including any index to subject matter, argument, appendices, and other attachments. An original and one (1) copy of the pleading should be filed. The pleading must be typewritten, double-spaced, on 8 1/2 by 11 inch paper.

time period set forth therein. In addition to spelling out those facts and characteristics of its proposed operation that the applicant wishes the Commission to consider, the direct case also should include any matters that normally would be raised in a petition to deny against another applicant. Within twenty (20) days after the filing of the direct case, each applicant must submit its written rebuttal case, 61/ including oppositions to any matters raised in any petitions to deny filed against its application. Twenty (20) days thereafter each applicant may submit its written surrebuttal case, 62/ including any replies to oppositions to matters raised in its petitions to deny filed against other applicants. With its surrebuttal case, each applicant also may submit any request it has for oral hearings and cross-examination, the subject matter of the desired cross-examination, and the basis therefor. Any request for oral hearing must state specifically the evidence that would be presented, the reason why the evidence is material to determine the merits of the proceeding, why oral hearing with cross-examination is necessary to bring it out, and what evidence already in the record would be contravened (with specific identification of the pleading and the page number). All material statements contained in any pleading must be verified by the person offering the statement--i.e., the facts must be sworn to as true and within the specific knowledge of the person offering the statement.

70. Within 30 days after the filing of the surrebuttal case, each applicant must file a proposed decision. 63/ This decision must set forth such information as the Commission would find necessary to make its decision, including a brief summary of the facts, proposed findings (including findings on all allegations raised in any petition to deny), and ultimate conclusions.

71. The Commission will attempt to dispose of virtually all low power comparative cases under the paper hearing procedure set forth herein. The Commission, of course, will review requests for oral testimony at the same time the staff recommended decision is submitted for consideration. However, oral testimony will be ordered only where it is shown that the paper proceeding alone will prejudice a party; 64/ where a substantial and material issue of decisional significance cannot adequately be resolved without oral hearing; 65/ or where designation of the matter for oral testimony would be [illegible] request will not be made in a separate decision. The request will be deemed denied where the Commission decides the case on the basis of all the pleadings submitted.

72. Should the Commission determine that oral testimony is necessary, it will order that the particular issue or issues be heard by an Administrative Law Judge. The issue or issues to be tried will be set forth in an interlocutory order, which also will set a pre-hearing conference, to establish a discovery and trial schedule. At this stage, the applicants may avail themselves of the discovery procedures normally available in adjudication cases, but not before. After the Administrative Law Judge issues the initial decision on the issue[s] being tried, it may be appealed directly to the Commission.

73. With these procedures and the cooperation of applicants, we believe that most low power proceedings will be resolved on the basis of entirely written submissions within reasonable time frames. With this goal in mind, we shall require strict compliance with procedural dates. Applicants that fail to adhere to established procedural dates or that, in any way, seek to delay resolution of these hearings are subject to having their applications dismissed for failure to prosecute. See, Section 73.3568(b) of the Rules. We encourage expedition, and we are concentrating staff resources with an eye to facilitating low power application processing; nevertheless, mutually exclusive applications that require hearings inevitably will suffer delay. We anticipate that this knowledge itself will act as an incentive to private settlements.

74. Comparative Factors. In the interest of administrative simplicity and efficiency, as well as to promote particular service objectives, the Notice proposed three tentative comparative criteria, for which an applicant either qualifies or does not, without more. In order to refine these proposals, we explicitly sought comments in this area. We take the wide range of commentary received to be an indication of the controversial nature of our proposal. Some parties praise the comparative factors as proposed. Others suggest various refinements on the up-or-down nature of the preferences themselves, e.g., consideration of factors such as participation of ownership in management, program proposals, past broadcast record and civic involvement, as part of the minority ownership preference. Still others suggest preference systems more elaborate than the traditional comparative hearing criteria. See, Policy Statement on Comparative Broadcast Hearings, 1 F.C.C. 2d 393 (1965). Finally, there are those who advocate that nothing short of traditional hearings using traditional comparative criteria are permitted under the Communications Act.

75. The comments raise problems with two of the preferences proposed. Commenters generally disapprove the preference to be afforded to the first-filed complete and sufficient application. They argue that this preference has little relevance to the quality of service that may be expected from an applicant. The first come, first served preference initially was proposed for two reasons: we wished to encourage complete and sufficient applications; and we believed that in a new, uncharted service there might be a need to provide an incentive for parties to use the previously fallow spectrum. The avalanche of interim applications belied the necessity of a measure to this end, however. We still wish to encourage complete and sufficient applications. However, we are convinced that we can better do this via strict adherence to our policy of returning deficient applications, without regard to any cut-off protection that might be considered to have vested. We shall adopt the single standard for acceptance of low power applications set out in Sections 22.31(b)(2) and 22.32(b)(1) of the Rules and we shall require all applicants to meet that standard. We therefore shall not accord any preferential treatment to first-filed applications. 67/

76. On examination of the record, we perceive confusion about the notion of noncommercial or public low power stations. Noncommercial low power service is defined only in the context of the preference proposed for applicants that are nonprofit entities proposing noncommercial service for the public. There are no other rules proposed that would distinguish the character or operation of a noncommercial low power station from its commercial counterparts. Among the commenters, contradictory assumptions regarding noncommercial or public low power stations appear to be operative. 68/

77. This issue previously has not arisen in the translator service, because the rules limit translators to rebroadcast only, and they therefore fully track the mode of operation of the primary, full service station, whether noncommercial under Section 73.621 or commercial. 69/ We perceive several reasons for not imposing strict regulations regarding noncommercial operation of low power stations. With respect to all aspects except technical ones, we envision the low power service as an essentially unregulated service. The Notice specifically stated that the mode of support, including free and pay programming in any proportions, would be left to the licensees' judgment of what the marketplace requires. In light of the secondary status, the absence of a prohibition upon the free transfer of stations and the as yet undetermined viability of low power stations, we believe that the decision whether or not to air commercials, and in what amounts, should be left to the licensee's discretion. 70/ The Commission will not concern itself with this matter, nor with the corporate or organizational structure of an applicant. Whether a low power applicant or licensee is noncommercial or not-for-profit is a decision properly made by the licensee on the basis of applicable corporate and tax law, pertinent requirements of the Corporation for Public Broadcasting and perceived characteristics of the market in which it proposes to operate. Therefore, Section 73.621 will not apply to low power stations.

78. In light of the above, we are not going to adopt the three preferences proposed. 71/ We are encouraged by many commenters to expand the comparative criteria proposed in the Notice of Proposed Rule Making, to include for example, female ownership, free versus pay service, local ownership, hours of operation, rebroadcast versus origination, financial capacity, integration of ownership and management, locally-oriented programming and/or local program production. While some of these characteristics of service might be a basis for preference in particular cases or in particular areas, it is not clear that they generally should be dispositive in every case, as they would be if they operated as preference points. In many cases, the nature of the particular market proposed to be served should dictate the characteristics of service that might be considered

61/ The rebuttal case is to be limited to 40 pages in length, including any index to subject matter, argument, appendices, and other attachments. An original and one (1) copy of the pleading should be filed. The pleading must be typewritten, double-spaced, on 8 1/2 by 11 inch paper.

62/ The surrebuttal case must be limited to 30 pages in length, including any index to subject matter, argument, appendices, and other attachments. An original and one (1) copy of the pleading should be filed. The pleading must be typewritten, double-spaced, on 8 1/2 by 11 inch paper.

63/ The proposed decision must be limited to 30 pages in length. An original and one (1) copy of the decision must be filed. The decision must be typewritten on 8 1/2 by 11 inch paper. However, it may be single-spaced.

64/ See, Section 556(d) of the Administrative Procedure Act, 5 U.S.C. 556(d).

65/ See, Section 309(e) of the Communications Act, 47 U.S.C. § 309(e).

66/ Id.

67/ Elimination of this proposed preference will not prejudice current applicants, because it was not to be effective for applications filed during the pendency of the rule making. See, note 48, supra.

68/ To receive funding from the Corporation for Public Broadcasting, a station must be both nonprofit and noncommercial, as defined in Section 397(b) of the Communications Act. A noncommercial, educational television station licensee, under Section 73.621 of the Commission's Rules, likewise must be nonprofit, noncommercial and have an educational or cultural purpose, or be a municipality with no independently constituted educational entity. In the FM and TV services, compliance with this rule is a condition of operation on a channel reserved for noncommercial use. In the AM service, where there is no table of assignments, a station may be noncommercial, educational and comply with the above definition, but there also may be stations operated by nonprofit entities that are not educational in nature.

69/ Under a 1971 policy, any applicant, noncommercial or otherwise, proposing rebroadcast of noncommercial, educational programming, has priority over a commercial translator operating on a reserved channel in the Television Table of Assignments. See, 23 RR 2d 1504, 1508 (1971). We are eliminating this policy as part of our removal of all distinctions in translator or low power status arising from operation on channels in the Table. See, paragraph 28, supra.

70/ The Public Broadcasting Amendments Act of 1981, Pub. L. No. 97-35, supra, mandated the establishment of the Temporary Commission on Alternative Financing for Public Telecommunications, whose mission it is to identify additional sources of funding to maintain and enhance public telecommunication services. The Temporary Commission was given specific authorization to conduct an Advertising Demonstration Project to test the desirability and revenue potential of advertising on public stations. In addition, other amendments to the Public Broadcasting Act (see, e.g., Section 399) specifically authorize commercial and commercial-like activities by public stations. In light of these amendments and other factors that are forcing public stations to become increasingly self-sufficient financially, we believe that those broadcasting entities that choose to operate on a non-profit basis should be given the greatest possible flexibility in raising operating revenue.

71/ We do, however, reaffirm the continuing vitality and usefulness of our minority ownership policy, as its intent was expressed in the comparative preference proposed for minority low power applicants. We shall continue to award a comparative merit on this basis in the comparative hearing. See also, Policy Statement on Minority Ownership of Broadcasting Facilities, 68 F.C.C. 2d 979 (1978).

desirable. In a secondary service, particularly one where no prohibition on "trafficking" will be imposed, (see, paragraphs 93 and 94, infra), meticulous comparative evaluation on the basis of an elaborate system of preferences easily could turn out to be a pointless, though time-consuming, exercise. Additionally, in an untested service, we cannot reliably predict what characteristics ultimately will prove desirable in a license proposal, and therefore should receive comparative preference.

79. We believe that the better course is to distill the issues that currently may be considered in broadcast application hearings to a modicum that should prove relevant for the low power service and manageable in a largely paper hearing. These include issues relating to basic qualifications as well as comparison of competing applicants. As stated above (see, paragraphs 60 through 62) we do not believe that Section 307(b) comparisons among competing low power applications is a worthwhile endeavor, because the goal of fair and efficient spectrum allocation already has been anticipated via the Tables of Assignments, and we can expect to accomplish little more by applying such analysis to a secondary service that has no required coverage area nor local programming requirement. As indicated in note 47, above, the application form has been amended to provide for certification of financial qualification, to conform to our practice with other broadcast applications. See, Appendix B. The citizenship requirement is straightforward enough. Because the Commission currently has the character requirement under scrutiny in Gen. Docket No. 81-500 (see, Notice of Inquiry, 47 Fed. Reg. 40899 (August 13, 1981)), we are not modifying this qualification for low power applications, but shall await the outcome of that Inquiry.

80. Of the comparative issues, we shall retain the criterion enunciated in our 1965 Policy Statement, supra, that we consider most relevant in the low power context, diversification of control of the media of mass communications. Along with this, we shall afford merit to applicants that are over 50 percent minority owned. We shall not consider full-time participation in station operation by owners because, in many instances, the functional characteristics of low power stations will not require such extensive involvement in the operations of a particular station by any individual, whether owner or owner's employee. Nor shall we consider program proposals, because we believe low power licensees should be fully responsive to marketplace considerations, without the Commission second-guessing their decisions. These issues are designated in full service comparative hearings only on a special showing, and they rarely are dispositive of the case. See, Chapman Radio and Television Co., et al., 7 F.C.C. 2d 213, 215 (1967); Flint Family Radio, Inc., et al., 69 F.C.C. 2d 38, 42-46 (1977), George E. Cameron, Jr. Communications, 71 F.C.C. 2d 460, 464-466 (1979). Additionally, comparative advantage generally is afforded to program proposals on the basis of local or public service programming. We are not requiring local programming by low power licensees, because we cannot determine across the board that this would be in the public interest in every market. Therefore, we would not want to afford across-the-board comparative preference for this. We are not going to consider comparative coverage, for reasons similar to those on which we base our decision not to make Section 307(b) considerations dispositive in individual cases. See, paragraphs 60 through 63, supra. We are not considering character in the comparative context, beyond the initial qualification determination (see, paragraph 74, supra). We also are not going to consider past broadcast record comparatively; because so many applicants are new entrants to the telecommunications industry, a result that we do not discourage, it could disadvantage them to accord merit or demerit that only could be garnered by applicants with previous broadcast experience. Both to facilitate expedition in the hearing process and, more importantly, because we believe that low power stations will be very directly responsive to audience needs and interests, we find it in the public interest to limit the comparative issues to diversification and minority ownership. Moreover, we believe that this combination of criteria can further a primary objective for the low power service, facilitating entry by groups and individuals that are new to the broadcast industry.

81. Low Power License Renewal. As proposed in the Notice, we are not now modifying the standards governing contested and comparative renewals. See, Notice, 45 Fed. Reg. at 69189 n. 60. Contested renewals will be handled in the manner that full service stations are at present. The license term for translators and low power stations will be five years, in accordance with the amendment to Section 73.1020(a) contained in the Order, FCC 81-497 (adopted October 30, 1981; released November 2, 1981). An abbreviated renewal form will be used, in conformity with the Commission's practice for full service stations. See, Revision of Application for Renewal of License of Commercial and Noncommercial AM, FM and Television Licensee, 46 Fed. Reg. 26236 (published May 11, 1981).

82. Modifications to the License. Sections 73.3572(a) and 74.751 currently require formal application for various equipment changes, channel changes, power changes, transmitter location changes and/or change in the primary station being rebroadcast. We are modifying this rule to include facilities or other modifications that would have a significantly greater or different preclusive effect than the existing authorization, including power or frequency change, certain equipment or other engineering modification and change in transmitter location (present Section 74.751(b) (1-5), (f) and (c)). Applications for such modifications will be treated as applications for major modification and be placed on "A" cut-off lists, subject to competing applications and petitions to deny. Transfer of ownership or control will not be considered a major modification, but applications for transfer will be subject to petitions to deny. Present or future translator licensees wishing to include low power features must notify the Commission in a manner that indicates an understanding of the additional rules with which they must comply, e.g., the operator requirements. Those wishing to change the primary station being retransmitted (present Section 74.751(b)(6)) will be subject only to a notification requirement.

VII. Low Power Station Operation

83. The Commission's ownership rules are informed by two related policies. The prohibitions upon multiple ownership at once are designed to encourage diversity of voices in the marketplace of ideas and to foster competition by preventing undue concentration of control of telecommunications facilities. The present rules are structured as barriers to entry imposed on proscribed entities in proscribed markets. 72/ In a new service, whose viability is unknown and probable competitive impact on other telecommunications services is believed not to be significant cannot yet accurately be predicted, we must exercise no less care to assure that we do not create entry barriers that fetter the development of the service. Ideally, the service effectively will compete with other video services and thus stimulate their responsiveness to market forces, and low power stations will compete with each other in a manner that promotes superior service within the low power service itself.

84. Ownership of translators did not raise the issue of diversity of voices, translators being repeater stations only. In the present ownership regulations, translators are regarded as mere extensions of the primary station and not as new voices. The present rules regarding translator ownership are:

(1) Commercial television stations may not own or financially support VHF translators in distant markets not operating on assigned channels. Section 74.732(e)(1) and (2).

(2) Cable systems may not own translators licensed to the community in which the cable system is franchised. Section 76.501(a)(3).

(3) No VHF translators may be licensed in areas receiving satisfactory service from UHF television stations or UHF translators, except where particular circumstances warrant. Section 74.732(d).

(4) Translators operating at maximum power on assigned channels may be authorized only to existing licensees of television stations, unless non-licensee applicants demonstrate the technical capability to operate them. Section 74.732(i).

The Notice proposed deletion of the first, third and fourth rules cited above. It also proposed that cable systems be permitted to own translators, but no originating or subscription low power stations, within their franchise areas. Few commenters take issue with deletion of Sections 74.732(e)(1) and (2), 74.732(d) and 74.732(i), affirming our belief that it is in the public interest to do so. Cable/low power cross ownership is discussed in greater detail, infra.

85. Several additional ownership restrictions were proposed for low power stations, but not translators, on the theory that low power stations should be treated as "voices" in the first amendment sense:

(1) A duopoly rule, which prohibits commonly-owned stations in the same service with overlapping contours.

(2) A one-to-a-market rule, which prohibits commonly-owned stations in different services with overlapping contours.

(3) The three national networks (see, Section 73.658(l)(1)(v)) would not be permitted to own any low power stations.

The duopoly and one-to-a-market rules would apply to noncommercial, as well as commercial, low power stations. No newspaper/low power cross ownership rule was proposed. Nor was a limit proposed on the maximum number of low power stations permitted in common ownership. 73/ No rule restricting regional concentration of control was proposed.

86. As the comment summary reveals, there are comments virtually on all sides of the ownership issues, with public interest groups generally supporting restrictions and broadcasters generally opposing restrictions. Citizens and consumer groups and other proponents of ownership restrictions tend to characterize the proposed ownership restrictions as devices designed to promote diversity and competition. Those opposing restrictions consider them unnecessary barriers to entry into the low power service. We find that in today's telecommunications environment in which there are an increasing number of avenues on which to communicate, there may be less need for structural restrictions designed to facilitate diverse entrants. That is, the increasing availability of other technologies for telecommunications itself is providing additional modes of access that reduce the efficacy of the scarcity rationale. These general arguments may be applied to each of the rules proposed.

87. Duopoly rule. The proposed duopoly rule is opposed particularly by those wishing to operate multiple-channel subscription systems via low power. They argue that STV may be distinguished from true origination on low power STV systems that merely retransmit terrestrial microwave or satellite feed; therefore, low power STV need not be considered a separate "voice" for multiple ownership purposes. Also, they contend that only with multiple channel capacity can low power STV compete effectively with cable.

72/ It is our intention presently to re-examine in a separate proceeding the efficacy of the Commission's ownership rules and policies in light of the conditions that prevail in today's telecommunications marketplace. Until such time as that is accomplished with respect to all broadcast services, we shall endeavor to enact flexible ownership policies for the low power service that are sensitive to the environment in which the service will develop. The low power rules of course would be subject to modification, should they deviate significantly from future revisions in our overall ownership policy.

73/ A limit of 15 stations in common ownership was imposed during the pendency of the rule making only. See, Memorandum Opinion and Order, 46 Fed. Reg. 10728 (published February 4, 1981).

74/ We perceive a difficulty in justifying a different ownership rule for STV low power stations. It is unlikely that they will operate on a subscription basis during all their hours of operation, although we are not adopting rules prohibiting this. When STV low power stations are operating in a free mode, they are indistinguishable from other low power stations, and we encourage some local origination on each station with the authority to do so.

74/ A number of comments advocate waiver of the duopoly restriction in rural areas, at least for low power STV, on the grounds that spectrum is less scarce in rural areas and viability also is less certain.

88. The Justice Department is among those who believe that a duopoly rule promotes competition. 75/ The worst-case scenario is that, in the absence of a duopoly prohibition, one entity will gain control of all available low power outlets in a community, when there are others who would, if they could obtain licenses, provide greater diversity. On the other hand, it is possible to envision more or less rural markets where only one entrepreneur would be willing to operate, using more than one channel, on a subscription basis or otherwise; if he is permitted to operate on only one channel, the other availabilities may lie fallow into the indefinite future, or he will choose not to initiate a single-channel operation, and the public will be deprived of service altogether. The irony of this situation is that it is precisely in markets that currently have the least service, where the viability of low power is the least certain, that have the greatest need for low power. On balance, we believe the public best may be served if we do not impose a duopoly restriction in the low power service. Therefore, we shall not do so.

89. One-to-a-market rule. Many commenters oppose a one-to-a-market rule, especially in the radio/low power context. Convincing arguments are made that local radio licensees already have broadcast expertise, already may have access to local and or national news services, already are familiar with the local community and may have the financial wherewithal to cross subsidize a low power operation with revenues from other broadcast properties. We agree that ownership rules that effectively restrict the entry of those with prior expertise or financial capacity can work to the detriment of a new service. Also, there may be significant economies in same-market ownership of a low power station and a broadcast station in another service. We note that the full service television/low power cross ownership situation closely resembles a duopoly situation, depending upon the nature of the low power operation, i.e., a free full service station and STV low power station that merely broadcasts satellite feed actually may be quite different and appeal to different audiences. While the proponents of a one-to-a-market rule argue that it will have the effect of promoting diversity and competition, we find the countervailing arguments in favor of free entry persuasive, especially in the context of a new service whose viability is undetermined. Moreover, where there are competing applicants, the comparative process will favor diversification. In a comparative situation new entrants will be favored, while current licensees will not be precluded from areas where new entrants may not wish to propose service.

90. Network ownership of low power stations. The three commercial networks express opposition to the prohibition on their ownership of low power stations that was proposed. They argue that their expertise can be put to good use in ensuring the viability of the fledgling service and that they are in a favorable position to develop and introduce new technological advances via low power. They dispute the contention of the Justice Department that network ownership of low power stations is highly anticompetitive and will preclude new entrants from the field. The networks cite in support of their position the Network Inquiry Staff Report's conclusion that group owners have an incentive to air diverse programming on co-owned stations, to maximize audience, rather than airing similar programming that could have the effect of fragmenting audience among several co-owned stations. We do not have sufficient evidence of the magnitude of the anticompetitive potential of network ownership of low power stations to justify implementing the rule proposed at this time. Both for this reason, and because we believe that the networks can, as they claim, contribute to the development of the fledgling low power service, we shall not prohibit network ownership of low power stations.

91. Multiple ownership of low power stations. A number of commenters advocate a limit on the number of low power stations, on diversity and competition grounds. We are encouraged to impose limits of between five and 25 on the number of stations the Commission would permit to a common owner; however, we are afforded no convincing reason, other than general administrative efficiency in application processing, for the choice of any particular number. Others point out that there are economies of scale in multiple ownership that may be essential to viablity in the low power service. As stated in paragraph 78, above, the Commission's ownership rules have a dual purpose: prevention of undue concentration and promotion of diversity. The over 6,000 applications currently on file evince an array of diverse kinds of applicants and program proposals. And, as we stated in the Notice: "The concern for anticompetitive effects is lessened where the stations are both secondary and inherently limited in their coverage potential." 45 Fed. Reg. at 69184. The comments do not persuade us to the contrary. That is, we regard low power as neither a signficant and general enough competitive threat to other broadcast services nor sufficiently distinct as a market in itself that monopolization should be considered a serious or dangerous enough possibility to warrant structural restraints on ownership. Should a real threat of inappropriate economic concentration arise as the service develops, it can be addressed via antitrust enforcement or by the Commission in appropriate proceedings.

87. We are told by some commenters that a ceiling on multiple ownership would prevent low power network formation. We believe, however, that program-oriented networking of stations can occur other than via common ownership of numerous stations. Affiliation for program distribution or syndication is an alternative. Also, a series of satellite or terrestrial microwave interconnected translators may be used to relay programming originated by one low power station. This suggests that common ownership of a number of low power stations is not necessary to the provision of common programming. However, with a network consisting of commonly-owned low power stations, as opposed to translators, the potential exists for each station to originate some programming targeted to discrete local or regional interests. This is a result that we would encourage. Additionally, there may be economies of scale in common ownership of a number of low power stations other than those related to program acquisition or distribution. It is our present belief that the potential economic savings of multiple ownership far outweigh a remote potential of undue concentration. For this reason, we are not imposing a ceiling on the number of low power stations that may be owned in common. We also shall not impose a rule relating to regional concentration of control.

93. Low power/cable cross ownership. The cable/low power cross ownership issue is treated similarly in the comments to cross ownership of low power and other broadcast services. The Justice Department is among those that believe that a cable system owning a low power station in its franchise area has an incentive not to maximize the potential of the low power station, because it would compete with the cable system. Other commenters argue that there may be rural areas where the cable operator is the sole potential low power licensee, and that in such cases diversity will be enhanced, not inhibited by cable/low power cross ownership. 76/ We note that issues affecting cable cross ownership are under separate consideration. 77/ Without prejudging any subsequent proceeding involving the full service/cable cross ownership rules, we believe that in the low power service, the possible economies of scale, including those relating to program distribution, favor our permitting cable/low power cross ownership. Therefore, we believe that there should be no restraints on cable/translator cross ownership.

94. Summary. As the preceding discussion indicates, the primary considerations that inform our deliberations on all aspects of the owership policy are that low power may provide an opportunity for new entrants into the telecommunications industry at lower cost than would be incurred in starting full service stations or cable systems. Because of both the low cost and the comparative criterion favoring diversification, even absent ownership restrictions, it is unlikely that new entrants will be precluded by existing broadcasters. Additionally, in some areas, the development of the service itself might be fettered irretrievably, were we to impose inviolable rules that eliminate experienced broadcasters with the potential to make the service viable. This is so particularly in markets where an owner of other broadcast properties might be the sole potential entrant. Furthermore, NTIA points out in comments that an alternative to imposition of ownership rules that accommodate the latter concern is the adoption of policies that apply in the comparative situation. That is, ownership of other local or distant outlets would not be considered when no one but a sole applicant is applying for the frequency; but only when there are competing applications. NTIA suggests that in such cases a comparative demerit or disadvantage be given to applicants that already own facilities, in local or distant markets. This approach resembles that taken in the traditional comparative hearing context, where diversification of ownership is part of the standard comparative issue among competing applicants, and we are continuing to apply that criterion in the low power service.

95. In summary, we are adopting no ownership restrictions per se for the low power service. This approach is in accord with our general belief that free entry into and out of the low power industry will best serve potential applicants and also the public. Low power stations have limited coverage potential, which effectively limits the area from which advertising support may be garnered; their secondary status poses the possibility that they might be required to alter facilities or cease operation at any time; the majority of channel availabilities are in rural areas, where viability generally is less certain than in urbanized areas. We believe these factors augur in favor of permitting experienced participants in the market to pioneer the low power service and outweigh our traditional concerns regarding multiple and cross-ownership. We do not wish to discourage new entrants, and we note again that the comparative criterion favoring diversification will inure to their benefit. However, we also recognize the important role those with proven track records may play in the development of the service, particularly in localities that individuals inexperienced in the market may perceive as posing too great an economic risk to warrant entry.

VIII. Low Power Station Operation

96. Construction Permit. Section 73.3598(b) will be applied to low power, and the Commission will strictly enforce the requirement that construction must be completed and the station be operational within twelve months of issuance of the authorization, or the construction permit must be turned back to the Commission. We envision no extensions of time with regard to this rule, the only possible exception being documented evidence of unforeseen and unavoidable delay in delivery of equipment that was contracted for properly. We do not believe this rule is overly stringent, in light of the relatively minimal burdens of construction of low power stations, as compared with full service stations. Section 73.3597(e) and (f), which prohibits payments upon assignment or transfer of a construction permit from exceeding reimbursement of the transferor's expenses and limits the equity interest that a transferor or assignor may retain in the permittee to a proportion equal to the transferor's capital contribution, until the station commences program test operations, also will be strictly applied in the low power context, as with the other broadcast services. This appears to be an

75/ The comments afford two contradictory economic theories that predict the behavior of common owners of stations in the same service in the same market. There may be an incentive not to actualize fully the potential of one commonly-owned facility, in order not to draw from the audience of the other. On the other hand, in a more formated service, an owner might attempt to attract different audiences with different kinds of programming on each commonly-owned station, and to add to the total audience without fragmenting the audience of either station. The Commission's Network Inquiry Staff Report, New Television Networks: Entry, Jurisdiction, Ownership and Regulation, October, 1980, describes such a result. The nature of the particular market would seem to be essential to realistic prediction of whether in fact this will occur.

76/ We believe that this would depend on the nature of the particular market: where a cable operator has little hope of garnering additional subscribers, there may be an incentive to maximize total audience with a low power operation. On the other hand, where there is head-to-head competition between cable and low power for audience, the service affording the lowest marginal cost per viewer, or greatest profit margin per viewer, may be favored by a common owner.

77/ See, Staff Report, FCC Policy on Cable Cross Ownership, November, 1981. We believe that permitting cable/low power cross ownership could provide valuable data for any proceeding that is initiated regarding cable cross ownership, in general. We received little commentary regarding the proposed deletion of Section 76.501(a)(3), which prohibits cable/translator cross ownership. We note that, where there are competing applicants for a translator, one a cable operator and one unaffiliated, the comparative criteria would favor the unaffiliated applicant. As the Staff Report pointed out in paragraph 362, this is the only area of real concern.

area in which Sections 301 and 304 of the Communications Act, as well as general public interest concerns, dictate that regulation should be continued. Sections 301 and 304 provide, inter alia, that licenses issued by the Commission convey no property interest. Allowing profit to be obtained upon transfer of a construction permit prior to commencement of program test operations appears to violate this prohibition. The permittee would appear to have nothing to convey for profit beyond the mere expectation of future profits that appends to the permit itself. Also, implicit in the filing of an application is an intent to construct a station and commence service. To maintain the integrity of the Commission's processes and to encourage the expeditious introduction of new service in an environment in which free transferability of stations is permitted, we believe it is in the public interest that Section 73.3597(e) and (f) be maintained for the low power service.

97. License. We received one comment seeking that the format for the call sign for low power stations be changed to a five-letter one resembling the four-letter call signs assigned to full service stations. We believe that the confusion that is likely to result from such a change, as well as the administrative inconvenience of carrying it out, are not justified by the result. Therefore, we shall continue to assign low power call signs as we assign translator call signs.

98. We proposed in the Notice that Section 73.3597(a) through (d), the "three year rule" not apply to low power stations. We opined that permitting free transferability of stations would encourage entrants into the industry, as well as provide a useful example for reference in other contexts. Indeed, we recently have sought comments on a proposal to do away with the "trafficking" issue altogether, on the grounds that the rule no longer serves a useful purpose in the present telecommunications environment. See, Notice of Proposed Rule Making, Amendment of Section 73.3597 of the Commission's Rules, supra.

99. The comments on the proposal not to impose an anti-"trafficking" rule in the low power service were divided. The Justice Department supports a policy facilitating ready entry into and exit from the market. The principal objection to the absence of a "trafficking" prohibition is voiced by groups that would hope to garner preference in the competition for licenses. They complain that the preference system easily can be defeated, unless the Commission imposes either a required holding period for the original licensee, or a condition that the station be transferred only to another preferred entity. We do not gainsay the cogency of this argument. However, it rests on an incorrect assumption about the purpose of a system of preferences. It is the statutory duty of the Commission to allocate the use of broadcast spectrum in a manner that best serves the public interest. This may be accomplished via comparative hearing, comparative preferences or lottery. However, requiring an unwilling licensee to retain an unwanted broadcast property hardly can result in the best service to the public. The Commission ought not to second guess private decisions that are made in response to marketplace forces, but should permit stations to be put to the highest valued use in the marketplace. Therefore, we shall not impose a "three year rule" in the low power service. We shall, however, impose a one-year holding period on new low power licenses in order to maintain the integrity of the Commission's comparative processes in situations where the construction permit was awarded by virtue of a comparative preference.

100. Station Management. The Commission's rules and policies governing Equal Opportunity in Employment will apply to all low power stations. Reporting requirements will apply to those with sufficient employment levels to trigger the requirements. See, Section 73.2080 of the Rules, which imposes a reporting requirement on all stations with five or more full-time employees. While some commenters argued forcefully to the contrary, we continue to believe that Sections 318 and 325(a) of the Communications Act require that all originating low power stations have an operator holding at least a Restricted Radio Telephone Operator's Permit in continuous attendance during local originations. It appears that some parties misunderstood the nature of the requirements proposed, for a number of comments argue that a low power station merely retransmitting terrestrial microwave or satellite feed should not require a full-time operator. We proposed that, during microwave-fed retransmissions, the statutory operator requirement would be fulfilled in the same manner as the current requirement for all translators employing modulators: observation of the off-air signal for ten continuous minutes each day on a conventional television receiver. In cases of local origination, the operator must be in continuous attendance at the transmitter site, at a remote control point or at the program source. These operator requirements are neither extraordinary nor overly burdensome, and we shall maintain them until and unless they are made unnecessary by legislative change.

101. Low Power Station Maintenance. We shall require translator and low power licensees to comply with Sections 74.752(c), (d) and (e) and also to measure the carrier frequencies of their output channels at least once a year, and as often as necessary to assure compliance with the frequency tolerance standards. See, paragraph 39, supra. The aural carrier frequency of stations employing modulators also must be measured, but we would permit factory measurement of the modulation characteristics. Proof of performance may be certified by a holder of a General Operator's permit. 78/ Maintenance logs must be kept by all translator and low power station licensees. See, Section 74.781.

IX. Programming

102. Station Identification. We shall require low power stations, during periods of program origination, to comply with the station identification requirements of full service broadcast stations. See, Section 73.1201. However, we shall continue to allow translators, and low power stations operating in a rebroadcast mode, to be identified in accordance with the current provisions of Section 74.783.

78/ The General Radiotelephone Operator's license now is issued in place of both First and Second Class licenses. See, Report and Order, Docket No. 20817, Radio Operator Licensing Program, 46 Fed. Reg. 35450 (published July 8, 1981).

103. We believe that low power stations should be subject to a minimum of program-related regulations, so that they might be fully responsive to marketplace conditions. We received comments urging a panoply of programming rules, some even more stringent than those governing full service stations. We do believe this kind of governmental surveillance is neither necessary nor appropriate. In many instances, particularly in rural or remote areas, low power stations will be set up specifically to fill local needs. In areas where the marketplace demands coverage of local events of common interest, licensees can be expected to provide it. In some urban markets, unserved ethnic enclaves may be targeted for low power service. But in a major market that already receives adequate local coverage from several full service stations, a low power licensee may discover and attempt to fill a need for additional national news, sports or entertainment programming. Such judgments properly are left to licensees; it is in their interest, and the public's, to garner audience by attempting to serve unmet needs.

104. The principal structural limit we shall impose on low power stations with respect to programming is that the programming aired must comply with the definition of "broadcast" in the Communications Act and Section 73.641(b) of the Commission's Rules. Where a potential use of radio frequencies has not yet been authorized for broadcast use, it will not be permitted via low power. See, e.g., Notice of Proposed Rule Making, Amendment of Part 73 to Authorize Transmission of Teletext by TV Stations, BC Docket No. 81-741, 46 Fed. Reg. 60851 (published December 14, 1981). Nor may low power stations be used for private communications, a service provided more suitably by point-to-point private and common carrier services. See, e.g., Report and Order, Docket No. 19493, Amendment of Parts 1, 2, 21 and 43 of the Commission's Rules and Regulations to Provide for Licensing and Regulation of Common Carrier Radio Stations in the Multipoint Distribution Service, 45 F.C.C. 2d 616 (1974). Finally, while we repeatedly have acknowledged the difficulty of adhering strictly to any definition by which translators and low power stations may be distinguished, we continue to believe that the distinction is best framed in terms of rebroadcast versus origination. Under Section 74.784 of the Commission's Rules, rebroadcast is simultaneous retransmission of the signal of an existing TV broadcast station. Anything other than this is, by definition, origination, for which a low power license is required. Whether or not the low power licensee engages in any local origination, broadcasts a network feed, offers a subscription service, etc., the potential to do so defines the station.

105. Statutory requirements. As we have indicated, the statutory prohibitions on the broadcast of obscene material, plugola, payola and lotteries apply to the low power service. See, 18 U.S.C. 1304, 1464, Section 303(m)(D) of the Communications Act of 1934, as amended, and Section 73.1211 of the Commission's Rules. 47 C.F.R. §73.1211 (1980). Our rule requiring fairness in licensee-conducted contests also will apply. We also shall continue to impose Fairness Doctrine obligations in the low power service only to an extent consonant with a station's origination capacity. If the Commission receives a complaint related to Part I of the Fairness Doctrine, the station may meet it by showing that it aired responsive issue-oriented programming submitted in a mode compatible with the station's origination equipment. Likewise, to meet its obligation under Part II of the Fairness Doctrine, the station must make time available, with or without sponsorship, to responsive issue-oriented programming submitted in a format compatible with the station's origination equipment. The Fairness obligation would be on a sliding scale, depending upon the direct involvement of the station management in program production and decisions. Similarly, Sections 312(a)(7) and (f) and 315 will apply to low power stations, to the extent that their origination capacity permits. See, Alaska Public Broadcasting Commission, 82 F.C.C. 2d 220 (1980). The reasonable requests of legally qualified candidates for federal elective office who seek to purchase reasonable amounts of time or respond to their opponents' messages must be acceded to, so long as they provide program material that is compatible with the station's origination equipment. See, Public Notice, Acceptance of Political Advertising by UHF Translator Licensees, 62 F.C.C. 2d 896 (1976). Without prejudging issues in our pending rule making on DBS, we note that the hybrid nature of subscription television, which suggests that statutory provisions for broadcast stations properly may not apply to STV stations, has been raised in the DBS proceeding. See, note 17, supra. In light of the fact that numerous low power applicants envision subscription service, the resolution of that issue in the DBS proceeding may have a direct bearing on our present conclusions regarding the applicability of these statutory provision to low power STV stations.

106. We are not imposing a formal ascertainment obligation on low power stations. It is in the nature of low power stations to be familiar with and responsive to the needs of the viewers they serve. Formalizing this would be needless. To be viable in the highly competitive telecommunications marketplace, these small stations will have to react with sensitivity to the needs and desires of their markets. Similarly, we are leaving decisions regarding commercialization and nonentertainment programming to the licensees' discretion. Such regulations also would have little public interest value. Indeed, at a time when the continuing vitality of such content-oriented regulations increasingly has been called into question even with respect to full service stations, it would be unreasonable to apply them to low power. See, e.g., Report and Order, Deregulation of Radio, 84 F.C.C. 2d 968 (1981), reconsid. denied, 87 F.C.C. 2d 797 (1981). Consonant with this view, we are requiring no minimum hours of operation in the low power service, nor the maintenance of program logs, but only maintenance logs.

107. Applicability of Copyright Law to Low Power Service. As we have recognized, the copyright laws apply fully to translators and low power stations. Under the General Revision of the copyright law, Pub. L. No. 94-553, 17 U.S.C. 101 et seq. (1976), translator and low power operations are subject to full copyright liability, with an exception for secondary transmissions made by local governments or non-profit organizations. See, 17 U.S.C. §111(a)(4). Section 325(a) of the Communications Act requires the consent of the originating station for rebroadcast of programming. Also see, Sections 73.1207 and 74.784(b) of the Rules. Retransmission consent may not unreasonably be refused. See, e.g., Memorandum Opinion and Order, Docket No. 9808, 17 Fed. Reg. 10309 (1952). We believe that this standard is appropriate to govern the negotiations of low power operators for program services, until and unless legislative change preempts it. Presumption of rebroadcast consent, sought by National Translator Association, could amount to a

substantive modification of the initial bargaining positions of the parties, one for which we do not see a necessity. Likewise, the specific standards for refusal of consent and terms for consent agreement, sought by the Washington State Association of Broadcasters, if enacted by this agency via rule making, would amount to a substantial intervention of the government in what properly should be left to private negotiations between parties at arm's length. We also believe that commercial substitution should be permitted, with consent, subject to the negotiations of the parties. Although the Washington State Association of Broadcasters opposes this, it is possible to envision a situation in which the primary station may benefit from allowing commercial substitution, and we believe the issue is best left to the parties.

108. Low Power Subscription Service. As we proposed, we are permitting STV via low power, at the licensees' discretion, and not subject to a "complement-of-four" restriction. 79/ STV may be particularly suited to formated programming on low power stations; indeed, in some markets it may be essential to the viability of the service. We believe that STV and low power share the potential to accelerate utilization of unused channels, provide viable financial support for specialized programming and small market stations and respond to the interests of the audience. We are not requiring a separate STV authorization, although proposed subscription operation must be indicated on the application form, and existing low power licensees that are providing free service wishing to change to subscription service must so notify the Commission via an application for minor modification. We also will not require low power STV stations to file their franchise agreements with the Commission, although we shall require that such agreements be consistent with the rules applicable to full service STV agreements, Section 73.642(e). Licensees, however, must provide a copy of the franchise agreement for public inspection at the station office. Consonant with the First Report and Order in Docket No. 21502, adopted September 25, 1979, FCC 79-535, 45 Fed. Reg. 60091, published October 18, 1979, we are not setting technical compatability standards for low power STV equipment. We also are not requiring any minimum hours of free programming, because this requirement could prove overly burdensome to low power operators, and would not be consonant with the absence of minimum required hours of operation. See, paragraph 101, supra.

109. We note that several of the issues relating to STV are under separate consideration in Docket No. 21502. See, Further Notice of Proposed Rule Making, FCC 81-449, adopted September 30, 1981, released November 13, 1981. That document explicitly leaves resolution of STV issues related to low power to the instant proceeding. There is one area, however, where we believe the issues are more appropriately addressed in the context of the separate proceeding on STV. That area is the sale of decoders. The Notice in the instant case proposed that decoders could be sold or leased, at the low power licensee's discretion. We received some comments on both sides of this issue, including a petition seeking consolidation of the STV and low power proceedings, filed by the Subscription Television Association. While that petition was denied (see, Further Notice, Docket No. 21502, supra, paragraph 58), we believe this particular issue would be the subject of more narrowly focused debate in the proceeding focused exclusively on subscription television service, particularly because we have sought comments on a proposal to permit the sale of decoders generally in that proceeding. Therefore, we shall defer resolution of the issue of the sale of decoders in this docket, pending its resolution in Docket No. 21502. 80/ Except in this respect, we believe that the functional differences between low power and full service stations, as well as the secondary nature of the low power service, and its inherently limited coverage potential, justify a distinction in regulatory treatment between full service and low power stations. Again, we note that the structuring of subscription on a broadcast model has been called into question in the DBS proceeding. See, note 17, supra. Without prejudging issues in our separate STV or DBS proceedings, we believe it is appropriate to acknowledge the possibly hybrid nature of subscription service in our treatment of low power STV stations, particularly in light of the fact that low power is something of a hybrid service itself.

110. Network Affiliation. In the interest of ensuring even-handed treatment of all network affilites, full service or low power, we are requiring that any affiliation agreements between low power stations and networks will be subject to the same regulations as full service station affiliation agreements, see, Sections 73.658 and 73.3613 of the Commission's Rules.

111. Mandatory Carriage. We proposed no mandatory carriage requirement of low power stations by cable systems. See, Notice, 45 Fed. Reg. at 69183 n. 31. 81/ This issue was hotly contested in the comments. A number of parties, including ABC, NTA and the National Association of Low Power Broadcasters, advocate mandatory carriage, on the grounds that "may carry" status could put low power stations at a serious competitive disadvantage, especially in markets where cable penetration is high. The National Cable Television Association, on the other hand, resists "must carry" rules for low power, on the grounds that they violate the first amendment rights of cable operators to choose the programming they carry and are anticompetitive. Field adds that, without a local public aevice requirement, low power stations do not fulfill the intent of the "must carry" rules: maintenance of local broadcast coverage within a market.

112. We carefully have considered both sides of the dispute. We believe that the decision whether a low power station will be carried on a local cable system is one best left to the private parties. Noting that the mandatory carriage issue is under consideration in connection with pending copyright legislation, and may well be considered by the Commission in the near future, we do not wish to prejudge or preempt forthcoming developments in this area. While we are not here questioning the continuing usefulness of our rules that require carriage of local full service stations by cable systems, we believe that it is not in the public interest to extend this rule to low power stations. Low power stations are not subject to the programming obligations with regard to the community of license that form the basis for our requiring carriage of full service stations. Additionally, it will not further our goal of fostering a fully competitive telecommunications marketplace if the Commission, by regulation, injects itself between the parties to what should be a private decision-making process. The cable operator, on the basis of his own assessment of marketplace conditions, not the FCC, should decide what programming a cable system will carry, beyond that required by our present carriage rules. Indeed, it is reasonable to assume that, if a cable system has excess channel capacity, it will carry low power programming. Where there is no excess channel capacity, the cable operator should not be required to make the hard choice beteween the low power signal and other programming for which his subscribers may indicate demand via pay mechanisms, when he already carries the local full service stations. And where low power must compete with other program sources for cable carriage, absence of "must carry" protection could be a spur to low power's provision of creative, innovative programming. This also may encourage low power applicants to seek out remote, unserved areas where cable is thought not to be viable economically, and thereby to fill gaps in existing television coverage, a function for which low power stations are uniquely suited. It is not inconceivable that provision of a high isolation switch, so that both cable and broadcast may be received alternately on the subscriber's set, may be negotiated, at the expense of one, or both, parties in situations where a cable system truly is unwilling or unable to carry a low power station. Finally, until and unless it becomes clear that low power stations are not being carried on cable systems, we have no reason to believe that a "must carry" rule for low power will be useful or necessary.

113. Alaska. The Alaska Public Broadcasting Commission evinces concern that several of the technical rules proposed in the Notice (and adopted herein) for the low power service would be overly burdensome, as well as unnecessary. For example, on-site measurement of frequency tolerance and on-site proof-of-performance certification would be prohibitively expensive, as well as unnecessary. APBC also avers that the operator requirement is unnecessary, as the Alaskan stations primarily engage in rebroadcast. We acknowledge that Alaska is a "special case," because the low power concept long has been in use there, on a waiver basis, and it is the only means by which much of the State may receive television service. See, e.g., Wrangell Radio Group, supra. We agree that the present maintenance program that the state carries out is adequate, and we shall not impose additional requirements in that area. Also, to the extent that we are adding other rules, such as the full-time operator requirement for local originations, that exceed the requirements to which the Alaskan low power facilities previously have been subjected and would be particularly burdensome in that unique environment, we shall continue to authorize waivers where appropriate.

114. Emergency Broadcast System Participation. Translator stations normally would carry any Emergency Action Notification alert messages originated by the full service TV broadcast station being retransmitted. However, low power stations, during periods of program origination, would have the obligation, similar to other broadcast stations, promptly to inform viewers of an Emergency Action Notification under the established Emergency Broadcast System procedures. Low power stations therefore will be expected to comply with the EBS procedures set forth in Subpart G of Part 73 of the rules with one exception because of the expected limited coverage area and unspecified operating schedule. Although encouraged to do so, low power stations will be exempted from the requirement to install the encoding device for generating the two-tone EBS attention signal. This exemption is similar to that afforded 10 watt noncommercial FM stations. Subpart G is being amended to accommodate this exemption.

X. Conclusion.

115. The rules promulgated herein represent, we believe, judicious balancing of competing concerns, for spectrum, for broadcast licenses, for overall maintenance of a healthily competitive telecommunications environment. The record adduced in this proceeding proffered opinion from all sectors on all aspects of the Commisaion's original proposals. With the comments as a basis, we have resolved the six decision criteria with which we commenced this proceeding in 1978. In light of the comments, and the Commission's intervening experience, it will be noted, we modified, to some extent, the proposals of the Notice. The one sentiment that has remained unshaken by the controversy surrounding this proceeding is that the low power service can provide additional television service, particularly in areas where there currently is little or none.

116. The existence of so many pending applications, filed by so many eager applicants, may belie, to some degree, the uncertainties to which the fledgling service will be subjected as it becomes operational. As the public has been reminded, a low power license may not be a license to print money. It certainly is, however, a license to serve the public. It is in this spirit that we authorize the low power service today. The Commission has every hope that low power will succeed in the marketplace, adding to the mix of competitive technologies in today's telecommunications environment and acting as a bellwether for "unregulation" of the broadcast services generally.

79/ This rule restricts STV operations to communities within the Grade A contour of at least five commercial television stations, including that of the STV operator.

80/ Interim low power grantees proposing STV have been informed that they may not sell decoders until the Commission finally has resolved this issue.

81/ Under the present rules, cable systems must carry, as well as full service stations, commercial translators over 100 watts and educational translators over 5 watts within a 35-mile radius of the cable system, except where this would result in substantial duplication or the cable system already carries the primary station. See, Sections 73.55(c)(1) and (2); 76.57(a)(2); 76.59(a)(5); and 76.61(a)(3).

112. Regulatory Flexibility Act - Final Analysis 82/

a. Need for and Purpose of Rules. The rule amendments promulgated herein are necessary to achieve the goal of additional low-powered television stations, for which the record indicates an overwhelming public demand. While the Commission intends the low power service to be a largely unregulated service, it nevertheless is essential that the technical aspects of the service, from application processing to operating specifications, be strictly maintained, to ensure that low power stations do not cause destructive interference to full service stations or to each other.

In view of the unexpectedly great numbers of TV translator and low power applications filed since the initiation of the rule making, as well as additional applications anticipated upon the lifting of the present moratorium, additional technical standards were proposed in the Further Notice to facilitate more fully automated application processing. The Commission's rules for TV translators did not contain precise standards for determining mutual exclusivity between proposed stations. A mode of processing that left much to engineering judgment was believed not to be feasible for use with large numbers of competing applications. The Commission herein adopts standards of prohibited contour overlap that will facilitate automated processing.

b. Comments. We received little commentary directly in response to the Initial Regulatory Flexibility Analysis. Several parties took issue with our prediction that the proposed technical standards would not significantly increase the burdens attendant upon preparation of the engineering section of the application. They evince particular concern about the burden of calculating antenna radiation center height above average terrain (HAAT). 83/ The Commission acknowledges the possible validity of this position. However, it is our belief that the two major competing considerations, expeditious reduction of the application backlog and spectral efficiency, override the possibly increased burdens on applicants. In the long run, it is our position that the increased opportunity in broadcasting provided for small entrepreneurs by authorization of the low power service is a much more significant overall benefit of the rule changes than the details required in making an application.

c. Alternatives Considered. The alternatives to the mode of processing are: (1) a table of assignments for low power stations, which was ruled out as too great an administrative burden on the Commission, as well as spectrally inefficient; (2) processing using assumed antenna heights, which also is spectrally inefficient; (3) processing taking actual, instead of average terrain factors into account, which also is too cumbersome administratively and may create too great a risk of interference; and (4) not authorizing the service at all, a result not supported by the record. The technical rules adopted herein, represent an optimal compromise between factors of spectral efficiency, prevention of undue interference, administrative efficiency and cost to both applicants and the Commission. As stated above, the overall effect of the rule changes is to create additional opportunities for small entrepreneurs to own and operate new broadcast facilities by using spectrum where full service stations would cause and sustain interference. The low power service is subject to a minimum of regulations; however, certain technical requirements are essential to national spectrum management and compliance with these bears a cost that must be sustained by applicants and station operators.

d. The Secretary shall cause a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to be sent to the Chief Counsel for Advocacy of the Small Business Administration in accordance with Section 603(a) of the Regulatory Flexibility Act (Pub. L. No. 96-354, 94 Stat. 1164, 50 U.S.C. et seq.).

118. In light of the foregoing and pursuant to authority contained in Sections 1, 4(i) and 303 of the Communications Act of 1934, as amended, IT IS ORDERED, That the rule amendments set out in Appendix A ARE ADOPTED; and

119. IT IS FURTHER ORDERED, That the petitions for reconsideration of the April 9, 1981, Order, FCC 81-173, filed by the Association of Maximum Service Telecasters, Bogner Broadcast Equipment Corp., the National Association of Broadcasters and the National Translator Association, ARE DISMISSED; and

120. IT IS FURTHER ORDERED, That this proceeding IS TERMINATED.

121. For further information concerning this proceeding, the contact person is Edythe Wise, Broadcast Bureau, (202) 632-7792.

FEDERAL COMMUNICATIONS COMMISSION *

William J. Tricarico
Secretary

Attachment: Appendices

*Statements of Commissioners Fowler, Chairman; Dawson, Washburn, Fogarty and Rivera attached.

82/ The Notice of Proposed Rule Making in this proceeding was promulgated prior to the effective date of the Regulatory Reform Act of 1980, so that no comments on the particular impact on small businesses were elicted therein. The Further Notice of Proposed Rule Making, however, was subject to the Act. This Final Analysis addresses issues raised in the Initial Analysis, at paragraph 29, of the Further Notice.

83/ Applicants are not required to compute this figure as part of the application process. Indeed, in most cases of UHF low power applications, conformance with the "UHF" taboos, formerly in Section 74.702(c)(2), will ensure a noninterfering application. However, because the Commission will make the calculation and use it in processing, it may be presumed that most, if not all, applicants will base their own engineering calculations upon HAAT.

APPENDIX A

1. Section 73.601 is revised in its entirety to read as follows:

§73.601 Scope of subpart.

This subpart contains the rules and regulations (including engineering standards) governing TV broadcast stations, including noncommercial educational TV broadcast stations and, where indicated, low power TV and TV translator stations in the United States, its Territories and possessions. TV broadcast, low power TV, and TV translator stations are assigned channels 6 MHz wide, designated as set forth in §73.603(a).

2. Section 73.903 is revised in it entirety to read as follows:

§73.903 Emergency Broadcast System (EBS).

The EBS is composed of AM, FM, and TV broadcast stations; low power TV stations; and non-government industry entities operating on a voluntary, organized basis during emergencies at National, State, or Operational (Local) Area Levels.

3. Section 73.904 is revised in its entirety to read as follows:

§73.904 Licensee.

The term "licensee" as used in this Subpart means the holder of a broadcast station license granted or continuing in force under authority of the Communications Act of 1934, as amended. Such licensee includes any AM, FM, TV, or low power TV station holding a valid license, program test authorization, or other authorization permitting regular programming operation.

4. SECTION 73.932 AMENDED:

The second sentence of paragraph (b) in Section 73.932 is revised to read:

All broadcast station licensees except noncommercial educational FM stations authorized to operate with transmitter output powers of 0.010 kW or less and low power TV stations, must install, operate, and maintain equipment capable of generating the Attention Signal (see §73.906) to modulate the transmitter so that the signal may be broadcast to other stations.

5. SECTION 73.961 AMENDED:

The last sentence of paragraph (c) of Section 73.961 is revised to read:

These tests will be conducted in accordance with the procedures set forth in the EBS checklist furnished to all broadcast stations. However, Class D noncommercial educational FM stations authorized to operate with transmitter output powers of 0.01 kW or less and low power TV stations need not transmit the two-tone EBS Attention Signal.

6. Section 73.1001 is amended by revising paragraph (c) to read as follows:

§73.1001 Scope.

* * * * *

(c) Certain provisions of this Subpart apply to International Broadcast Stations (Subpart F, Part 73), TV translator stations, and low power TV stations (Subpart G, Part 74) where the rules for those services so provide.

* * * * *

7. Section 73.1010 is amended by revising paragraph (e) to read as follows:

§73.1010 Cross reference to rules in other Parts.

* * * * *

(e) Part 74 (Volume III), "Experimental, Auxiliary and Special Broadcast, and Other Program Distributional Services" including Subparts on the following stations: A, "Experimental Television--," B, "Experimental Fascimile--," C, "Developmental--", Instructional TV Fixed Service--," L, "FM Translator and Booster--."

8. Section 73.3500 is amended by revising the titles for FCC Forms 346, 347, and 348 as follows:

* * * * *

346 ..... Application for Authority to Construct or Make Changes in a Low Power TV, TV Translator, or FM Translator Station.

347 ..... Application for a Low Power TV, TV Translator, or FM Translator Station License.

348 ..... Application for Renewal of a Low Power TV, TV Translator, or FM Translator Station License.

* * * * *

9. Section 73.3516 is amended by revising paragraph (a) to read as follows:

§73.3516 Specification of facilities.

(a) An application for facilities in the AM, FM, or TV broadcast services or low power TV service shall be limited to one frequency, or channel assignment, and no application will be accepted for filing if it requests alternate frequency or channel assignments.

* * * * *

10. Section 73.3533 is amended by revising paragraph (a)(7) to read as follows:

§73.3533 Application for construction permit.

(a) * * *

* * * * *

(7) FCC Form 346, "Application for Authority to Construct or Make Changes in a Low Power TV, TV Translator, or FM Translator Station."

* * * * *

11. Section 73.3536 is amended by revising paragraph (a)(7) to read as follows:

§73.3536 Application for license to cover construction permit.

(a) * * *

* * * * *

(7) FCC Form 347, "Application for a Low Power TV, TV Translator, or FM Translator Station License."

* * * * *

12. Section 73.3539 is amended by revising paragraph (d)(8) to read as follows:

§73.3539 Application for renewal of license.

* * * * *

(d) * * *

* * * * *

(8) FCC Form 348, "Application for Renewal of Low Power TV, TV Translator, or FM Translator Station License."

* * * * *

13. Section 73.3564 is amended by revising paragraph (a) to read as follows:

§73.3564 Acceptance of applications.

(a) Applications tendered for filing are dated upon receipt and then forwarded to the Broadcast Bureau, where an administrative examination is made to ascertain whether the applications are complete. Except for low power TV and TV translator ppplications, those found to be complete or substantially complete are accepted for filing and are given file numbers. In the case of minor defects as to completeness, the applicant will be required to supply the missing information. Applications that are not substantially complete will be returned to the applicant. In the case of low power TV and TV translator applications, those found to be complete are accepted for filing and are given file numbers. Low power TV and TV translator applications that are not complete will be returned to the applicant.

14. Section 73.3572 is amended by revising the headnote and paragraph (a)(1) to read as follows:

§73.3572 Processing of TV broadcast, low power TV, and TV translator station applications.

(a) * * *

(1) In the first group are applications for new stations or major changes in the facilities of authorized stations. A major change for TV broadcast stations authorized under this Part is any change in frequency or station location, or any change in the power or antenna location or height above average terrain (or combination thereof) that would result in a change of 50% or more of the area within the Grade B contour of the station. (A change in area is defined as the sum of the area gained and the area lost as a percentage of the original area.) In the case of low power TV and TV translator stations authorized under Part 74, it is any change in:

(i) frequency (output channel) assignment;

(ii) transmitting antenna system including the direction of the radiation, directive antenna pattern or transmission line;

(iii) antenna height;

(iv) antenna location exceeding 200 meters;

(v) authorized operating power; or

(vi) community or area to be served.

However, the FCC may, within 15 days after the acceptance of any other application for modification of facilities, advise the applicant that such application is considered to be one for a major change and therefore subject to the provisions of §§73.3580 and 1.1111 pertaining to major changes.

* * * * *

15. Section 73.3580 is amended by revising paragraphs (c) [introducation], (d)(3) [introduction], and (g) [introduction] to read as follows:

§73.3580 Local public notice of filing of broadcast applications.

* * * * *

(c) An applicant who files an application or amendment thereto which is subject to the provision of this Section, must give a notice of this filing in a newspaper. Exceptions to this requirement are applications for renewal of AM, FM, TV, and International broadcast stations; low power TV stations; TV and FM translator stations; FM booster stations; and applications subject to paragraph (e) of this Section. The filing notice shall be given in a newspaper either immediately following the tendering for filing of the application or amendment, or immediately following notification to the applicant by the FCC that a major change is involved requiring the applicant to give public notice pursuant to §§ 73.3571, 73.3572, 73.3573, or 73.3578.

(1) * * *

(d) * * * * * * * *

(3) An applicant who files for modification, assignment or transfer of a broadcast station license (except for International broadcast, low power TV, TV translator, FM translator, and FM booster stations) shall give notice of the filing in a newspaper as described in paragraph (c) above, and also broadcast the same notice over the station as follows:

(i) * * *

(g) An applicant who files an application or amendment thereto for a low power TV, TV translator, FM translator, or FM booster station must give notice of this filing in a daily, weekly, or biweekly newspaper of general circulation in the community or area to be served. The filing notice will be given immediately following the tendering for filing of the application or amendment or immediately following notification to the applicant by the FCC that public notice is required pursuant to §§ 73.3571, 73.3572, 73.3573, or 73.3578.

(1) * * *

* * * * *

16. Section 73.3594 is amended by revising paragraphs (a) [introduction, (b) [introduction], (f) [introduction] and (f)(2) to read as follows:

§73.3594 Local public notice of designation for hearing.

(a) Except as otherwise provided in paragraph (c) of this Section when an application subject to the provisions of §73.3580 (except for applications for International broadcast, low power TV, TV translator, FM translator, and FM booster stations) is designated for hearing, the applicant shall give notice of such designation as follows: Notice shall be given at least twice a week, for 2 consecutive weeks within the 3-week period immediately following release of the FCC's order, specifying the time and place of the commencement of the hearing, in a daily newspaper of general circulation published in the community in which the station is located or proposed to be located.

(1) * * *

* * * * *

(b) When an application which is subject to the provisions of §73.3580 and which seeks modification, assignment, transfer, or renewal of an operating broadcast station is designated for hearing (except for applications for an International broadcast, low power TV, TV translator, FM translator, or FM booster stations), the applicant shall, in addition to giving notice of such designation as provided in paragraph (a) of this Section, cause the same notice to be broadcast over that station at least once daily on 4 days in the second week immediately following the release of the FCC's order, specifying the time and place of the commencement of the hearing. In the case of both commercial and noncommercial TV broadcast stations such notice shall be broadcast orally with the camera focused on the announcer. The notice required by this paragraph shall be broadcast during the following periods:

(1) * * *

* * * * *

(f) When an application for a low power TV, TV translator, FM translator, or FM booster station which is subject to the provisions of §73.3580 is designated for hearing, the applicant shall give notice of such designation as follows: Notice shall be given at least once during the 2-week period immediately

following release of the FCC's order, specifying the time and place of the commencement of the hearing in a daily, weekly or biweekly publication having general circulation in the community or area to be served. However, if there is no publication of general circulation in the community or area to be served, the applicant shall determine an appropriate means of providing the rive notice of such designation as follows: Notice shall be given at least once during the 2-week period immediately following release of the FCC's order, specifying the time and place of the commencement of the hearing in a daily, weekly or biweekly publication having general circulation in the community or area to be served. However, if there is no publication of general circulation in the community or area to be served, the applicant shall determine an appropriate means of providing the required notice to the general public, such as posting in the local post office or other public place. The notice shall state:

(1) * * *

(2) The call letters, if any, of the station or stations involved, the output channel or channels of such stations, and, for any rebroadcasting, the call letters, channel and location of the station or stations being or proposed to he rebroadcast.

* * * * *

17. Section 73.3597 is amended by revising paragraphs (a)(1) and (e)(1)(i) to read as follows:

§73.3597 Procedures on transfer and assignment applications.

(a) * * *

(1) The application involves a low power TV, TV translator, FM translator, or FM booster station only;

* * * * *

(e) * * *

(1) * * *

(i) "Unbuilt station" refers to an AM, FM, or TV broadcast station or a low power TV station for which a construction permit is outstanding, and, regardless of the stage of physical completion, for which program tests have not commencedor, if required, been authorized.

* * * * *

18. Section 73.3598 is amended by revising paragraph (b) to read as follows:

§73.3598 Period of construction.

* * * * *

(b) Other broadcast, auxiliary and Instructional TV Fixed Stations. Each original permit for the construction of a new AM, FM, or International broadcast; low power TV; TV translator, FM translator; FM booster; broadcast auxiliary; or Instructional TV Fixed station, or to make changes in such existing stations, shall specify a period of 12 months within which construction shall be completed and application for license be filed.

19. Section 73.3613 is amended by revising paragraph (a)(1) to read as follows:

§73.3613 Filing of contracts.

(a) * * *

* * * * *

(1) All network affiliation contracts, agreements, or understandings between a TV broadcast or low power TV station and a national, regional, or other network.

* * * * *

20. Section 74.15 is amended by revising paragraph (d) [introduction] to read as follows:

§74.15 License period.

* * * * *

(d) Initial licenses for low power TV, TV translator, and FM translator stations will ordinarily be issued for a period running until the date specified in this Section for the State or territory in which the station is located or, if issued after such date, to the next renewal date determined in accordance with this Section. When renewed, low power TV amd TV translator station licenses will ordinarily be renewed for 5 years and FM translator station licenses be renewed for 7 years. However, if the FCC finds that the public interest, convenience, or necessity will be served, it may issue either an initial license or a renewal thereof for a lesser term. The time of expiration of all licenses will be 3.a.m., local time, on the following dates, and, thereaftet, at 5-year intervals for low power TV and TV translator stations and at 7-year intervals for FM translator stations:

(1) * * *

* * * * *

21. Section 74.432 is amended by revising paragraph (a) to read as follows:

§74.432 Licensing requirements and procedures.

(a) A license for a broadcast remote pickup station or system will be issued only to the licensee of an AM, FM, noncommercial educational FM, TV, or International broadcast station; low power TV station; or to an elgible network entity. To be eligible, a network entity must provide a program service for simultaneous transmission by 10 or more stations through circuit facilities available for program distribution to each affiliated station at least 12 hours of each day.

* * * * *

22. Section 74.601 in its entirety to read as follows:

§74.601 Classes of TV broadcast auxiliary stations.

(a) TV pickup station A land mobile station used for the transmission of television program material and related communications from the scenes of events occurring at points removed from the station studios to TV broadcast and low power TV stations.

(b) TV STL station (studio-transmitter link). A fixed station used for the transmission of television program material and related communications from the studio to the transmitter of a TV broadcast or low power TV station.

(c) TV intercity relay station. A fixed station used for intercity transmission of television program material and related communications for use by TV broadcast and low power TV stations.

(d) TV translator relay station. A fixed station used for relaying programs and signals of TV broadcast stations to LPTV, TV translator, and other communications facilities that the FCC may authorize.

(e) TV broadcast licensee. Licensees and permittees of both TV broadcast and low power TV stations, unless specifically otherwise indicated.

23. Section 74.602 is amended by revising paragraph (h) and deleting reserved paragraph (i) as follows:

§74.602 Frequency assignment.

* * * * *

(h) TV auxiliary stations licensed to low power TV stations and translator relay stations will be assigned on a secondary basis, i.e., subject to the condition that no harmful interference is caused to other TV auxiliary stations assigned to TV broadcast stations, or to community antenna relay stations (CARS) operating between 12,700 and 13,200 MHz. Auxiliary stations licensed to low power TV stations and translator relay stations must accept any interference caused by stations having primary use of TV auxiliary frequencies.

24. The undesignated title of Subpart G of Part 74 is amended to read as follows:

SUBPART G - LOW POWER TV AND TV TRANSLATOR STATIONS.

25. Section 74.701 is amended by adding new paragraphs (f) and (g) to read as follows:

§74.701 Definitions.

(f) Low power TV station. A station authorized under the provisions of this Subpart that may retransmit the programs and signals of a TV broadcast station and that may originate programming in any amount greater than 30 second per hour and/or operates a subscription service. (See §73.641 of Part 73.)

(g) Program origination. For purposes of this Part, program origination shall be any transmissions other than the simultaneous retransmission of the programs and signals of a TV broadcast station. Origination shall include locally generated television program signals and program signals obtained via video recordings (tapes and discs), microwave, common carrier circuits, or other sources.

26. Section 74.702 is revised in its entirety to read as follows:

§74.702 Channel assignments.

(a) An applicant for a new low power TV or TV translator station or for changes in the facilities of an authorized station shall endeavor to select a channel on which its operation is not likely to cause interference. The applications must be specific with regard to the channel requested. Only one channel will be assigned to each station.

(1) Any one of the 12 standard VHF Channels (2 to 13, inclusive) may be assigned to a VHF low power TV or TV translator station. Channels 5 and 6 are allocated for nonbroadcast use in Alaska, and will not be assigned to a VHF low power TV or TV translator station in that State.

(2) Any one of the UHF Channels from 14 to 69, inclusive, may be assigned to a UHF low power TV or TV translator station. In accordance with §73.603(c) of Part 73, Channel 37 will not be assigned to such stations.

(3) Application for new low power TV or TV translator stations or for changes in existing stations, specifying operation on output Channels from 70 through 83 will not be accepted for filing. License renewals for TV translator stations operating on those channels will be granted only on a secondary basis to land mobile radio operations.

(b) Changes in the TV Table of Assignments (§73.606(b) of Part 73), authorizations to construct new TV broadcast stations or to change facilities of existing ones, may be made without regard to existing or proposed low power TV or TV translator stations. Where such a change results in a low power TV or TV

translator station causing actual interference to reception of the TV broadcast station, the licensee of the low power TV or TV translator station shall eliminate the interference or file an application for a change in channel assignment.

27. Section 74.703 is revised in its entirety to read as follows:

§74.703 Interference.

(a) An application for a new low power TV or TV translator station or for changes in the facilities of an authorized station will not be granted when it is apparent that interference will be caused. The licensee of a new low power TV or TV translator station shall protect existing low power TV and TV translator stations from interference within the protected contour defined in §74.707 of this Part.

(b) It shall be the responsibility of the licensee of a low power TV or TV translator station to correct at its expense any condition of interference to the direct reception of the signals of a TV broadcast station operating on the same channel as that used by the low power TV or TV translator station or on an adjacent channel, which occurs as the result of the operation of the low power TV or TV translator station. Interference will be considered to occur whenever reception of a regularly used signal is impaired by the signals radiated by the low power TV or TV translator station, regardless of the quality of such reception or the strength of the signal so used. If the interference cannot be promptly eliminated by the application of suitable techniques, operation of the offending low power TV or TV translator stations shall be suspended and shall not be resumed until the interference has been eliminated. If the complainant refuses to permit the low power TV or TV translator licensee to apply remedial techniques that demonstrably will eliminate the interference without impairment of the original reception, the licensee of the low power TV or TV translator station is absolved of further responsibility.

(c) It shall be the responsibility of the licensee of a low power TV or TV translator station to correct any condition of interference which results from the radiation of radio frequency energy outside its assigned channel. Upon notice by the FCC to the station licensee or operator that such interference is caused by the spurious emissions of the station, operation of the station shall be immediately suspended and not resumed until the interference has been eliminated. However, short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures.

(d) When a low power TV or TV translator station causes interference to a CATV system by radiations within its assigned channel at the cable headend or on the output channel of any system converter located at a receiver, the earlier user, whether cable system or low power TV or TV translator station, will be given priority on the channel, and the later user will be responsible for correction of the interference.

(e) Low power TV and TV translator stations are being authorized on a secondary basis to existing land mobile uses and must correct whatever interference they cause to land mobile stations or cease operation.

(f) In each instance where suspension of operation is required, the licensee shall submit a full report to the FCC in Washington, D.C., after operation is resumed, containing details of the nature of the interference, the source of the interfering signals, and the remedial steps taken to eliminate the interference.

28. New Section 74.705 is added to read as follows:

§74.705 TV broadcast station protection.

(a) The TV broadcast station protected contour shall be its Grade B contour as defined in §73.683 of Part 73.

(b)(1) An application to construct a new low power TV or TV translator station or change the facilities of an existing station will not be accepted if it specifies a site which is within the protected contour of a co-channel or first adjacent channel TV broadcast station.

(2) Due to the frequency spacing which exists between TV Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, adjacent channel protection standards shall not be applicable to these pairs of channels. (See §73.603(a) of Part 73.)

(3) A UHF low power TV or TV translator construction permit application will not be accepted if it specifies a site within the UHF TV broadcast station's protected contour and proposes operation on a channel either 14 or 15 channels above the channel in use by the TV broadcast station.

(4) A UHF low power TV or TV translator construction permit application will not be accepted if it specifies a site less than 100 kilometers from the transmitter site of a UHF TV broadcast station operating on a channel which is the seventh channel above the requested channel.

(5) A UHF low power TV or TV translator construction permit application will not be accepted if it specifies a site less than 32 kilometers from the transmitter site of a UHF TV broadcast station operating on a channel which is the second, third, fourth, or fifth channel above or below the requested channel.

(c) The low power TV or TV translator station field strength is calculated from the proposed effective radiated power (ERP) and the antenna height above average terrain (HAAT) in pertinent directions.

(1) For co-channel protection, the field strength is calculated using Figure 9a, 10a, or 10c of §73.699 (F(50,10) charts) of Part 73.

(2) For low power TV or TV translator applications that do not specify the same channel as the TV broadcast station to be protected, the field strength is calculated using Figure 9, 10, or 10b of §73.699 (F(50,50) charts) of Part 73.

(d) A low power TV or TV translator station application will not be accepted if the ratio in dB of its field strength to that of the TV broadcast station at its protected contour fails to meet the following:

(1) -45 dB for co-channel operations without offset carrier frequency operation or -28 dB for offset carrier frequency operation. An application requesting offset carrier frequency operation must include the following:

(i) A requested offset designation (zero, plus, or minus) identifying the proposed direction of the 10 kHz offset from the standard carrier frequencies of the requested channel. If the offset designation is not different from that of the station being protected, the -45 dB ratio must be used.

(ii) A description of the means by which the low power TV or TV translator station's frequencies will be maintained within the tolerances specified in §74.761 of this Part for offset operation.

(2) 6 dB when the protected TV broadcast station operates on a VHF channel that is one channel above the requested channel.

(3) 12 dB when the protected TV broadcast station operates on a VHF channel that is one channel below the requested channel.

(4) 15 dB when the protected TV broadcast station operates on a UHF channel that is one channel above or below the requested channel.

(5) 23 dB when the protected TV broadcast station operates on a UHF channel that is fourteen channels below the requested channel.

(6) 6 dB when the protected TV broadcast station operates a UHF channel that is fifteen channels below the requested channel.

29. New Section 74.707 is added to read as follows:

§74.707 Low power TV and TV translator station protection.

(a)(1) A low power TV or TV translator will be protected from interference from other low power TV and TV translator stations within the following predicted contours:

(i) 62 dBu for stations on Channels 2 through 6;

(ii) 68 dBu for stations on Channels 7 through 13; and

(iii) 74 dBu for stations on Channels 14 through 76.

(2) The low power TV or TV translator station protected contour is calculated from the authorized effective radiated power and antenna height above average terrain, using Figure 9, 10, or 10b of §73.699 (F(50,50) charts) of Part 73.

(b)(1) An application to construct a new low power TV or TV translator station or change the facilities of an existing station will not be accepted if it specifies a site which is within the protected contour of a co-channel or first adjacent channel low power TV or TV translator station.

(2) Due to the frequency spacing which exists between TV Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, adjacent channel protection standards shall not be applicable to these pairs of channels. (See §73.603(a) of Part 73.)

(3) A UHF low power TV or TV translator construction permit application will not be accepted if it specifies a site within the UHF low power TV or TV translator station's protected contour and proposes operation on a channel either 7 channels below or 14 or 15 channels above the channel in use by the low power TV or TV translator station.

(c) The low power TV or TV translator construction permit application field strength is calculated from the proposed effective radiated power (ERP) and the antenna height above average terrain (HAAT) in pertinent directions.

(1) For co-channel protection, the field strength is calculated using Figure 9a, 10a, or 10c of §73.699 (F(50,10) charts) of Part 73.

(2) For low power TV or TV translator applications that do not specify the same channel as the low power TV or TV translator station to be protected, the field strength is calculated using Figure 9, 10, or 10b of §73.699 (F(50,50) charts) of Part 73.

(d) A low power TV or TV translator station application will not be accepted if the ratio in dB of its field strength to that of the authorized low power TV or TV translator station at its protected contour fails to meet the following:

(I) -45 dB for co-channel operations without offset carrier frequency operation or -28 dB for offset carrier frequency operation. An application requesting offset carrier frequency operation must include the following:

(i) A requested offset designation (zero, plus, or minus) identifying the proposed direction of the 10 kHz offset from the standard carrier frequencies of the requested channel. If the offset designation is not different from that of the station being protected, or if the station being protected is not maintaining its frequencies within the tolerance specified in §74.761 of this Part for offset operation, the -45 dB ratio must be used.

(ii) A description of the means by which the low power TV or TV translator station's frequencies will be maintained within the tolerances specified in §74.761 of this Part for offset operation.

(2) 6 dB when the protected low power TV or TV translator station operates on a VHF channel that is one channel above the requested channel.

(3) 12 dB when the protected low power TV or TV translator station operates on a VHF channel that is one channel below the requested channel.

(4) 15 dB when the protected low power TV or TV translator station operates on a UHF channel that is one channel above or below the requested channel.

(5) 0 dB when the protected low power TV or TV translator station operates on a UHF channel that is seven channels above the requested channel.

(6) 23 dB when the protected low power TV or TV translator station operates on a UHF channel that is fourteen channels below the requested channel.

(7) 6 dB when the protected low power TV or TV translator station operates a UHF channel that is fifteen channels below the requested channel.

30. New Section 74.709 is added to read as follows:

§74.709 Land mobile station protection.

(a) Stations in the Land Mobile Radio Service, using the following channels in the indicated cities will be protected from interference caused by low power TV or TV translator stations, and low power TV and TV translator stations must accept any interference from stations in the land mobile service operating on the following channels:

CITY	CHANNELS	COORDINATES (LAT/LONG)
Boston, MA	14, 16	42-21-24/071-03-24
Chicago, IL	14, 15	41-52-28/087-38-22
Cleveland, OH	14, 15	41-29-51/081-41-50
Dallas, TX	16	32-47-09/096-47-37
Detroit, MI	15, 16	42-19-48/083-02-57
Houston, TX	17	29-45-26/095-21-37
Los Angeles, CA	14, 20	34-03-15/118-14-28
Miami, FL	14	25-46-37/080-11-32
New York, NY	14, 15	40-45-06/073-59-39
Philadelphia, PA	19, 20	39-56-58/075-09-21
Pittsburgh, PA	14, 18	40-26-19/080-00-00
San Francisco, CA	16, 17	37-46-39/122-24-40
Washington, DC	17, 18	38-53-51/077-00-33

(b) The protected contours for the land mobile radio service are 130 kilometers from the above coordinates, except where limited by the following:

(1) If the land mobile channel is the same as the channel in the following list, the land mobile protected contour excludes the area within 145 kilometers of the corresponding coordinates from list below. Except if the land mobile channel is 15 in New York or Cleveland or 16 in Detroit, the land mobile protected contour excludes the area within 95 kilometers of the corresponding coordinates from the list below.

(2) If the land mobile channel is one channel above or below the channel in the following list, the land mobile protected contour excludes the area within 95 kilometers of the corresponding coordinates from the list below.

CITY	CHANNEL	COORDINATES (LAT/LONG)
San Diego, CA	15	32-41-48/116-56-10
Waterbury, CT	20	41-31-02/073-01-00
Washington, DC	14	38-57-17/077-00-17
Washington, DC	20	38-57-49/077-06-18
Champaign, IL	15	40-04-11/087-54-45
Jacksonville, IL	14	39-45-52/090-30-29
Ft. Wayne, IN	15	41-05-35/085-10-42
South Bend, IN	16	41-36-20/086-12-44
Salisbury, MD	16	38-24-15/075-34-45
Mt. Plessant, MI	14	43-34-24/084-46-21
Hanover, NH	15	43-42-30/072-09-16
Canton, OH	17	40-51-04/081-16-37
Cleveland, OH	19	41-21-19/081-44-24
Oxford, OH	14	39-30-26/084-44-09
Zanesville, OH	18	39-55-42/081-59-06
Elmira-Corning, NY	18	42-06-20/076-52-17
Harrisburg, PA	21	40-20-44/076-52-09
Johnstown, PA	19	40-19-47/078-53-45
Lancaster, PA	15	40-15-45/076-27-49
Philadelphia, PA	17	40-02-30/075-14-24
Pittsburgh, PA	16	40-26-46/079-57-51
Scranton, PA	16	41-10-58/075-52-21
Parkersburg, WV	15	39-20-50/081-33-56
Madison, WI	15	43-03-01/089-29-15

(c) A low power TV or TV translator station application will not be accepted if it specifies a site that is within the protected contour of a co-channel or first adjacent channel land mobile assignment.

(d) The low power TV or TV translator station field strength is calculated from the proposed effective radiated power (ERP) and the antenna height above average terrain (HAAT) in pertinent directions.

(1) The field strength is calculated using Figure 10c of §73.699 (F(50,10) charts) of Part 73.

(2) A low power TV or TV translator station application will not be accepted if it specifies the same channel as one of the land mobile assignments and its field strength at the land mobile protected contour exceeds 52 dBu.

(3) A low power TV or TV translator station application will not be accepted if it specifies a channel that is one channel above or below one of the land mobile assignments and its field strength at the land mobile protected contour exceeds 76 dBu.

(e) In order to protect stations in the Offshore Radio Telecommunications Service, a low power TV or TV translator station construction permit application specifying operation on Channel 17 will not be accepted if it specifies a latitude south of the line 31° 30' North, and between longitudes 86° 30' West and 95° 30' West. An application specifying operation on either Channel 16 or Channel 18 will not be accepted if it specifies a latitude south of the line 31° 00' North and between longitudes 87° 00' West and 95° 00' West.

31. Section 74.731 is amended by revising paragraphs (g), (h), (i), and (j) to read as follows:

§74.731 Purpose and permissible service.

* * * * *

(g) Low power TV stations may operate under the following modes of service:

(1) As a TV translator station, subject to the requirements of this Part;

(2) For origination of programming and commercial matter as defined in §74.701(f) of this Part;

(3) For the transmission of subscription television broadcast (STV) programs, intended to be received in intelligible form by members of the public for a fee or charge, subject to the provisions of §§73.642(e) and (f)(3), and 74.644.

(h) A low power TV station may not be operated solely for the purpose of relaying signals to one or more fixed receiving points for retransmission, distribution or relaying.

(i) Low power TV stations are subject to no minimum required hours of operation and may operate in any of the 3 modes described in paragraph (g) above for any number of hours.

(j) An applicant for a 1 kW UHF TV translator station to operate on a channel assigned to a TV broadcast station which is not in operation, shall notify the licensee or permitee of the TV broadcast station, in writing, of the filing of the application and shall certify to the FCC that such notice has been given.

32. Section 74.732 is revised in its entirety to read as follows:

§74.732 Eligibility and licensing requirements.

(a) Subject to the restrictions described in paragraph (e) of this Section, a license for a low power TV or TV translator station may be issued to any qualified individual, organized group of individuals, broadcast station licensee, or local civil govenmental body.

(b) More than one low power TV or TV translator station may be licensed to the same applicant whether or not such stations serve substantially the same area. Low power TV and TV translator stations are not counted for purposes of §73.636 of Part 73, concerning multiple ownership.

(c) Only one channel will be assigned to each low power TV or TV translator station. Additional low power or translator stations may be authorized to provide additional reception. A separate application is required for each station and each application must be complete in all respects.

(d) The FCC will not act on applications for new low power TV or TV translator stations or for changes in facilities of existing stations when such changes will result in an increase in signal range in any horizontal direction until at least 30 days have elapsed since the date on which "Public Notice" is given by the FCC of acceptance for filing of such application, in order to afford interested parties opportunity to comment and afford opportunity for competing applications to be filed.

(e) A proposal to change the primary TV station being retransmitted or an application of a licensed translator station to include low power TV station operation, i.e., program origination or subscription service will be subject only to informal objections.

(f) Applications for transfer of ownership or control of a low power TV or TV translator station will be subject to petitions to deny.

33. Section 74.734 is revised in its entirety to read as follows:

§74.734 Attended and unattended operation.

(a) In all circumstances other than during local origination (see §74.701(g)), low power TV and TV translator stations may be operated without a licensed radio operator in attendance if the following requirements are met:

(1) If the transmitter site cannot be promptly reached at all hours and in all seasons, means shall be provided so that the transmitting apparatus can be turned on and off at will from a point that readily is accessible at all hours and in all seasons.

(2) The transmitter also shall be equipped with suitable automatic circuits that will place it in a nonradiating condition in the absence of a signal on the input channel or circuit.

(3) The transmitting and the ON/OFF control, if at a location other than the transmitter site, shall be adequately protected against tampering by unauthorized persons.

(4) The FCC shall be supplied with the name, address, and telephone number of a person or persons who may be called to secure suspension of operation of the transmitter promptly should such action be deemed necessary by the FCC. Such information shall be kept current by the licensee.

(5) In cases where the antenna and supporting structure are considered to be a hazard to air navigation and are required to be painted and lighted under the provisions of Part 17 of the Rules, the licensee shall made suitable arrangements for the daily observations, when required, and lighting equipment inspections required by §§17.37 and 17.38 of the FCC rules.

(6) In the case of a low power TV or TV translator station using modulating equipment, observation of the transmitted program signal on a suitable receiver shall be made for at least 10 continuous minutes each day by a person designated by the licensee, who shall institute measures sufficient to assure prompt correction of any condition of improper operation that is observed.

(b) An application for authority to construct a new low power TV station (when rebroadcasting the programs of another station) or TV translator station or to make changes in the facilities of an authorized station, and that proposes unattended operation, shall include an adequate showing as to the manner of compliance with this Section.

34. Section 74.735 is amended by revising paragraphs (a), (b) [introduction only], (c), (d), and (e); and adding new paragraph (f) to read as follows:

§74.735 Power limitation.

(a) The power output of the final radiofrequency amplifier of a VHF low power TV or TV translator station, except as provided for in paragraphs (d) and (f) of this Section shall not exceed 0.01 kW peak visual power. A UHF station shall be limited to a maximum of 1 kW peak visual power, except as provided for in paragraph (f) of this Section. In no event shall the transmitting apparatus be operated with a power output in excess of the manufacturer's rating.

(b) In individual cases, the FCC may authorize the use of more than one final radio frequency amplifier at a single VHF or UHF station under the following conditions:

(1) * * *

* * * * *

(c) No limit is placed upon the effective radiated power that may be obtained by the use of horizontally or vertically polarized directive transmitting antennas, provided the provisions of §§74.705, 74.707, and 74.709 are met.

(d) VHF low power TV and TV translator stations authorized on channels listed in the TV table of allocations (see §73.606(b) of Part 73) will be authorized a maximum output power of the radio frequency amplifier of 0.1 kW peak visual power.

(e) The power output of the final radio amplifier of a VHF or UHF transmitter may be fed into a single transmitting antenna, or may be divided between two or more transmitting antennas or antenna arrays in any manner found useful or desirable by the licensee.

(f) A station proposing to use antenna(s) designed for circularly polarized radiation may be authorized to use a type accepted transmitter or parallel connected of two type accepted translator amplifiers to operate at peak visual output power of twice that specified under the maximum transmitter power limitations given above in this Section.

35. Section 74.736 is amended by revising paragraph (a) to read as follows:

§74.736 Emissions and bandwidth.

(a) The license of a low power TV or TV translator station station authorizes the transmissions of the visual signal by amplitude modulation (A5) and the accompaning aural signal by frequency modulation (F3).

* * * * *

36. Section 74.737 is revised in its entirety to read as follows:

§74.737 Antenna location.

(a) An applicant for a new low power TV or TV translator station or for a change in the facilites of an authorized station shall endeavor to select a site that will provide a line-of-sight transmission path to the entire area intended to be served and at which there is available a suitable signal from the primary station, if any, that will be retransmitted.

(b) The transmitting antenna should be placed above growing vegitation and trees lying in the direction of the area intended to be served, to minimize the possibility of signal absorption by foliage.

(c) A site within 8 kilometers of the area intended to be served is to be preferred if the conditions in paragraph (a) of this Section can be met.

(d) Consideration should be given to the accessibility of the site at all seasons of the year and to the availability of facilities for the maintenance and operation of the transmitting equipment.

(e) The transmitting antenna should be located as near as is practical to the transmitter to avoid the use of long transmission lines and the associated power losses.

(f) Consideration should be given to the existence of strong radio frequency fields from other transmitters at the site of the transmitting equipment and the possibility that such fields may result in the retransmissions of signals originating on frequencies other than that of the primary station being rebroadcast.

37. Section 74.750 is amended by revising the headnote and paragraphs (a), (b), (c) [introduction], (c)(3)(iii), (c)(7), (d) [introduction], (d)(1), (e)(1), (e)(2), (e)(3), and (g) to read as follows:

§74.750 Transmission system f cilities.

* * * * *

(d) Low power TV and TV translator transmitting equipment using a modulation process for either program origination or rebroadcasting must meet the following requirements:

(1) The equipment shall meet the requiirements of paragraphs (1)(1), (a)(2), (a)(3), (b)(1), and (b)(7) of §73.687.

* * * * *

(e) * * *

(1) Any manufacturer of apparatus intended for use at low power TV or TV translator stations may request type acceptance by following the procedures set for in Part 2, Subpart J, of this Chapter. Equipment found to be acceptable by the FCC will be liated in the "Radio Equipment List" published by the FCC. These lists are available for inspection at the FCC headquarters in Washington, D.C. or at any of its field offices.

(2) Low power TV and TV translator transmitting apparatus that has been type accepted by the FCC will normally be authorized without additional measurements from the applicant or licensee.

(3) Applications for type acceptance of modulators to be used with exisiting type accepted TV translator apparatus must include the specifications electrical and mechanical interconnecting requirements for the apparatus with which it is designed to be used.

* * * * *

(g) Low Power TV or TV translator stations installing new type accepted transmitting apparatus incorporating modulating equipment need not make equipment performance measurements and shall so indicate on the station license application. Stations adding new or replacing modulating equipment to existing low power TV or TV translator transmitting apparatus must have an operator holding a General Radiotelephone Operator License examine the transmitting system after installation. This operator must certify in the application for the station license that the transmitting equipment meets the requirement of paragraph (d)(1) of this Section. A raport of the methods, measurements, and results must be kept in the station records. However, stations using modulating equipment solely for the limited local origination of signals permitted by §74.731 need not comply with the requirements of this paragraph.

The following rules are applicable to programs originated by low power TV stations:

(a) §73.658, "Affiliation agreements and network program practices; territorial exclusivity in non-network program arrangements."

(b) §73.1202, "Station identification."

(c) §73.1205, "Fraudulent billing practices."

(d) §73.1206, "Broadcast of telephone conversations."

(e) §73.1207, "Rebroadcasts."

(f) §73.1208, "Broadcast of taped, filmed, or recorded material."

(g) §73.1211, "Broadcast of lottery information."

(h) §73.1212, "Sponsorship identification; list retention; related requirements."

(i) §73.1216, "Licensee-conducted contests."

(j) §73.1940, "Broadcasts by candidates for public office."

(k) §73.2080, "Equal employment opportunities."

(l) Part 73, Subpart G, "Emergency Broadcast System."

48. Section 74.783 is amended by revising the introduction of paragraph (a) and paragraph (c) and adding new paragraph (d) to read as follows:

§74.783 Station identification.

(a) Each TV translator station over 0.001 kW peak visual power (0.002 kW when using circularly polarized antennas) must transmit its station identification as follows:

(1) * * *

* * * * *

(c) A low power TV station shall comply with the station identification procedures given in §73.1201 of Part 73 when originating programming (See Section 74.701(g)). The identification procedures given in paragraphs (a) and (b) are to be used when programs of another station are being rebroadcast.

(d) Call signs for low power TV and TV translator stations will be made up of the initial letter K or W followed by the channel number assigned to the station and two additional letters. The use of the initial letter generally will follow the pattern used in the broadcast serice, i.e., stations west of the Mississippi River will be assigned an initial letter K and those east, the letter W. The two letter combinations following the channel number will be assigned in order and requests for the assignment of the particular combinations of letters will not be considered. The channel number designator for Channels 2 through 9 will be incorporated in the call sign as a 2-digit number, i.e., 02, 03,...., so as to avoid similarities with call signs assigned to amateur radio stations.

49. Section 74.784 is amended by revising paragraphs (b) and (c) and adding new paragraph (d) to read as follows:

§74.784 Rebroadcasts.

* * * * *

(b) The licensee of a low power TV or TV translator station shall not rebroadcast the programs of any other TV broadcast station or other station authorized under the provisions of this Subpart without obtaining prior consent of the station whose signals or programs are proposed to be retransmitted. The FCC shall be notified of the call letters of each station rebroadcast and the licensee of the low power TV or TV broadcast translator station shall certify that written consent has been obtained from the licensee of the station whose programs are retransmitted.

(c) A TV translator station may rebroadcast only programs and signals that are simultaneously transmitted by a TV broadcast station.

(d) The provisions of §73.1207 of Part 73 apply to low power TV stations in transmitting any material during periods of program origination obtained from the transmissions of any other type of station.

50. Section 74.832 is amended by revising paragraphs (a)(1) and (c) to read as follows:

§74.832 Licensing requirements and procedures:

(a) * * *

(1) A licensee of an AM, FM, TV, or International broadcast station or low power TV station. Low power auxiliary stations will be licensed for use with a specific broadcast or low power TV station or combination of stations licensed to the same licensee within the same community.

* * * * *

(c) Licensees of AM, FM, TV, and International broadcast stations; low power TV stations; and eligible network entities may be authorized to operate low power auxiliary stations in the frequency bands set forth in §74.802(a).

51. Section 76.501 is amended by revising paragraph (a)(2) and deleting paragraph (a)(3) in its entirety as follows:

§76.501 Cross-ownership

(a) * * *

(1) * * *

(2) A TV broadcast station whose predicted Grade B contour, computed in accordance with §73.684 of Part 73, overlaps in whole or in part the service area of such system (i.e., the area within which the system is serving subscribers).

(3) [Deleted.]

52. Section 76.605 is amended by revising paragraph (a)(9)(iii) to read as follows:

§76.605 Technical standards.

(a) * * *

* * * * *

(9) * * *

* * * * *

(iii) Each signal that is first received by the cable television system by direct video feed from a TV broadcast station or a low power TV station.

* * * * *

53. Section 78.1 AMENDED;

The last sentence in Section 78.1 is revised to read as follows:

In addition CARS stations may be used to transmit television and related audio signals to TV translator and low power TV stations.

54. Section 78.11 AMENDED.

The first sentence of Section 78.11, paragraph (a) is revised to read as follows:

CARS stations are authorized to relay TV broadcast and low power TV and related audio signals, the signals of AM and FM broadcast stations, signals of instructional TV fixed stations, and cablecasting intended for use by one or more cable television systems.

APPENDIX B

Federal Communications Commission
Washington, D.C. 20554

Instructions for FCC 346
Application For Construction Permit For Auxiliary Broadcast Station

(FCC Form 346 attached)

GENERAL INSTRUCTIONS

A. This FCC form is to be used to apply for authority to construct a new auxiliary broadcast station, or to make changes in the existing facilities of such a station. It consists of the following sections:

I. GENERAL INFORMATION
II. LEGAL QUALIFICATIONS
III. FINANCIAL QUALIFICATIONS
IV. PROGRAM SERVICE STATEMENT
V. ENGINEERING DATA AND ANTENNA AND SITE INFORMATION
VI. EQUAL EMPLOYMENT OPPORTUNITY PROGRAM
VII. CERTIFICATION

An applicant for a change in facilities need not file Sections II, III, IV and VI.

B. Prepare and submit three copies of this form and all exhibits to: The Secretary
Federal Communications Commission
Washington, D.C. 20554

C. Many references to FCC Rules (47 CFR) are made in this application form. Before filling it out, the applicant should have on hand and be familiar with current broadcast rules in:

(1) Volume I: Parts 0 ("Commission Organization"), 1 ("Practice and Procedure"), and 17 ("Construction Marking and Lighting of Antenna Structures").

(2) Volume III: Part 73 ("Radio Broadcast Services").

FCC Rules may be obtained through the Government Printing Office, Washington, D.C. 20402. Orders should be sent directly to the Government Printing Office (not through the FCC). The printed rules are sold on a subscription basis, which entitles the purchaser to receive subsequent amendments to the rule part purchased until an overall revised edition is printed. You may telephone the Government Printing Office at (202) 783-3238.

D. Public Notice Requirement:

(1) Section 73.3580 of the Commission's Rules requires that applicants for construction permits for new broadcast stations and major changes in existing facilities (as defined in Section 73.3572(a)(1) or 73.3573(a)(1) of the Rules) give local notice in a newspaper of general circulation in the community to which the station is licensed. This publication requirement also applies with respect to major amendments thereto as defined in Sections 73.3572(b) and 73.3573(b) of the Rules.

(2) Completion of publication may occur within 30 days before or after tendering of the application. Compliance or intent to comply with the public notice requirement must be certified in Section VI of this application. The information that must be contained in the notice of filing is described in Paragraph (f) of Section 73.3580 of the Rules. Proof of publication need not be filed with this application.

E. A copy of this completed application and all related documents shall be made available for inspection by the public, pursuant to Section 73.3526 of the FCC Rules.

F. Replies to questions in this form and the applicant's statements constitute representations on which the FCC will rely in considering the application. Thus, time and care should be devoted to all replies, which should reflect accurately the applicant's responsible consideration of the questions asked. Include all information called for by this application. If any portions of the application are not applicable, so state. Defective or incomplete applications will be returned without consideration. Furthermore, inadvertently accepted applications are also subject to dismissal.

38. Section 74.751 is amended by revising paragraphs (b)(1), (b)(2), (b)(6), and (c), and adding new paragraph (d) to read as follows:

§74.751 Equipment changes.

(b) * * * * * * * * * *

(1) Replacement of the transmitter as a whole, except replacement with a transmitter of identical power rating which has been type accepted by the FCC for use by low power TV and TV translator stations, or any change which could result in a change in the electrical characteristics or performance of the station.

(a) Application for new low power TV and TV translator ions and for increased transmitter power for previously orized facilities will not be accepted unless the transmitter lated in the FCC's list of equipment type accepted for nsing under the provisions of this Subpart.

(2) Any change in the transmitting antenna system, including the direction of radiation, directive antenna pattern, antenna gain, transmission line loss characteristics, or height of antenna center of radiation.

* * * * *

(6) Any changes in the location of the transmitter except within the same building or upon the same pole or tower.

* * * * *

(c) Other equipment changes not specifically referred to in paragraph (a) or (b) above many be made at the discretion of the licensee, provided that the Engineer in Charge of the Radio District in which the low power TV or TV translator station is located and the FCC in Washington, D.C., are notified in writing upon completion of such changes, and that the changes are appropriately reflected in the next application for renewal of the station license.

(d) Upon installation of new or replacement transmitting equipment for which prior FCC authority is not required under the provisions of this Section, the licensee must place in the station records a certification that the new installation complies in all respects with the technical requirements of this part and the station authorization.

* * * * *

39. Section 74.761 is amended by revising the introduction and adding new paragraph (d) to read as follows:

§74.761 Frequency tolerance.

The licensee of a low power TV or TV translator station shall maintain the transmitter output frequencies as set forth below. The frequency tolerance of stations using direct frequency conversion of a received signal and not engaging in offset carrier operation as set forth in paragraph (d) of this Section will be referenced to the authorized plus or minus 10 kHz offset, if any, of the primary station.

(iii) plus or minus 1 kHz of its rated frequency for transmitters to be used at stations employing offset carrier frequency operation.

* * * * *

(5) The apparatus must be equipped with automatic controls that will place it in a non-radiating condition when no signal is being received on the input channel, either due to absence of a transmitted signal or failure of the receiving portion of the facilities used for rebroadcasting the signal of another station. The automatic control may include a time delay feature to prevent interruptions caused by fading or other momentary failures of the incoming signal.

(6) * * *

(7) The transmitters of over 0.001 kW peak visual power (0.002 kW when circularly polarized antennas are used) shall be equipped with an automatic keying device that will transmit the call sign of the station, in International Morse Code, at lease once each hour during the time the station is in operation when operating in the translator mode retransmitting the programming of a TV broadcast station. However, the identification by Morse Code is not required if the licensee of the low power TV or TV translator station has an agreement with the TV broadcast station being rebroadcast to transmit the aurally or visually the low power TV or TV translator station call as provided for in §74.783. Transmission of the call sign can be accomplished by:

(i) * * *

(b) Transmitting antennas, antennas used to receive the signals to be rebroadcast, and transmission lines are not type accepted by the FCC. External preamplifiers also may be used provided that they do not cause improper operation of the transmitting equipment, and use of such preamplifiers is not necessary to meet the provisions of paragraph (c) of this Section.

(c) The following requirements must be met before low power TV and TV translator transmitters will be type accepted by the FCC:

(1) * * *

* * * * *

(d) The visual carrier shall be maintained to within 1 kHz of the assigned channel carrier frequency if the low power TV or TV translator station is authorized with a specified offset designation in order to provide protection under the provisions of §74.705 or §74.707 of this Part.

40. Section 74.762 is amended in its entirety to read as follows:

§74.762 Frequency measurements.

(a) The licensee of a low power TV or TV translator station is not required to provide a means for measuring the operating fraquencies of the transmitter. However, only equipment having the required stability will be type accepted for use by low power TV or TV translator stations.

(b) In the event that a low power TV or TV translator station is found to be operating beyond the frequency tolerance prescribed in §74.761, the licensee promptly shall suspend operation of the transmitter and shall not resume operation until transmitter has been restored to its assigned frequencies. Adjustment of the frequency determining circuits of the transmitter shall be made only by a qualified person in accordance with §74.750(g).

41. Section 74.763 is revised by amending paragraphs (a) and (c) to read as follows:

§74.763 Time of operation.

(a) A low power TV or TV translator station is not required to adhere to any regular schedule of operation. However, the licensee of a TV translator station is expected to provide service to the extent that such is within its control and to avoid unwarranted interruptions in the service provided.

* * * * *

(c) Failure of a low power TV or TV translator station to operate for a period of 30 days or more, except for causes beyond the control of the licensee, shall be deemed evidence of discontinuation of operation and the license of the station may be cancelled at the discretion of the FCC.

* * * * *

42. Section 74.764 is revised in its entirety to read as follows:

§74.764 Station inspections.

The licensee of a low power TV or TV translator station shall make the station and the records required to be kept by the rules in this Part available for inspection by representatives of the FCC.

43. Section 74.765 is amended in its entirety to read as follows:

§74.765 Posting of station and operator licenses.

(a) The station license and any other instrument of authorization or individual order concerning the construction of the station or manner of operation shall be kept in the station record file so as to be available for inspection upon request of authorized representatives of the FCC.

(b) The licenses or permits of operators employed at low power TV stations originating programs shall be posted in accordance with the provisions of §73.1230(b) of Part 73.

(c) The call sign of the station, together with the name, address, and telephone number of the licensee or local representative of the licensee, if the licensee does not reside in the community served by the station, and the name and address of the person and place where the station records are maintained, shall be displayed at the transmitter site on the structure supporting the transmitting antenna, so as to be visible to a person standing on the ground. The display shall be maintained in legible condition by the licensee.

44. Section 74.766 is amended by revising the headnote and adding new paragraph (e) to read as follows:

§74.766 Low power TV and TV translator operator requirements.

* * * * *

(e) An operator holding any class of FCC operator license or permit, except the Marine Operator Permit, must be on duty in charge of the transmitting apparatus of a low power TV station during all periods of program origination as defined in Section 74.701(g).

G. In accordance with Section 1.65 of the Rules, the applicant has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in the information furnished.

SECTION I INSTRUCTIONS

A. The name of the applicant stated in Section I shall be:

(i) if a corporation, the EXACT corporate name;
(ii) if a partnership, the names of all partners, and the name under which the partnership does business;
(iii) if an association, the name of the individual(s) authorized to act on behalf of the association, and the name of the association;
(iv) if an individual applicant, the full legal name.

In all other sections of this form, the organization name alone will be sufficient for identification of the applicant.

B. In Section I use the following State abbreviations:

Alabama	AL	Kentucky	KY	Ohio	OH
Alaska	AK	Louisiana	LA	Oklahoma	OK
American Samoa	AS	Maine	ME	Oregon	OR
Arizona	AZ	Maryland	MD	Pennsylvania	PA
Arkansas	AR	Massachusetts	MA	Puerto Rico	PR
California	CA	Michigan	MI	Rhode Island	RI
Colorado	CO	Minnesota	MN	South Carolina	SC
Connecticut	CT	Mississippi	MS	South Dakota	SD
Delaware	DE	Missouri	MO	Tennessee	TN
District of Columbia	DC	Montana	MT	Texas	TX
Florida	FL	Nebraska	NB	Trust Territory Of The Pacific	
Georgia	GA	Nevada	NV	Islands	TT
Guam	GU	New Hampshire	NH	Utah	UT
Hawaii	HI	New Jersey	NJ	Vermont	VT
Idaho	ID	New Mexico	NM	Virginia	VA
Illinois	IL	New York	NY	Virgin Islands	VI
Indiana	IN	North Carolina	NC	Washington	WA
Iowa	IA	North Dakota	ND	West Virginia	WV
Kansas	KS	Northern Mariana Islands	CM	Wisconsin	WI
				Wyoming	WY

SECTION II INSTRUCTIONS

A. As used in Section II, the words "party to this application" have the following meanings:

INDIVIDUAL APPLICANT: The applicant.

PARTNERSHIP APPLICANT: All partners, including limited partners. If any partner is a corporation or other entity, the definitions set forth below will apply.

CORPORATE APPLICANT: All officers and directors, and all persons or entities who are the beneficial or record owners or have the right to vote any capital stock, membership or owner interest, or subscribers to such interests, shall be considered parties to this application. If any corporation or other legal entity owns stock in the applicant, its officers, directors and persons or entities who are the beneficial or record owners or have the right to vote any capital stock, membership or owner interest, or subscribers to such interest, of that entity shall also be considered parties to this application.

In the event the applicant has more than 50 stockholders, only officers and directors and persons or entities who are the beneficial or record owners or have the right to vote 1% or more of the capital stock, membership or owner interest, or subscribers to such interest shall be considered parties to this application. However, if such entity is a bank, insurance company, or investment company (as defined by 15 U.S.C. §80a-3) which does not invest for purposes of control, the relevant stock, membership or owner interest is 5% or more. If any corporation or other legal entity owns 1% or more of an applicant with more than 50 stockholders, its officers, directors and all persons or entities who are the beneficial or record owners or have the right to vote 1% or more of the

capital stock, membership or owner interest, or subscribers to such interest in the entity, shall also be considered parties to this application. However, if such entity is a bank, insurance company or investment company (as defined by 15 U.S.C. §80-3) which does not invest for purposes of control, the relevant stock, membership or owner interest is 5% or more.

ANY OTHER APPLICANT: All executive officers, members of the governing board and owners or subscribers to any membership or ownership interest in the applicant.

B. All applicants must comply with Section 310 of the Communications Act of 1934, as amended. Specifically, Section 310 proscribes issuance of a construction permit to an alien, the representative of an alien, a foreign government or the representative thereof, or a corporation organized under the laws of a foreign government. This proscription also applies with respect to any corporation of which any officer or director is an alien or of which more than 20% of the capital stock is owned or voted by aliens, their representatives, a foreign government or its representative, or by a corporation organized under the laws of a foreign country. This proscription could likewise apply to any corporation directly or indirectly controlled by another corporation of which (a) any officer is, (b) more than 25% of the directors are, or (c) more than 25% of the capital stock is owned and voted by aliens, their representatives, a foreign government or its representative. The Commission may also deny a construction permit to a corporation controlled by another corporation organized under the laws of a foreign country.

C. The applicant must determine the citizenship of each officer and director. It must also determine the citizenship of each shareholder or else explain how it determined the relevant percentages. For large corporations, a sample survey using a recognized statistical method is acceptable for this purpose.

SECTION III INSTRUCTIONS

A. All applicants filing Form 346 must be financially qualified to effectuate their proposals. Certain applicants (i.e., for a new station, to reactivate a silent station, or if specifically requested by the Commission) must demonstrate their financial qualifications by filing Section III. DO NOT SUBMIT Section III if the application is for changes in operating or authorized facilities.

B. An applicant for a new station must attest it has sufficient net liquid assets on hand, or committed sources of funds to construct the proposed facility and operate for three months, without revenue. As used in Section III, "net liquid assets" means the lesser amount of the net current assets or of the liquid assets shown on a party's balance sheet, with net current assets being the excess of current assets over current liabilities.

C. Documentation supporting the attestation of financial qualification need not be submitted with this application but must be available to the Commission upon request. The Commission encourages that all financial statements used in the preparation of this application be prepared in accordance with generally accepted accounting principles.

D. It is Commission policy not to grant extension of time for construction on the basis of financial inability or unwillingness to construct.

SECTION VI INSTRUCTIONS

A. Applicants seeking authority to construct a new low power television (LPTV) broadcast station, applicants seeking authority to obtain assignment of the construction permit or license of such a station, and applicants seeking authority to acquire control of an entity holding such construction permit or license are required to afford equal employment opportunity to all qualified persons and to refrain from discriminating in employment and related benefits on the basis of race, color, religion, national origin or sex. See Section 73.2080 of the Commission's Rules. Pursuant to these requirements, an applicant who proposes to employ five or more full-time station employees must establish a program designed to assure equal employment opportunity for women and minority groups (that is, Blacks not of Hispanic origin, Asian or Pacific Islanders, American Indians or Alaskan Natives, and Hispanics). This is submitted to the Commission as the Model EEO Program Form. If minority group representation in the available labor force is less than five percent (in the aggregate), a program for minority group members is not required. However, a program must be filed for women since they comprise a significant percentage of virtually all area labor forces. If an applicant proposes to employ less than five full-time employees, no EEO program for women or minorities need be filed.

B. Guidelines for developing an Equal Employment Opportunity program are set forth as a separate Model EEO Program.

NOTE: This five-point Model EEO Program Form is to be utilized only by applicants for new construction permits, assignees and transferees.

SECTION I GENERAL INFORMATION FILE # _____

FCC FORM 346

1. _____
Name of Applicant

_____
Mailing Address

_____
City State Zip Code Telephone No.

2. This application is for: ___ FM Translator ___ LPTV ___ TV Translator

(a) Channel number: _____

(b) Community of license: _____
City State

(c) Check one:

____ New Station

____ Major change in existing station _____
Call Letters

____ Minor change in existing station _____
Call Letters

____ Amendment to pending application _____
Application Reference Number

____ Modification of Construction Permit _____
Construction Permit File Number

[NOTE] It is not necesary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information.

3. (a) Is this application mutually exclusive with a renewal application?

☐ YES ☐ NO

If Yes, state: Call letters: Community of license:

(b) To the applicant's knowledge, is this application mutually exclusive with any other application(s)?

☐ YES ☐ NO

If Yes, state: Call letters: Community of license:

4(a) Is translator applicant the licensee of primary station?

____ Yes; ____ No.

(b) If answer to 4(a) is no, has written authority been obtained from the licensee of the station whose programs are to be retransmitted?

____ Yes; ____ No.

5. Station Identification.

Indicate how station identification will be made:

____ FSK ____ Live or tape

____ By primary station ____ Amplitude modulation of FM Aural Carrier

____ Not required

6. Is type approved broadcast equipment being specified?

____ Yes ____ No If no, please indicate date equipment submitted to FCC Lab for approval.

7. Would a Commission grant of your application be major action as defined by Section 1.1305 of the Commission's Rules?

____ Yes If yes, submit as Exhibit No. _____ the required statement in accordance with Section 1.1311 of the Rules.

____ No If no, explain briefly.

8. If this application is for a new FM translator, have any funds, legal or engineering services or anything else of value been furnished, directly or indirectly, by the licensee or permittee of any FM broadcast station or any person associated with such station? If the answer is "Yes", attach an explanation as Exhibit No. , identifying the source and nature of the financial support or assistance.

___ Yes __ No

LEGAL QUALIFICATIONS

Section II
Applicant's Name: _____

1. Applicant is: ☐ an individual; ☐ a general partnership;

☐ a limited partnership; ☐ a corporation ☐ other

2. If the applicant is an unincorporated association or a legal entity other than an individual, partnership or corporation, describe in Exhibit No. _____ the nature of the applicant.

CITIZENSHIP AND OTHER STATUTORY REQUIREMENTS

		YES	NO
3. (a)	Is the applicant in compliance with the provisions of Section 310 of the Communications Acts of 1934, as amended, relating to interests of aliens and foreign goverments?	☐	☐
(b)	Will any funds, credit, etc., for the construction, purchase or operation of the station(s) be provided by aliens foreign entities, domestic entities controlled by aliens, or their agents?	☐	☐
	If yes, provide particulars as Exhibit No._____.		
4. (a)	Has an adverse finding been made, adverse final action taken or consent decree approved by any court or administrative body as to the applicant or any party to the application in any civil or criminal proceeding brought under the provisions of any law related to the following: any felony, antitrust, unfair competition, fraud, unfair labor practices, or discrimination?	☐	☐
(b)	Is there now pending in any court or administrative body any proceeding involving any of ther matters referred to in (a)?	☐	☐

If the answer to (a) or (b) above is yes, submit as Exhibit No._____, a full disclosure concerning the persons and matters involved, identifying the court or administrative body and the proceeding (by dates and file numbers), stating the facts upon which the proceeding was based or the nature of the offense committed, and disposition or current status of the matter.

OTHER MEDIA INTERESTS

	YES	NO
5. Does the applicant or any party to this application have any interest in or connection with the following:		
(a) an AM, FM or TV broadcast station?	____	____
(b) a broadcast application pending before the FCC?	____	____
(c) other non-broadcast media of mass communications, e.g. cable television, theatres and printed publications.	____	____
6. Has the applicant or any party to this application had any interest in:		
(a) an application which has been dismissed with prejudice by the Commission?	____	____
(b) an application which has been denied by the Commission?	____	____
(c) a broadcast station, the license which has been revoked?	____	____
(d) an application in any Commission proceeding which left unresolved character issues against the applicant?	____	____

If the answer to any of the questions in 5 is yes, state in Exhibit No. _____ the following information:

(i) Name of party having such interest;
(ii) Nature of interest or connection, giving dates;
(iii) Call letters of stations or file number of application, or docket number;
(iv) Location

MINORITY OWNERSHIP

7. Is the applicant over 50 percent minority owned? ____ Yes ____ No

If the answer is yes, state in Exhibit No. _____ for each minority owner:

(i) Name, address and percentage of ownership;

(ii) Minority group (e.g., Black not of Hispanic origin, Asian or Pacific Islander, American Indian or Alaskan native, and Hispanic).

SECTION III

FINANCIAL QUALIFICATIONS

NOTE: If this application is for a change in an operating facility, do not fill out this section.

	YES	NO
1. The applicant certifies that sufficient net liquid assets are on hand or are available from committed sources to construct and operate the requested facilities for three months without revenue.	☐	☐
2. The applicant certifies that: (a) it has a reasonable assurance of a present firm intention for each agreement to furnish capital or purchase capital stock by parties to the application, each loan by banks, financial institutions or others and each purchase of equipment on credit; (b) it can and will meet all contractual requirements as to collateral, guarantees, and capital investment; (c) it has determined that a reasonable assurance exists that all such sources (excluding banks, financial institutions and equipment manufacturers) have sufficient net liquid assets to meet these commitments.	☐	☐

SECTION IV

Program Service Statement

For LPTV (Including STV applicants) only:

1. LPTV stations must offer a broadcast program service: a non-program broadcast service will not be permitted. Therefore, submit as Exhibit No. _____, a brief description, in narrative form, of your planned programming service. STV applicants should provide a complete description of your proposed STV system including the manner in which you intend to provide decoders to the public.

ENGINEERING DATA

1. Facilities requested:

a. Output Channel No.	Transmitter Output Power (watts)	Proposed Principal Community or Communities to be served: City: State:	Primary Station (station to be rebroadcast) (Translator only) Call: Channel No. City: State: Frequency: MHz

b. Offset (Low Power TV and TV Translator Stations only)
___ No offset ___ Plus offset
___ Zero offset ___ Minus offset

c. Input Channel No.

If station is to operate via another translator station, indicate call sign and location of final intermediate translator:

2. Proposed transmitter location:

City	County	State

Address or other description of location	Geographical coordinates of transmitting antenna to nearest second North Latitude ° ' " West Longitude ° ' "

Attach as Exhibit No. a map or maps (preferably topographic, if obtainable, such as U. S. Geological Survey quadrangles) for the area of the proposed transmitter location and show drawn thereon the following data:

a. Scale of miles.
b. Proposed transmitter location accurately plotted.
c. Principal community to be served by the proposed TV or FM translator station, clearly identified and labeled.
d. Locations of all known radio stations (except amateur), such as AM, FM, TV, Translator, Police, Fire, Aeronautical, Public Utility, etc., and known commercial or government receiving sites, within the immediate vicinity of the proposed transmitter location.

3. Transmitter:

Make	Type No.	Rated output power (watts) P

4. Transmission line:

Make	Type No.	Length	Rated efficiency E for length given (decimal fraction)

5. Transmitting antenna

Manufacturer	Model No. 1/	Description 1/	Power gain G (multiplier) in lobe of maximum radiation relative to a half-wave dipole	Height of radiation center above mean sea level (ft)

Orientation 2/	Height above ground 3/	Elevation of Site 4/	Elevation of Community 5/	Effective radiated power R (R = F × E × G) (kW)

1. Give basic type using general descriptive terms such as half-wave dipole, "bow-tie" with screen, comer reflector, 10 element Yagi, 4 element in-phase array, two stacked 5 element Yagis, etc.
2. Show the direction of the main radiation lobe in degrees with respect to true north in a 360 degree horizontal azimuth, numbered clockwise, with true north as zero azimuth.
3. Show height to topmost portion of structure, including highest top mounted antenna and beacon if any.
4. Show the ground elevation above mean sea level at the base of the transmitting antenna supporting structure.
5. Show the average elevation of the community above mean sea level, or in lieu thereof, the commonly used elevation figure for the community to be served.

6. Attach as Exhibit No. a vertical plan sketch for the proposed total structure(s) including supporting structure(s), giving height of center of radiation above ground, overall height of structure above ground, including lighting beacon (if any) and height above mean sea level in feet for all significant features for BOTH RECEIVING AND TRANSMITTING ANTENNAS. Also indicate any horizontal separation between receiving transmitting antennas.

7. Will the proposed antenna supporting structure be shared with another station or stations of any class? ☐ YES ☐ NO
If the answer is "Yes", list the call signs and class of such stations.

8. Attach as Exhibit No. a polar diagram of the radiation pattern (relative field) of the transmitting antenna, showing clearly the correct relationship between the major lobe or lobes and the minor lobes of radiation. If a non-directive transmitting antenna will be employed, i.e., an antenna with an approximately circular radiation pattern, check this ☐ and omit the polar diagram.

9. Has FAA been notified of proposed construction? ☐ YES ☐ NO
If yes, give date and office where notice was filed.
(Not necessary to file FCC Form 714, See Part 17 of the rules.)

10. Unattended operation:

a. Is unattended operation proposed? ☐ YES ☐ NO
If the answer is "Yes", and this application is for authority to construct a new station or to make changes in the facilities of an authorized station which proposes unattended operation for the first time, attach Exhibit No. , containing a full description of the means of compliance with the several requirements of Section 74.734 (TV Translators) or Section 74.1234 (FM Translators) of the Rules concerning unattended operation.

b. In space below state name, address and telephone number of a person or persons who may be contacted in an emergency to suspend operation of the translator should such action be deemed necessary by the Commission:

Name(s)

Address (street or other description)

City & State. ZIP Code

Telephone number(s) (include area code)

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Date _____ Signature _____
(check appropriate box below)

Telephone _____
(include area code)

☐ Technical Director ☐ Chief Operator
☐ Registered Professional Engineer ☐ Other (Specify)
☐ Consulting Engineer

Section VI — Equal Employment Opportunity Program

1. Does the applicant propose to employ five or more fulltime employees? ☐ YES ☐ NO

If the answer is Yes, the applicant must include an EEO program called for in the separate 5 Point Model EEO Program.

Section VII — Certification

1. Has or will the applicant comply with the public notice requirement of Section 73.3580 of the Commission's Rules? ☐ YES ☐ NO

A copy of the text and dates of publication is attached as Exhibit No. _____.

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. *(See Section 304 of the Communications Act of 1934, as amended.)*

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with Section 1.65 of the Commission's Rules, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT.
U.S. CODE, TITLE 18, Section 1001.

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signed and dated this _____ day of _____, 19____.

_____ Name of Applicant

_____ Signature

_____

_____ Title

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal purpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously of attorneys, accountants, engineers, and application examiners, will use the information to determine whether the application should be granted, denied, dismissed, or designated for hearing. If all the information requested is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide all necessary information. Your response is required to obtain the requested Permit.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3)

United States of America
Federal Communication Commission
Washington, D.C. 20554

MODEL EEO PROGRAM

1. Name of Applicant | Street Address

City | State | Zip Code | Telephone No. (Include Area Code)

2. This form is being submitted in conjunction with:

☐ Application for Construction Permit for New Station

☐ Application for Assignment of License

☐ Application for Transfer of Control

(a) Call letters (or channel number or frequency) _____

(b) Community of License _____ City _____ State

INSTRUCTIONS

Applicants seeking authority to construct a new low power television broadcast station, applicants seeking authority to obtain assignment of the construction permit or license of such a station, and applicants seeking authority to acquire control of an entity holding such construction permit or license are required to afford equal employment opportunity to all qualified persons and to refrain from discriminating in employment and related benefits on the basis of race, color, religion, national origin or sex. See Section 73.2080 of the Commission's Rules. Pursuant to these requirements, an applicant who proposes to employ five or more fulltime station employees must establish a program designed to assure equal employment opportunity for women and minority groups (that is, Blacks not of Hispanic origin, Asians or Pacific Islanders, American Indians or Alaskan Natives and Hispanics.) This is submitted to the Commission as the Model EEO Program. If minority group representation in the available labor force is less than five percent *(in the aggregate)*, a program for minority group members is not required. In such cases, a statement so indicating must be set forth in the EEO model program. However, a program must be filed for women since they comprise a significant percentage of virtually all area labor forces. If an applicant proposes to employ less than five fulltime employees, no EEO program for women or minorities need be filed.

Guidelines for a Model EEO Program and a Model EEO Program are attached.

NOTE: Check appropriate box, sign the certification below and return to FCC:

☐ Station will employ less than 5 fulltime employees; therefore no written program is being submitted.

☐ Station will employ 5 or more fulltime employees. Our 5 point program is attached.

CERTIFICATION

I certify that the statements made herein are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signed and dated this_____ day of _____, 19___.

_____

Signature

_____

Title

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT U.S. CODE, TITLE 18, SECTION 1001.

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal purpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously of attorneys, accountants, engineers and application examiners, will use the information to determine whether the application should be granted, denied, dismissed, or designated for hearing. If all the information requested is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide all necessary information.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3).

GUIDELINES TO THE MODEL EEO PROGRAM

The model EEO program adopted by the Commission for construction permit applicants contains five sections designed to assist the applicant in establishing an effective EEO program for its station. The specific elements which should be addressed are as follows:

I. General Policy

The first section of the program should contain a statement by the applicant that it will afford equal employment opportunity in all personnel actions without regard to race, color, religion, national origin or sex, and that it has adopted an EEO program which is designed to fully utilize the skills of minorities and women in the relevant available labor force.

II. Responsibility for Implementation

This section calls for the name (if known) and title of the official who will be designated by the applicant to have responsibility for implementing the station's program.

III. Policy Dissemination

The purpose of this section is to disclose the manner in which the station's EEO policy will be communicated to employees and prospective employees. The applicant's program should indicate whether it: (a) intends to utilize an employment application form which contains a notice informing job applicants that discrimination is prohibited and that persons who believe that they have been discriminated against may notify appropriate governmental agencies; (b) will post a notice which informs job applicants and employees that the applicant is an equal opportunity employer and that they may notify appropriate governmental authorities if they believe that they have been discriminated against; and (c) will seek the cooperation of labor unions, if represented at the station, in the implementation of its EEO program and in the inclusion of nondiscrimination provisions in union contracts. The applicant should also set forth any other methods it proposes to utilize in conveying its EEO policy (e.g., orientation materials, on-air announcements, station newsletter) to employees and prospective employees.

IV. Recruitment

The applicant should specify the recruitment sources and other techniques it proposes to use to attract minority and female job applicants. Not all of the categories of recruitment sources need be utilized. The purpose of the listing is to assist the applicant in developing specialized referral sources to establish a pool of minorities and women who can be contacted as job opportunities occur. Sources which subsequently prove to be nonproductive should not be relied on and new sources should be sought.

V. Training

Training programs are not mandatory. Each applicant is expected to decide, depending upon its own individual situation, whether a training program is feasible and would assist it in its effort to increase the pool of available minority and female applicants. Additionally, the applicant may set forth any other assistance it proposes to give to students, schools or colleges which is designed to be of benefit to minorities and women interested in entering the broadcasting field. The beneficiary of such assistance should be listed, as well as the form of assistance, such as contributions to scholarships, participation in work study programs, and the like.

( ) When we recruit prospective employees from educational institutions such recruitment efforts will include area schools and colleges with significant minority and female enrollments. Educational institutions to be contacted for recruitment purposes are:

_____

_____

_____

( ) When utilizing media for recruitment purposes, help-wanted advertisements will always include a notice that we are an Equal Opportunity Employer and will contain no indication, either explicit or implied, of a preference for one sex over another.

( ) When we place employment advertisements in printed media some of such advertisements will be placed in media which have significant circulation or are of particular interest to minorities and women. Examples of publications to be utilized are:

_____

_____

_____

( ) We will encourage employees, particularly minority and female employees, to refer minority and female candidates for existing and future job openings.

V. Training

( ) Station resources and/or needs will be such that we will be unable or do not choose to institute specific programs for upgrading the skills of employees.

( ) We will provide on-the-job training to upgrade the skills of employees.

( ) We will provide assistance to students, schools or colleges in programs designed to enable minorities and women to compete in the broadcast employment market on an equitable basis:

School or Other Beneficiary	Proposed Form of Assistance
_____	_____
_____	_____
_____	_____

( ) Other (Specify)

_____	_____
_____	_____
_____	_____

MODEL EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

I. General Policy

It will be our policy to provide equal employment opportunity to all qualified individuals without regard to their race, color, religion, national origin or sex in all personnel actions including recruitment, evaluation, selection, promotion, compensation, training and termination.

It will also be our policy to promote the realization of equal employment opportunity through a positive, continuing program of specific practices designed to ensure the full realization of equal employment opportunity without regard to race, color, religion, national origin or sex.

To make this policy effective, and to ensure conformance with the Rules and Regulations of the Federal Communications Commission, we have adopted an Equal Employment Opportunity Program which includes the following elements:

II. Responsibility for Implementation

(Name/Title) _____, will be responsible for the administration and implementation of our Equal Employment Opportunity Program. It will also be the responsibility of all persons making employment decisions with respect to recruitment, evaluation, selection, promotion, compensation, training and termination of employees to ensure that our policy and program is adhered to and that no person is discriminated against in employment because of race, color, religion, national origin or sex.

III. Policy Dissemination

To assure that all members of the staff are cognizant of our equal employment opportunity policy and their individual responsibilities in carrying out this policy, the following communication efforts will be made:

( ) The station's employment application form will contain a notice informing prospective employees that discrimination because of race, color, religion, national origin or sex is prohibited and that they may notify the appropriate local, State or Federal agency if they believe they have been the victims of discrimination.

( ) Appropriate notices will be posted informing applicants and employees that the station is an Equal Opportunity Employer and of their right to notify an appropriate local, State, or Federal agency if they believe they have been the victims of discrimination.

( ) We will seek the cooperation of unions, if represented at the station, to help implement our EEO program and all union contracts will contain a nondiscrimination clause.

( ) Other (specify)

IV. Recruitment

To ensure nondiscrimination in relation to minorities and women, and to foster their full consideration in filling job vacancies, we propose to utilize the following recruitment procedures:

( ) We will attempt to maintain systematic communication, both orally and in writing, with a variety of minority and women's organizations to encourage the referral of qualified minority and female applicants. Examples of organizations we intend to contact are:

_____ _____
_____ _____
_____ _____
_____ _____

( ) In addition to the organizations noted above, which specialize in minority and female candidates, we will deal only with employment services, including State employment agencies, which refer job candidates without regard to their race, color, religion, national origin or sex. Examples of these employment referral services are:

_____
_____
_____

Attachment 1 to FCC Form 346

The following information may be submitted at the option of applicants. However, applications containing the requested information will be processed at a faster rate than applications not containing such information. In the latter case, the Commission's limited staff will be required to compute the data manually and processing will, therefore, require substantially more time.

Attach as Exhibit No. _____ an allocation study utilizing topographic maps or an accurate full scale reproduction thereof and using pertinent field strength measurement data where available, a full scale exhibit of the entire pertinent area to show the following:

(a) Normally protected and the interfering contours for the proposed operation along all azimuths.

(b) Normally protected and interfering contours of existing stations and other proposed stations in pertinent areas with which prohibited overlap would result as well as those existing stations and other proposals which require study to clearly show absence of prohibited overlap.

(c) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers, and operating or proposed facilities.

(d) Properly labeled longitude and latitude degree lines, shown across entire exhibit.

APPENDIX E

Tiered Application Processing Procedures for Pending Applications

1. The Commission currently is confronted with an unprecedented processing backlog of more than 6,500 applications for television translators and low power stations. While herein we adopt channel allocation standards tailored to rapid computerized interference analysis, the full implementation of this capability cannot be realized for at least the next 12 months. During this period, the processing staff faces the enormous task of identifying mutually exclusive applications on an essentially manual basis. 1/ We also are confronted by a situation in which a sizeable majority of the applications propose service in the larger television markets. We estimate that approximately one half of the applications are associated with the top 50 television markets and 70 percent with the top 100 markets. In contrast, only 15 to 20 percent propose to locate outside of any ranked market, i.e., outside a market having at least one commercial television station. We recognize that these percentages do not reflect the extent to which numerous applicants compete for relatively few available channels in the largest markets. Nonetheless, we are concerned that this imbalanced demographic array of the pending applications could frustrate near-term attainment of one of our principal goals in this proceeding: to provide programming, including local outlets, in unserved and lesser-served rural areas. We believe the public interest would be served by our adopting a processing hierarchy that would facilitate the expeditious authorization of service to rural areas. In view of the circumstances, we believe the best vehicle for achieving this objective is a transitional "tiered" processing system, in which the application backlog is subdivided into a number of prioritized groups of applications on the basis of the extent of existing television diversity. Once the present backlog has been eliminated (in three phases), and only then, will we lift the freeze on the filing of television translator and low power applications.

2. In general terms, the tiered processing system will function in the following manner. We shall identify and make public lists of applications as either TIER I, TIER II or TIER III applications, classified on the basis of market location. We envision three stages of processing pending applications, including freeze-exempt applications. During the initial phase only TIER I and freeze-exempt applications will be processed. All pending freeze-exempt applications as of the effective date of this Report and Order will be treated as TIER I applications. During the second stage, only pending TIER II and freeze-exempt applications (as these are filed) will be considered. TIER I applications still awaiting grant or denial (some may be awaiting hearing) will be accorded "protected" status in terms of our contour overlap standards. During this second stage, newly-received freeze-exempt applications will be accorded equal protection status with pending TIER II applications. The freeze will be lifted only for competing TIER II filings. Finally, the Commission will enter into the third stage, in which the remaining pending TIER III applications will be considered. At this stage, TIER III applications must protect yet-undisposed TIER I and II applications. Freeze-exempt applications received during this stage will be treated as TIER III applications. The Commission will announce publicly the completion of each stage of processing.

3. The three tier classifications will be defined in terms of the Commission's ranking of television size as contained in the Public Notice encaptioned "Television Channel Utilization" (Public Notice dated March 25, 1981, mimeo number 07820). This report ranks markets from one to 212. For purposes of tiered processing, we define the boundary of a market as a 55-mile circle centered about the reference coordinates of the principal market city or town (cities or towns in the case of hyphenated markets). 2/ The 55-mile radius is roughly equivalent to the predicted Grade B coverage area of a full service UHF television station operating at maximum power. Thus, TIER I will consist of those applications proposing to locate the transmitting antenna at a distance of more than 55 air miles from any FCC-ranked television market. TIER II will consist of those additional applications proposing a location within 55 miles from the reference coordinates of all ranked markets from 101 through 212. TIER III will comprise the remaining applications proposing location within 55 miles of the reference coordinates of all ranked markets from one through 100, inclusive. Hereinafter, we shall eliminate the freeze exemption pertaining to the number of television services received. In its place, we shall consider any prospective applicant meeting TIER I qualifications to be freeze exempt. The remaining two freeze exemptions will remain unchanged. 3/

4. We believe that this tiered processing approach is consistent with the public interest and represents the best means of addressing the application backlog until a fully automated system of processing can be implemented. During the initial stage, the staff will be required to make its determinations through analysis of only 15 to 20 percent of the pending applications. Upon commencement of the last stage, involving some 70 percent of the applications, we expect to have a fully automated processing capability. Second, and perhaps of greater significance, the tiered processing approach will provide greater opportunities for increased service, beginning with the least-served rural areas, a major goal of this proceeding. 4/

5. We recognize that, in affording priority to rural applicants, we may be precluding timely-filed non-rural applications that may be mutually exclusive with rural applications. To alleviate this situation and to preserve any rights that may be argued to have accrued on behalf of non-rural applicants, where a group of mutually exclusive applications includes applications that would fall into a tier to be processed later, the entire group will be deferred until we reach the later tier. That is, if an otherwise exclusively TIER I group contains one or more applications that do not meet the standard for processing during TIER I (more than 55 miles from any ranked market) but fall within TIER II or III, we will defer processing of the group until TIER II (or III) applications are to be processed. The same will hold true when TIER II groups contain TIER III applications. Only in this manner can we ensure that urban channel availabilities will not be precluded by tiered processing of rural applications. With this exception, we believe that tiered processing is fully justified, both on policy and administrative grounds. Provision of service to rural areas that currently are unserved or underserved is an objective that the low power service is particularly suited to carry out. The cost of constructing and operating a full service station often is prohibitive in sparsely-populated rural areas. The lower cost of a low power television may facilitate the introduction of local television service in such areas. However, saddling rural applicants with the costs and delays associated with hearings involving urban applicants as well would raise the entry costs considerably and could discourage applicants from attempting to provide service to rural areas. Additionally, giving priority to rural applicants comports with our mandate under Section 307 (b) of the Communications Act to allocate spectrum in an equitable, fair and efficient manner, and with the way we interpret Section 307(b) as it applies to the low power service. See, paragraph 61 of the Report and Order. Moreover, applications in TIERS II and III appear to contemplate additional television service to areas and populations already receiving multiple services, whereas TIER I applications would bring needed service to unserved or underserved rural areas and populations. Affording processing priority to the latter group would appear to comport with our Section 307(b) obligations. Finally, all interim applicants have been on notice from the outset of this proceeding that their applications and/or interim authorizations would be conditioned upon the outcome of the rule making, so that no inalterable rights can be argued to have accrued.

6. In the near term, between of adoption of the Report and Order and employment of fully computerized processing methods, the tier system will be of little assistance in expediting authorization of service due to the necessarily tedious nature of manual processing using complex engineering criteria. However, with the advent of the computer as a processing tool, the tier system will aid in increasing the number of authorizations because it will reduce the numbers of mutually exclusive applications that must be considered together in chain sequences. This also will expedite the hearing process.

1/ To this end, we are requesting additional topographical information from present applicants that could greatly facilitate our manual processing. See, note 25 of the Report and Order.

2/ We shall utilize the reference coordinates for cities and towns specified in the publication "Airline Distances Between Cities and Towns in the United States," published by the U.S. Department of Commerce, Special Publication No. 238, available from the Superintendant of Documents, United States Government Printing Office, Washington, D.C. 20402. If this publication does not contain the reference coordinates, the coordinates given in the National Atalas Index of the main post office in the principal market city(ies) will be used.

3/ The other exceptions are applications for major amendments to change frequency from Channels 70 through 83 or to change frequency to resolve interference to or from full service stations.

STATEMENT OF
CHAIRMAN MARK S. FOWLER
IN WHICH COMMISSIONER MIMI WEYFORTH DAWSON
JOINS

Re: LOW POWER TELEVISION

Low power television may not have the transmission capabilities of full broadcast television, but its capacity to provide televised programming that is directly responsive to the interests of smaller audience segments makes it truly unique in its ability to expand consumer choices in video programming. From this perspective, the power of these stations may be low, but their potential is enormous.

I fear, however, that the majority may not realize how their vote to impose a one year trafficking limitation on low power facilities may undercut the potential for this service to provide an outlet for new broadcast entrepreneurs, particularly minorities and nonprofit groups, to enter the market. We cannot ignore the fact that the low power service will be inaugurated during a time when financing costs pose a significant barrier to capital investment. It will be difficult enough for these new entrants to obtain financial backing without the added burden that this limitation on the disposability of the facility will impose. Against this very real concern, the majority's speculations as to possible problems that might arise absent a rule seem all the less compelling as a pretext for a general proscription.

Absent a showing of need for government interference in the marketplace, the burden for imposing regulation should lie with those proposing regulation with the presumption in favor of non-interference. I find no argument of the majority overcoming the presumption in favor of non-interference and, therefore, dissent to this aspect of the order.

March 4, 1987

DISSENTING - IN PART - STATEMENT OF COMMISSIONER ABBOTT WASHBURN

RE: Low Power Television, BC Docket No. 78-253

The absence of any limitation on multiple ownership of this new low power service is inconsistent with the Commission's long-standing limitation on ownership of conventional television stations and of AM and FM stations. Currently, ownership of each of these three services is limited to seven stations per licensee. Such limits have proved valuable in preventing concentration (chain ownership) of these facilities and in encouraging diversity of voices of opinion. It would have been in the public interest to include a similar provision here for low power television. Therefore, I dissent to that portion of today's decision which permits unlimited ownership of low power stations.

I also dissent to the majority's abandonment of the proposed preference for noncommercial applicants. As both the Congress by statute and the Commission by our decisions have affirmed repeatedly: there is an important place for public broadcasting in our society. But the tremendous number of applications for LPTV, only 6% of which are noncommercial applicants, suggests that we cannot be sure that noncommercial licensees will occupy that place in low power television unless we award a comparative preference to noncommercial licensees. Similarly, the record before us does not persuade me that a completely open and unregulated market environment will assure diversity of programming. Specifically, programming which appeals to special or limited audiences will not survive in a commercial marketplace environment where success is largely determined by broad audience appeal.* The Commission recognizes this fact in preserving the comparative preference for minority low power applicants (see Footnote 62). I regret that my colleagues' desire to maximize diversity of programming for the public does not extend to awarding a preference to noncommercial applicants.

Finally, I caution the Commissioners to keep a close watch on the hearing procedures under which decisions in mutually exclusive low power cases are to be made by the Commission in the first instance. It may happen that contrary to our goal of expediting establishment of the new low power service, resolution of mutually exclusive cases by the Commission itself without the helpful assistance of an Administrative Law Judge's Initial Decision and review by the Review Board will prove to be too cumbersome and burdensome. It is possible that a total of 10,000 to 12,000 additional applications will be received. Our staff estimates that three quarters of these are likely to be mutually exclusive. Such a flood of LPTV paperwork could end up seriously impeding the other work of the Commissioners and their staffs.

* An example of this is children's television programming which today, in quality and quantity, is so well handled on public television.

SEPARATE STATEMENT

OF

COMMISSIONER JOSEPH R. FOGARTY

In Re: Low Power Television Broadcasting--Report and Order.

This Report and Order begins to clear the way for Low Power Television (LPTV) to have its chance in the telecommunications marketplace. The regulatory framework established by this decision gives LPTV the opportunity to prove its promise of enhanced program service diversity and increased minority ownership without jeopardizing the technical integrity or continued development of the full service television station system.

Because of the uncertain viability of this new and secondary LPTV service and the herculean administrative task of processing the 6,000 low power applications now pending before the Commission, this Report and Order wisely and appropriately prescribes a minimum of governing regulation. At the same time, however, I also believe that the tiered processing system and comparative criteria specified by this decision meet the Commission's important statutory responsibilities under Section 307(b) and 309(e) of the Communications Act. In particular, the tiered processing standards ensure first consideration of underserved rural area LPTV applications but also guarantee that where early grant of a rural application might preclude the availability of an LPTV frequency in an urban area, those rural and urban applications will be jointly processed and reviewed. In light of the fledgling and secondary status of this new LPTV service, I am convinced that this processing system meets the command of Section 307(b) that the Commission "provide a fair, efficient, and equitable distribution" of service to each of the "several States and communities." As I emphasized in my Separate Statement on the Notice of Proposed Rulemaking in this proceeding, the statutory mandate of Section 307(b) is not a static, one-time requirement because the balance of demand for broadcast facilities and service is dynamic and changes over time.1/ While the Commission has considerable discretion in implementing the Section 307(b) requirement, it may not ignore it. We have kept faith with Section 307(b) in this Report and Order.

Our decision to apply the 1965 Policy Statement on Comparative Broadcast Hearings2/ to competing LPTV applications according to diversification and minority ownership criteria also adheres to the statutory requirements of Section 309(e) of the Act while providing the flexibility and expedition necessary for the effective implementation of this untested, secondary service. While difficult ad hoc adjudicatory issues may be presented under these two criteria, I believe that the paramount public interest in "best practicable service" will be advanced and protected by this case-by-case process.

In terms of further protecting the public interest, I am especially pleased that the Commission has decided to apply a one-year anti-trafficking rule to LPTV license grants. Together with the strict requirement that LPTV stations be constructed and go on-air within one year of grant of construction permit, this action safeguards the integrity of the diversification and minority ownership comparative criteria and provides critical assurance that only bona fide public interest applications will be prosecuted.

1/ Separate Statement of Commission Joseph R. Fogarty, Concurring in Part, 82 FCC 2d 82, 83-84 (1980), citing Pasadena Broadcasting Co. v. FCC, 555 F.2d 1046 (D.C. Cir. 1977).

2/ 1 FCC 2d 393 (1965).

Low Power Television offers exciting new ownership and public service opportunities in broadcasting, as the 6,000 applications filed during the pendency of this proceeding more than amply demonstrate. This Commission is doing its part to provide the fair chance for these dreams to become reality. Candor, as well as standards of truth in advertising, compels the final observation that there are no guarantees. As former Chairman Robert E. Lee perhaps presciently observed, an LPTV authorization "isn't going to be a license to print money."3/ The fair opportunity, however, is afforded. This Commission should do no less and can do no more.

3/ Concurring Statement of Commissioner Robert E. Lee, 82 FCC 2d 81 (1980).

SEPARATE STATEMENT OF COMMISSIONER HENRY M. RIVERA

RE: Broadcast Docket No. 78-253

Low Power Television

Today's Report and Order is the first concrete step toward making the low power television service available to the American public. There are several impediments to substantial near-term development of this service. Among the most prominent obstacles to the low power service are: (i) the staggering number of pending applications and the resulting continuation of the existing processing freeze; and (ii) the possibility that low power grants may even be precluded in some large markets if the Commission reallocates television spectrum for land mobile use after reviewing the staff recommendations it has requested on the subject. In this context, truth in advertising requires that the public (especially members of minority groups) be advised to temper its optimism over the low power television service at this juncture.

Despite these implementation handicaps, I firmly support the decision to launch the first new broadcast service in decades. The Commission's initiative offers a rich, if distant, opportunity to promote diversity of ownership generally and to widen opportunities for minority ownership in particular; it also may serve as a testing ground for new regulatory approaches.

Our decision to impose minimum regulatory constraints upon low power television is appropriate for a service whose viability is so uncertain, and whose stations are of limited reach and easily preemptable by full-service stations. However, the framework adopted is not without risk. The failure to impose any ownership limitations, for instance, is said to be likely to induce experienced broadcasters to provide LPTV service and to allow parties to achieve economies of scale from multiple ownership -- thereby generally fostering the development of the low power service. It is also possible, on the other hand, that without restrictions on network ownership, cross-ownership or duopolies, a low power television landscape far different from that intended by the Commission will develop. I am persuaded by the Report and Order that the Commission does not now need to impose ownership limits but am prepared to reconsider if the absence of ownership rules seriously erodes the primary goals of the low power service.

The tiered processing system adopted to resolve the serious administrative problems caused by the ocean of pending LPTV applications is an unfortunate, but probably necessary, by-product of this proceeding. Most unfortunate is that under the scheme, LPTV authorizations in major urban centers -- where ethnic and minority groups with special needs are highly concentrated -- will be the last to be made. However, to its credit, the system is designed to protect urban LPTV service: it expressly defers action on all rural applications, which if granted, would foreclose a pending application to serve an urban area.

Not surprisingly, a sizeable number of applications filed by minorities are concentrated in urban markets. A processing hierarchy premised exclusively on geographic remoteness would have precluded many of these applications at the starting gate, and substantially undercut this proceeding's goals of encouraging minority ownership of broadcast facilities. The Commission's modified tier approach avoids that pitfall by according priority to underserved rural areas as a general matter but preserving the interests of those proposing service in urban areas where there are competing demands to provide LPTV.

The one-year holding period preserves the dignity of the comparative process. It gives some assurance that those who were deemed comparatively superior by the Commission will indeed serve the public and forestalls the creation of a low power "CP futures market" that could vitiate the essential goals of the comparative process. Contrary to assertions in some quarters, this restriction will not force parties to operate failing LPTV stations. Waivers of the holding period are always grantable upon a proper showing by the licensee. Moreover, if the restriction works an unintended hardship on the development of the service the Commission has the discretion to revisit the issue.

I sincerely hope that the Commission's decision to award priority to diversification of media control and minority ownership in comparative cases will go far in advancing the goals of this new service. 1/

1/ In view of the severe underrepresentation of minorities in broadcast ownership, see, e.g., Policy Statement on Minority Ownership of Broadcast Facilities, 68 FCC 2d 979 (1979), the decision to accord comparative priority to applicants proposing over fifty percent minority ownership in low power television licensing policies is eminently justified. That decision also follows the theme of prior agency actions designed to increase minority ownership of broadcast facilities. In the clear channel proceeding, for example, see Clear Channel Broadcasting in the AM Broadcast Band, 78 FCC 2d 1345 (1980), the Commission found that the public interest would be served (in awarding frequencies made available by the decision to allow limited sharing of clear channel frequencies), by giving precedence to applicants proposing a first or second local primary service, applicants with over fifty percent minority ownership and applicants proposing non-commercial operations. See 78 FCC 2d at 1368-70. The Commission classified as "paramount" among competing demands for spectrum the need to increase the number of minority-owned radio stations, citing the fact that just 200 of the over 8,000 radio stations were then owned by minorities. Id. at 1368. This

(footnote continued next page)

Applying these two comparative factors will surely be among the Commission's most challenging tasks. I frankly would have preferred a more precise discussion of the substantive elements of the comparative process, but on balance am satisfied to let the requisite detail emerge as we begin to process the myriad pending comparative cases.

The Commission may ultimately find that adoption of a policy statement to guide its application of the two primary comparative criteria -- diversification of ownership and minority ownership -- will facilitate speedier and surer resolution of comparative cases. Until that time, considerable gloss will have to be placed on these criteria in evaluating competing applications. The Commission has reconfigured its comparative licensing standards for the low power service, 2/ and its comparative analysis will have to be reconfigured as well. 3/

1/ (continuation)
decision was recently judicially affirmed. Loyala University v. FCC, No. 80-1824 (D.C. Cir. Jan. 26, 1982). The record regarding minority ownership of television outlets is even more discouraging, with just 16 of 1,050 licensees being minority owned, and thus, the case for awarding comparative priority in this new television service all the more compelling. See also Policy Statement on Minority Ownership, supra; Grayson Enterprises, Inc., FCC 80-175 (1980) (allowing approval of "distress sale" applications when it is shown that over fifty percent of the prospective licensee is minority-owned).

2/ As an initial matter, the focus of the Commission's comparative inquiry has been substantially narrowed. In addition, the Commission has altered the prerequisites for comparative recognition of minority ownership in two important particulars: integration of ownership and management is no longer required, but over fifty percent ownership by minorities must now be shown. The Commission, in my judgment, has the latitude to recast its comparative analysis in this manner, and the record in this proceeding furnishes a rational basis for doing so.

3/ For example, because the Commission has altered the circumstances under which it will consider minority ownership in the low power service, reference to the "merit" concept as it has evolved under TV 9, Inc. v. FCC, 495 F.2d 929 (D.C. Cir. 1973) and its progeny would be essentially inapposite here.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

In the Matter of	)	3660
	)	
An Inquiry into the Future Role of	)	
Low Power Television Broadcasting	)	BC Docket No. 78-253
and Television Translators in the	)	
National Telecommunications System.	)	

ERRATUM

Released: April 26, 1982

By the Commission:

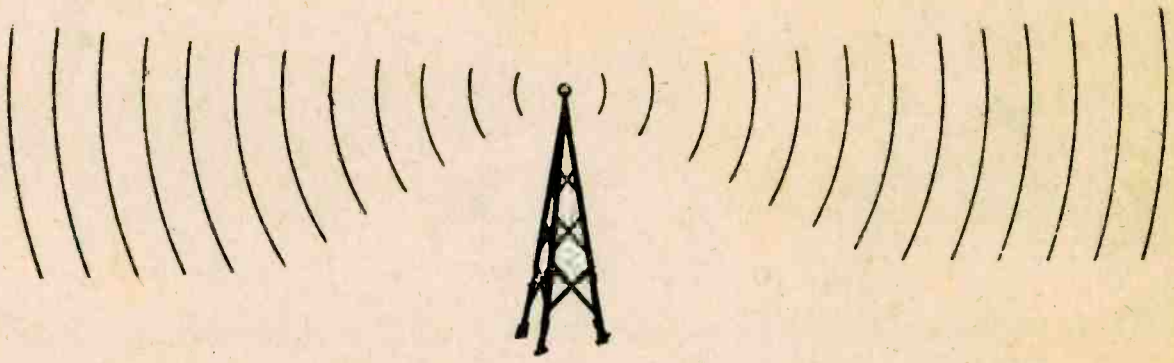
In paragraph 118 of the Report and Order in the aforementioned proceeding, FCC 82-107, adopted March 4, 1982, released April 26, 1982, the effective date was inadvertently omitted. Paragraph 118 should read as follows:

> 118. In light of the foregoing and pursuant to authority contained in Sections 1, 4(i) and 303 of the Communications Act of 1934, as amended, IT IS ORDERED, That the rule amendments set out in Appendix A ARE ADOPTED, EFFECTIVE June 7, 1982; and

FEDERAL COMMUNICATIONS COMMISSION

William J. Tricarico
Secretary

For the sake of space and cost limitations, we have not reproduced the dozens of pages regarding comments filed on the low power proposed rules. They will be published in the Federal Register if you should be interested in reading them in full.



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"LO-POWER COMMUNITY TELEVISION MONTHLY MAGAZINE $50 a year

LO-POWER COMMUNITY TV

JUNE 1982 VOLUME 1 ISSUE 14

NEWSPAPERS

Numbers dropping each year with more control by fewer and fewer entities.

TELEVISION

A handful of entities now control what is seen by 80% of U.S. viewing population.

CABLE TV

Large broadcast interests took over ownership of 70% of cable subcribers in 1981, expected to increase to 80% in 1982.

LOW POWER TV

FCC changes rules to allow unlimited takeover by present large broadcasters, networks and chains to buy up the independents who do get licenses.

WHAT'S HAPPENING?

We are, in this issue, reproducing some of the pages from 'How to Run a Low Power TV Station', which is not yet off the press and sells for $30. Next issue we will run a few pages from 'How to File Under the New Rules'. Both are not yet off the press (if you ordered them and are wondering), because the new rules have not yet come out in the Federal Register and we need some of that including application forms in typeset versions.

We are also running this issue on a web fed press for various reasons and may go back to glosssy stock in August.

We do take advertising in this publication at ridiculously low rates, but if we are going to have to pay a salesman to contact you and do a lot of other labor, then of course we are going to have to charge much higher rates. Right now, we haven't got time or the personnel, so if you could benefit from reaching the active people in LPTV, you contact us about running an ad, and we'll do it very inexpensively for you.

The NAB had lots of new products and things for low power as did the NCTA convention, but our expenses per issue always exceed our income per issue it seems so we have to stop somewhere in what we include. We leave out a lot each issue we just don't have pages (money to afford) to get in. Please renew your subscription. We can only do so much with such a small subscription base.

This week we are spending three days at the video show in Los Angeles and will have some coverage of that for you in the July issue. The July issue will also include more of what we planned for June but didn't have room for.

The ICTV alliance is growing rapidly and we will be contacting members soon on lobbying activities to get the little guys' interest in perspective at the commission. We have several members who now have CP's, so let us know what we can do to help and what we should be doing to help get you LPTV operation on the air successfully. We included some of the pages from 'How to Run a Successful Low Power Staion' this issue so that some of you that need that right away won't have to wait for the whole manual to be printed.

Incidently, ICTV members that do not have a VCR with VHS format and want to use some of the videotapes can often borrow one from a friend or rent one from most video stores for $10 a week. Members are welcome to copy any of the tapes we produced for their own use, but copyright laws prohibit copying the other tapes we loan you.

One of the LPTV CP's (construction permit) granted recently was to Deloy Miller at Portland, Oregon, Channel 11. He also received a grant on La Grande, Oregon, on 5. Apparently, Portland went through a cutoff nearly two years ago and had no competitive application or he made an agreement with an opposing applicant to withdraw. There are several other big city applications through cutoff (before freeze last year) with no opposing applications and some with only one other competitive application.

A reporter doing a story on LPTV last week called and said when she called the FCC regarding how many had been licensed, she said 160. We have seen only about 40 come out in releases, but we have many applicants call and tell us (including some that filed their own application with our manual) they have been granted a CP, but they have not yet appeared in public releases (apparently 6 to 8 weeks behind). The 160 could of course include Alaska which is another story. Many of Alaska's areas being licensed promptly are not any more TV isolated than other states and maybe in the next issue, we will tell you the **real** inside reason Alaska gets expedited treatment. One applicant told us that one of his applied for since the freeze was granted a CP last week, and it is only 40 miles from a full service station, so you figure that one.

Rumor was that the Federal Register would carry the new rules by May 20 but we have had no confirmation of that.

Low power seems to be getting some more publicity lately, but interest of new people seems to have died down. The paper hucksters are still attending newspaper conventions and selling blocks of LPTV applications 'as an investment' in the future. One such customer reported he was promised by this application **firm** they would file no competing applications for anyone else in the same city because of 'ethics' but later went ahead and filed one for someone else anyway. When it comes down to it, $4,000 is apparently more important than ethics. When it comes to comparative hearings, they say you'll have to hire someone else for that, we only do applications. That is like HR Block doing your income tax and when you get called in for a hearing on your tax figures, saying we don't back up our figures and filing. We only file it for you.

The commission still refuses to release any information of any kind on when any comparative hearings on LPTV can be expected to start. Some have already been through cutoff for 18 months and the commission has not even given an estimate as to when they will be set for 'paper' hearings or otherwise.

Some of you may be looking for consulting firms that can help you get a station on the air. Here is the name of a firm that has a lot of solid background in this type of broadcast operation, and though we have no knowledge of whether their prices or charges are in the ball park or not or whether they will rip you off or not, at least we know they have the right experience to do a good job for you which may be more than you can say for some others you may come up with. Contact:

Summit Engineering
P.O. Box 98
White Haven, PA 18661
(717) 443-9850 or
(707) 894-3185

You may not receive your magazine in time, but if you do, the National Translator Association are running three simultaneous LPTV seminars on June 4 and 5 in St. Louis, Washington, D.C., and Los Angeles. Cost is $185 for non-members. We can't tell you who will be on the programs. The regular NTA convention is set for November. Contact, (801) 237-2623.

Lo-Power Community Television magazine and associated low power manual and other publications are edited and published by Harlan L Jacobsen to bring together the information required to make the concept of low power television work

Lo-Power Community Television Magazine is published twelve times per year. Sample copies are $5, subscription $50 per year. Intended to supply needed information on Low Power Television at reasonable cost.

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PUBLIC NOTICE

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TV TRANSLATOR AND LOW POWER APPLICATIONS ACCEPTED FOR FILING AND NOTIFICATION OF CUT-OFF DATE

Released: March 26, 1982

CUT-OFF DATE: APRIL 30, 1982

NOTICE is hereby given that the applications listed in the attached appendix are accepted for filing. They will be considered to be ready and available for processing after April 30, 1982. An application, in order to be considered with any application appearing on the attached list or with any other application on file by the close of business on April 30, 1982, which involves a conflict necessitating a hearing with any application on this list, must be substantially complete and tendered for filing at the offices of the Commission in Washington, D.C., not later than the close of business on April 30, 1982.

Petitions to deny any application on this list must be on file with the Commission not later than the close of business on April 30, 1982.

Applications for new stations may not be filed against any applicaton on the attached list which is designated by an asterisk(*).

The applications on the attached list represent applications that meet one of the exceptions to the freeze on the acceptance of new applications for television translators and low power broadcast stations. Any party who may have an application pending before the Commission awaiting acceptance and such applications meets one of the freeze exceptions, should promptly inform the Commission of this fact so that the application may be included on the next cut-off list.

UHF LOW POWER TV APPLICATIONS

BPTTL-810119JN	NEW	Fallon, Nevada City of Fallon Req: Channel 25, 536-542 MHz, 100 watts
BPTTL-810119JP	NEW	Incline Village, Nevada North Lake Tahoe Community Foundation Req: Channel 14, 470-476 MHz, 100 watts
BPTTL-810119JR	NEW	Hawthorne & Babbitt, Nevada Mineral Television District No. 1 Req: Channel 14, 470-476 MHz, 100 watts
BPTTL-810119JS	NEW	Lovelock, Nevada Pershing County Req: Channel 14, 470-476 MHz, 100 watts
BPTTL-810119JT	NEW	Elko, Nevada Elko Television District Req: Channel 14, 470-476 MHz, 100 watts
BPTTL-810122II	NEW	Winnemucca, Nevada Humboldt County Req: Channel 17, 488-494 MHz, 100 watts
BPTTL-810122IQ	NEW	Vail, Colorado American Television Network Req: Channel 39, 620-626 MHz, 1000 watts
BPTTL-810122IU	NEW	Charlotte Amalie Territory, Virgin Island American Television Network Req: Channel 43, 644-650 MHz, 1000 watts
BPTTL-810122JA	NEW	Aspen, Colorado American Television Network Req: Channel 47, 668-674 MHz, 1000 watts
BPTTL-810122JB	NEW	Durango, Colorado American Television Network Req: Channel 39, 620-626 MHz, 1000 watts
BPTTL-810123JA	NEW	Tonopah, Nevada Nye County Req: Channel 17, 488-494 MHz, 100 watts
BPTTL-810126IE	NEW	Tyler, Texas Inner City Broadcasting Corporation Req: Channel 51, 692-698 MHz, 1000 watts
BPTTL-810128IZ	NEW	Farmington, New Mexico Munsch-Westenhaver Company Req: Channel 50, 686-692 MHz, 10 watts
BPTTL-8103310L	NEW	Chayenne, Wyoming North American Television Network Req: Channel 44, 650-656 MHz, 1000 watts
BPTTL-811221IZ	NEW	Iola, Kansas Allen County TV Req: Channel 35, 596-602 MHz, 1000 watts
BPTTL-811230TP	NEW	Cordell, Oklahoma Cordell Beacon Company, Inc. Req: Channel 23, 524-530 MHz, 1000 watts
BPTTL-820107TU	NEW	Milan, Tennessee Futures TV, Inc. Req: Channel 20, 506-512 MHz, 1000 watts
BPTTL-820107TX	NEW	Winchester, Virginia Shenandoah Valley LPTV Company Req: Channel 48, 674-680 MHz, 100 watts
BPTTL-820125TW	NEW	Newberry, Florida Weather Center International, Inc. Req: Channel 33, 584-590 MHz, 1000 watts
BPTTL-820128TX	NEW	Silver City, New Mexico Munsch-Westenhaver Company Req: Channel 58, 734-740 MHz, 10 watts
BPTTL-820128TY	NEW	Raton, New Mexico Munsch-Westenhaver Company Req: Channel 56, 722-728 MHz, 10 watts
BPTTL-820129TC	NEW	Pecos, Texas Mr. Jose Villareal (DBA) Villareal Broadcasting, Company Req: Channel 55, 716-722 MHz, 10 watts
BPTTL-820129TD	NEW	Jacksonville, Texas Mr. Jose Villareal (DBA) Villareal Broadcasting, Company Req: Channel 55, 716-722 MHz, 10 watts
BPTTL-820129TH	NEW	Orcas Island, Washington Project Interspeak Req: Channel 44, 650-656 MHz, 1000 watts
BPTTL-820129TN	NEW	Bellingham, Washington Project Interspeak Req: Channel 59, 740-746 MHz, 100 watts
BPTTL-820129TO	NEW	Carrizo Springs, Texas Mr. Jose Villareal (DBA) Villareal Broadcasting, Company Req: Channel 55, 716-722 MHz, 10 watts
BPTTL-820129TP	NEW	Rio Grande City, Texas Mr. Jose Villareal (DBA) Villareal Broadcasting,Company Req: Channel 55, 716-722 MHz, 10 watts
BPTTL-820129TQ	NEW	Del Rio, Texas Mr. Jose Villareal (DBA) Villareal Broadcasting, Company Req: Channel 55, 716-722 MHz, 10 watts
BPTTL-820129TR	NEW	Snyder, Texas Mr. Jose Villareal (DBA) Villareal Broadcasting, Company Req: Channel 55, 716-722 MHz, 10 watts
BPTTL-820129TS	NEW	Crockett, Texas Mr. Jose Villareal (DBA) Villareal Broadcasting, Company Req: Channel 55, 716-722 MHz, 10 watts
BPTTL-820129TY	NEW	Waycross, Georgia NSN, Inc. Req: Channel 60, 746-752 MHz, 1000 watts
BPTTL-820201TN	NEW	Clovis, New Mexico Munsch-Westenhaver Company Req: Channel 51, 692-698 MHz, 10 watts
BPTTL-820201TO	NEW	Clayton, New Mexico Munsch-Westenhaver Company Req: Channel 55, 716-722 MHz, 10 watts
BPTTL-820201TQ	NEW	Hobart, Oklahoma Munsch-Westenhaver Company Req: Channel 27, 548-554 MHz, 10 watts
BPTTL-820201TR	NEW	Clinton, Oklahoma Munsch-Westenhaver Company Req: Channel 23, 524-530 MHz
BPTTL-820201TS	NEW	Santa Rosa, New Mexico Munsch-Westenhaver Company Req: Channel 52, 698-704 MHz, 10 watts
BPTTL-820201TT	NEW	Durant, Oklahoma Munsch-Westenhaver Company Req: Channel 53, 704-710 MHz, 10 watts
BPTTL-820201TV	NEW	Truth or Consequences, New Mexico Munsch-Westenhaver Company Req: Channel 54, 710-716 MHz, 10 watts
BPTTL-820201TW	NEW	Gallup, New Mexico Munsch-Westenhaver Company Req: Channel 49, 680-686 MHz, 10 watts
BPTTL-820201TX	NEW	Hugo, Oklahoma Munsch-Westenhaver Company Req: Channel 54, 710-716 MHz, 10 watts

BPTTL-820201TY	NEW	Altus, Oklahoma Munsch-Westenhaver Company Req: Channel 40, 626-632 MHz, 10 watts
BPTTL-820202TY	NEW	Williamsport, South Williamsport, Pennsylvania Local Power Television, Inc. Req: Channel 32, 578-584 MHz, 1000 watts
BPTTL-820203TU	NEW	Price, Utah Spectrum Press, Inc. Req: Channel 21, 512-518 MHz, 100 watts
BPTTL-820203TW	NEW	Cedar City, Utah Spectrum Press, Inc. Req: Channel 22, 518-524 MHz, 100 watts
BPTTL-820203TX	NEW	International Falls, Minnesota North Star Publishing Company Req: Channel 31, 572-578 MHz, 100 watts
BPTTL-820203TZ	NEW	St. George, Utah Spectrum Press, Inc. Req: Channel 14, 470-476 MHz, 100 watts
BPTTL-820204TX	NEW	Montevideo, Minnesota Kaercher Publications, Inc. Req: Channel 32, 578-584 MHz, 1000 watts
BPTTL-820204TY	NEW	Morris, Minnesota Kaercher Publications, Inc. Req: Channel 18, 494-500 MHz, 1000 watts
BPTTL-820209TQ	NEW	Alexandria, Minnesota Selective TV, Inc. Req: Channel 34, 590-596 MHz, 100 watts
BPTTL-820209TY	NEW	Delta Junction, Alaska State of Alaska Req: Channel 17, 488-494 MHz, 20 watts
BPTTL-820212TY	NEW	Paragould, Arkansas Local Power Television, Inc. Req: Channel 28, 554-560 MHz, 100 watts
BPTTL-820212TZ	NEW	Cookeville, Tennessee Local Power Television, Inc. Req: Channel 46, 662-668 MHz, 1000 watts
BPTTL-820216TZ	NEW	Sheridan, Wyoming Sheridan Newspapers, Inc. Req: Channel 16, 482-488 MHz, 1000 watts
BPTTL-820217TB	NEW	Waycross, Georgia Ronald J. Malik Req: Channel 55, 716-722 MHz, 1000 watts
BPTTL-820217TC	NEW	Alamogordo, New Mexico Ronald J. Malik Req: Channel 61, 752-758 MHz, 100 watts
BPTTL-820217TD	NEW	Wenatchee, Washington Ronald J. Malik Req: Channel 27, 548-554 MHz, 100 watts
BPTTL-820217TF	NEW	Barstow, California Ronald J. Malik Req: Channel 55, 716-722 MHz, 100 watts
BPTTL-820217TG	NEW	Douglas, Arizona Ronald J. Malik Req: Channel 28, 554-560 MHz, 100 watts
BPTTL-820217TH	NEW	Brainerd, Minnesota Ronald J. Malik Req: Channel 59, 740-746 MHz, 100 watts
BPTTL-820217TI	NEW	Fergus Falls, Minnesota Ronald J. Malik Req: Channel 57, 728-734 MHz, 100 watts
BPTTL-820217TJ	NEW	Vero Beach, Florida The Malik-Harris Corporation Req: Channel 60, 746-752 MHz, 1000 watts
BPTTL-820217TK	NEW	Junction City, Kansas The Malik-Harris Corporation Req: Channel 55, 716-722 MHz, 1000 watts
BPTTL-820217TL	NEW	Aberdeen, Washington The Malik-Harris Corporation Req: Channel 55, 716-722 MHz, 100 watts
BPTTL-820217TM	NEW	Clovis, New Mexico The Malik-Harris Corporation Req: Channel 69, 800-806 MHz, 1000 watts
BPTTL-820217TN	NEW	Tyler, Texas The Malik-Harris Corporation Req: Channel 57, 728-734 MHz, 1000 watts
BPTTL-820217TO	NEW	New Ulm, Minnesota Ronald J. Malik Req: Channel 55, 716-722 MHz, 1000 watts
BPTTL-820217TQ	NEW	Trapper Creek & Talkeetna, Alaska State of Alaska Req: Channel 24, 530-536 MHz, 10 watts
BPTTL-820217TS	NEW	Kenai, Soldotna and Sterling, Alaska State of Alaska Req: Channel 23, 524-530 MHz, 100 watts
BPTTL-820222TW	NEW	La Salle, Oglesby, Illinois Local Power Television, Inc. Req: Channel 51, 692-698 MHz, 1000 watts
BPTTL-820222TX	NEW	Jackson, Tennessee Local Power Television, Inc. Req: Channel 38, 614-620 MHz, 1000 watts
BPTTL-810227TR	NEW	Lakeport, California The Lake County Television Club Req: Channel 25, 536-542 MHz, 100 watts
BPTTL-820302TN	NEW	Sagaponack, New York Response Broadcasting Corporation Req: Channel 62, 758-764 MHz, 1000 watts
BPTTL-820302TO	NEW	Sagaponack, New York Response Broadcasting Corporation Req: Channel 39, 620-626 MHz, 1000 watts
BPTTL-820302TP	NEW	Sagaponack, New York Response Broadcasting Corporation Req: Channel 32, 578-584 MHz, 1000 watts
BPTTL-820302TQ	NEW	Sagaponack, New York Response Broadcasting Corporation Req: Channel 29, 560-566 MHz, 1000 watts
BPTTL-820303TG	NEW	Mountain Home, Arkansas Baxter Broadcasting, Inc. et al Req: Channel 43, 644-650 MHz, 1000 watts
BPTTL-820309TS	NEW	Valdez, Alaska State of Alaska Req: Channel 15, 476-482 MHz, 10 watts
BPTTL-820309TT	NEW	Nome, Alaska State of Alaska Req: Channel 15, 476-482 MHz, 10 watts
BPTTL-820309TU	NEW	Kitzebue, Alaska State of Alaska Req: Channel 15, 476-482 MHz, 10 watts
BPTTL-820309TV	NEW	South Fork, Colorado Clifford Hoelscher and wife Jean L. Hoelscher Req: Channel 54, 710-716 MHz, 100 watts
BPTTL-820312TX	NEW	Wrangell, Alaska State of Alaska Req: Channel 21, 512-518 MHz, 10 watts
BPTTL-820312TY	K48AA	St. James, Minnesota Watonwan TV Improvement Association Req: Change from conventional translator to low power broadcast station

VHF LOW POWER TV APPLICATIONS

BPTVL-801124IW	NEW	Rural West Riverton, Wyoming Riverton Fremont TV Club, Inc. Req: Channel 6, 82-88 MHz, 5 watts
BPTVL-811119TX	NEW	D'Iberville, Mississippi Benjamin Moore Req: Channel 9, 500-506 MHz, 10 watts
BPTVL-811230TQ	NEW	Perryton, Texas Southwest Community TV Req: Channel 5, 76-82 MHz, 10 watts
BPTVL-820107TV	NEW	Tyler, Texas Don Pierson/Mack Mercer d/b/a M & M Telecasting Req: Channel 4, 66-72 MHz, 10 watts
BPTVL-820107TW	NEW	Selmer, Tennessee McNairy County Publishing Company Req: Channel 6, 82-88 MHz, 10 watts
BPTVL-820107TY	NEW	Madison, Florida Thomas H. Greene, Jr., and R. H. Fackelman Req: Channel 3, 60-66 MHz, 10 watts
BPTVL-820118TL	NEW	Bend, Oregon Daloy Miller Req: Channel 8, 180-186 MHz, 10 watts
BPTVL-820125TU	NEW	Concordia, Kansas The Blade-Empire Publishing Company Req: Channel 6, 82-88 MHz, 10 watts
BPTVL-820125TV	NEW	Palestine, Texas Palestine Herald Press Company Req: Channel 4, 66-72 MHz, 10 watts
BPTVL-820125TX	NEW	Crockett, Texas Palestine Herald Press Company Req: Channel 5, 76-82 MHz, 10 watts

BPTVL-820125TY	NEW	Fort Stockton, Texas Don Pierson/Mack Mercer d/b/a M & M Telecastin Req: Channel 5, 76-82 MHz, 100 watts
BPTVL-820125TZ	NEW	Buffalo, Texas Palestine Herald Press Company Req: Channel 12, 204-210 MHz, 10 watts
BPTVL-820127TX	NEW	Cabery, Illinois Reeves Telecommunications Req: Channel 10, 192-198 MHz, 10 watts
BPTVL-820201TZ	NEW	Jacksonville, Texas George E. Gunter Req: Channel 5, 76-82 MHz, 10 watts
BPTVL-820203TV	NEW	Moab, Utah Spectrum Press, Inc. Req: Channel 2, 54-60 MHz, 100 watts
BPTVL-820203TY	NEW	Vernal, Utah Spectrum Press, Inc. Req: Channel 6, 82-88 MHz, 100 watts
BPTVL-820211TX	NEW	Glenallen & Copper Center, Alaska State of Alaska Req: Channel 13, 210-213 MHz, 100 watts
BPTVL-820211TY	NEW	Homer, Seldovia, Alaska State of Alaska Req: Channel 11, 198-204 MHz, 100 watts
BPTVL-820211TZ	NEW	Lake Louise, Eureka, Nelchina, Snow Lake and Tazlina, Alaska State of Alaska Req: Channel 11, 198-204 MHz, 100 watts
BPTVL-820216TT	NEW	Nicholls, Georgia David Allen Crabtree Req: Channel 2, 54-60 MHz, 10 watts
BPTVL-820216TU	NEW	Concordia, Kansas David Allen Crabtree Req: Channel 6, 82-88 MHz, 10 watts
BPTVL-820216TW	NEW	Mt. Pleasant, Iowa David Allen Crabtree Req: Channel 5, 76-82 MHz, 10 watts
BPTVL-820216TX	NEW	Alva, Oklahoma David Allen Crabtree Req: Channel 7, 174-180 MHz, 10 watts
BPTVL-820217TE	NEW	Uvalde, Texas Ronald J. Malik Req: Channel 2, 54-60 MHz, 100 watts
BPTVL-820217TP	NEW	Naknek, Alaska State of Alaska Req: Channel 13, 210-216 MHz, 10 watts
BPTVL-820217TR	NEW	English Bay, Alaska State of Alaska Req: Channel 3, 60-66 MHz, 10 watts
BPTVL-820217TT	NEW	Ernestine, Alaska State of Alaska Req: Channel 11, 198-204 MHz, 10 watts
BPTVL-820217TV	NEW	Womens Bay, Alaska State of Alaska Req: Channel 2, 54-60 MHz, 10 watts
BPTVL-820217TU	NEW	Gakona, Alaska State of Alaska Req: Channel 11, 198-204 MHz, 10 watts
BPTVL-820219TZ	NEW	Girdwood, Alaska State of Alaska Req: Channel 10, 192-198 MHz, 10 watts
BPTVL-820222TZ	NEW	Homosassa Springs, Florida Pleasant Television, Inc. Req: Channel 12, 204-210 MHz, 10 watts
BPTVL-820308TZ	NEW	Oil City, Pennsylvania Olga De Anda Req: Channel 5, 76-82 MHz, 10 watts
BPTVL-820311TZ	NEW	Victoria, Texas J.M.J. Tele-Radio, Ltd. Req: Channel 9, 186-192 MHz, 10 watts

UHF TV TRANSLATOR APPLICATIONS

BPTTV-820101UC	NEW	Plevna, Montana Plevna Television District Req: Channel 6, 82-88 MHz, 10 watts Primary: KHSD-TV, Lead-Deadwood, South Dakota
BPTTV-820118IM	W03AJ	Wytheville, Virginia Holston Valley Broadcasting Corporation Req: Add Wytheville, Crockett, rural retreat Ft. Chiswell, Max Meadows, Jackson Ferry Austinville, Virginia to present princip. Community
BPTTV-820126TU	NEW	Pitkin & Ohio, Colorado Gunnison County Metropolitan Recreation Distri Req: Channel 8, 180-186 MHz, 1 watt Primary: KBTV-TV, Denver, Colorado
BPTTV-820126TV	NEW	Pitkin & Ohio, Colorado Gunnison County Metropolitan Recreation Distri Req: Channel 10, 192-198 MHz, 1 watt Primary: KMGH-TV, Denver, Colorado
BPTTV-820128ID	K12IW	Chemult, Crescent, Oregon Walker Mountain Translator Association Req: Change primary Station to KTVZ-TV, Oregon
BPTTV-820217TX	NEW	Manderson and rural area, Wyoming Town of Manderson Req: Channel 3, 60-66 MHz, 1 watt Primary: KRMA-TV, Denver, Colorado
BPTTV-820217TY	NEW	Manderson & rural area, Wyoming Town of Manderson Req: Channel 7, 174-180 MHz, 1 watt Primary: KTVQ-TV, Billings, Montana
BPTTV-820217TZ	NEW	Manderson & rural area, Wyoming Town of Manderson Req: Channel 13, 210-216 MHz, 1 watt Primary: KULR-TV, Billings, Montana
BPTTV-820222IE	K03CC	Cortez, Colorado Montezuma Dolores County Metropolitan Recreation District Req: Change principal community to Montezuma County, rural area, Colorado
BPTTV-820222TU	NEW	Cahone and Dove Creek, Colorado Montezuma Dolores County Metropolitan Recreation District Req: Channel 8, 180-186 MHz, 10 watts Primary: KGGM-TV, Albuquerque, New Mexico
BPTTV-820222TV	K07DM	Cahone and Dove Creek, Colorado Montezuma Dolores County Metropolitan Recreation District Req: Channel 2, 54-60 MHz, 10 watts Primary: KOB-TV, Albuquerque, New Mexico
BPTTV-820223IT	K13AO	New Castle, Rifle, Colorado XYZ Television, Inc. Req: Add Carbondale, Cattle Creek Mo., Hgts, Glenwood Springs, Colorado to present principal Community
BPTTV-820309IB	K09FS	Cut Bank, Montana Glacier County TV Club, Inc. Req: Change Primary Station to KRTV-TV, Great Falls, Montana
BPTTV-820309IC	K13AR	Cut Bank, Montana Glacier County TV Club, Inc. Req: Change principal community to Montana Power Camp, Cut Bank, Santa Rita, Montana Power North Camp, Montana
BPTTV-820826TU	K04CO	Healy, Alaska Northern Television, Incorporated Req: Change frequency to Channel 6, 82-88 MHz, 10 watts
BPTT-811116ID	K20AA	Bear Valley Springs, California Bear Valley Springs Properties Owners Association Req: Change Primary Station to KHJ-TV
BPTT-810424IE	W73AH	Chambersburg, Pennsylvania South Central Educational Broadcasting Council Req: Change frequency to Channel 41, 632-638 MHz
BPTT-811124TX	NEW	Broadus, Ashland & surrounding rural areas, Montana Powder River County TV Board Req: Channel 61, 752-758 MHz, 100 watts Primary: KUED-TV, Salt Lake City, Utah
BPTT-820129TJ	NEW	Quincy, Washington Quincy Valley TV, Inc. Req: Channel 26, 542-548 MHz, 100 watts Primary: KHQ-TV, Spokane, Washington
BPTT-820129TK	NEW	Quincy, Washington Quincy Valley TV, Inc. Req: Channel 24, 530-536 MHz, 100 watts Primary: KXLY-TV, Spokane, Washington
BPTT-820129TL	K73AP	Quincy, Washington Quincy Valley TV, Inc. Req: Channel 21, 512-518 MHz, 20 watts Primary: KREM-TV, Spokane, Washington
BPTT-820129TZ	K70EP	Quincy, Washington Quincy Valley TV, Inc. Req: Channel 30, 566-572 MHz, 100 watts Primary: KSPS-TV, Spokane, Washington

VHF TV TRANSLATOR APPLICATIONS

BPTT-820204TZ NEW
Salina, Kansas
Stauffer Communications, Inc.
Req: Channel 53, 704-710 MHz, 100 watts
Primary: WIBW-TV, Topeka, Kansas

BPTT-820208TZ NEW
Cortez, Colorado
Montezuma Dolores County Matropolitan
Recreation District
Req: Channel 33, 584-590 MHz, 100 watts
Primary: KGGM-TV, Albuquerque, New Mexico

BPTT-820209TR NEW
Rural Elgin Community Elgin, Oregon
Blue Mt. Translator District
Req: Channel 44, 650-656 MHz, 100 watts
Primary: KXLY-TV, Spokane, Washington

BPTT-820209TS NEW
Rural Elgin Community, Elgin, Oregon
Blue Mt. Translator District
Req: Channel 46, 662-668 MHz, 100 watts
Primary: KHQ-TV, Spokane, Washington

BPTT-820209TT NEW
Rural Elgin Community Elgin, Oregon
Blue Mt. Translator District
Req: Channel 42, 638-644 MHz, 100 watts
Primary: KREM-TV, Spokane, Washington

BPTT-820209TU NEW
Rural homes in Elgin area of Union County,
Elgin, Oregon
Blue Mt. Translator District
Req: Channel 40, 626-764 MHz, 100 watts
Primary: KPTV-TV, Portland, Oregon

BPTT-820209TV NEW
Rural Baker Valley, Baker, Oregon
Blue Mt. Translator District
Req: Channel 40, 626-632 MHz, 20 watts
Primary: KPTV-TV, Portland, Oregon

BPTT-820209TW NEW
Ninilchik, Kasilof and Anchor Point, Alaska
State of Alaska
Req: Channel 27, 548-554 MHz, 100 watts
Primary: KIVA-TV, Anchorage, Alaska

BPTT-820209TX NEW
Ninilchik, Kasilof and Anchor Point, Alaska
State of Alaska
Req: Channel 15, 476-482 MHz, 100 watts
Primary: KTUU-TV, Anchorage, Alaska

BPTT-820209TZ NEW
English Bay, Alaska
State of Alaska
Req: Channel 69, 800-806 MHz, 20 watts
Primary: KIMO-TV, Anchorage, Alaska

BPTT-820210TZ NEW
Ninilchik, Kasilof and Anchor Point, Alaska
State of Alaska
Req: Channel 33, 584-590 MHz, 100 watts
Primary: KIMO-TV, Anchorage, Alaska

BPTT-820211TV NEW
English Bay, Alaska
State of Alaska
Req: Channel 43, 644-650 MHz, 20 watts
Primary: KIVA-TV, Anchorage, Alaska

BPTT-820211TW NEW
English Bay, Alaska
State of Alaska
Req: Channel 31, 572-578 MHz, 20 watts
Primary: KTUU-TV, Anchorage, Alaska

BPTT-820217SX NEW
Petersburg, Alaska
State of Alaska
Req: Channel 15, 476-482 MHz, 20 watts
Primary: KIVA-TV, KTUU-TV, KIMO-TV,
KAKM-TV, Anchorage, KTOO-TV,
Juneau, KYUK-TV, Bethel, KUAC-TV,
Fairbanks, Alaska

BPTT-820217SY NEW
Wrangels, Alaska
State of Alaska
Req: Channel 15, 476-482 MHz, 20 watts
Primary: KIVA-TV, KTUU-TV, KIMO-TV,
KAKM-TV, Anchorage, KTOO-TV,
Juneau, KYUK-TV, Bethel, KUAC-TV,
Fairbanks, Alaska

BPTT-820217TA NEW
Trapper Creek & Talkeetna, Alaska
State of Alaska
Req: Channel 16, 482-488 MHz, 20 watts
Primary: KIVA-TV, KTUU-TV, KIMO-TV,
KAKM-TV, Anchorage, KTOO-TV,
Juneau, KYUK-TV, Bethel, KUAC-TV,
Fairbanks, Alaska

BPTT-820219TW NEW
Indian Hope, Alaska
State of Alaska
Req: Channel 25, 536-542 MHz, 20 watts
Primary: KTUU-TV, Anchorage, Alaska

BPTT-820219TY NEW
Indian Hope, Alaska
State of Alaska
Req: Channel 47, 668-674 MHz, 20 watts
Primary: KIMO-TV, Anchorage, Alaska

BPTT-820308TX NEW
Gold Hill, Oregon
Southern Oregon Education Company
Req: Channel 55, 716-722 MHz, 10 watts
Primary: KSYS-TV, Medford, Oregon

BPTT-820312TW NEW
Winnemucca, Nevada
Humboldt County
Req: Channel 53, 704-710 MHz, 100 watts
Primary: WOR-TV, New York

UHF LOW POWER TV APPLICATIONS

BPTTL-820216TY NEW
Ridgecrest, California
High Desert Broadcasting
Req: Channel 19, 500-506 MHz, 100 watts

BMPTTV-820311TY NEW
Crawford and Fort Robinson State Park, Nebraska
Nebraska Educational Television Commission
Req: Channel 8, 180-186 MHz, 10 watts
Primary: KINE-TV, Alliance, Nebraska

BPTTL-810122IP NEW
Ely, Nevada
White Pine Television District #1
Req: Channel 14, 470-476 MHz, 100 watts

BPTTL-820129TV NEW
Palestine, Texas
Mr. Jose Villareal (DBA) Villareal Broadcasting,
Company
Req: Channel 55, 716-722 MHz, 10 watts

VHF LOW POWER TV APPLICATIONS

BPTVL-810911QA NEW
Denison, Texas
Harte-Hanks LPTV, Inc.
Req: Channel 9, 186-192 MHz, 10 watts

BPTVL-810904QB NEW
Del Rio, Texas
Harte-Hanks LPTV, Inc.
Req: Channel 10, 192-198 MHz, 10 watts

(Continued on back green pages)

COMPARATIVE HEARINGS

Above photo is from Lo-Power (March issue) and shows a stack of applications for other broadcast services waiting for action in comparative hearings. Every big city application will generate 10 more in cutoff.

Recently I have been reading FCC administrative judges' decisions (there are very few, incidently) in other broadcast decisions on comparative hearings (at the rate other broadcast services' decisions came out, it would be the year 3000 before all the low powers are settled).

Anyway, the preference for new voices for the community seems to be the determining factor in most. Some say they weighed the fact the other applicant proposed greater coverage but gave it to the one with a preference of not presently already having a voice in a community. We have not yet seen any where one had a newspaper and the other had no voice but have been dealing where one already has an AM, for example. Some mention consideration of owners participating in management more than others, but the new voice seems to be predominating as the major deciding rule. Also, not yet seen, is whether an applicant with a broadcast facility elsewhere loses out to an applicant with no broadcast interest. Say an applicant has a big city application and a rural small town. In the meantime, he gets the small town license. Is he now out of luck in the big city? Can he sell or even give away his small town license? We will keep you informed as to any trends in rulings on other broadcast (and eventually LPTV) comparative hearings. Keep in mind the commission has set no date or estimate when they may even start comparative hearings on low power. In my last visit to the FCC the staff told me that in the last two years, they had a 300% increase in comparative hearings for other broadcast services and, at the same time, the hearing staff had recently been cut considerably. It appeared then that a two or three year wait for a standard broadcast service hearing to even come up for the first hearing was standard procedure and getting worse. With additional hearings rescheduled, it can take years and years (five or more) with appeals and so on adding considerably to that.

In my opinion, the surest thing the commission could do to guarantee practically no low power licenses for years was to do exactly what they did. They have set it up so you can't file for an unused or unfiled for channel in the frozen cities, (there are often 10 to 15 channels available) you can only file on top of someone already filed, thereby guaranteeing that **nobody** gets an LPTV license in any city of any size for 5 to 10 years, unless someone pays off somebody (or except those that got through a cutoff over a year ago with no opposition which were few and far between).

The way that it is set up, it is a cruel hoax, particularly to those that filed early. It is guaranteed comparative hearing because the latecomers can't file for anything else. The big broadcasters in the major markets are protected by the FCC final rules from any competition for years until a time when low power that is not already established has been possibly obsoleted by technology and other services that become established first.

The way it was done for public and congressional consumption, the illusion is that the FCC is getting right on with low power. To the big established broadcasters, it securely looks like they are adequately protected from ever having (except for occasional flukes) any significant competition from low power broadcasters for 5 to 10 years. So the FCC people that wrote this mish mash pulled off a biggee.

Everybody supposedly is happy but me. I think the public got ripped off and were denied useful and needed TV service. I think the people that filed early got ripped off. I think the little guys who were serious about getting on the air will be discouraged and say to hell with it. The blue suede shoe paper mill application hucksters will continue to rake in big bucks filing piles of paperwork for 'License Investors' who are sold on getting in on the 'gold rush' of getting licenses and holding on to them as an investment. No one will get anything, the public won't get more TV service, and the FCC staff who were warned about being overwhelmed with low power applications are absolutely guaranteed to be overwhelmed with low power comparative hearings, that would be entirely unnecessary if applicants could file for other unused channels. It may sound odd, but the only way the commission can undo this monstrosity is to take the freeze off each layer when they start processing that layer, that way the late applicants can file for other unused channels, the early filers can get licensed without mutual exclusives, and the FCC will be out from under unnecessary lengthy comparative hearings. The public will get almost immediate additional TV service, **but hold it . . .** the potentially powerful big broadcasters would get competition. (Remember, the Fowler commission is for less regulation for the big broadcaster but **not more competition.)**

There is some indication a new lottery procedure from congress in cooperation with the FCC that will come out (bureaucratically speaking) soon, however, will only be used as we understand it, to determine who gets it when all other factors happen to turn out equally. Look for lottery talk to continue as a method 'always just over the horizon' that gets the commission off the hook now for not accomplishing anything on comparative hearings in the present but holds it off to some magical future date when the lottery will suddenly solve all the delay problems and frustrations. Just be patient and try not to get too old to run a low power station. In the meantime, the powerful big city broadcasters are still nicely protected from any LPTV competition.

MUTUAL EXCLUSIVE IS A BAD WORD

WHAT NOW?

There is still some apparent misunderstanding about what happens now even after reading the new rules. If you weren't confused before, you are now, right?

First of all, let's discuss the freeze. The present freeze means you can now essentially only file new applications on any channel or area that has only one or no grade B signal from a commercial station. This freeze has been on for over a year. It looks now that this freeze on new applications on new channels not filed on before will likely continue for another year or maybe even two (in the past, the commission has left other broadcast freezes on as long as five years while

HOW MANY YEARS?

they twiddled their thumbs and made up their minds what they wanted to do, if anything). So, perhaps you see lots of channels available for low power and lots of demand for local TV, but you can't do a thing because you have two grade B's or more. You have to wait . . . wait. . . **except** . . . Someone filed there before the freeze. They are going to put these on cutoffs in tiers (mostly rural first, see the rules). When they are published on an 'A' cutoff, you will have 30 days or so to file on top of that application. Now that sounds exciting, you have a chance (they may eventually use a lottery) but the history is a lot of people file on top of these since there is nothing else to file on. You positively know there is going to be a comparative hearing between your application and the original applicant (unless you pay them off, or something) and maybe 10 or 15 more will file, too.

IT WILL BE A LONG TIME

So you know you aren't going to get a license for a long time. If you are just a paper trader or license paper investor, (not a station investor) and you have been sold on that by the paper mill hucksters, you may want to get in that game. Personally, I think that whole thing stinks. Regardless of what they say, the lawyers are going to get involved. If not in the hearing, then if you get awarded a CP, one of the losers will appeal. You will have a lengthy court proceeding that have been known to cost over a million dollars in legal fees. Do you really want to be in that mess? Or some paper monkey will say, give me 1/3 interest in your LPTV station for $1.00, and I'll withdraw my application and you'll get your license.

MUTUALLY EXCLUSIVE IS A BAD WORD

From my point of view, filing on top of someone should only be done in rare cases when you have a solid, logical reason.

You may have a need to receive to go over 'A' cutoff lists more quickly than they appear in the magazine. In that case, let us know and we will work something out to get them to you almost immediately.

After your 'A' cutoff listing appears and expires and no one files on top of you, they then check over your applications, and if all is well, in around 90 days issue you a license (hopefully). If someone files on top of your application, you will sooner or later appear on a 'B' cutoff list. No one additional can file against anything on a 'B' cutoff, but it gives the public a chance to file petition to deny against the new applicants. After that, it goes eventually (years) to comparative hearings. But, if you were just filing on top, you and they will automatically be 'years' getting a license, because you have to have some type of comparison hearing, whether it is paper, lottery or otherwise, you have to wait for it to come up. Say it eventually does (miracle) come up, and because of this or that, (lottery or whatever) you get a CP. Now the losers can and do appeal -- more years and legal fees and you still haven't got a license. You could have filed for other channels, if there had been no freeze, gone through cutoff and been protected. As a result of the freeze, nobody has a license, nobody broadcasts, despite all the filing activity (lawyers' heaven). All the unused channels can't even be applied for and the Washington attorneys that Fowler told 'don't worry about deregulation, there will be lots of other work for you', find out now what he meant and cash in on LPTV. The attorneys, the paper hucksters encouraging you to file on top of others, the FCC bureaucrats are all in the money. Great rules. Why don't you talk to your Senator or congressman. Tell him you want to supply a legitimate needed TV service and this is ridiculous.

CAN YOU FILE FOR YOUR TOWN UNDER THE PRESENT FREEZE
HOW TO DETERMINE

Many people are sending us information on an area they want to file on and send us lots of information they have spent a lot of time digging up. They want some information or help in filing and we are always disturbed that we often have to tell them that even though they are in a fringe area with poor or limited TV, they cannot file in their town under the present freeze.

You have to understand this freeze on new applications on channels not applied for previously, **continues**, even after the new rules go into effect, and we fear it may go on at least another year unless there is considerable political pressure.

The best way to determine is to go down to your library and look up in the 'TV Factbook' (one of two books) with maps of all grade B coverages of all full service stations in the U.S. If your town falls within one or none of those grade B's, but no more than that, you can file now. If there are two or more, but in fact, you do not get TV from those stations well because there is a ridge or mountain or some high point between you and those stations, then we can probably show you how to do an engineering showing exhibit that proves there is no grade B there, even though the map shows there is supposed to be. Then they will accept the application. If you get more than one channel that is watchable with rabbit ear antennas direct from the stations, (translators do not count) then you can be almost certain that there are two or more grade B levels in your community.

If you are an ICTV member, drop us a line and we will, free of charge, check for you as to whether your town or towns can be filed for now.

FINANCING LPTV

Financing is a major concern, and we have been putting together materials to use in a videotape for presentation to raise money. One of the main concerns of any potential financial source is, is this a proven business, and of course, there is no track record, so we have to do some educating of what low power is all about. We hope you get enough information from our writing here to have you well informed and enthusiastic about the opportunities low power television offers, but the problem is you have to be able to communicate to other people which, just incidently, may be the one with the closed purse strings that you have to open.

Most of us think first of banks and we won't really go into that one here, except to say when I started in cable TV, no bank would talk to you about financing, because they didn't know what it was. Now of course, there is an entirely different attitude, so when you are a pioneer, you have to blaze some trails and as a pioneer, expect it to run up a lot of dead end canyons.

We may do an item on getting SBA loans in a future issue of the magazine. This is one avenue you can explore of course on your own by contacting your local office, and you might let us know your results and successes and dead ends. Maybe we can help overcome them for you.

Here today, I just want to spring one on you that may be one of the best sources, and 100 to 1 you never thought of it.

Most areas have county, stae or city or some agency has a bonding authority they use for attracting industry that creates jobs. Now, your LPTV station is going to create jobs (ad salesman, etc., plus office personnel, possibly you figure it). We suggest you be very light on labor intensive operations, but go heavy on sales that produce revenue and that type of thing. So don't worry about you aren't going to be creating 50 jobs. If you are creating two jobs or more, you have a story. Besides, you don't need all that much money compared to a factory. The main advantage of this type of government loan is you get the money usually below prevailing interest rates and you can often get it at long term payback. So run down the leads on who has this type of tax free bonding authority to loan money to industry in your area.

ICTV members, keep us informed if you are in a hurry to use a videotape on getting financing. This is a tape you will show to potential financiers that will help loosen their purse strings.

Another aspect you may have overlooked is leasing your basic transmission and studio equipment. We will take that up in a future issue of Lo-Power magazine when some established leasing names get into that.

Most areas have county, state or city or some agency has that type of thing. So don't worry about you aren't going to be creating 50 jobs. If you are creating two jobs or more, you have a story. Besides, you don't need all that much money

Another aspect you may have overlooked is leasing your basic transmission and studio equipment. We will take that up in a future issue of Lo-Power magazine when some established leasing names get into that.

People financing you will be judging and betting on whether you know the low power business or not. Lo-Power magazine tries to give enough ongoing LPTV information to make you an expert, so when questions come up, you have the answer.

One of the hardest things to do is to get 100% financing and not give up any of the ownership of your station or stations. The second hardest thing is to not commit yourself to a payback note that you may not be able to meet if things go bad.

So the safest way to go into low power from that stand point is to do it all with your own money or money you don't have to pay back for a few years. So you may want to get into lifting yourself up by your own boots. Let us say you get five CP's granted and you have maybe enough loose cash readily available to barely get one on bare bones without financing help. Pick the best one most likely to succeed. Get out and do some real selling, sign up churches for Sunday broadcasts, offer whoever can raise the money the best time spot and 25% off for one year in advance. Run the ad party we suggest here elsewhere and sign up contracts totalling several times your station cost. Sell the news, weather, and sports to a local radio station for six months' payment in advance. Sell classified time to the local newspaper and give a large discount for cash in advance for some time period. Offer any of your biggest ad contracts a cash in advance discount.

If you are a good enough salesman, you may even get your total station cost back (if you went bare bones) before you ever go on the air. If you do not have any luck with that one, if you have enough ad contracts to show the bank or other financier showing you can't possibly lose money the first year, you may be able to get some financing on your payback terms which are -- no payback for a year.

If you are selling subscription TV, you might offer a substantial discount to charter subscribers for one year in advance, plus some other incentive.

SELLING A PIECE OF THE ACTION

Many people are interested in getting into broadcasting. Heaven knows they have nearly all turned into a great investment and that has been the history of broadcasting.

Most do not know the first thing about oil wells, but they still invest in oil wells. Most do not know anything about broadcasting but they know it may be a good thing to invest in.

Enter you from stage left with your piccolo. You show them you have the expertise to make a bundle with low power but you need some teammates. You are furnishing the valuable license and the know how and all they have to furnish is the money. Maybe you can sell 49% for the cost of construction with an option to buy them out at 10 times their investment in three years or some such. Use your imagination. Put together a package they can't refuse. Every town you have a license in, run a little program for local investors. Get local people to invest in it. You have more people on your station's side looking out locally for your interest and helping make it a local success. We will be offering a preplanned program later for ICTV members to use for this type of local financing promotions.

3 LEGS = SUCCESS

THE FIRST LEG YOU KNOW ABOUT

The first leg you are having to deal with is coverage enginnering of antenna pattern and maximum power, antenna height, etc.

The second is viewers. What programming competition local programming mix, etc. to succeed you have to viewers as a result of facilities and programming.

The third leg is advertising revenue. One of your top management jobs is to get intitial and continued advertising income support.

Not planning and doing a job on any of these three legs, and your three legged stool will fall. We have talked a lot about engineering for good coverage. Next will come the importance of programming that is competitive and, last but not least, getting advertising support or to get subscriptions if you are STV.

TWO OTHER LEGS OF INCOME

You may believe that you have two chances for income in LPTV, ads and/or subscription income. Actually, you have two other sources, for a total of three, that will in the next few years probably equal or succeed the income from traditional ads and STV fees.

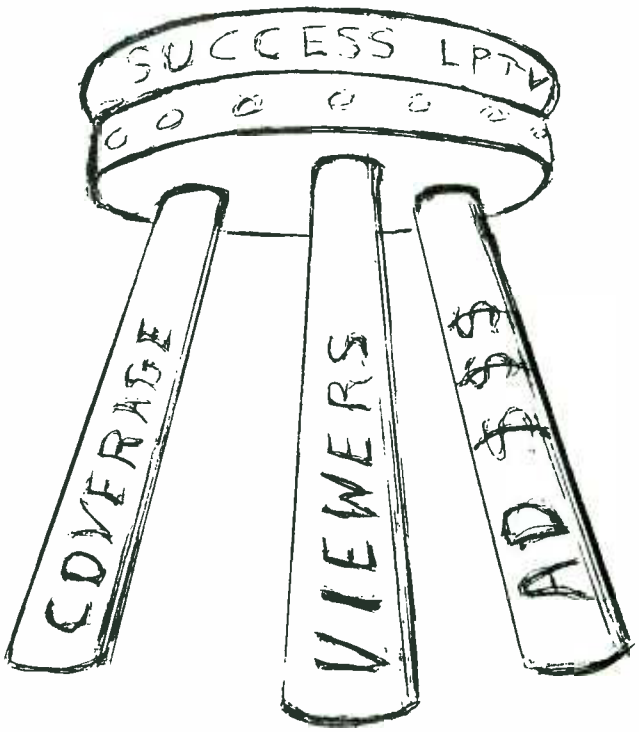
The other two are business data and transaction services. The latter two may exceed the traditional income within five years.

THE FIRST LEG MAY BE SMALLEST INCOME

People in the know are not after low power licenses for traditional program profits. Primarily, they are after the latter two, and if they make something on the program end, that's a bonus. Two examples of this are Sears Roebuck and Federal Express, both in there with over 100 LPTV applications. Did you really think that Sears was willing to invest millions to bring 'country' programming from Prescott, Arizona to viewers who already have more country programming than they can stand? Sears is interested in transaction services (catalog). See our item on electronic publishing.

Federal Express is interested in transporting business data, including electronic mail and information to smart word processors. Business data transmission is expected to exceed $3 billion by 1990. There are an estimated 25 employees per computer terminal today and that is expected to be one terminal for ever 3.5 employees in just 8 years, by 1990. Most of these computers, to be effective, must be be tied to an ongoing data base whether local or national. National can be distributed widely by satellite but are hung up be each computer having to have a satellite receiver. With low power, the data is rebroadcast as part of the VBI (vertical blanking interval) or subcarrier audio and is picked up with simple inexpensive home type antennas.

There needs to be a concentrated organized effort by low power operators to develop these customers before they find alternative methods of distributing these tie ins.



Rural area low power stations with surrounding farms and grain elevators should contact Steve Johnson, Hanover Systems, Box 2614, Waterloo, Iowa 50704, (319) 236-3636, if they are interested in getting data on farm information, prices, futures, etc., that is distributed nationally on a satellite out to farmers and grain elevators who can use either a screen and/or a hard copy printer. It is too expensive to put in a satellite receiver for every customer. This data would be carried during vertical blanking interval and this advisory service would worry about the technical details. They are currently paying FM stations about $500 per month to carry the same data where they have a subcarrier available.

Now this is just one such data service and they are going to be springing up by the hundreds. We are attempting to deal with this type of customer and equipment for the ICTV members who do not have the time or expertise to dig them up themselves. $500 a month for 1/2 of one of 25 lines is like found money because it adds nothing to your overhead. Sell them all out at this rate and who cares if your entertainment channel makes money or not. We believe, however, you will have three nearly equal legs.

Let us get into transaction services. Going back to Sears Roebuck, for example. The simple method we describe of sending full pages on the normal TV channel at 1800 pages a minute would likely be able to cover the Sears Roebuck catalog including today's sales supplements and full color pictures would take less than 10 minutes. Now, we do not know if this method would ever be used for that, but that technology is available right now and you could look through this with a single frame advance recorder just like running through a catalog and look up in indexes and speed to the page or category you wanted.

OR ONE FAT LEG

PRINTING AND MAILING BECOME PROHIBITIVE

Now Sears knows that printing a catalog and mailing it is becoming far too expensive, and it becomes obsolete (prices, new products, soldouts, etc.) before it gets printed and even delivered. Sears could use the VBI technology, but they also know a lot more sophisticated equipment is just around the corner at very low prices.

Sears tried making video discs with the entire catalog on one disc as an experiment and learned a lot from that. The disc machines will search and find one certain page of video on demand. VCR's will not currently do that, but that technology will arrive soon.

Now, Montgomery Ward, and all the other mail order biggees will certainly not be far behind Sears, and though they may not own their own staions, they are all going to want to distribute catalogs the same way. They will buy the distribution service from you if you have an LPTV staion with good coverage. If you have the **best** coverage of any low power station in your market, you can be sure you will get the lion's share of this type of income.

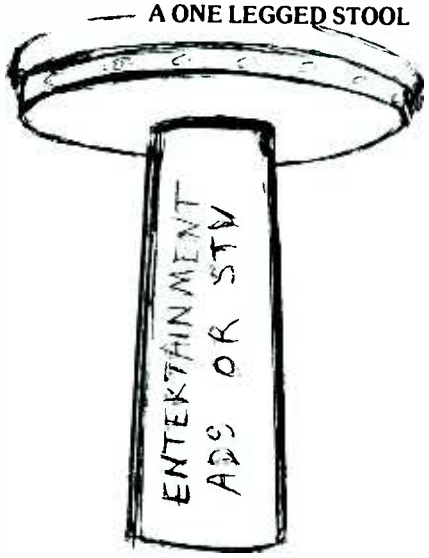
TRANSACTION SERVICES

There are hundreds of other sources of interactive or transaction services. We cover these usually on Saturday night of the Crash Courses and those of you ICTV members seeing the Crash Course tapes should realize that we have not been videotaping Saturday night's programs because they are a good portion on videotape but not all. We do demonstrations of VBI transmissions of text on Saturday night's part of the programs.

Transaction services include things like video banking. These are conducted and carried on your VBI. For example, First National contracts with you to distribute their video banking service. People who have a VBI unit can then dial up the bank's computer on the telephone, punch in their code number after the machine asks for it, and there then appears on the TV screen something like the following. It says, Hello there account #28374, what would you like to do today? 1. pay bills, 2. transfer money from checking to savings, 3. transfer money from savings to checking, 4. check your balance. Please punch the appropriate numbers on your telephone. Mr. Jones then punches #4, he would like to check his balance. It then appears on the screen that his balance is $2,424.80. It says what else would you like to do? It then lists the choices once more and he punches #1, he would like to pay bills. A menu flashes up with 20 different accounts he usually sends checks to like, 1. car payment, 2. doctor, 3. house payment, 4. phone bill, 5. light bill, and so on. So he punches number 2, doctor. The screen then says how much would you like to pay your doctor? Please punch up the amount on your phone numbers. He punches up $25. $25 appears on the screen and says if this is the correct amount to pay your doctor. Please push the number #.

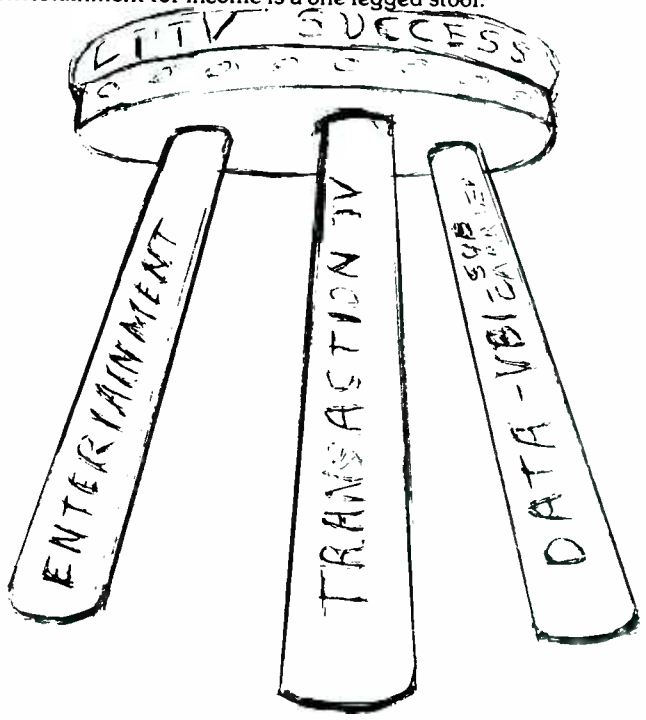
This goes on and Mr. Jones pays his bills without leaving his house or office. The bank did all of these transactions without labor; it was done totally by computer and your LPTV station was the method that got this service out to the user. LPTV is the data link out in transaction data and telephone is the link back in.

— A ONE LEGGED STOOL



IT'S ONLY OKAY IF YOU HAVE A FAT LEG

We could go on and on about other such services, but by now you get the idea of what is coming, and coming much faster than you think possible. In the case above, the bank supplied all of the equipment, you just allowed them use of one of your VBI lines for anywhere from $500 per month to $2,000 per month, depending on the population coverage of your station. An LPTV station that depends on just entertainment for income is a one legged stool.



ELECTRONIC PUBLISHING

IT IS HERE NOW!

We hear about the future and Electronic Publishing replacing paper. Let us explain how the Sony Model 2500 front load slim VCR, a similar Zenith model (also Beta), and many VHS units just coming out make this possible with what is known as **Single Frame Advance**. We expect machines made later to do the same thing perhaps on a small disk for under $300, but let's just talk about right now, not the future.

If you run a cable system, a multi-wireless cable system or a single-channel low power station, please pay attention. Elsewhere, we are going to tell you that in 5 to 10 years your income will be almost equally divided between delivering standard entertainment and informative television as one third of your income. One third will be for delivering text and data, and the final third will come from interactive service, which we will explain later.

This 2500 model Sony will do one frame at a time, and sit on one frame and reproduce it just as good as standard television. This and several other recorders that can do this and be advanced one frame at a time by a wireless hand held control may seem like no big deal to you now , but let's look at what it means to you in the future.

INEXPENSIVE SYSTEMS

Getting down now to **Electronic Publishing** finally, we need to explain we have three trends leading directly and rapidly to this new technology use:

1. The cost of paper, printing and postage has gone up faster than other costs, and continues to rise.

2. Electronics cost has come down dramatically each year and continues to do so while other costs rise. This is due, in part, to the fact cost-per-function on complex integrated circuits is decreasing far more rapidly than inflation is boosting the basic cost of making one such IC. Twenty years ago, a computer equivalent to a single microprocessor chip today, filled an entire room.

3. The paper and information explosion, where you can't keep up with the snowstorm of "paper" information and can't access or find it when you need it.

NO WAITING

Take Lo-Power Community Magazine , for example. We typeset the information, paste it up, take it to the printer, wait as long as 10 days, ship by mail, and that takes up to two weeks for delivery. The resulting production and delivery time means that information you get is four weeks old or more.

The cost of typesetting, printing and delivery for a short run publication of this type with the number of pages we run is often higher than the cost to the reader. This gives us nothing for the time and expense to put the information together.

Let us now move down the road a year or two. You have a low power station, a satellite receiver and a VCR with single stop frame advance. Sony has just developed a device that attaches to the VCR. When the station sends the turn on signal, the new machine turns on the VCR.

Instead of typesetting, we do single pages with a character generator. We do full page color photos and full page color ads. We record all of this and let us say that since the type is bigger, we send you 500 video pages instead of 50 magazine pages. Our cost to put this all together in full color is far less than typesetting and pasting up presently.

WE SAVE PAYING A PRINTING BILL

We put these 500 pages, including ads, on videotape, which at 30 frames per second means about 16 seconds.

We take it down to Western Union and buy one minute of satellite time at 3 AM on the 1st. We can send some manufacturers 500 page catalog along and the annual 500 page directory of who's who in LPTV, all in that minute. Cost for our minute of satellite time, about $10.

YOU HAVE IT THE NEXT DAY AT THE LATEST AND IN FULL COLOR

Your VCR turns on automatically and tapes the information at 3 AM on the 1st after receiving turn on information. You come in Monday morning. Rewind your one minute of tape. You now use the wireless remote control to advance page by page and read your magazine which has across the bottom the name of the magazine, the date of send out and the page number and a computer encoded number. You can turn forward or backward one page at a time or zip through to page 240 where the index says the article you want to read is located.

PAPER IS DEAD

STORE A LIFETIME SUBSCRIPTION ON ONE TAPE

You will be able to handle and store 3600 issues, including two other 500 page publications or whatever is sent along at the same time on the one tape. A lifetime of information updated monthly on the subject of low power. Later, they will have an adaptor that will computer search for and stop the machine on any page for the last 10 years on command. You read all this on your TV screen in full color. You no longer have to pay for your magazine. It is now only one day old when you get it instead of news one month old and it is paid for entirely but ads it contains because of the low production and distribution cost. We use absolutely no paper, using computer generated graphics, etc., and still photos taken on an electronic camera, such as the new Sony Mavica.

WE COULD DO IT NEXT ISSUE -- OTHERS CAN WILL TOO

Let us say I am a womens' magazine. I do everything the same, except I not only buy the satellite time for $10, I buy 1/3 minute on one low power station in every major market in the country at 3:30 AM. All the ladies that want to receive this publication free have their machine set to the right channel and the device turns on automatically when a cueing signal from the station turns it on. You will be carrying and sending hundreds of publications arriving at your station via satellite in off hours, and the home customer can set his machine to record only the publications he or she wants.

EVERYBODY GETS IT THE NEXT DAY

No postage, no delay, no paper, no cost to the customer. And all ad supported. You get paid for distributing the satellite fed information to people in your locality.

This requires no new technology. It is already available in off the shelf equipment. We anticipate starting our magazine delivery this way within 18 months and do both ways for one year and then discontinue the paper version entirely.

PAPER IS DEAD -- ELECTRONIC PUBLISHING IS ON THE WAY

This is just one example of information delivery, and we could write a book on just these types of uses that you will be getting as much or more income for than you do for carrying standard television fare. Since you may be able to readily see how this one will work, just take my word for all the others, since I do not feel we should take up more on this now, but just remember many of the companies that filed for hundreds of channels were not all interested in what standard TV channel programs they might carry, only the auxiliary services. Now they don't know something you don't know because you know auxiliary services on the Verticaly Blanking Interval subcarrier audio and off hour delivery as explained above can be your greatest source of income.

More next on the same subject.

YOU CAN GET INTO AUXILIARY BUSINESSES OR JUST SELL TIME

Let us say you or someone you hire use one of the new Sony Mavica cameras that shoots electronic stills (available at $800 in 1983) with no film and shoot three photos of every home the Real Estate Multiple Listing Service for your town lists this week. Now all the members would love to have color photos (22 inches or whatever their TV screen is) of all the homes they want to show a prospect. One or two pages of text set on your character generator describing each house, who listed it, terms, address, how many bedrooms, swimming pool, etc. You put all these together and broadcast it once a week or every day deleting those sold and adding in new ones. One minute's time can broadcast 1800 pages of home photos and text. It could be any time, just before you sign off (if you do). Every real estate office that has one of these type of recorders would then record one minute of homes and be able to show them the same day. A portable VCR and a small TV set that plugs in the cigarette lighter could even be used by a salesman in a car to view with the prospect to see if they want to go see this or that home.

A MULTIPLE LISTING BOOK ON TAPE AND IN FULL COLOR

Maybe you don't want to be in that business, you just want to sell them one minute to get this out, whatever, anyway, you should be able to think of several other marketable information services that normally go on paper in the mail. Sell them this method on your channel as faster, cheaper, in full color, and easy to store and retrieve.

FAST CLASSIFIEDS -- FRESH

You could even broadcast fast classifieds with full photos, 1800 pages of pictures of cars with information and phone numbers. People that were interested in buying a used car can then look through the 1800 pictures full color with text beneath and call the owners of those they consider.

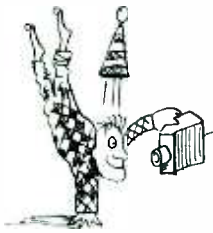
THESE ARE JUST EXAMPLES

We are just running some ideas by you here so you can brainstorm a little and see what lies ahead. The main point is the information that will need to be distributed and your low power station is one pipe line to get it out at low cost. Others will be coming to you to want to buy 30 seconds or whatever to send this type of text and photos, and you are going to have additional income as a result, even in off hours.

REMEMBER:

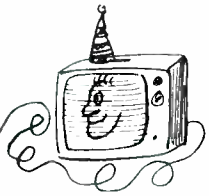
We are only seeing the tip of the iceberg of what is coming. They all need spectrum to get it out, and you own spectrum when you have a LPTV license.

PROMOTE IN ADVANCE



CONTEST

IF I HAD MY OWN CHANNEL



ENTER BY SENDING 50 WORDS OR LESS ON WHAT YOU WOULD PUT ON TV -- 'IF I HAD MY OWN CHANNEL'. CONTEST CLOSES JULY 1st. FIRST PRIZE IS PRIME RIB DINNER FOR TWO AT MEL'S PRIME RIB; SECOND PRIZE IS SUNDAY BRUNCH FOR TWO AT THE HILTON. WINNERS TO BE ANNOUNCED ON THE 6 P.M. NEWS ON LOCALVISION -- CHANNEL 7 -- JULY 7th. REMEMBER, 'YOUR OWN CHANNEL', CHANNEL 7 STARTS FULL TIME PROGRAMMING JULY 7th.

Tune in July 7, but send your entry today to 'Contest'
Localvision, Channel 7, Ourtown, Arizona 85257

ICTV members, let us know if you need more ads and ad ideas when you are ready to start promoting.

THE YELLOW PAGES PROMOTE WHILE THEIR SALESMEN SELL ADS

When the telephone company is about to call on businesses to sign them up for the next year's yellow page ads, they run a 60 day ad campaign in advance about how consumers should use the yellow pages. Billboards, television ads, and newspaper campaigns all push 'let your fingers do the walking'. This ad campaign is directed to consumers using the yellow pages but is actually orchestrated to make merchants aware of the value of advertising in yellow pages.

YOU PROMOTE VIEWERS, WHICH MAKES ADVERTISERS MORE AWARE

The point here is that we suggest 90 days before you go on the air with your LPTV station and/or ad insertion project on translator and cable channels that you start running consumer awareness ads. These ads will in effect help make merchants and other potential advertisers keenly aware of this new video becoming available to them as advertisers.

You are going to be telling merchants they should sell their prospects on using their services through advertising.

You will need to take that advice yourself and promote your local TV commercial insertion, your programming and what they are going to be getting as a result of your new television services. You will not sell or advertise to the potential advertisers direct but advertise to the viewers. Then when you are making a presentation to advertisers, you have a market that is looking forward to the start of your services and are well aware of local interest.

RUN A TEASER CAMPAIGN

Create a lot of anticipation about your new television service. An ongoing ad campaign starting 90 days before you start up is recommended.

IF YOU CAN REALLY GET IT OFF THE GROUND, IT'S NOT HARD TO KEEP IT HIGH

William Wrigley, the man who made millions with chewing gum, said that to get a business up and successful could be compared to getting an airplane to take off. It takes a lot of initial power to get it up and off the ground. He also said that many make the mistake of shutting off the engines (promotion) once they are way up and going. He said it didn't take as much power to keep it flying once it was up, but you need to keep on the power to keep it up.

GET'EM IN THE HABIT OF CHECKING YOUR CHANNEL

You need to remember that when you sell or buy a TV station, the value in buying or selling is how many viewers you have actively watching your channel. A good solid viewer is worth $150 to $200 to a buyer or seller of an LPTV station (best estimates). Therefore, all that hardware (towers, transmitters, studio equipment, remote vans, etc.) is of no value other than how many extra viewers you get as a result of them.

HARDWARE DOESN'T GET VIEWERS, THEY ARE JUST TOOLS THAT YOU USE. MAINTAIN A HIGH PROFILE, KEEP THE LOCALS TALKING ABOUT YOUR STATION

How many viewers you have as an average will depend on several factors. One, quality of the received signal (out of the snow) in relation to quality of other reception methods. Two, programming they want to watch they are not getting as well from another source, including local news, weather events, etc. they cannot get elsewhere. Three, where you are on the dial and how conscious and aware people are of your channel. The latter may be crucial.

RUN A TEASER CAMPAIGN

You can make the new local TV station coming on July 7 the talk of the town

Get the local population enthusiastic and advertisers become enthusiastic. Now is the time to generate excitement. Selling and promoting now is like selling before Christmas. One dollar's worth of ads will do far more good now than $10 dollar's worth after you get on. This is also true for wireless multiple channel TV and premium service and subscription.

PRE-START-UP AD PARTY

START WITH ENOUGH ADS SOLD TO BE WELL IN THE BLACK

WHEN THE BANK SEES ALL THESE ADVANCE AD CONTRACTS, FINANCING GETS EASIER

If you know you are going to have your transmitter delivered and be on the air in 60 days, then you might do what a South Carolina cable system commercial inserter programmer does when launching an ad availability service on cable advertising. He has a big reception party at a local hotel and invites all of the area's potential advertisers. Now we are assuming you have considered, or have leased, or attempted to lease all the cable system's ad availabilities (local insert places) on satellite supplied channels such as CNN, ESPN, USA, L.O., etc., and you have tried to lease the same thing on local translators etc., and that you may have gotten licenses for more than one channel in your market yourself. Anyway, your party is to announce the availability of local television advertising at unheard of low rates.

NOBODY KNOWS WHAT AN AD IS WORTH

You announce that you don't know and they didn't know really what TV spots are worth, but we are going to make an offer to all of our charter advertisers at $10 a spot guaranteed for one year to those that sign up as charter advertisers tonight.

RESEARCH COSTS MORE THAN THE ADS TO FIND OUT

Now you tell them they can spend money doing some research to find out whether this will pay for you or not, but the research is going to cost you more than the ad campaign

CHARTER MEMBERS--PAY OWN PRODUCTION COSTS--CAN CANCEL IN 30 DAYS

to try it. On this charter contract, you pay production costs. If, after 30 days, you decide it isn't working for you, you can cancel and discontinue.

We have all of these spaces available in all of these different types of programming (and channels if you're also selling the cable and translators ads and/or the second or third LPTV channels you have). We are giving our advertisers first choice and preference of what channels or programs these ads are going to be tied in with. All of what's left over, if we don't sell them all, we are going to run charter advertiser's spots in those places free so you

WE ARE GOING TO USE ALL OF OUR COMMERCIAL SPOTS

may get a lot more spots than you are paying for. For now, we will not take any advertisers that are not signing up for running $300 to $500 a month worth of spots with us.

PRIME CHARTER MEMBERS--WE PAY ALL PRODUCTION COSTS FOR INITIAL 6 TO 8 SPOTS--CAN CANCEL AFTER 90 DAYS

If you get in on our prime charter contract, then on this one you are free to cancel after 90 days, and we will absorb your initial production costs and credit your first month's ad payments on future production charges.

If you do a good job of showing what TV advertising is all about and why it can be very effective, you will have a large percentage sign up as charter advertisers. The Alliance, Independent Community Television (ICTV) plans to produce a videotape later for use at this advertiser introduction party. You introduce your ad salesman (or salesperson) and you get your station's P.R. off with a bang.

MAKE IT A PARTY WITH FREE BOOZE, ETC.

Now you spend the next 60 days producing all of these commercials. You will charge somewhere between $50 to $25 for producing a spot except your prime charter advertisers. You are doing a number of these production of spots free for each one.

Now you can explain and offer informercials such as a 30 minute show by the savings and loan explaining IRA accounts. Or a local real estate office doing 30 minutes on how to buy a house when there is 20% interest, etc., etc. You get five times the spot rate and you run these informercials not once, but book them for at least five times or on five channels or whatever combination so they get at least five exposures.

Initially you may start out only doing commercials from 4 to 12 P.M. or whatever you decide, depending on the size of your market.

THROW A SECOND ADVERTISER PARTY AND SHOW THEIR COMMERCIALS

After doing the two months of production of spots and informercials, you have another party just before you go on the air with regular programming and/or cable or translator commercial insertion. You let them see their commercials. You invite any that still haven't signed up as charter advertisers to still be able to do so until 2 P.M. tomorrow.

The cable system ad programmer that used this method with cable system insertion ads on a cable system with 6,000 subscribers, wrote $72,000 worth of contracts at the initial

Sell Cable, Translator and LPTV Ad Inserts

party. This party tells us they are now making a profit on advertising (after expenses) of over $2 per subscriber (viewing home) per month.

EACH HOME IS GOOD FOR $25– ANNUAL PROFIT

They are writing over $300,000 a year worth of advertising on a cable system with 6,000 subscribers. They use automatic commercial insertion equipment that is cued by tones on the satellite supplied channels. They also use a local origination channel.

He pays 15% commission to advertising agencies and says in the smaller towns you will have little local commercials handled by ad agencies, but in large cities, over half your business will come through agencies, so be sure and invite near and far agencies to your party.

He said he invested $30,000 on studio equipment including tape decks and automatic commercial insertions equipment. He is doing $300,000 worth of business with two ad salesmen and a $30,000 investment.

MANY CABLE SYSTEMS ARE NOT USING THEIR AD AVAILABILITIES

There seems to be no discoverable figures on what people that do the commercials and local programming are paying to lease the advertising rights on a cable system when they are not the people that own the cable system. It appears that some are paying so much a month per subscriber for the ad rights and others are paying a percentage of their ad revenue to the cable system. It seems to me to be a great way to get you and the cable system working together for mutual benefits instead of looking on each other as

YOU HELP OTHERS MAKE MONEY

competitors. If you can go to the cable system that is not now deriving income from advertising and say I can generate 'X' number of tens of thousands of dollars extra for you with no effort, investment, or expense on your part by doing advertising on your channels and I can do local programming that helps keep the city happy with your franchise, then you and the cable system are promoting each other instead of trying to kill off each other.

YOU CAN MAKE THEM MORE MONEY

There are certain economies in one party in a small market handling all TV production and having only one set of ad salesmen instead of two.

TRANSLATORS GLAD TO GET OUT FROM FUND DRIVES--SIGN THEM UP, START DOING ADS NOW

As far as translators are concerned, most are either tax supported or fund drive supported. Those that are fund drive supported are tired of running fund drives and most would be happy to turn over commercial insertion rights in exchange for picking up the tab for maintenance etc. We suggest that when you get contracts for this type of commercial rights on the cable systems and/or translator that you get long term contracts with an option to renew. Why sell and produce ads for just your low power station, why not be 'the source' for all television advertising in your town.

HAVING SEVERAL CHANNELS TO SELL MAKES IT TOUGH ON COMPETITIVE LPTV

When or if a low power competitor comes on, they are selling ads on one channel. You can offer lots of different channels with lots of different demographics. An advertiser may wish to reach teenagers. If you are selling cable ads, you can offer spots on the music channel. If you are selling ads to an advertiser that wants to reach some other group, you suggest appropriate channels, including network TV on the translators as well as the cable, plus some on your LPTV

WHY WAIT FOR YOUR LPTV LICENSE--GET INTO TV COMMERCIAL PRODUCTION, INSERTION AND SALES NOW--GET $$ STARTED

station that reaches the rural areas. Your new competitor's ad salesman with just one low power channel will have a hard time competing with your ad salesman. In addition, you are more likely to get your LPTV channel on the local cable system and the other LPTV station may not.

YOU SCRATCH THEIR BACK, SO----

You are far better off having the present established people working with you instead of against you.

Political advertising can be a big source of ad revenue. Most say it is far better not to offer cherry picking to any advertiser, political or otherwise (picking certain times for spots), except at a very high premium. Most also get higher rates for political advertising in addition. Most also advise selling packages ($250 or more) and refusing single spots.

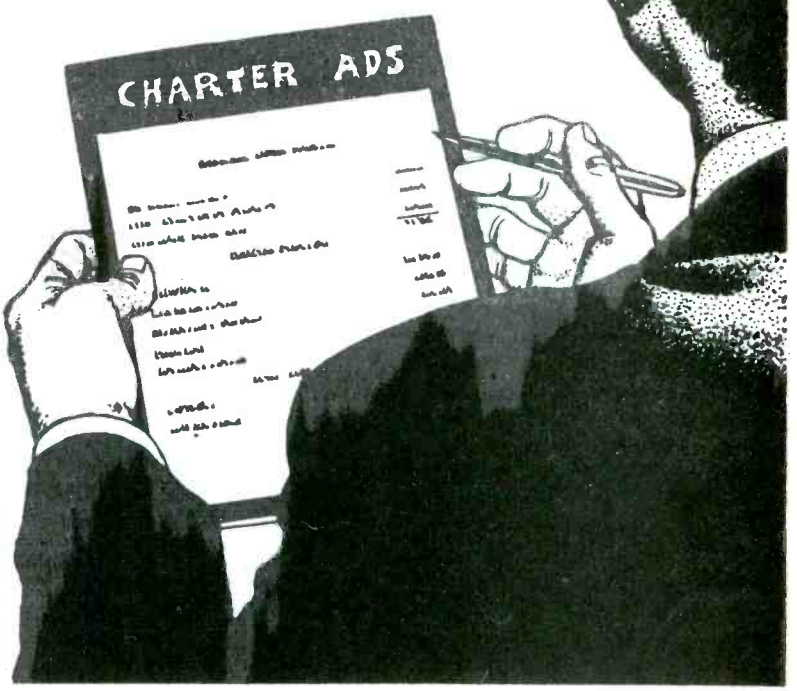
SELL ONLY PACKAGES OF ADS

When you have unused or unsold spots, give them free to your charter advertisers in ratio of what they are spending with you.

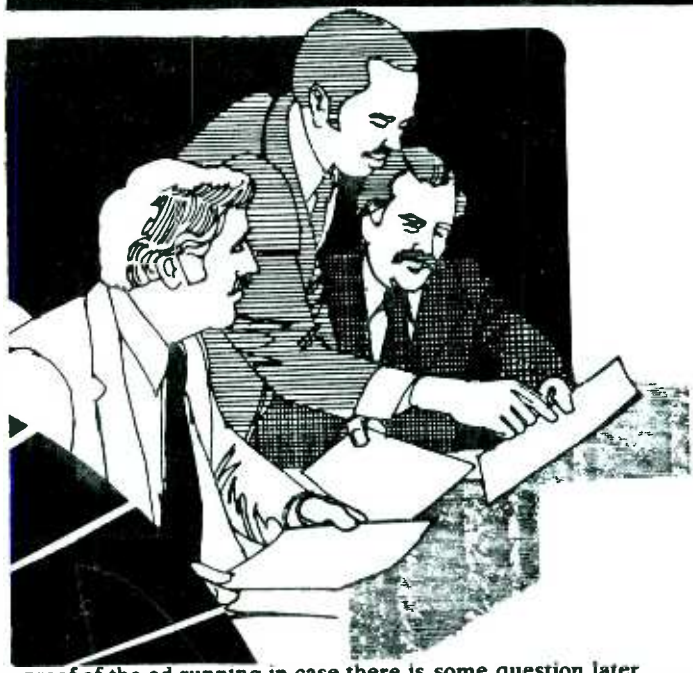
We recommend you use commercial insertion equipment that rewinds your VCR so you can run one commercial over and over without having to put it several times on the same tape. There are several different levels of insertion equipment all the way from $300 to $20,000, so you have to make some decisions on what is right for your budget. Our initial run through the number of suppliers of insertion equipment indicates that Tele-Engineering has a middle of the road system which you can start at a small investment and add to as you can afford to get more sophisticated.

YOU CAN ALWAYS ADD ON

One of the sophistications you can add is a printer that shows when each ad was run by printing a tape. Another company, Channelmatic, makes another version that uses a videotape recorder to record off the air the commercial and automatically puts character generated words showing date, channel and time right over the picture being recorded as



Automatic Insert Equipment



proof of the ad running in case there is some question later as to how it ran. We won't go into all details here since that would add considerable copy, and by the time we run it, someone has developed something that may make it obsolete anyway. The best move is to get on everybody's mailing list that makes this type of equipment so you keep up on new equipment that's coming out.

LO-POWER MAGAZINE KEEPS YOU UP TO DATE

The simplest $300 to $400 systems you merely put a tone on the second channel (be sure and use two audio channel industrial type VCR's) and then it turns on by hearing a satellite tone or a timer generated tone or a telephone generated tone. It then shuts off on its own taped tone by

USE THE LEAST LABOR INTENSIVE EQUIPMENT

video switching back with the first tone and shutting down the VCR on the second tone which means the tape is cued to start on the next commercial. With this and many other systems, you have to have the commercial dubbed on the tape over and over if you want it to appear several times, whereas the Tele-Engineering and a few other systems will rewind and find the commercial you want.

We will be putting out a report on automatic commercial insertion later and you may check with us to see if that's available when you are getting down to where you are nearly ready for this equipment. In the meantime, here are some supplier's names and addresses.

LPTV SOURCEBOOK
Available October, 1982

NEW-BETTER, LESS ESPENSIVE EQUIPMENT ON THE WAY

FULLY AUTOMATED AUTOMATIC-COMMERCIAL INSERTION EQUIPMENT

COMMERCIAL INSERTION EQUIPMENT

Tele-Engineering Corporation
2 Central Street
Framingham, MD 01701
(617) 877-6494

Channelmatic, Incorporated
2232 Lindsay Michelle Drive
Alpine, CA 92001
(714) 445-2691

Telecommunications Products Corporation
P.O. Box 444
Chambersburg, PA 17201

Character generator that automatically inserts character generator created ads
BEI
P.O. Box 937
Olathe, KS 66061
(800) 255-6226 or Kansas (913(764-1900

Video Tape Systems, Incorporated
P.O. Box 70
Fountainville, PA 18923
(215) 345-0750

Kavco, Incorporated
3931 Image Drive
Dayton, OH 45414
(513) 898-2003

Control Video
578 Division Street
Campbell, CA 95008
(408) 866-7447

H.A. Solutec, Limited
4360 Iberville Street
Montreal, Quebec
Canada H2H2LB
(514) 524-6893

Microtime, Incorporated
1280 Blue Hills Avenue
Bloomfield, CT 06002
(203) 242-4242

Gardiner Communications
3605 Security St.
Garland, Tex 75042
713 961-7348

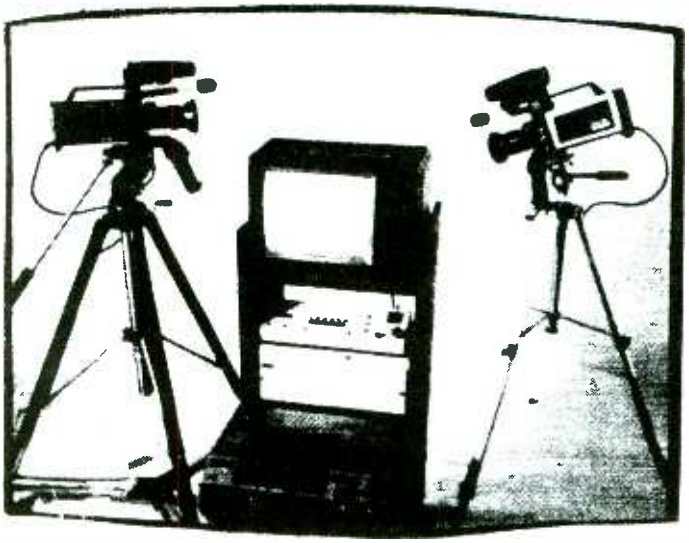
LOW COST STUDIO

One-camera operations are inexpensive ($1,500 up), and we will be doing many pieces in the regular Lo-Power Magazine, and on the Video Tapes available to ICTV members on Techniques of Using One Camera (one tape available now, others planned).

However, two cameras offer a lot more versatility, and can save considerable labor expense in not having to edit tapes or save even having an editor.

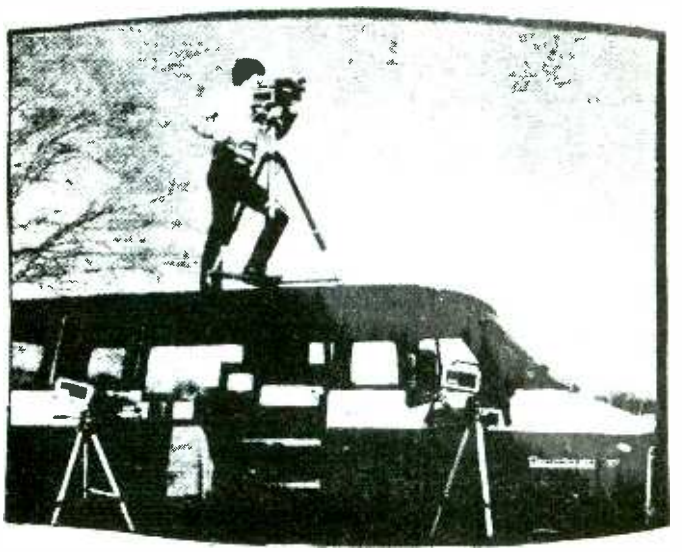
It gets much more complicated technically than just hooking them together, when you use two cameras, since you must have them operating on the same synchronization, so you can go from one to the other without big jumps, roll-ups or roll-downs of the picture. The term for tying two cameras together is called GENLOCK.

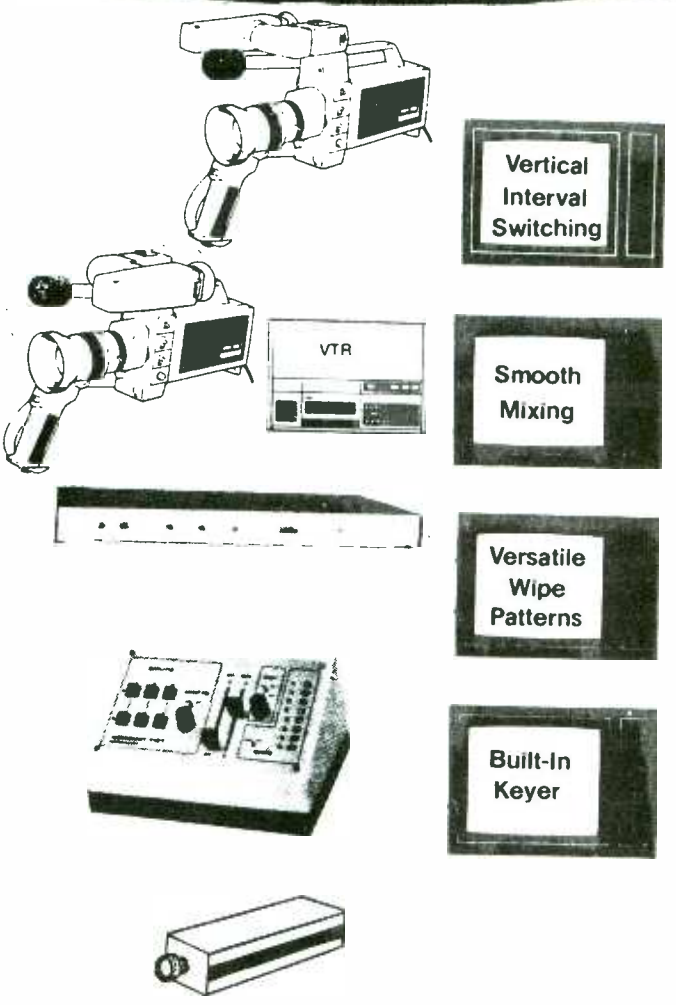
Many times you can buy a good used camera or you want two different types of camera, or you want to use the home type cameras, but they are not available with two-camera setups "Genlocked" together. We have been



working with a firm that has developed and has been selling and operating with good success a system to tie most any cameras together, by using the output of any camera as the master sync signal generator, and modifying a second camera by tapping into its inner workings to lock or "slave" its sync to the other camera's "master sync".

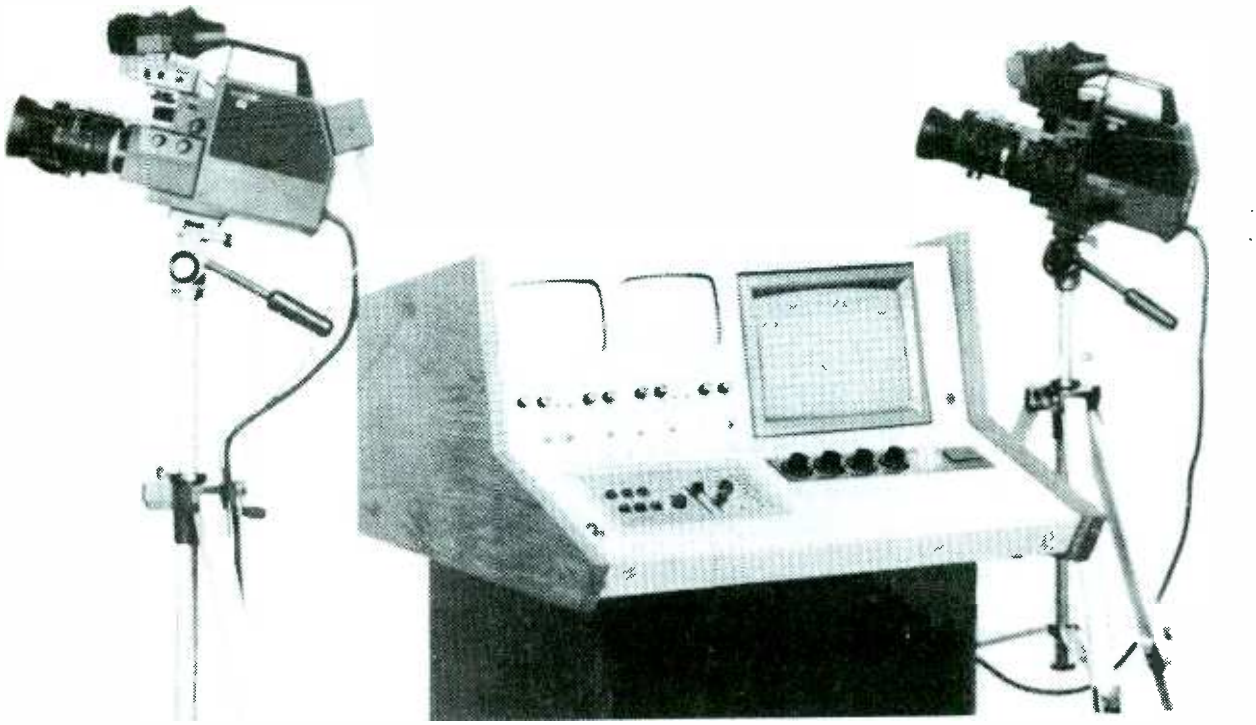
The second, tapped-into camera, can be used independently, as always, or can be driven by the synchronizations derived by a device they have developed which takes the sync off the video arriving from the unmodified master camera. They have built into this device a third output to drive a black-and-white camera as a "keying camera". This allows superimposing titles, etc, in color - inserts from the second color camera appear wherever on the screen the black-and-white camera sees black. This allows you to do all sorts of effects, which we won't go into here in detail, but it gives you some great capabilities, limited only by your imagination.





This combination of equipment can turn out some remarkably sophisticated production at a low investment.

SYSTEMS YOU CAN AFFORD.



WHAT KEYING IS

In this case, Vidcom accomplishes keying by a B & W camera. Keyed output video is genlocked to another input such as a master camera. A keyer cuts a hole in the background video of one camera and fills in the hole in this case with video from a second color camera. Black letters in front of the B & W keying camera in this case, cut the hole and could be made plaid letters by putting the second camera on plaid material. A black cutout the shape of a house can allow you to superimpose a picture of the house over a mountain background. A beach location or wherever, to show people a builder can build this house for you anywhere. It offers all kinds of professional camera tricks done normally only be very expensive equipment.

A character generator that works with an Apple computer does amazing things for a relatively inexpensive system. Contact Video Associates Labs, 2304 Hancock Drive, Suite 1-F, Austin, Texas, 78756, (512) 459-5684.

We use and demostrated at the Crash Courses two RCA CC011 ($1400 retail each, $1100 to ICTV members) and do a creditable job. You will need to add in two camera power supplies at a total of $65 to ICTV members. These CC011 cameras use a new Saticon tube that operates on amazingly low light. You can, however, use Sony's, as shown on the page with the console, or any other type of camera, providing they can figure how to tap into and put the little external adapter box on the back of one (see photo of Sonys with control mixer).

You can do wipes, inserts and just no end of professional-looking effects with this two-camera setup, which is ideal for making commercials. You could upgrade later by replacing the master camera with a higher quality, and still use the second CC011 as the slave driven camera, and the B&W keying camera , all with no modification. You can then take the now unused CC011 and use it for field single-camera work.

If you want to insert titles, etc., over a previously shot tape, or do inserts over a previous tape, you can use the tape output as the input ion place of the master camera, provided you run it through a time base corrector.

A TBC is a device you'll want sooner or later to straighten up tapes for better quality broadscast ($1000 up). Videcom can sell you several different makes of mixers which have different capabilities. The key to this 3-camera setup is the VCS 102C Camera Synchronizer that they make, and then your sending in one camera to them to be tapped into and the adapter box fastened on the back. So, let's get down to prices. Let's say you are an ICTV member and get two CCO11 for $2,200 plus $65 for power supplies. For tying the two together (for switching and dissolving between the two) will cost an additional $1,485. to Videcom for tapping in and mixing units , for a total of $3,750. This, we will call "System A".

CAPABILITIES

Photo right is a playback of the Dallas crash course and the still camera caught this picture of the TV screen during a fast angle wipe from one camera to another. Speaker is Dr. St. Clair of Television Technology. This is a Videcom setup with two CCO11 cameras.

Add in a $350 Black and White Keying Camera plus keying, 6-color matte and black, add $260 to Videocom for additional equipment, for a total of $4,360. This, we will call "System B".

Next, the full Special Effects Generator with 22 wipe patterns, Matte, Key, Dissolve (and more) for $845 more, for a total of $5,105.

This is all very portable, of course. In ABCD, we have not included Camera Tripods or Dollies. They are about $80 for each camera, up.

Next step is the console with two 6" B&W monitoirs and one 9" color monitor. It also has an audio mixer panel, a headset intercom circuit, and has two camera power supplies built in. This package, to ICTV members, works out at an even $8,000. including two RCA CC011 cameras, a B&W Keying Camera and the console. Add a couple of microphones to this last one and you are in business. We call this one System "System D".

You can substitute more expensive cameras, etc. The A,B and C setups have no audio mixer included. You can use one camera's built-in sound system or the other, but to mix them together, you would need an audio mixer, about $100 up. You would want to add a third audio input which would mean buying a microphone and cord. Unit D has built-in audio mixing.

We have, on the following page, listed two packages offered by another firm. Note, however, that neither one includes a keying camera and do not as a result have as many capabilities as the Videocom system. The panasonic Cameras listed are about the same category as the CC011's. The three-tube camera setup offers better picture quality, but also requires more technical expertise to keep the three camera tubes tuned up correctly.

In future issues of Lo-Power Magazine we will tell you how to make Video monitors out of ordinary TV sets for about $25. (Video m onitors are normally very expensive.)

When you buy a character generator, you want one that will "Genlock" into the camera synchronization setup, so when shopping for character generators, keep this in mind, otherwise, when you switch from character generator to camera you get picture jump or hop. Also, you cannot superimpose character generator created letters (text) over a picture unless they are "Genlocked" together. We are working with Videocom to develop a way of hooking in an inexpensive character generator and Genlock it all together at low cost with their system. This company will work with you on LPTV needs, which is something you won't get the big camera manufacturers to do.

We know you will not have any troubles finding higher quality cameras or equipment. The Videocom system is easily upgraded. We do not list any more costly equipment here because you won't have any trouble finding that on your own. You do, however, usually have trouble finding inexpensive equipment that works superbly so we are concentrating on helping you find that.

For example, camera cables are very expensive. To put one camera in the stands at a basketball game and the other camera at one end of the court would be very difficult and expensive with nearly all camera setups. With the Videocom system and using independent powe r supply (4x4 inch box that plugs into the wall) you can put the master camera as far from the control panel and second camera as you want, and only connect the two together with inexpensive RG59 coax cable, practically any length (within reason). However, to get the slave camera very far from the control panel will cost $3 or more per foot (about 20 feet comes with the camera) and the distance is limited (because of voltage drop).

Pre-Packaged Studios

Some firms offer packages.
Here is one.

Package 1
CVC 3000
High Quality Single-Tube Mobile Studio

Includes
- 2 Panasonic WV 3890 Color Camera Ensembles
- 2 Panasonic WV 3806A Camera Control Units
- 2 Panasonic 19A50 Camera Cables
- 2 Quickset Samson Trollies
- 2 Quickset Samson Cam Heads
- 1 Panasonic WJ 4600A Special Effects Generator
- 1 Panasonic WV 5203B Triple Monitor
- 1 JVC TM41AU 5" Color Monitor
- 1 Shure M267/A268R Mic Mixer w/Rack Adapter
- 4 Electrovoice 635A Microphones
- 3 Comprehensive CHS 490 Intercom Headsets
- 1 CVC 600 Custom Console Shipper & 24" Base
- Completely Pre-Wired w/Power Strip

Complete Package
$10,995.00

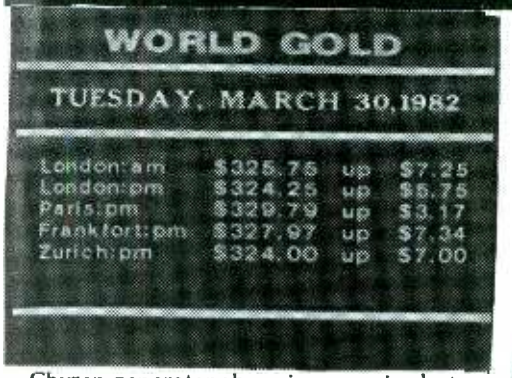
Package 2
CVC 1900
"Travelers' Series" Three Tube Mobile Production Studio

Includes
- 2 JVC KY 1900CHL-10 Color Camera Ensembles w/10x Servo Zoom
- 2 JVC RS 1900 CCU
- 2 JVC 513U 65 ft. Cables
- 2 Quickset Samson Trollies
- 2 Quickset Samson Cam Heads
- 1 Panasonic WJ 5500A SEG
- 1 Panasonic WV 5203B Triple Monitor
- 1 Shure M267/A268R Audio Mixer
- 4 EV DO56 Microphones
- 1 Comprehensive SGM 2 Shotgun Mic
- 1 JVC TM41AU 5" Color Monitor
- 3 Comprehensive CHS 490 Intercom Headsets
- 1 CVC 600 Console/Shipper & 24" Rack Base
- Completely Pre-Wired w/Power Strip

Complete Package
$18,000.00

Center Video Center
5565 N. Elston Avenue
Chicago, IL 60630
(312) 637-1600
or outside Illinois,
(800) 621-4354

CHARACTER GENERATORS



Chyron generator above is expensive but produces terrific range of high fidelity type in great colors. This unit ties in with a computer. 265 Spagnoli Road (576) 249-3296 Melville, NY 11747

The BEI Marquee-800A offers you a low cost method for inserting commercials on tone commands. Marquee-800A detects the tones sent by the satellite service.

BEI
Box 937
Olathe, KS 66061
(800) 255-6226 or
Kansas (913) 764-1900

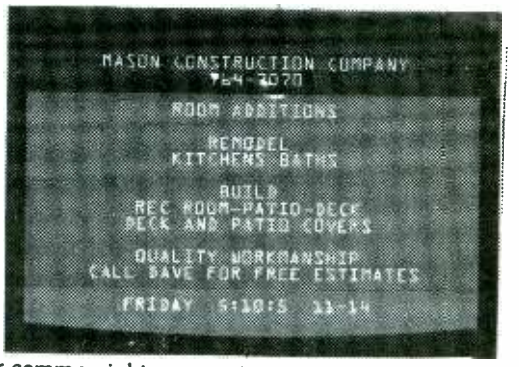


Photo above of BEI generator that produces only one type size in white as shown in photo taken off of screen at right. Also responds to tones and has 100 pages of memory for doing character generator commercial inserts. About $4,400.

MSI 4788 S. State Street
Salt Lake City, UT 84107
(801) 262-8475

Laird Telemedia
2424 S. 2570 West
Salt Lake City, UT 84119
(801) 972-5900

Metro Data
1190 Burnett Avenue
Suite F
Concord, CA 94520
(415) 827-9900

Cable Text Instruments Corp
705 Avenue k, Suite 4
Plano, TX 75074
(214) 424-2554

Teledac, Incorporated
1575 Taschereau
Longueuil, Quebec
Canada J4K2X8
(514) 651-3716

Mykro-Tek
820 West Second
Wichita, KS 67203
(800) 835-2055

Telecommunications Products
P.O. Box 444
Chambersburg, PA 17201
(800) 233-7600 or
PA (800) 692-7370

System Concepts, Inc.
2440 S. Progress Dr.
Salt Lake City, UT 84119
(801)974-0992

System Concepts, Inc.
2440 S. Progress Dr.
Salt Lake City, UT 84119
(801) 974-0992

Knox Video Products
5001 J Forbes Blvd.
Lanham, MD 20801
(301) 459-2106

Computer Video Systems
3678 W. 2150 S.
Unit 2
Salt Lake City, UT 84120

Comprehensive Video Supply
148 Veterans Dr.
Northvale, NJ 07647
(201) 767-7990

For-A-Corp. of America
1680 Vine Street
Suite 201
Los Angeles, CA 90028
(213) 467-8412

AV Equipment
3M-223-5E/3M Center
St. Paul, MN 55144
(612) 733-8132

Video Data Systems
7001 S. 900 East
Suite 250
Midvale, UT 84047
(801) 566-3635

CHARACTER GENERATORS

Character Generators are fast evolving. Many ad systems do all of their ads with character generators. This is particularly true when you do classified types of advertising.

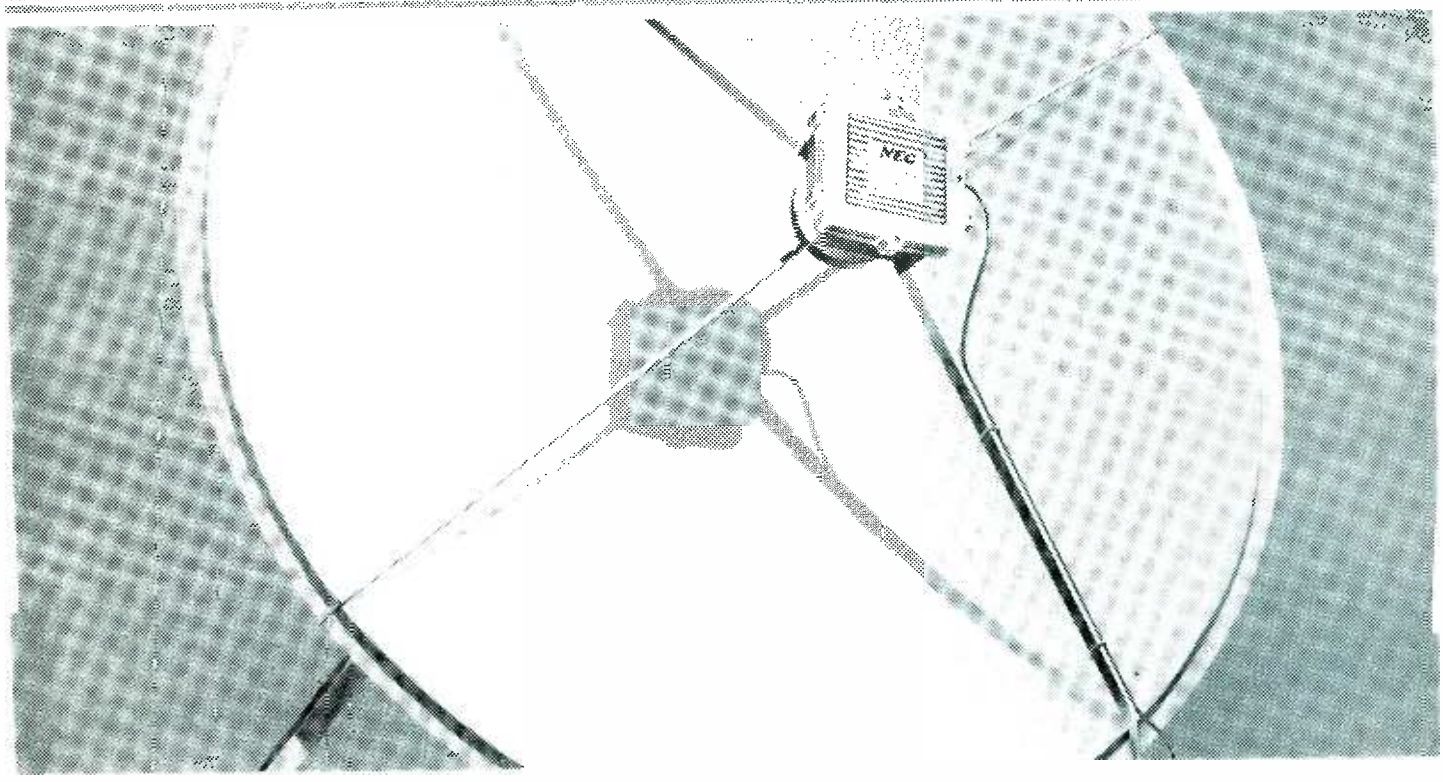
The differences in Character Generators are:
1 How many sizes and type styles.
2. How many colors of letters, bands and backgrounds.
3. Can Text Flash-Crawl or Roll?
4. Number of pages of memory.
5. Will it sequence automatically, and/or insert at specified times or command s?
6. Is it capable of Genlock?
7. Resolution (fine detail compared to coarse jagged)

Some new units are tied to a computer (one can use an Apple computer) and can be tied to a video graphics computer art machine.

••••••••••••••••

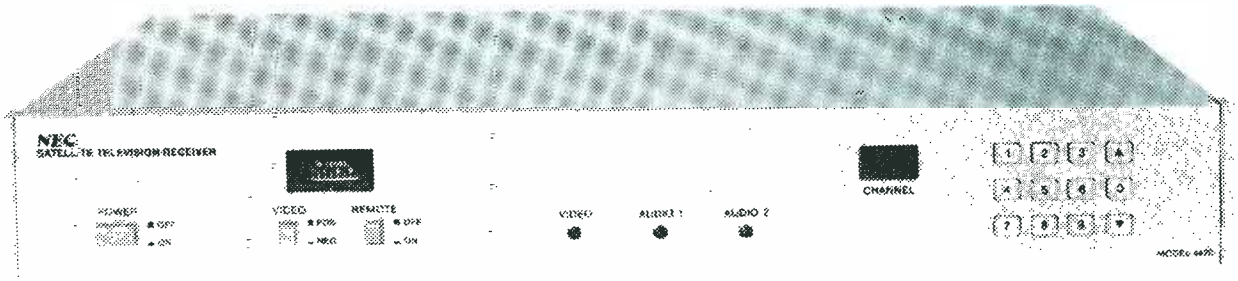
If you have an Apple computer, contact:
Video Associates Labs (512)
2304 Hancock Drive 459-5684
Suite 1-F Austin, TX 78756

NEW TVRO EQUIPMENT



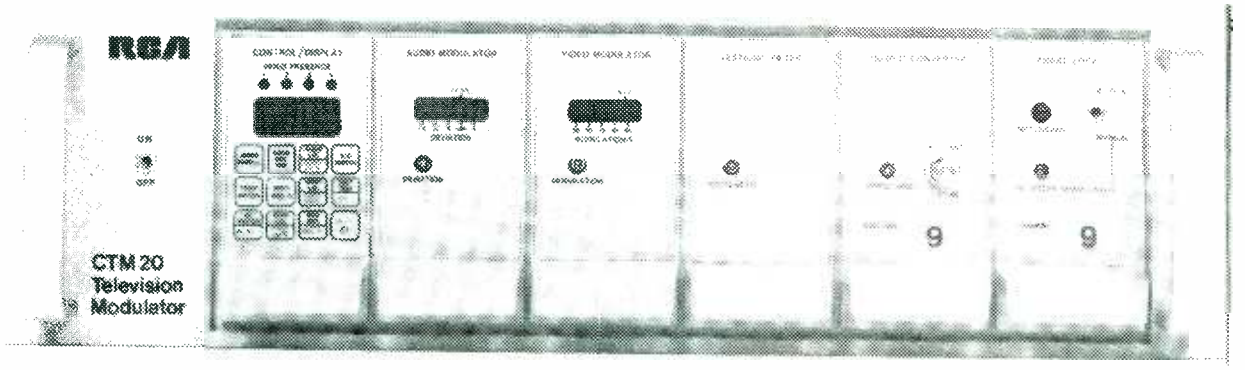
NEC America is now selling (the first Japanese unit I've seen) a new TVRO unit that is broadcast quality equipment. A hundred degree Kelvin LNC and receiver runs about $3,100 (minus dish). Second channel or subcarrier channels etc., at $275 with a wide range of options.

Write or call NEC America, Inc., 130 Martin Lane, Elk Grove Village, Illinois 60007, (312) 640-3792. NEC also makes TBC, ENG cameras and other broadcast equipment.



The large dishes (10 foot up) are ususally available from local sources since some are hard to ship. We will be taking up the multiple satellite dish problem in future issues of Lo-Power magazine. We mention this new TVRO equipment here because you may not yet have heard of it. NEC equipment has traditionally had very sophisticated engineering. The size of the dish you will need will depend on what part of the country you are in and which satellite you wish to pick up. Dishes will usually run from $1,300 to $8,000. See LPTV Sourcebook available October, 1982 for

RCA Color Television Modulator CTM20



THERE IS AN RCA MODULATOR IN YOUR FUTURE

Nearly every American manufacturer of low power transmitters starts with an RCA Modulator. Pictured above is the latest version, which has a lot of neat features. Eventually, you will be able to talk to the low power manufacturers directly about these modulators, but, as we write this, most do not even know about this new model. Therefore, you may have to talk directly to RCA, for now, to obtain information; even though you may want to buy it from RCA, you will probably order it through your LPTV manufacturer.

Normally, this type of modulator represents about $2,000 of the cost of your transmitter, and this newer basic model is about $200 higher. The new unit has microcomputer control, and, in the bells and whistles department, has bar graph modulation indicators, and several self-test modes.

The Modulator is the unit which takes your raw video and puts it on a radio frequency carrier. The rest of the LPTV transmitter you buy just basically soups it up a few million times, and gets enough power steamed up to get out there and do some good.

Translators do not have the modulator; they just amplify an incoming, already modulated channel, kick it over to some other channel, amplify it some more, and back out; so translator transmitters are usually $1,500 less at least.

The beauty of this modulator unit is that it can do some things later, when you are ready for it, even if you are not ready to use all the features initially. Nearly all of the options are plug-in boards, and could be added later.

Examples: Controlling, switching channels and monitoring performance can all be done from remote central control. The self test and monitoring allow checking 34 points within the unit. It will also indicate any out-of-tolerance conditions which occur.

THIS UNIT IS AVAILABLE BARE BONES AND OPTIONS CAN BE ADDED LATER

An AGC (Automatic Gain Control) unit is optional ($200), so that constant modulation percentages are maintained when switching between different input sources. A scrambler interface is included as standard equipment.

To be able to switch in Emergency Audio to make announcements, like a tornado warning, call for volunteer firemen, etc., add about another $100.

INSERT REQUIRED STATION BREAKS

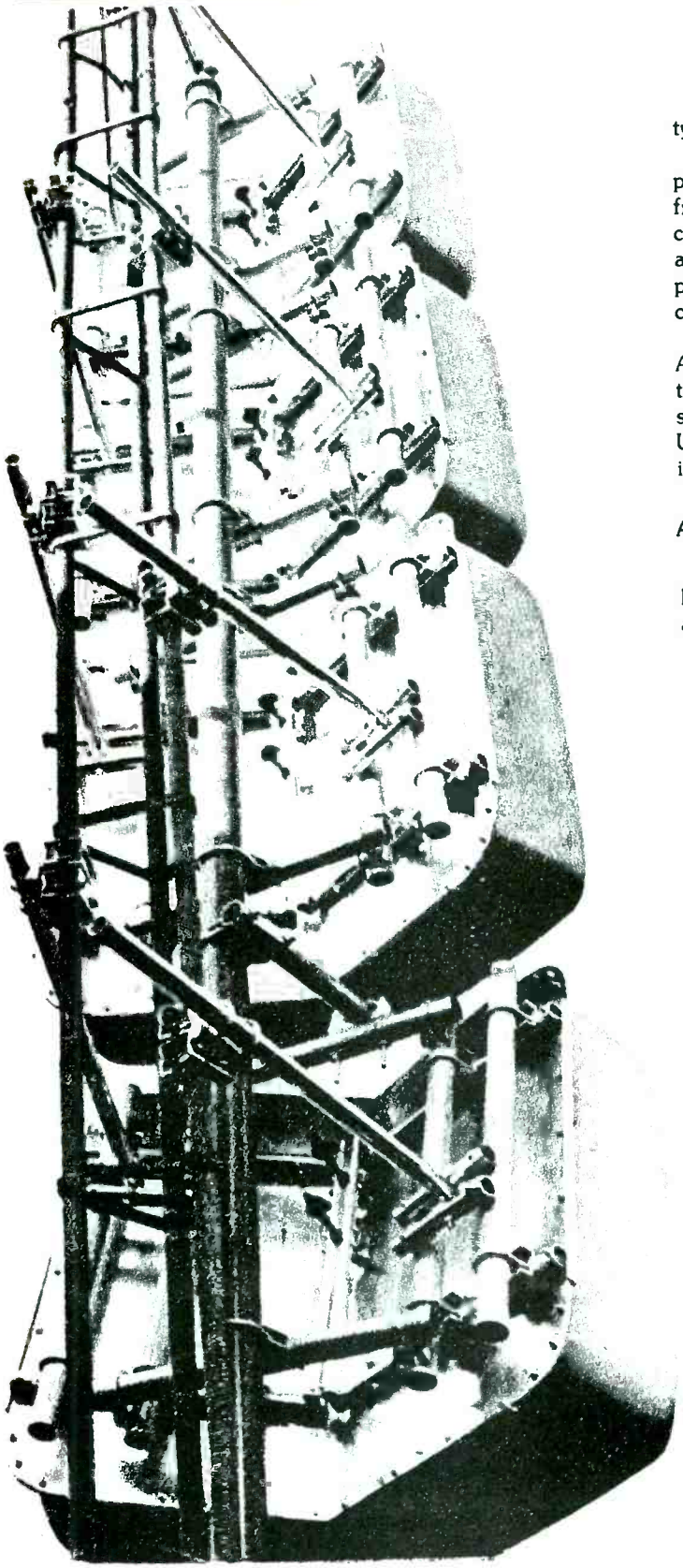
Normally, if you marked "FSK" (Frequency Shift Keying) on that portion of your application as to how you were going to identify your station, the unit to do that function adds about $300 to your transmitter cost. With the new system, transmitter identification is done with a built-in, pre-programmed (one set of wording only) character generator for about $350 additional (replaces FSK). This will be switched in by time clock, if you like, and replaces the other video for 3 seconds, or whatever. With an additional-cost programmable generator, you may just superimpose your call letters over the incoming picture. Slightly higher, but not priced yet, this unit can also be programmed for other insertions. A battery may be attached as stand-by power, and the control can read the condition of the battery through the unit.

The unit is available with four separate inputs, which can be switched by central control time clocks, etc. When one input fails, it can switch to a pre-determined input priority (such as switching to your local commercial), to the built in character generator (Please Stand By, Network Trouble, etc.).

For further information, contact your low power transmitter manufacturer, or **RCA, at 8500 Balboa Blvd., Van Nuys, CA 91409 [213] 764-2411.** RCA has a toll-free number, if you just want literature: **[800] 423-5651.**

★ **Cable system headends and translators adding low power features will aslo be able to use this unit.**

UHF TRANSMITTING ARRAYS



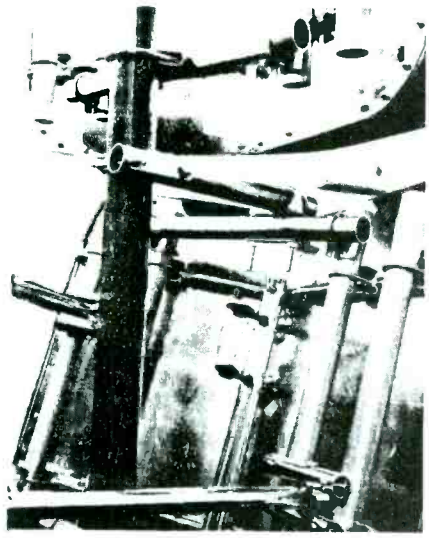
There are many types of UHF antennas, and one of the types we have not discussed is the 'Panel Antenna'.

These have all of the metal radiating parts enclosed in a plastic cover 'Radome'. This keeps the antennas themselves from loading up with ice and snow, which alters the electrical characteristics. Panel antennas are relatively low gain, but again, stacking gets them to a reputable figure. Medium priced, these panels may be worth considering in certain circumstances.

Panels shown here are mounted on a very light tower. An additional 'boom' pole has been added with a downward tilt to cover a valley below from a mountain top. Shooting straight out toward the horizon would not put the radiated UHF channel down into the area where homes are, where it counts.

AIM AND DIRECT YOUR SIGNAL LIKE A FLASHLIGHT

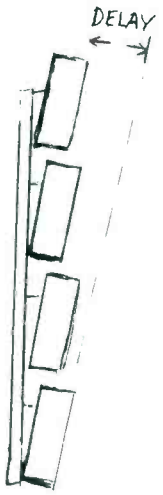
Note the lowest panel has been especially tilted to cover homes directly below the mountain. The other panels are additive to cover a longer distance.



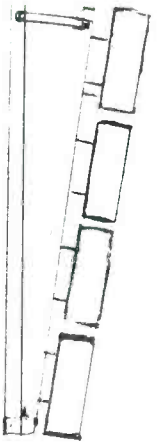
This panel arrangement is manufactured by:

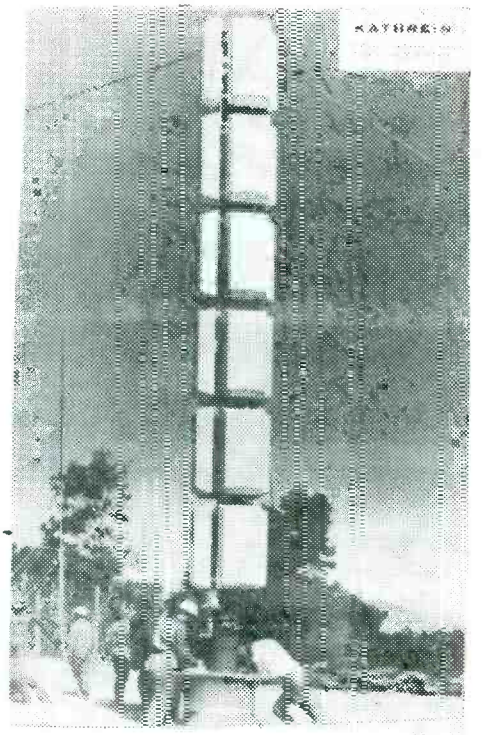
Thomas Electronics
1115 E. Edgewater, NW
Salem, OR 97304
(503) 364-8901

AIM YOUR LPTV



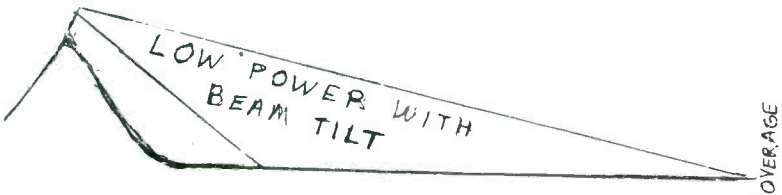
Drawing left shows how the signal from the top panel arrives later, and as a result, is out of phase. Drawing right shows how entire array is correctly angled together.



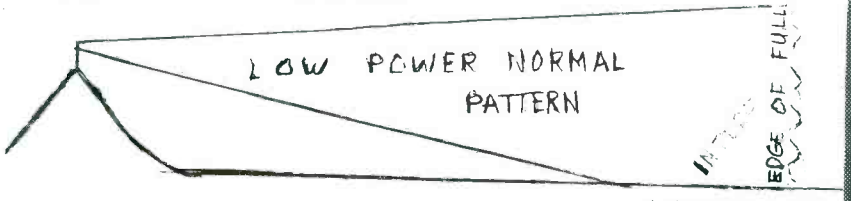


By angling antennas on a vertical mast, the radiated signal arrives at different times since the path length is slightly longer as you go up the tower. By using a secondary mast that tilts out, you get all radiation elements the same distance from the receiving antenna and all signals arrive at the same in phase.

Another advantage of tilting a beam (which can be done with most types of antennas) is to limit how far your radiation will carry and possibly cause interference to another station. By angling your beam down, you put a hotter level where the receiving antennas are located, and still limit the power you put out at a distance which may be crucial in showing you will serve the area well but still not interfere with another LPTV or full service station in the direction of your radiation pattern. See drawings. This is shown on your application as a (you fill in the degree angle) blank degree beam tilt.



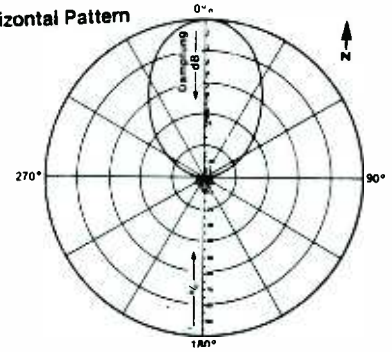
Drawing above shows how the down beam tilt puts hotter level where it is needed and keeps it from going into an area where it could interfere with a full service station as it normally would as shown below. Beam tilt can be down with yagis and other antennas as well.



BEAM PRECISELY!

Figure 3
Top View

Figure 3
Side View



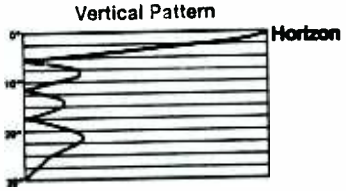
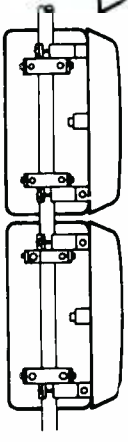


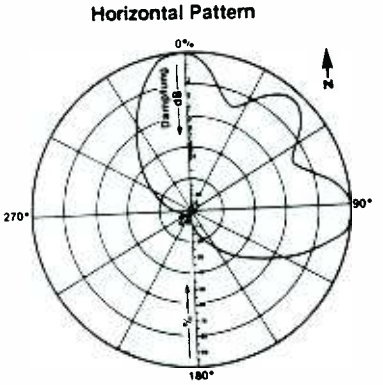
Fig. 3 — Four In Line

This plan yields the highest gain. For instance 20W transmitters would have an ERP of over 500W including losses of combiner and feed line (foam). The site needs to be outside the area to be covered.

Figure 4
Top View

Figure 4
Side View





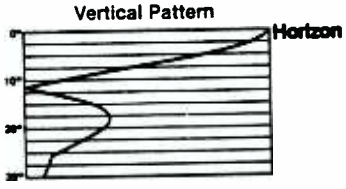


Fig. 4 — Two-By-Two

This plan has more coverage at the expense of gain. Example: 20W transmitters would have an ERP of over 150W after allowance for losses.

Tennaplex Systems Ltd.
34 Bentley Avenue
Ottawa, Ontario
Canada
K2E 6T8
Tel.: (613) 226-5870

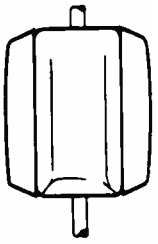
Directional horizontal patterns and null-filled or shaped vertical patterns facilitate the concentration of available power to where it is needed most, thus making the antenna ideal for providing coverage to local communities.

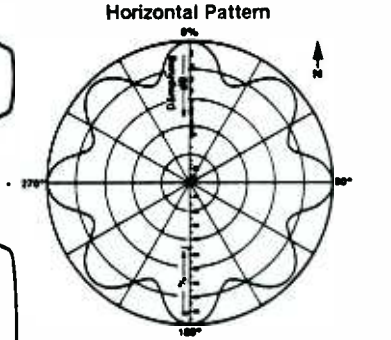
UHF Broadbrand Antenna Package

Depending on coverage, 4 broadband antenna panels can be arranged in various ways to suit a particular application for gain and coverage. An infinite number of variations are possible with different numbers of panels and special power splits. The following serve as examples of 4 panel similar hardware possibilities.

Figure 5
Top View

Figure 5
Side View





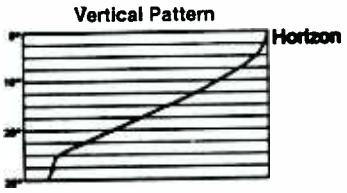
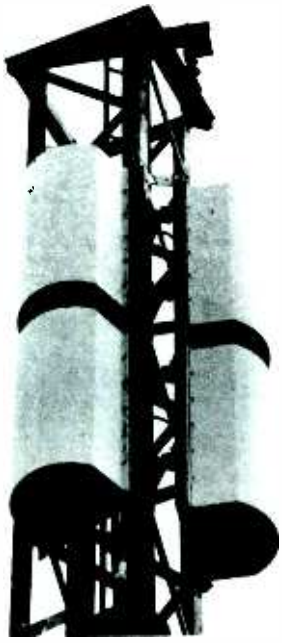
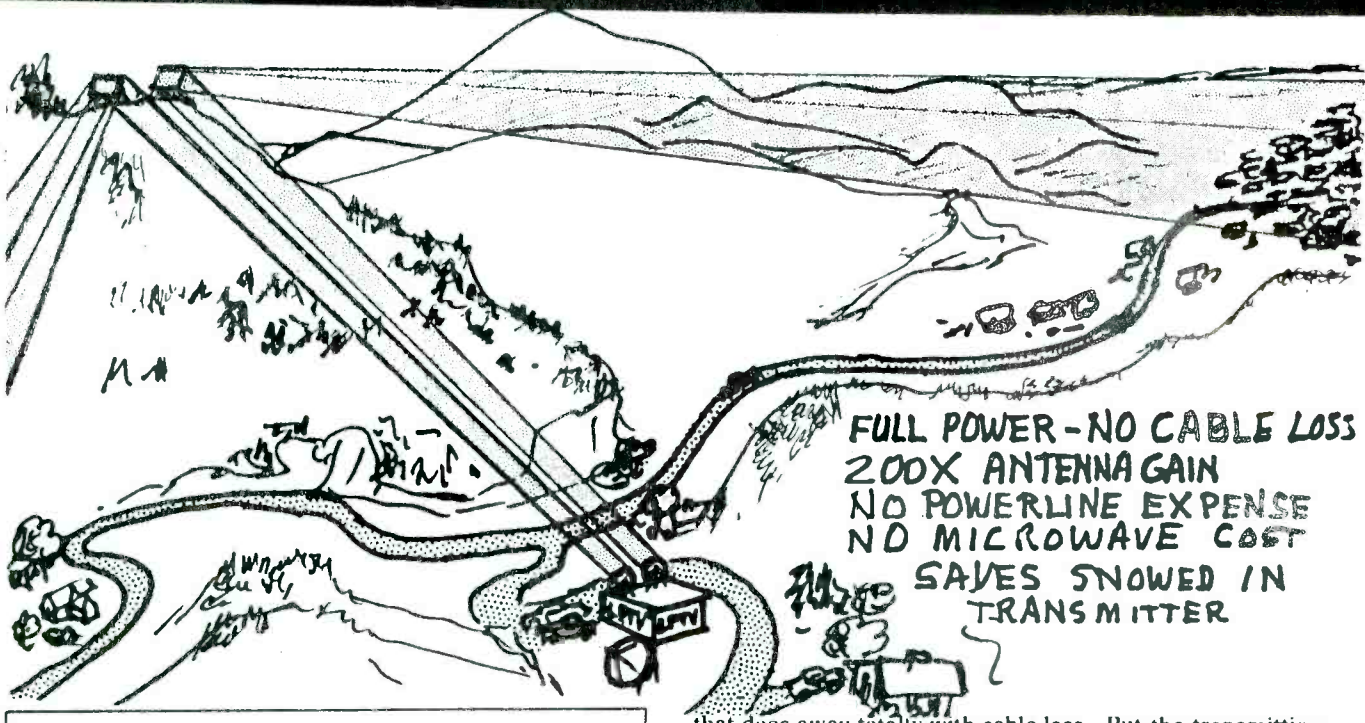


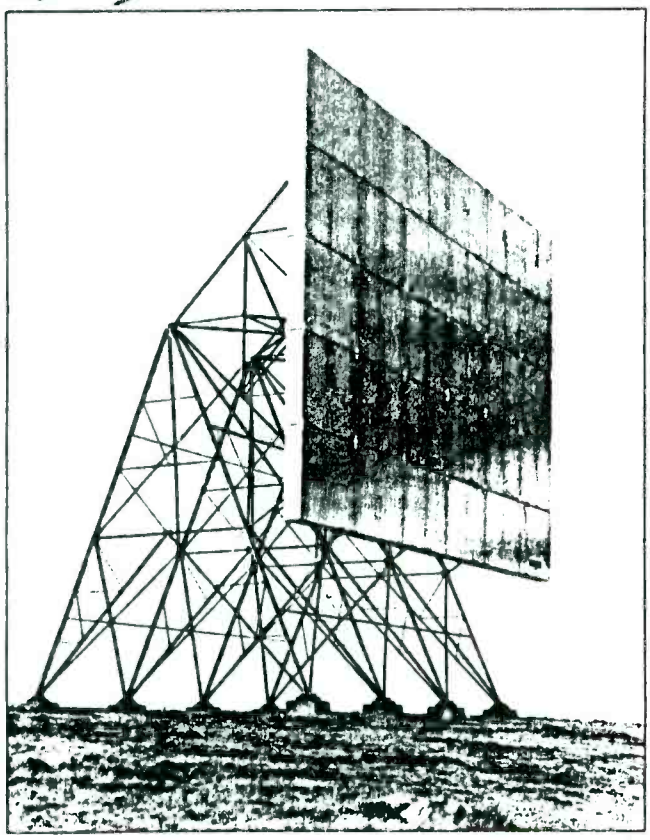
Fig. 5 — Four OMNI

This plan is needed if transmitting site is in the center of the area to be served. The gain is 3 dB after allowance for losses and perhaps more antenna would be desirable. The gain doubles as the antenna doubles.



THINK ABOUT THIS IDEA





As we have mentioned before, there is a problem in getting UHF to the top of a tall tower without losing much of your power. One method is to use extremely expensive (several thousand dollars) cable. Another solution, Townsend Industries developed a system to put the final part of the transmitter up on the tower, therefore, no cable loss.

There is a third system useable under certain conditions that does away totally with cable loss. Put the transmitting dish on the top of your equipment shack pointing straight up the tower. You have zero loss to the dish. At the top of the tower (or hill) you put a billboard reflector that reflects it out to the general area you want to cover. There is no loss in a good billboard. In fact, some of them add additional gain. These are called periscope antenna systems. We have done a couple of drawings to give you some ideas. The size of the reflector is dependent on frequency and distance. We haven't priced this all out, yet. The accuracy of these billboards becomes more severe as you go up in frequency. Since UHF is relatively low compared to what some of these are built for, perhaps a lower tolerance, lower cost system would work. Suppose for comparison's sake that buying a billboard of this type on a hill costs you $10,000 on the top of the mountain and it reflects it back down in the valley to the town you want to cover. You save getting electricity to the top of the hill, you save a $10,000 microwave link to get your video up to the hill from your studio, and you maintain all of your electronic transmission equipment right at the office. On a tower, a periscope antenna system can give you full transmitter power and as much as 200 times gain in a highly directional pattern. You might investigate the cost comparisons here.

NO ONE HAS DONE THIS, THAT WE KNOW OF, WITH UHF -- MAYBE YOU COULD BE THE FIRST

It may be possible to put hilltop reflectors together yourself if you have some engineering talent. Even larger mesh than that used in the satellite dishes could be used due to the much larger wave length of UHF. A slight curve could be built into disperse reflected radiation at a wider beam width where it was required. If there is enough demand, I am sure someone will be designing and building these for UHF low power use at reasonable prices.

Billboard left is used for microwave.

```
  AA      PPPPP     PPPPP     EEEEE     N    N    DDDDD      IIIII    X    X
 A  A     P    P    P    P    E         NN   N    D    D       I       X  X
A    A    PPPPP     PPPPP     EEEE      N N  N    D    D       I        XX
AAAAAA    P         P         E         N  N N    D    D       I        XX
A    A    P         P         E         N   NN    D    D       I       X  X
A    A    P         P         EEEEEE    N    N    DDDDD      IIIII    X    X
```

(Continued from front green pages)

BPH-810407AA NEW BUCKHANNON, WEST VIRGINIA
MULTIPLEX COMMUNICATIONS, INC.
REQ: 93.5 MHZ; CHANNEL NO. 228A
ERP: 3 KW; HAAT: 218 FT.

BPH-810515AG NEW OLYMPIA, WASHINGTON
W-2 INCORPORATED
REQ: 96.1 MHZ; CHANNEL NO. 241C
ERP: 100 KW; HAAT: 1270 FT.

BPH-810723AD NEW BALTIMORE, MARYLAND
SRW, INC.
REQ: 92.3 MHZ; CHANNEL NO. 222B
ERP: 20 KW; HAAT: 390 FT.

BPH-810805AA NEW SAN LUIS OBISPO, CALIFORNIA
CABRILLO COMMUNICATIONS, INC.
REQ: 98.1 MHZ; CHANNEL NO. 251B
ERP: 3.6 KW; HAAT: 1624 FT.

BPH-810819BC NEW COLUMBIA, MISSOURI
RADIO CORPORATION OF MISSOURI, INC.
REQ: 101.7 MHZ; CHANNEL NO. 269A
ERP: 3 KW; HAAT: 300 FT.

BPH-810821AJ NEW SPENCER, INDIANA
SPENCER COMMUNICATIONS, INC.
REQ: 92.7 MHZ; CHANNEL NO. 224A
ERP: 1 KW; HAAT: 480 FT.

BPH-810825AE NEW ELKINS, WEST VIRGINIA
ELKINS RADIO CORP.
REQ: 95.3 MHZ; CHANNEL NO. 237A
ERP: 3 KW; HAAT: -26 FT.

BPH-810831AC NEW BALTIMORE, MARYLAND
BELVEDERE BROADCASTING CORP.
REQ: 92.3 MHZ; CHANNEL NO. 222B
ERP: 50 KW; HAAT: 197 FT.

BPH-810903AD NEW HILTON HEAD, SOUTH CAROLINA
MARK ANTHONY BROADCASTING
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 273 FT.

BPH-810922AA NEW SAN LUIS OBISPO, CALIFORNIA
SLO SOUND COMMUNICATION, INC.
REQ: 98.1 MHZ; CHANNEL NO. 251B
ERP: 4.46 KW; HAAT: 1517 FT.

BPH-810924AB NEW SAN LUIS OBISPO, CALIFORNIA
HAYES-BARRETT BROADCASTING, INC.
REQ: 98.1 MHZ; CHANNEL NO. 251B
ERP: 4.47 KW; HAAT: 1511 FT.

BPH-810924AC NEW OLYMPIA, WASHINGTON
MARROW ENTERPRISES, INC.
REQ: 96.1 MHZ; CHANNEL NO. 241C
ERP: 100 KW; HAAT: 1654 FT.

BPH-810924AE NEW SAN LUIS OBISPO, CALIFORNIA
MADRONE COMMUNICATIONS,LTD.
REQ: 98.1 MHZ; CHANNEL NO. 251B
ERP: 4.4 KW; HAAT: 1508 FT.

BPH-810924AF NEW MANCHESTER, VERMONT
RADIO ST. ALBANS INC.
REQ: 102.7 MHZ; CHANNEL NO. 274B
ERP: 8.3 KW; HAAT: 1022 FT.

BPH-810925AG NEW OLYMPIA, WASHINGTON
THREE CITIES, INC.
REQ: 96.1 MHZ; CHANNEL NO. 241C
ERP: 100 KW; HAAT: 1720 FT.

BPH-810925AH NEW SANTA FE, NEW MEXICO
WKNE CORPORATION
REQ: 105.1 MHZ; CHANNEL NO. 286C
ERP: 45 KW; HAAT: 2824 FT.

BPH-810925AL NEW OLYMPIA, WASHINGTON
MASON COMMUNICATIONS CORP.
REQ: 96.1 MHZ; CHANNEL NO. 241C
ERP: 100 KW; HAAT: 1361 FT.

BPH-810925AM NEW OLYMPIA, WASHINGTON
WASHINGTON OREGON BROADCASTING, INC.
REQ: 96.1 MHZ; CHANNEL NO. 241C
ERP: 100 KW; HAAT: 1415 FT.

BPH-810925AO NEW WAPPINGERS FALLS, NEW YORK
JAMES P. RILEY
REQ: 92.1 MHZ; CHANNEL NO. 221A
ERP: 1.45 KW; HAAT: 439 FT.

BPH-810925AP NEW ELY, NEVADA
EASTERN NEVADA BROADCASTING INC.
REQ: 92.7 MHZ; CHANNEL NO. 224A
ERP: 3 KW; HAAT: 169 FT.

BPH-810925AQ NEW POUGHKEEPSIE, NEW YORK
HUDSON VALLEY COMMUNICATIONS CO.
REQ: 92.1 MHZ; CHANNEL NO. 221A
ERP: 1.5 KW; HAAT: 425 FT.

BPH-810925AR NEW SANTA FE, NEW MEXICO
UNITED BROADCASTERS OF NEW MEXICO
REQ: 105.1 MHZ; CHANNEL NO. 286C
ERP: 20 KW; HAAT: 2825 FT.

BPH-810925AS NEW SAN LUIS OBISPO, CALIFORNIA
D & B RADIO
REQ: 98.1 MHZ; CHANNEL NO. 251B
ERP: 4.44 KW; HAAT: 1508 FT.

BPH-810925AT NEW QUINCY, CALIFORNIA
PLUMAS WIRELESS, INC.
REQ: 101.9 MHZ; CHANNEL NO. 270B
ERP: 1.17 KW; HAAT: 2550 FT.

BPH-810925AU NEW WAPPINGERS FALLS, NEW YORK
WAPPINGERS FALLS BROADCASTING CO.
REQ: 92.1 MHZ; CHANNEL NO. 221A
ERP: 3 KW; HAAT: 976 FT.

BPH-810925AV NEW TUMWATER, WASHINGTON
WASHINGTON WIRELESS, INC.
REQ: 96.1 MHZ; CHANNEL NO. 241C
ERP: 100 KW; HAAT: 1326 FT.

BPH-810925AW NEW POUGHKEEPSIE, NEW YORK
HARMONY BROADCASTING CORP.
REQ: 92.1 MHZ; CHANNEL NO. 221A
ERP: 2.1 KW; HAAT: 364 FT.

BPH-810925AX NEW MANCHESTER, VERMONT
NORTH COUNTRY COMMUNICATIONS, INC.
REQ: 102.7 MHZ; CHANNEL NO. 274B
ERP: 19.5 KW; HAAT: 722 FT.

BPH-810925BA NEW SAN LUIS OBISPO, CALIFORNIA
CHORRO COMMUNICATIONS CO.
REQ: 98.1 MHZ; CHANNEL NO. 251B
ERP: 4.79 KW; HAAT: 1506 FT.

BPH-811028AI NEW HILTON HEAD ISLAND, SOUTH CAROLINA
SUNCOAST TELEVISION, INC.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 284 FT.

BPH-820128AQ NEW HILTON HEAD, SOUTH CAROLINA
OCEAN BROADCASTING, INC.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 275 FT.

BPH-820128AT NEW HILTON HEAD, SOUTH CAROLINA
WOMEN'S B/CASTING COALITION, INC.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 298 FT.

BPH-820129AJ NEW HILTON HEAD, SOUTH CAROLINA
HERITAGE B/CASTING CORP.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 284 FT.

BPH-820129AK NEW HILTON HEAD, SOUTH CAROLINA
PALMETTO COMM. OF HILTON HEAD
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 190 FT.

BPH-820129AQ NEW HILTON HEAD, SOUTH CAROLINA
ISLAND COMMUNICATIONS, INC.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 300 FT.

BPH-820129AR NEW HILTON HEAD, SOUTH CAROLINA
JESSE N. WILLIAMS, JR.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 300 FT.

BPH-820129AS NEW BLUFFTON, SOUTH CAROLINA
TRADEWINDS B/CASTING, LTD.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 300 FT.
(ALLOCATED TO HILTON HEAD, SC.)

BPH-820129AT NEW BLUFFTON, SOUTH CAROLINA
PORT ROYAL B/CASTING, INC.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 300 FT.
(ALLOCATED TO HILTON HEAD, SC.)

BPH-820129AW NEW BLUFFTON, SOUTH CAROLINA
PLANTATION B/CASTING CORP.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 299.6 FT.
(ALLOCATED TO HILTON HEAD, SC.)

BPH-820129BA NEW HILTON HEAD, SOUTH CAROLINA
TANTAMOUNT COMMUNICATIONS CO., LTD.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 286 FT.

BPH-820129BC NEW HILTON HEAD, SOUTH CAROLINA
WBSL, INC.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 296 FT.

BPH-820129BD NEW HILTON HEAD, SOUTH CAROLINA
CONSTANCE J. WODLINGER
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 285 FT.

BPH-820129BL NEW HILTON HEAD, SOUTH CAROLINA
SUNCOAST RADIO-SOUTH CAROLINA CORP.
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 300 FT.

BPH-820129BS NEW HILTON HEAD, SOUTH CAROLINA
CHARLES A. BROOKS
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 280 FT.

BPH-820129BT NEW HILTON HEAD, SOUTH CAROLINA
CALIBOGUE SOUND
REQ: 105.5 MHZ; CHANNEL NO. 288A
ERP: 3 KW; HAAT: 300 FT.

Listing of LPTV applications since the freeze

ALABAMA

Cherokee
42 100w Barrett Dunn & Ray 5/4/82

Demopolis
3 10w Benjamin B. Moore 4/13/82

Florence
5 10w Benny Carle Brdcst. Inc. 3/31/82
3 100w Orion Brdcst. Group 4/20/82
5 100w Orion Brdcst. Group 4/20/82

Greenville
6 10w Millard V. Oakley 3/18/82

Piedmont
4 .01kw Barrett Dunn & Ray 5/4/82
16 .1kw Barrett Dunn & Ray 5/4/82

Russelville
7 .01kw Barrett Dunn & Ray 5/4/82

ARIZONA

Bullhead City
51 1kw Patrick J. Arcuri 5/5/82

Flagstaff
5 10w Clearvision Communic. 4/29/82
5 100w Orion Brdcst. Group 4/20/82
5 100w Sun Network, Inc. 4/7/82
7 100w Orion Brdcst. Group 5/3/82
18 100w Russell Communic. 5/7/82
28 1kw Barnett Dunn & Ray 5/4/82
28 1kw Orion Brdcst. Group 4/20/82
28 100w Sun Network, Inc. 4/7/82
28 1kw TransAmerica Brdcst. Co. 4/5/82
32 100w Black Women Net. of NJ 4/20/82
32 1kw Orion Brdcst. Group 4/20/82
32 1kw Eddie Robinson 4/23/82
32 100w Sun Network Inc. 4/7/82
51 1kw Orion Brdcst. Group 4/20/82
51 100w Sun Network, Inc. 4/7/82
56 1kw Orion Brdcst. Group 4/20/82
56 100w Sun Network, Inc. 4/7/82

Kingman
12 10w Harlan L. Jacobsen 3/4/82

Page
5 100w Lake Powell Chronicle 3/24/82

Payson
17 1000w Roundup Print. & Pub. 4/7/82

Prescott
23 100w Black Women Net. of NJ 4/20/82
23 100w Sun Network, Inc. 4/20/82

ARKANSAS

Newport
12 10w Newport Brdcst. Co. 3/31/82

CALIFORNIA

Alturas
3 .01kw Barrett Dunn & Ray 5/4/82

Barstow
3 10w Arnold N. Applebaum 5/5/82
6 10w Arnold N. Applebaum 5/5/82
55 100w Response Brdcst. Corp. 4/30/82

Berkeley
13 10w Grassroots Video, Inc. 3/24/82

Bishop
23 1kw Eddie Robinson 4/20/82

Cloverdale
25 1kw Response Brdcst. Corp. 4/30/82

Fort Bragg
36 100w Mendocino Publishing 5/5/82

Gridley
46 1kw McClatchy Newspapers 4/23/82

Mindem
60 1kw Kemmerly & Kemmerly 4/22/82

Oroville
41 1kw TV Tech Systems 4/20/82
46 1kw TV Tech Systems 4/20/82
55 1kw TV Tech Systems 4/23/82

Paso Robles
19 1kw Arnold N. Applebaum 5/20/82
19 1kw Marie G. Bernier 5/5/82
36 1kw Arnold N. Applebaum 4/20/82
36 1kw Marie G. Bernier 5/5/82

Ridgecrest
3 10w Russell Communications 5/5/82
6 10w Russell Communications 5/5/82
25 1000w Eddie Robinson 4/14/82

Santa Barbara
33 1kw Barrett Dunn & Ray 5/5/82

Susanville
14 92.4w James Schlaudraff 3/24/82

Twenty-Nine Palms
25 1000w Eddie Robinson 4/14/82

COLORADO

Aspen
36 1kw TransAmerica Brdcst. 5/5/82

Cortez
20 20w Harlan L. Jacobsen 5/5/82
24 100w Collis M. Callihan 5/5/82
26 100w Collis M. Callihan 5/5/82

Denver
9 .1kw Orion Brdcst. Group 4/22/82
14 1kw Orion Brdcst. Group 4/22/82
22 1kw Orion Brdcst. Group 4/22/82

Glenwood Springs
25 100w Dennis H. Owen 5/5/82
25 1kw TransAmerica Brdcst. 4/20/82

Grover
19 .1kw Barrett Dunn & Ray 5/4/82

Pagosa Springs
40 1kw Eddie Robinson 4/20/82

Rangely
30 20w KUTV, Inc. 4/5/82
61 20w KUTV, Inc. 3/18/82

Rifle
29 100w Grand Junction News. 4/20/82

Sterling
6 10w Harlan L. Jacobsen 4/14/82
8 10w Harlan L. Jacobsen 4/14/82
11 10w Harlan L. Jacobsen 4/14/82
13 10w Harlan L. Jacobsen 4/14/82

Vail
36 1kw Barrett Dunn & Ray 5/4/82
36 1kw TransAmerica Brdcst. 5/5/82

Wiley
12 10w Harlan L. Jacobsen 3/24/82
6 10w Harlan L. Jacobsen 4/14/82

FLORIDA

Crystal River
4 10w Clearvision Commun. 4/29/82
4 10w Channel 9 of Orlando 4/20/82
4 10w Global Village Video 4/20/82

Key West
9 100w Orion Brdcst. Group 4/20/82
9 10w TransAmerica Brdcst. 5/5/82
28 1kw Eddie Robinson 4/13/82
34 1kw Barrett Dunn & Ray 5/4/82
34 1kw Orion Brdcst. Group 4/20/82

Live Oak
2 10w WNER Radio 4/20/82

Marathon
5 10w Woodson Newspapers 4/29/82

Marco Island
18 1kw Meycom, Inc. 4/20/82
21 1kw Meycom, Inc. 4/22/82
24 1kw Meycom, Inc. 4/22/82
42 1kw Meycom, Inc. 4/22/82
46 1kw Meycom, Inc. 4/22/82
55 1kw Meycom, Inc. 4/22/82

Vero Beach
3 10w Channel 9 of Orlando 4/20/82
3 10w TransAmerica Brdcst. 5/5/82
3 10w Vero Beach Press 3/31/82
13 10w Elizabeth W. Smith 4/20/82
15 10w Creative Brdcst. Comm. 4/20/82

GEORGIA

Deenwood
39 .01kw Barrett Dunn & Ray 5/4/82

Douglas
5 .01kw Barrett Dunn & Ray 5/4/82

Hazelhunt
63 100w Jeff Davis Brdcst.

McRae
2 10w Benjamin B. Moore 4/29/82

Waycross
19 1kw Complexicable LPTV 5/5/82
27 1kw Complexicable LPTV 5/5/82
32 1kw Complexicable LPTV 5/5/82

IDAHO

Twin Falls
29 100w Peyton Brdcst. Ltd. 4/20/82
49 1kw Orion Brdcst. Group 4/20/82
51 1kw James Farmer 5/5/82

ILLINOIS

Fairbury
6 10w Cornbelt Press, Inc. 3/31/82

Ottawa
22 1kw Eddie Robinson 4/20/82

South Streator
22 100w Barrett Dunn & Ray 5/4/82

IOWA

Eldon
25 100w Barrett Dunn & Ray 5/4/82
38 100w Barrett Dunn & Ray 5/5/82

KANSAS

Emporia
6 10w White Corporation, Inc. 5/5/82

Hiawatha
40 1000w Kanza Brdcsts., Inc. 5/5/82

Junction City
38 1kw Eddie Robinson 4/13/82

Manhattan
9 10w Montgomery Publications 5/5/82

Riley
21 .1kw Barrett Dunn & Ray 5/4/82

KENTUCKY

Cave City
18 .1kw Barrett Dunn & Ray 5/4/82

Fulton
9 10w Joseph Harpole, Sr. 5/5/82

Leitchfield
28 100w Grayson County News 5/5/82

LOUISIANA

Hornbeck
2 10w Barrett Dunn & Ray 5/5/82
11 100w Barrett Dunn & Ray 5/4/82

Many
4 10w L. Witherell & E. Taylor 4/14/82
11 10w L. Witherell & E.Taylor 5/5/82
13 10w L. Witherell & E.Taylor 5/5/82

MICHIGAN

Detroit
56 1000w Los Cerezos TV Co. 4/26/82

Grand Rapids
14 1kw John W. Boler 5/5/82

MINNESOTA

Alexandria
2 10w Christian TV of Alexan. 4/7/82

Donnelly
55 100w Tri-County UHF-TV Inc. 4/14/82

Grand Rapids
16 1kw John W. Boler 5/5/82
19 1kw Eddie Robinson 4/20/82

Montevideo
18 1000w Monte-Video 3/24/82

Wadena
17 100w Wadena Pioneer Journal 4/14/82

Windom
66 100w City of Windom 5/5/82

MISSISSIPPI

Biloxi
2 10w Tel-Radio Comm. Proper. 4/20/82
27 .1kw Barrett Dunn & Ray 5/4/82
39 1000w Eddie Robinson 4/13/82

Columbus
31 1kw Charisma TV Company 4/23/82
53 1kw Charisma TV Company 4/23/82

MISSOURI

Bethany
6 10w Green Hills LPTV Inc. 5/4/82
8 10w Green Hills LPTV Inc. 5/4/82
13 10w Green Hills LPTV Inc. 5/5/82
17 100w Green Hills LPTV Inc. 5/4/82
20 100w Green Hills LPTV Inc. 5/4/82
28 100w Green Hills LPTV Inc. 5/5/82

Maryville
20 100w Frank Merenghi 3/31/82

Milan
8 10w Green Hills LPTV Inc. 5/4/82
11 10w Green Hills LPTV Inc. 5/5/82
13 10w Green Hills LPTV Inc. 5/4/82
29 100w Green Hills LPTV Inc. 5/4/82
42 100w Green Hills LPTV Inc. 5/4/82
49 100w Green Hills LPTV Inc. 5/5/82

Princeton
16 100w Green Hills LPTV Inc. 5/4/82
25 100w Green Hills LPTV Inc. 5/5/82
31 100w Green Hills LPTV Inc. 5/4/82
47 100w Green Hills LPTV Inc. 5/4/82
52 100w Green Hills LPTV Inc. 5/5/82

Quitman
8 .01kw Barrett Dunn & Ray 5/4/82
10 .01kw Barrett Dunn & Ray 5/4/82
13 .01kw Barrett Dunn & Ray 5/4/82

Rolla
12 10w G. Carney & D. Douglas 3/31/82

Trenton
7 10w Green Hills LPTV Inc. 5/5/82
18 .1kw Green Hills LPTV Inc. 5/4/82
26 .1kw Green Hills LPTV Inc. 5/4/82
30 .1kw Green Hills LPTV Inc. 5/4/82
36 .1kw Green Hills LPTV Inc. 5/4/82
39 100w Green Hills LPTV Inc. 5/5/82

NEVADA

Las Vegas
27 1000w Las Tres Campanas TV 4/26/82

Smith/Wellington
62 20w Community TV 4/14/82

Weed Heights
21 20w Lyon County 5/5/82
72 20w Lyon County 5/5/82

NEW JERSEY

Cape May
5 10w Carter Brdcst. Corp 5/5/82
13 10w Barrett Dunn & Ray 5/4/82
56 .1kw Barrett Dunn & Ray 5/4/82

Princeton
35 100w Green Hills LPTV Inc. 5/4/82

NEW MEXICO

Alamogordo
3 10w Alamogordo Daily News 4/29/82
29 100w Local Power TV Inc. 3/24/82

Clovis
51 1kw Response Brdcst. Corp. 4/30/82

Deming
19 .1kw J.H. Voyers Comp. 4/22/82
29 .1kw J.H. Voyers Comp. 4/22/82

Farmington
4 10w Russell Communications 3/24/82
36 100w Provincial Video Cast. 4/7/82

Lovington
15 1kw Eddie Robinson 4/22/82
20 1kw Eddie Robinson 4/22/82
25 1kw Eddie Robinson 4/22/82
41 1kw Eddie Robinson 4/23/82
51 1kw Eddie Robinson 4/22/82

Reserve
12 1kw Reserve Comm. TV Assn. 4/14/82

Silver City
5 10w Harlan L. Jacobsen 4/14/82
8 10w Harlan L. Jacobsen 3/24/82

NEW YORK

Canton
39 .1kw Barrett Dunn & Ray 5/4/82

Ellenville
24 1kw Catskill Bdcst. Corp. 5/5/82

Kerhonkson
26 .1kw Barrett Dunn & Ray 5/4/82

Liberty
8 10w D. Scher & S. Kaufman 4/14/82

New York
2 .01kw Global Village Video 4/23/82

Poughkeepsie
27 .1kw Phyllis D. Teasdale 4/23/82

Southampton
32 1kw Southampton Press Pub. 4/7/82

NORTH DAKOTA

Cleveland
3 20w Harlan L. Jacobsen 4/14/82
7 10w Harlan L. Jacobsen 3/24/82
10 20w Harlan L. Jacobsen 4/14/82

Jamestown
23 100w Lloyd Lorenz 5/5/82

SOUTH DAKOTA

Mitchel/Woonsocket
12 10w Harlan L. Jacobsen 4/7/82

OHIO

Cleveland Heights
11 10w NE Ohio Brdcst. Corp. 3/31/82
12 10w NE Ohio Brdcst. Corp. 3/31/82

Lima
67 100w Provincial Video Cast. 4/7/82

Parma/Brookpark
12 10w NE Ohio Brdcst. Corp. 3/31/82

OKLAHOMA

Ardmore
64 1kw Local Power TV Inc. 5/4/82

Broken Bow
4 100w Jewel B. Callahan 5/5/82

Coalgate
24 1kw George B. & John C. Hill 4/7/82

Durant
18 1kw George B. & John C. Hill 4/7/82
21 1000w OPEC 3/31/82

Elk City
52 100w OPEC 3/31/82
52 1000w Ronca Bdcst. Co. Inc. 5/5/82

Madill
36 1000w Tom McCurdy 4/14/82

Marietta
30 1000w Tom McCurdy 4/14/82

Strong City/Leedy/Hannon
36 20w Northfork TV Transl. 3/31/82
52 20w Northfork TV Transl. 3/31/82

Weatherford
27 1kw Weatherford News Inc. 5/5/82

Woodward
35 1kw Barrett Dunn & Ray 5/4/82

OREGON

Lakeview
60 100w Hydesert Comm. & Elec. 5/5/82

PENNSYLVANIA

Duboistown
32 100w Hazleton TV Assoc. 3/24/82

Jersey Shore
5 10w Barrett Dunn & Ray 5/4/82
24 100w Barrett Dunn & Ray 5/4/82

Pleasant Gap
17 .1kw Barrett Dunn & Ray 5/4/82
44 100w Barrett Dunn & Ray 5/5/82

Williamsport
32 1kw Wm. Kane & R. Carey 3/24/82

South Williamsport
2 .01kw Barrett Dunn & Ray 5/4/82
32 .01kw Barrett Dunn & Ray 5/4/82

TEXAS

Alpine
2 10w B. Langdon & H. DeVilliers 3/24/82

Alto
4 10w Geo. E. Gunter 5/5/82

Amarillo
9 01kw Thomas C. Higley 4/22/82
60 1kw First Choice Video 4/22/82

Brownwood
4 10w Pompey Mtn. Brdcst. Co. 4/20/82
11 10w Barrett Dunn & Ray 5/4/82
11 10w Pompey Mtn. Brdcst. Co. 4/20/82

Bryan
61 100w Provincial Video Cast. 4/7/82

Crockett
11 10w Polk County Pub. Co. 5/4/82
60 1kw Barrett Dunn & Ray 5/4/82
60 1kw Amanda Steed Kelton 4/7/82

Dallas
55 1000w Richard V. Menchaca 4/26/82

Denison
54 1kw Creative Brdcst. Comm. 4/20/82

Frankston
3 10w Jeffrey L. Ward 5/4/82

Houston
60 110w SW Hispanic Brdcst. 4/22/82

Huntsville
5 10w First Choice Video 4/20/82
59 1kw Barrett Dunn & Ray 5/4/82

Kerrville
2 10w First Choice Video 4/20/82

Livingston
7 10w Polk County Pub. Co. 4/14/82

Lufkin
42 1kw Black Women Net. of NJ 4/20/82
55 1kw Intern'l Bdcst. Network 4/29/82
57 1kw Jean M. Ikezoe 5/5/82

Nacogdoches
57 1kw Forward Brdcst. Comm. 4/20/82

Palestine
4 10w Jeffrey L. Ward 5/5/82
6 10w Geo E. Gunter 5/5/82
10 10w Geo E. Gunter 5/5/82

Tyler
2 100w Orion Brdcst. Corp. 4/20/82
6 10w Geo E. Gunter 5/5/82
10 10w Jeffrey L. Ward 3/31/82
35 1000w Provincial Video Cast. 4/7/82
59 1000w Diane Nash-Bevel 5/5/82
59 100w Kemmerly & Kemmerly 4/29/82
67 1kw Intern'l Brdcst. Network 4/7/82

Victoria
42 100w Hombres Enterprises 5/5/82
48 100w Hombres Enterprises 5/5/82
53 1kw Freda A. Brown 5/5/82
54 100w Hombres Enterprises 5/5/82
58 100w Hombres Enterprises 5/5/82
60 100w Hombres Enterprises 5/5/82
67 100w Provincial Video Cast. 4/7/82

TENNESSEE

Cookeville
38 1kw Creative Brdcst. Comm. 4/20/82

Humboldt
49 1kw Warmath Communications 5/5/82
60 100w Local Power TV Inc. 3/24/82

Jackson
2 10w Protestant Episc. Church 3/24/82
4 10w Tel-Radio Comm. Propert. 4/20/82

Madison
53 1kw Creative Brdcst. Comm. 4/23/82

Milan
44 100w Local Power TV Inc. 3/24/82

Nashville
22 .1kw Focus Translators 4/23/82
25 1kw Focus Translators 4/22/82

Wynnburg
2 10w Joseph W. Harpole, Sr. 5/5/82

UTAH

Cedar City
6 10w Harlan L. Jacobsen 3/24/82
40 20w KUTV Inc. 3/31/82
67 20w KUTV Inc. 3/31/82

Manti
28 100w Sanpete TV Corp. 5/5/82

Marysvale
32 20w Univ. Of Utah 5/5/82
65 20w Univ. Of Utah 5/5/82

Moab/Spanish Valley
3 10w Harlan L. Jacobsen 4/14/82
5 10w Harlan L. Jacobsen 4/14/82
7 10w Harlan L. Jacobsen 4/14/82
9 10w Harlan L. Jacobsen 4/14/82
11 10w Harlan L. Jacobsen 4/14/82
13 10w Harlan L. Jacobsen 4/14/82

Vernal/Hayden
3 10w Harlan L. Jacobsen 4/14/82
11 10w Harlan L. Jacobsen 4/14/82

VIRGINIA

Front Royal
15 1kw Kenneth M. Callaway 5/5/82
34 1000w Shenandoah Valley LPTV 3/24/82

Luray
30 1000w Shenandoah Valley LPTV 4/14/82

Staunton
25 1000w Shenandoah Valley LPTV 3/24/82

Woodstock
17 1000w Shenandoah Valley LPTV 3/24/82

WEST VIRGINIA

Franklin
30 1000w Shenandoah Valley LPTV 3/24/82

WASHINGTON

Aberdeen
19 100w Russell Communications 3/24/82
55 100w Response Brdcst. Corp. 4/30/82

Bellingham
53 100w Russell Communications 3/24/82

Fastsound/Ferndale
44 100w Response Brdcst. Corp. 4/30/82

Grand Coulee
21 1kw Eddie Robinson 4/20/82

Omak
31 100w Statesman-Examiner Inc. 5/5/82

Othello
17 1kw Eddie Robinson 4/20/82

WISCONSIN

Shell Lake
16 1kw Steven C. Lutz 5/5/82

WYOMING

Cheyenne
3 100w Orion Brdcst. Group 4/20/82
11 100w Orion Brdcst. Group 4/20/82
17 1kw Eddie Robinson 4/14/82
61 100w Provincial Video Cast. 4/7/82

Cody
19 1kw Eddie Robinson 4/20/82

Evanston
3 100w Listeners' Network TV 5/5/82
8 10w Star Publishing Co. Inc. 5/5/82

Gillette
8 10w Russell Communications 5/5/82
13 10w Russell Communications 5/5/82
16 100w Telecrafter Corpor. 4/29/82

Jackson
9 10w Grand Teton Print. & Pub. 4/20/82

Sheridan
5 10w Russell Communications 5/5/82
9 10w Russell Communications 5/5/82
15 100w Orion Brdcst. Group 4/20/82

Shoshoni
40 100w Riverton Fremont TV Club 5/5/82

ICTV

Membership Information

Independent Community Television Alliance

- ☐ Local Power Hot Line - 50 hours a week.
- ☐ Subscription - Monthly Lo Power Magazine
- ☐ Co-Op Group Purchases of Equipment
- ☐ Expedited Washington Research Information
- ☐ Collective Lobbying for the Little Guy in LPTV.
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(Use for one week; members pay only for shipping, handling, record-keeping.)

• Techniques of Using One Camera	1 hour
• Setting Up a Studio	30 minutes
• Television Tape Production	45 minutes
• Lighting for Television	25 minutes
• Multiple Camera Techniques	30 minutes
• Shooting Video "Basics"	60 minutes
• How to Shoot a Sports Event	20 minutes
• How to Broadcast a Local Wedding	20 minutes
• How to Broadcast a Church Service	20 minutes
• How to Set Up a Video Tape Business	20 minutes
• Shooting Local Commercials for Cable or LPTV	20 minutes
• LPTV Crash Course	12 hours
• LPTV Crash Course "B"	10 hours
• Subscription TV	17 minutes
• World's Smallest Full Service TV Station	35 minutes
• The New *Mavica* "Still Camera"	17 Minutes

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Members free one week use of each tape

BOOKS AND MANUALS LOANED -- TWO WEEKS FREE TO MEMBERS

- ★ How To File Under The New LPTV Rules
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- ★ How To Run A Successful Low Power TV Station
- ★ Color TV Studio Design And Operation
- ★ Video Tape Production And Communication Techniques
- ★ Designing And Maintaining a Small TV Studio
- ★ Television Production Handbook

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Membership Application

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_____ _____

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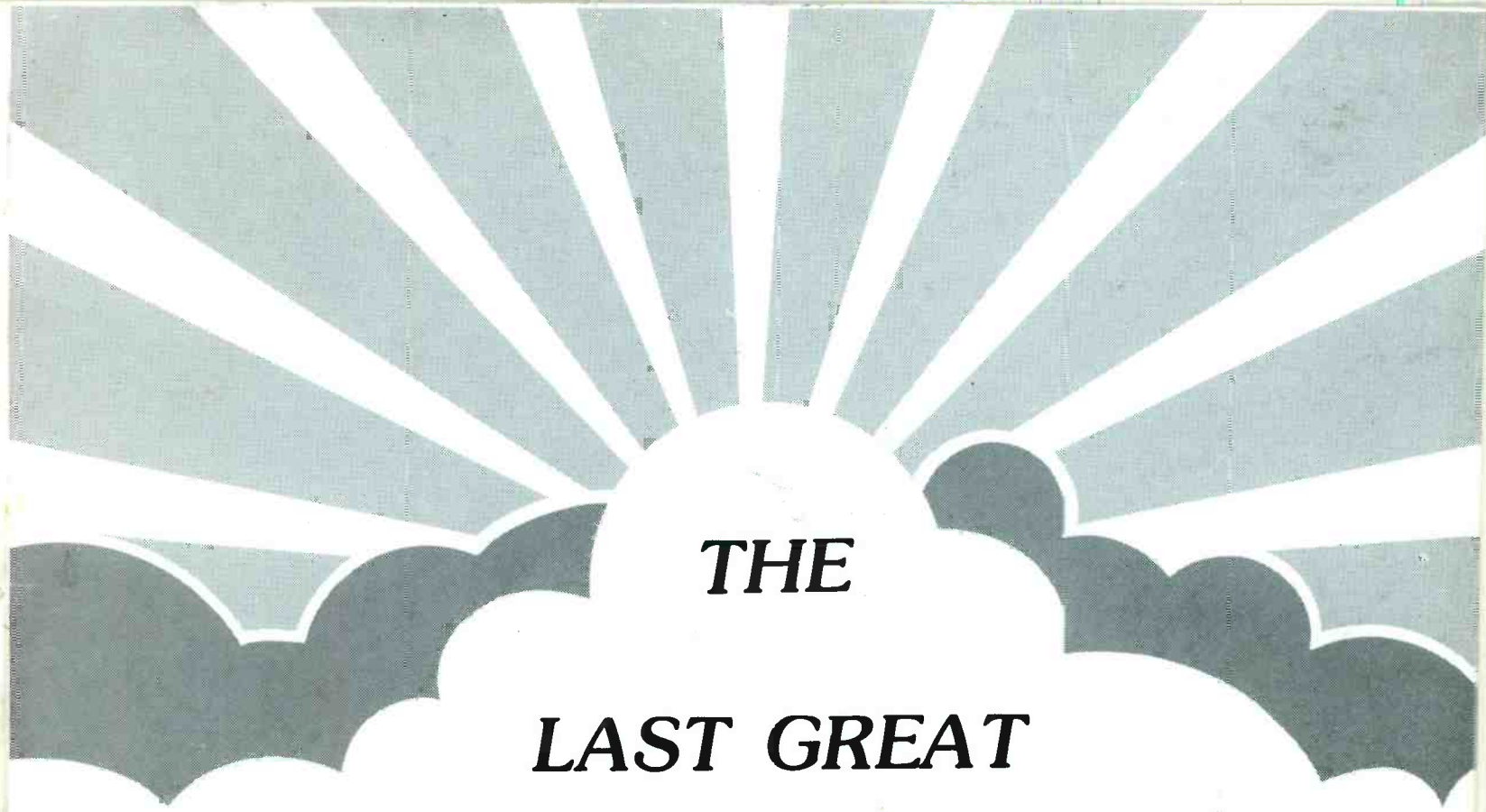
City _____ State _____ Zip Code _____

Phone ( )



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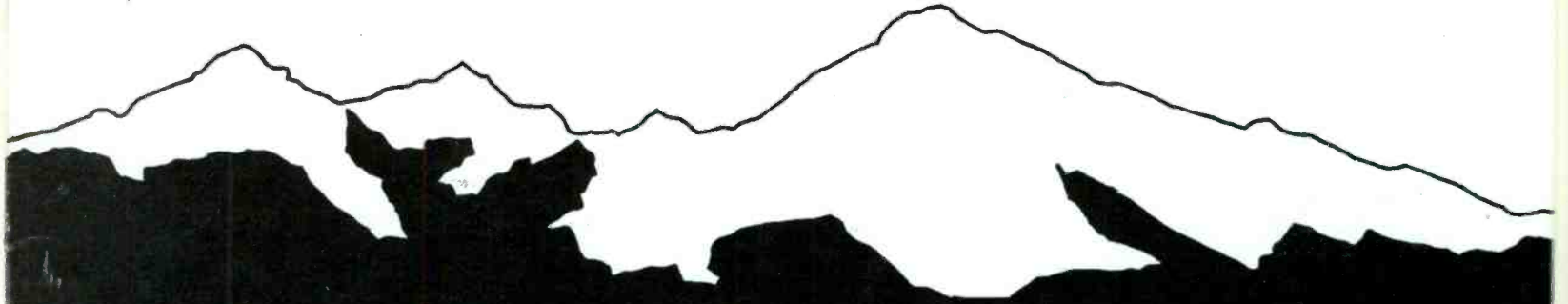

LO-POWER COMMUNITY TV

July 1982

WHAT'S HAPPENING?

ICTV members who received the FCC release and form for amending along with the top 212 coordinates by first class mail right after it was released should know that we omitted several major cities inadvertently in the index we put together by state to enable you to make your own map up right away easily.

We rushed to assemble that index for your convenience, and get it out, but didn't proofread it until after it was mailed. Omissions were almost all major obvious big cities like San Francisco, Boston, Seattle, etc., but you should know the corrected complete version appears in this magazine.

Market No. 170 is missing because the Commission purposely left out Anchorage, Alaska. You will see other reference regarding Alaska in this issue and previous issues. Alaska is rather remote, but the Anchorage area has more TV than many places in Utah, Montana, Arizona, etc. We would llke to see Alaska get all the TV they want and do not begrudge them that. However, we believe the Commission is violating the letter of the law (the communication act) in granting more LPTV CPs in Alaska than the other 49 combined in far less processing time, and now, excluding Alaska from the tiered processing system and freeze. They have also licensed low power FM in Alaska. The Communications Act says that all states shall be treated equitably. Alaska is in a position to and can thumb their nose at the Commission if they do not license Alaska LPTV promptly and stall Alaska too, because Alaska can say we do not need federal authority red tape or delay because these broadcasts will definitely not cross state lines, and therefore, we are licensing them as an interstate function, and we aren't going to wait around anymore. If the FCC delayed Alaska like everyone else, that is what would probably happen. Now if Alaska pulled that off, the Commission would have a whole new can of worms in the lower 48 as others proved their transmissions would not cross state lines, either.

In three other developments, the Commission received so many applications the last days of the old rules and first days of the new rules (reported over 1500) they went to shock and on June 21, planned to implement a total freeze until September, but withdraw that at the last moment when word had leaked out and it was no longer politically expedient. In the meantime, they did put on an amendment period for previously filed applications which essentially stops all processing and cutoffs for 90 days (there have been no cutoffs released in the last 60 days). Harris, the new man in charge of getting the Commission moving, had promised 50 a month in 1982 by had. So far in the first six months, they have licensed only around 80 in the 48 with an essential halt for at least five months now because there have been no new applications going through cutoffs and there apparently will be none till October which means those cannot be granted until around December. Just more cover and excuses for stalling and doing nothing with LPTV. The computer expected in the fall they say now will not help until the following spring. Harris promised up to 500 a month with the computer. In the meantime, the Commission took restrictions off of full service stations wanting to go subscription and, on top of that, got set to license the first direct to consumer satellite channels essentially giving several big broadcasters the right to cover the whole country and totally bypass local stations and local control, receivable on a garbage can lid size dish nationwide, so local TV doesn't rate in states and really big (whole country) stations are being readied to give out. So the competitive situation deteriorates for local broadcasters as the Commission diddles and processes 80 LPTV applications in 1982 and stackes up 2,000 more. They won't, but if they took the tiered freeze completely off, they would have 20,000 applications by the end of 1982. They still act amazed and surprised every time they get another large bunch of applications. We expect there will eventually be 50,000 to 100,000 LPTV stations in the 48 states. The Commission, meantime, still pretends there will only be 4,000, still refusing to face reality. Nationwide all powerful DBS are their priority emphasis, local TV doesn't rate. We expect that when they are stacked up with over 12,000 waiting applications (over 8,000 now), the political pressure for LPTV will be so great the Commission will either have to start acting or the roof is going to come off. In the meantime, it's the same old stall, just under a different pretense. The big present entrenched broadcasters still want low power stalled, and the Commission, essentially a captive agency of the industry it is supposed to regulate, is still pulling it off despite political pressure to get moving on LPTV.

Arizona has filed an anti-trust action against the satellite delivered programmers who refuse to sell to anyone but cable system. Action is a result of some satellite programmers refusing to sell to SMATV and motel, etc., systems.

It seems that similar action would be feasible when they charge cable systems $4.50 per month per subscriber, and some other greater price per subscriber to STV operators other than cable, and/or refuse to sell to one method or the other. This court case may turn out to be very significant to low power. We will keep you posted.

The Commission is setting up two tracks for processing. One is supposed to be the express way, where the applicant pays for the extra engineering research to be done to process applications and the other track is the slow one. Some of the paper mill people are offering to file the extra engineering for you for faster processing for an additional thousand dollars. From what we hear, that is no more competent a job than what they've been turning out when they file the original application for $4,000. Barnum said there was a sucker born every minute. You may want to get this extra engineering filing done on those applications you really want expedited. I'd suggest you shop for **competent** engineering, and I really do not believe that this paper showing of calculations should cost more than $500 in most cases.

The problem is, many applicants do not know when they have been taken and most do not know when someone has done a superb job. Unfortunately, the good conscientious engineering types are usually terrible salesmen, promotion and P.R. people. Conversely, it appears the really great salesmen that have been doing such a good selling job on applications get lousy engineering done for you.

We plan to mail this issue July 2. We are including 16 pages of dictionary and FCC phone book that were to be included in the August issue. We decided you could probably use the information in July, so, as a result, you get a larger publication in July, which means if anything comes up that needs to be gotten to you swiftly, the August issue may be small enough that we could afford to mail it first class.

LPTV crash courses are currently scheduled for September in Phoenix in connection with a newspaper group, and October 30 and 31 in Las Vegas.

For those of you getting discouraged and wanting to drop out, we are already getting inquiries from people that want to obtain your license position.

Lo-Power Community Television Magazine is published twelve times per year. Sample copies are $5, subscription $50 per year. Intended to supply needed information on Low Power Television at reasonable cost.

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Despite Communications Act -- FCC SAYS LOCAL TV SECONDARY

> *"[The administration's] magic word is 'deregulation,' a euphemism for 'let the Big Boys handle it.'"*
>
> —Rose Goldsen

LOCAL LPTV STATIONS AND PROGRAMMING REMAIN SECONDARY TO FULL SERV—ICE STATIONS UP TO 200 MILES AWAY. Read FCC Docket BC-78-253, Parts 26 and 34; reference to section 74.703 a and b.

Rose Goldsen is the author of 'The Show and Tell Machine' and is a professor of sociology at Cornell University.

The essence of the FCC's statutory mandate is the maintenance and development of a locally responsive broadcast service. Section 307(b) of the Communications Act[4] specifically authorizes licensing of broadcast service to localized areas. In relevant part, Section 307(b) provides:

The Commission shall make such distribution of licenses . . . among the several States and communities as to provide a fair, efficient and equitable distribution of radio service to each of the same.

In the view of the Supreme Court, Section 307(b) imposes on the Commission "broad responsibilities for the orderly development of an appropriate system of local television broadcasting,"[5] not the authority to establish a nationally licensed system.

JAMES J. POPHAM. Speaking at the American Bar Association on DBS.

Editor's Note:
How can the Commission justify dozens of LPTV CPs for Alaska, more than the other 49 states combined, when the Communications Act calls for equitable distribution?

[2]The Commission is obligated to regulate in the public interest. Unreasoned embrace of competition as the equivalent of the public interest has not met with judicial favor. *See, e.g.*, FCC v. RCA Communications, Inc., 346 U.S. 86 (1953); MCI Telecommunications Corp. v. FCC, 561 F.2d 365 (D.C. Cir. 1977), *cert. denied*, 434 U.S. 1040 (1978); Nat'l Ass'n of Independent Television Producers and Distributors v. FCC, 516 F.2d 526 (2d Cir. 1975); Hawaiian Telephone Co. v. FCC, 498 F.2d 771 (D.C. Cir. 1974); Kessler v. FCC, 326 F.2d 673 (D.C. Cir. 1963); Carroll Broadcasting Co. v. FCC, 258 F.2d 440 (D.C. Cir. 1958).

[3]Interim Notice, *supra* note 1, at ¶ 44 *et seq.*

[4]U.S.C. § 307(b) (1976).

[5]United States v. Southwestern Cable Co., 392 U.S. 157, 177 (1968).

[6]Interim Notice, *supra* note 1, at ¶¶ 46-48.

[7]Fourco Glass Co. v. Transmirra Products Corp., 353 U.S. 222, 228-29 (1957); Clifford F. MacEvoy Co. v. United States, 322 U.S. 102, 107 (1944). The Commission has been admonished to avoid this sort of extension of its powers on several occasions. *See* National Ass'n of Regulatory Util. Commissions v. FCC, 533 F.2d 601, 619 (D.C. Cir. 1976); American Telephone and Telegraph Company v. FCC, 487 F.2d 865 (2d Cir. 1973).

[8]*See Packwood Goes Public With Aim to Deregulate*, BROADCASTING, November 24, 1980, at 27.

LPTV license rules finally out; Lottery may trim wait

Publishers' Auxiliary/May 31, 1982

WASHINGTON—The final rules for licensing low-power television stations—a relatively cheap entry into local broadcasting—have emerged from the Federal Communications Commission.

How long processing nearly 7,000 LPTV license applications may take, however, now depends on Congress as well as the FCC.

A bill, H.R. 5008, providing for a "lottery" selection process for winnowing applicants for FCC-granted broadcast licenses (including LPTV) was to be considered by the House Energy and Commerce Committee May 26.

Without some streamlining of the process for granting LPTV licenses, observers in and out of the FCC said, it could be "many years" before some contested licenses might be granted.

Newspaper publishers interested in low-cost television stations covering a 10 to 20 mile radius comprise an estimated 40 percent of the applicants.

According to the FCC's report and order published at the end of April, newspaper ownership will be considered "mass media" for the purposes of weighing competing applications in the same geographical area.

The FCC has said it will seek "media ownership diversity" in awarding LPTV licenses. An applicant with no media ownership will have more chance in a comparative hearing if pitted against a publisher.

But, said media attorney Booker Wade Jr., the owner of a television or radio station will be at a disadvantage compared to a publisher.

The FCC's announced leaning toward broadcast deregulation under Reagan-era chairman Mark Fowler apparently will use the new but already crowded LPTV market as a laboratory.

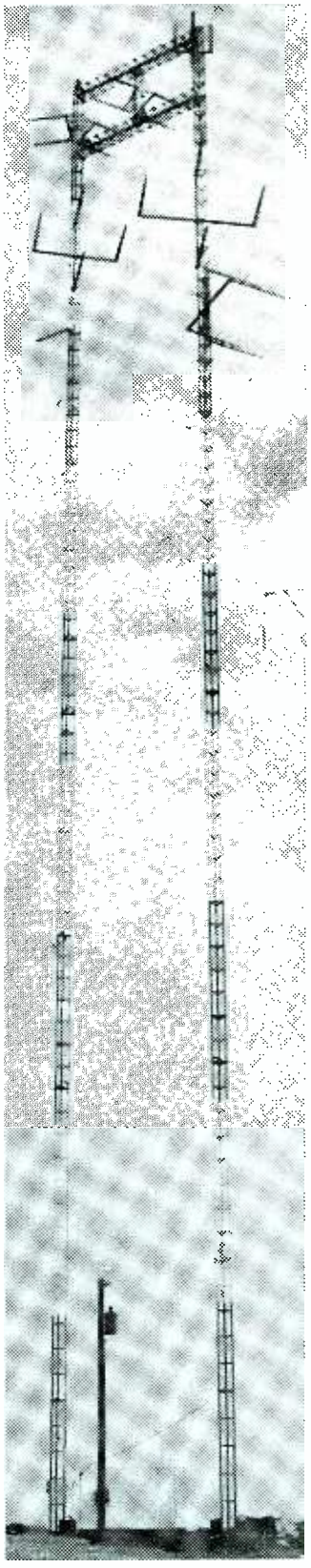
There are virtually no rules against cross-ownership of an LPTV station by a full-service station, or by a radio or television network—let alone a publisher.

And the FCC, as it moved toward its final version of the rules, dropped even a modest one-year ban on selling a granted license—a move that was designed to discourage speculation, or "trafficking."

A license that is "mutually exclusive"—that is, won out over a competing applicant—cannot be sold during the first year the LPTV station is on the air.

Even that may be waived if hardship can be demonstrated. And Chairman Fowler, in a separately filed dissent to the order, said that would unreasonably restrict licensees, because it would make it harder to get a loan for the station's construction.

FCC legislative staffers said the looming problem of processing 7,000 LPTV applicants—with a "paper hearing" evaluation when more than one applicant seeks the same slot—was one reason for the commission's renewed interest in a lottery procedure.



The FCC had earlier this year rejected the first congressional stab at designing a lottery procedure for reducing its workload under a much-curtailed annual budget.

The FCC "has basically been dismantled in terms of its ability to solve large problems" like how to deal with 7,000 LPTV applicants, said LPTV consultant Parry Teasdale, a former FCC staffer himself.

One way the FCC has tried to reduce the workload, Teasdale and other observers agree, was to build incentives into the final rulemaking procedure that encouraged settlement of contested licenses before the choice was put up to the FCC.

"We strongly encourage plans that involve time-sharing and pooling of resources. . . . We shall make every effort to rule promptly on all settlements among competing applicants," the FCC's report and order said.

"When and if" a lottery is approved, the FCC said, it will "of course" be used to streamline the LPTV licensing approval process.

Without one or both of these time-savers, said FCC attorney Molly Pauker to a National Newspaper Association LPTV workshop in March, choosing among contending applicants wouldn't begin until October of this year and could stretch out for three years.

The new lottery provision before the House, said FCC legislative liaison Terry Mahoney, differed from the one earlier rejected in allowing a "significant preference for underrepresented groups" built into the process. Otherwise, he said, "it is much less exacting" for the FCC because the staff wouldn't have to evaluate other qualifications before the random selection took place.

Minority-owned applicants and those with "media ownership diversity" would be awarded "extra balls in the lottery hopper," as Teasdale put it.

Mahoney said the backlog of LPTV applications was "one of the primary reasons" for renewed interest in a lottery authorization that the FCC would buy and Congress would pass.

H.R. 5008 "stands a good chance of adoption into law," Mahoney said, though there are "always minefields" in Congress. If passed by the House, it will probably be combined in conference with a bill the Senate passed last year that is similar to H.R. 5008 in many respects, he added.

Prescott-based fourth network on hold

FCC's low-power rules

By Steven Bergsman
News Editor

May 18, 1982

ABC. NBC. CBS.

And now KUSK.

Marshall M. Carpenter is the president of Neighborhood TV Co., Inc. At this time, he is not to be confused with William S. Paley or even, perhaps, Fred Silverman, but he has a vision. He wants to start a fourth network, with the mother station to be Prescott's new independent station, KUSK-TV.

The idea isn't as farfetched as it might seem. Carpenter, who has been involved in the technical development of television since the early '50s, became aware of a shift in the Federal Communications Commission rules that allowed for the interconnection of television translators via satellite.

Translators were conceived some 30 years ago as an inexpensive technique for extending television service to remote areas or for filling in bad reception spots in the service areas of full-service stations. They pick up the signal of an operating station and merely extend it out. As an example, KOOL-TV uses a translator to bring its signal to Globe.

Carpenter came across the rules change in 1980, but in fact, the rule had been changed in 1978. No one had picked up on it. Carpenter saw that satellites can vastly reduce the cost of earthbound interconnection of the translator.

He took the idea of a nationwide broadcast television network based on translator interconnections to Sears Roebuck's Allstate Insurance Co.'s venture capital department, and they agreed to give him financing. In the process, they applied to the FCC for 141 translator facilities in large population centers around the country.

Two years later, none of the applications have been acted on.

What has happened to Carpenter's vision of a fourth television network is a combination of what he says is bureaucratic bungling, "low-power" competition and pressure from the major networks to preserve the status quo in TV broadcasting.

Carpenter claims the processing of Neighborhood's applications were held up because the FCC invited the filing of new applications for low-power television service which at the time they were contemplating establishing.

Low-power television, which would be competing with Neighborhood for frequency use in major markets, has become a popular crapshoot. Some 5,000 to 7,000 low-power applications have been filed by such companies as ABC, NBC, Turner Broadcasting, Harte Hanks Communications, Gannett and a host of others.

The VHF channels — the very high frequency ones that use channels 2 to 13 on the television dial — were snapped up in the major markets long ago. The channels available for low-power stations are UHF (ultra-high frequency) and many are available in major markets.

The reason the FCC suddenly started allowing applications for low-power television had a lot to do with politics and opportunism, Carpenter says.

Carpenter explains that the surge of applications began

Marshall Carpenter

in the waning hours of the Carter administration.

On Sept. 9, 1980, there was a new program announced by the FCC to help minorities by letting them file for low-power stations. The proposal was made via the conventional rule-making route that requires notice, comment, deliberation. However, in a complete break with precedent, the FCC said it would accept applications and authorize the new stations on an interim basis, even though the rule-making body was simply posing the question of whether low-power service should be established.

According to Carpenter, "The former administration had in mind establishing a new service and pushed it through prematurely before it was thought out. Charles Ferris, commissioner at the time, wanted the service ... sparked by some of his staff, because they had prepared applications before they left in the middle of 1980. Shortly after leaving the FCC, they filed for multiple stations across the country."

Carpenter alleges that Ferris was attempting to see that 15 low-power television stations would be awarded to a former FCC staffer, whom very soon after leaving the FCC, filed for 15 translators stations with the same features that ultimately were permitted under the proposed and ultimately adopted rules.

"Ferris was seeking to establish a monument to himself before he left," Carpenter said, "so he screwed around the rules in such a fashion that it permitted him to do that, but it didn't succeed because the length of time it takes in order to work even what he tried to do was longer than what he foresaw. Now he's ended up by being their (low-power applicants') spokesman. His main clientele happens to be low-power people."

Neighborhood TV unplug

Continued

Five months after Ferris' low-power ruling, one FCC commissioner told the Texas Broadcasting Association, "With respect to the low-power docket, I would emphasize that the Commission's action on Sept. 9, 1980, was only a Notice of Proposed Rulemaking to establish a low-power television service.

"At that time, we also established interim guidelines to cover the handling of low-power applications until we have a service in being. But under existing FCC rules, there is no such thing as low-power television."

And commissioner James Fogarty was quoted as saying, "The only thing we handled worse was CB radio."

When present chairman Mark S. Fowler testified before his confirmation hearings, he recognized this problem. The cart, he said, had come before the horse.

However, even under the Fowler administration, things haven't gotten any easier for Carpenter's Neighborhood TV. According to Carptenter, the FCC first will decide on low-power applications in areas at least 55 miles outside the top 212 markets. Then it will go to work on those markets smaller than the top 100 markets, before finally going to work on the largest markets.

Carpenter added that once the FCC starts working on the applications, they will go through a lengthy paper hearing process before reaching an administrative hearing judge.

"You're looking at five years before New York City will see a Channel 19."

But what bothers Carpenter the most is that the FCC has structured low-power rules so that there will be no large accumulation of low-power stations in one hand.

"It would be difficult to own a large group, because if you are competing for the same frequency in the same town with three or four other people and none of those other people own any other stations, they are more likely to get it than you are, because they will get extra points in terms of their application."

Carpenter interpreted this ruling as a way to protect the current establishment: ABC, NBC and CBS.

"Nobody could gain a critical mass of stations in order to create a fourth network."

Despite all these roadblocks, Carpenter remains undeterred. Not only is Neighborhood TV continuing program research and identifying target areas of they could be reaching, Carpenter maintains August 1983 will be the date the nation's fourth network gets rolling.

Programming content for Neighborhood already has been decided. It will be a blend of music, actualities, comedy, attitudes and folklore of rural and small-town America, all of which will reflect patriotic and historic events, old-fashioned values and the virtues of family living.

The proposed mother station, KUSK, goes on the air this summer. That station is owned by William H. Sauro, one of three principals in Neighborhood TV. The other two are Carpenter and Lyle Mettler, former manager for KAET.

Meanwhile, Carpenter hopes the FCC will take another look at its October 1980 Network Study. That study said over the years, the FCC had structured television broadcasting to that it could be dominated by the three large networks.

One of the directors of that study, Thomas G. Krattenmaker, said one of the ways the FCC could reduce that domination was, as the *New York Times* reported, "recommend approval of an application filed by Sears, Roebuck & Co. (Neighborhood TV) ... to start a network of low-powered television stations, connected by satellite, in more than 100 cities around that nation.

"The Sears application ... would become an instant fourth network of some competitive size ..."

Reprinted with permission of the Arizona Business Gazette, May 18.

ANCHORAGE, MARKET NO. 170, DELETED BY COMMISSION.

FCC LISTINGS SAY --

Alaska has no major 212 markets. Also, the Commission is giving Alaska applications favored expedited treatment. The state is putting in and paying for LPTV stations in every village (eventually) over 25 people. If the Commission had not expedited them, the state evidently would have gone ahead anyway since the transmission does not cross state lines and may not legally be under Federal jurisdiction at all, or at least that point was contestable. Therefore, Alaska state applications are being turned out rapidly by the hundreds by the Commission and the other 48 states (continental U.S.) have to wait.

HOW TO SPEAK LOW POWER

A Glossary of LPTV Terms

ADDRESSABLE DECODER: A decoder that can be addressed by the broadcast station's computer and turned off and on from the station. Can be turned off if stolen or if subscriber fails to pay. All through the station's broadcast signal.

ADJACENT CHANNEL: The channel alongside either side, except channels 4 and 5 are not adjacent because of other communication services between. Channels 6 and 7 are not adjacent because of the FM band and other services in between. Channels 13 and 14 are not adjacent because of a wide range of other communication services between them.

ALPHA NUMERIC: Words and numbers transmitted electronically without a camera.

APERTURE: How far the lens is open. The iris or F stop which determines the amount of light collected to the camera. Most camera lenses are a maximum of 1.6. Those with the 'faster' lens 1.4 get considerably more light. To cut down light, the lens can be adjusted to lower light output F stops (bigger number).

ASPECT RATIO: The size comparison ratio of width to height. Three units high and four units wide.

ASSEMBLE EDIT: Add editing a new sequence that is consecutively added to previously edited material.

ASSIGNED CHANNELS: Previously set aside by the commission for that area as full power channels.

AUDIO: Sound portion.

AUDIO DUB: Add new sound in over a previously recorded tape without disturbing the picture.

AUDIO MIXER: Device that mixes and combines several sound inputs into one or two outputs.

AUTOMATED STATION: Operated by tones, time, etc., without personnel in attendance.

AUTOMATIC GAIN CONTROL (AGC): A circuit that automatically maintains or adjusts the volume or intensity of audio or video levels.

AUTOMATIC LEVEL CONTROL (ALC): See AGC above. Sometimes also used to mean automatic light control. A circuit that compensates for different light levels.

AZIMUTH: The horizontal pointing angle of a satellite antenna measures clockwise in degrees from true North.

BACK LIGHT: Light that is used behind the subject to create depth and/or silhouetting.

B - CUTOFF LIST: A second cutoff list published when second parties file for the same channel that appeared on 'A' cutoff lists. 30 days for public to file objections only.

BEAM TILT: Angling the broadcast antenna (usually down) to put more signal on the ground instead of out into space.

BETA: 1/2 tape format used by Sony, Zenith, Sanyo, Toshiba and Sears Roebuck. VCR.

BETAMAX: Sony VIR; one hour on 1/2 inch.

BETA 2: Two hour version of above.

BLACK: Horizontal and vertical sync information being transmitted without any picture information.

BLACKER THAN BLACK: The portion of the composite signal below black reference levels that go below black for synchronizing pulses.

BOOSTER: Like a translator but does not change channels, merely amplifies and rebroadcasts the same channel.

BURN: A bright spot (sun, flash bulb etc.) burn in the camera picture tube that stays permanently.

B & W: Black and white.

HOW TO SPEAK LOW POWER

A Glossary of LPTV Terms

CAPSTAN: Main driving rotating shaft that determines speed of the tape moving through your VCR.

CATV: Cable TV.

CATV: Acronym for Community Antenna Television.

CCD: Charge coupled device; replaces camera tube in some new TV cameras.

CCTV: Closed circuit TV (not broadcast).

C of R: Center of Radiation.

CHANNEL: A specified group of frequencies assigned to TV stations.

CHANNEL SEARCH: A listing of mileage separations of LPTV useable and present licensed channels, etc., from your antenna site.

CHARACTER GENERATOR: An electronic typewriter keyboard that can be used to type words on the television screen.

CHROMAKEY: A key that is colored (usually blue) instead of a black key. Allows insert for special effects.

CIRCULAR POLARIZATION: Part of power broadcast horizontally and part vertically. Usually allowed full power both ways. Improves rabbit ear reception primarily and cuts down ghosting.

COAXIAL CABLE: A special kind of cable that can be used to get your picture from the studio to transmitter without using microwave. Usually limited to several hundred feet. The outside is grounded and the center is one single wire and is also used for most video as well as RF connections. RG-59 is the pencil size and is most commonly used. RG-11 is penny size and has less than 1/2 the loss of RG-59.

CO-CHANNEL: Same channel.

COLOR BARS: Colored stripes used as a method of calibrating as a reference for brightness, contrast, color intensity and balance. Often generated directly in some cameras.

COLOR PHASE: Correct timing of color signal that is required to reproduce the correct hues.

COMPARATIVE HEARING: When two or more want the same channel, the FCC eventually will have hearings to determine who is best qualified for it.

COMPATIBILITY: The ability to be able to use one piece of equipment with another.

CONTRAST: The range of light and dark shades in a picture. Ratio between the maximum and minimum brightness levels.

COVERAGE: How far out your low power signal will be successfully received or the amount of homes that receive your programs successfully.

CP: Construction permit; grant by FCC to begin to construct.

CUT-OFF DATE: A time when the FCC prepares a list of applications which will be protected from further applications on that channel in that city after a certain date.

CUTOFF LIST: List of applications the FCC has ready to be granted and is published to allow anyone else to file for the same channel in the same area. After 30 days, they are protected from others filing.

DATA BASE: The current data the FCC keeps on present licensed stations and previous applications.

DATA TRANSMISSION: Carrying computer type information and alpha numeric printouts, etc., to users of information in your area. Usually carried unnoticed during the VBI.

DB: Abbreviation for decibel.

DBS: Direct broadcast satellite. Three channels or more of pay TV to be receivable all over the country from a higher power satellite around 1986. More may be licensed later, including High Definition TV. Three foot dishes.

DECIBEL: A measure of sound level or a measurement of strength. A term used to express the ratio of two power levels.

HOW TO SPEAK LOW POWER

A Glossary of LPTV Terms

DECODER: A box-type device for the home installation of pay TV subscribers that reconverts an encoded signal so it can be used by an ordinary TV set.

DEFINITION: Amount of sharpness in a TV picture, ability to produce fine detail. Often expressed in number of lines. The average TV set reproduces under 300 lines of definition. Cameras range from 240 usually to around 500. Usually determines by test patterns vertical narrowing lines and the ability to distinguish them close together on a TV screen.

DEMODULATOR: Takes an incoming off-the-air radio frequency TV channel and changes it back to video. Essentially a TV set without a picture tube.

DEPTH OF FIELD: The distance in your picture from in focus close to in focus distant. Closing down the F stop (less light) on the lens increases the range or area in focus. Poorly lit scenes, the lens must be wide open, therefore, poor depth of field.

DEREGULATION: Removing regulations governing the industry.

DIN: European standard multipin push on connector. Usually 4 pin and 6 pin plugs.

DISH: The parabolic shaped circular antenna used to receive microwave and satellite signals.

DISSOLVE: A fade out of one picture (camera) and fade in of another so at one point they are both on the screen at the same time with one image dissolving into the other.

DIVERSITY PREFERENCE: A preference given to an applicant that has less present access to local media than another applicant who may presently own a radio station, newspaper, cable system, etc.

DOCUMENTARY: One format of shooting a program for TV.

DOLLY: Wheeled contrivance usually referring to wheeled tripod for a camera. To dolly is to move toward or away from an object being televised.

DOWN CONVERTER: An electronic device that converts the frequency of a received signal typically RF (radio frequency) down to IF (intermediate frequency).

DOWN STREAMING: Reproducing full screen information on a repeating low power station or translator that does not appear on the originating station, though it originates at the originating station and is carried on the VBI and reproduced only on a specified downstream broadcast facility.

DROP OUT: Picture streaks from lack of recording on spots on a videotape.

DUBBING: Duplication of a videotape from one VCR to another, or the adding of new audio information to the tape.

DU RATIOS: Desirable to undesirable signal ratios.

EARTH STATION: A ground installation that uses a dish on associated electronic equipment to receive and transmit and in general, process communications via satellite.

EDITING: The process of putting into some sequence various segments or scenes from various tapes. There are several different qualities of editing, including frames exactly locked together on exactly the same synchronization to simply cutting them in wherever the synchronization happens to be or several shades of sophistication in between.

EDITING CONTROLLER: Device that controls two VCRs to edit tapes electronically.

EEO: Equal employment opportunity.

EFP: Electronic field production.

ELECTRONIC PUBLISHING: Transmission of words and numbers for reading including still pictures to replace paper carried information. Can be taped and played back for reading one page at a time, or stored in a computer.

ELEVATION: The angle above the horizontal line that a satellite dish must be angled and directed in order to aim it correctly to receive a certain satellite. Also known as the look angle.

HOW TO SPEAK LOW POWER

A Glossary of LPTV Terms

ENCODER: Subscription TV device that scrambles a TV signal at the station so non-paying subscribers without decoders cannot receive the picture or sound.

ENG: Electronic News Gathering.

ERP: Effective radiated power that comes off your antenna. Transmitter output minus the amount you lose in the cable getting to the antenna times the amount of gain (boost) in the antenna equals ERP. Power radiated may be as much as 100 times as much or more as the transmitter power with certain antenna arrangements.

EX-PARTE RULES: Oral or written communication other than a formal addressing of the merits of a pending proceeding from the person with an interest in the proceeding or his representative to decision making FCC personnel involved in the proceeding, when other interested parties are not present or are not provided with copies of the presentation. Will be put in public file. Rules generally prohibit such contacts.

EXTENDED PLAY: Longer than usual videotapes.

FADE IN AND OUT: A gradual fade to black or fade from one camera to another or fade sound down and/or up.

FAIRNESS DOCTRINE: A rule that said broadcast stations must allow a certain amount of broadcast time to opposing views.

FCC: Federal Communications Commission. Agency that is an arm of Congress set up to regulate broadcasting in the public interest. Some say it has become a captive agency of the big broadcasters. Long term reputation as the most politically influenced and bureaucratic, inefficient, slow nightmare of all federal regulating agencies. Currently bent on deregulating to allow market place (those with the money) to determine who controls media without limitation. Current commission is very popular with big broadcasters as a result.

FIELD: One half of a frame. A camera scans every other line and the second field fills in the lines between. Two fields are used to finish or complete one frame.

FILL LIGHT: Third or side light off to one side, nearly right angle to the camera.

FINANCIAL QUALIFICATIONS: Showing on paper or proving you are solvent enough to build and get the thing going and keep it going for three months at least.

FIXED FOCUS LENS: Area of focus not adjustable. Usually wide range.

FLAGGING: A skew or bend in the top of picture usually in 1/2 inch playback.

FLYING ERASE HEAD: Only recorders with this extra erase head can do the most sophisticated glitch free editing.

FLYING SPOT SCANNER: A still camera type device that works on a different principle. Has maximum picture fidelity and maintains it indefinitely. Ideal for slides etc.

FOOT CANDLE: A measurement of light falling on a subject.

FORMAT: A category of tape system, 1/2 inch or 3/4 inch, or VHS or Beta, etc.

FRAME: A complete picture consisting of two fields interlaced together. A frame is completed every 1/30th of a second. 30 frames per second compared to motion picture frame rate of 24 frames per second.

FREEZE: Putting on hold a specific category of what the FCC was supposed to be doing; stopping incoming work until the Commission gets their act together or gets caught up.

FREEZE FRAME: VCR capable of stopping on one frame and reproducing it perfectly. Able to advance one frame at a time.

FREQUENCY: The number of signal vibrations per second.

FSK: Frequency shift keying. Method of sending station identification primarily for translators.

F-STOP: The amount of opening of the iris of a lens; the measurement of light output of the lens.

FULL SERVICE STATION: Full power allowed traditional TV broadcast station.

HOW TO SPEAK LOW POWER

A Glossary of LPTV Terms

GAIN: The amount of amplification.

GENERATION: The number of taped copies down from the original. Making a copy of a copy is the third generation, for example.

GENLOCK: Tying cameras or tape machines, etc., all to a common sync source, all units locked together.

GEOSTATIONARY: Satellites that appear to stand still at 22,300 miles out.

GHOST: A second overlapping picture to the left fringing the original picture. Ghosts are due to a second signal reflected off of something arriving later.

GLITCH: A form of interference in the picture, such as caused by a bad edit, or a black bar, etc. Any picture distortion.

GRADE B CONTOUR: An imaginary line around a station that indicates past this line you will probably need an outdoor antenna to get a good picture. Stations submit a map showing where they think this falls.

HAAT: Height above average terrain. Also, AAT, above average terrain.

HEAD (RECORDER): The magnetic device that records on tape and/or plays it back and/or erases.

HEAD (TRIPOD): The swivel head of a camera tripod. Fluid heads expensive but smoothest operation.

HERTZ: Cycles per second.

HI-BAND: Channels 7 through 13.

HIGH DEFINITION TV: Proposed TV standards that would double the number of lines in a TV picture and result in movie-like quality. 1100 or more lines, as opposed to present 525. Would require digital processing to squeeze into one standard channel width.

HIGH DENSITY: Tape that has more particles per square inch.

HIGH IMPEDANCE: 800 to 10,000 ohms. See impedance.

IC: Integrated circuit.

ICTV: Independent Community Television Alliance. An association of independent low power station applicants and owners.

IF: Intermediate frequency.

IFTS: Instructional fixed TV service. May be opened up for MDS type service.

IMPEDANCE: The resistance to the flow of current rated in ohms. Usually expressed as high impedance; high Z or low Z.

INSERTION EQUIPMENT: Automatic device that inserts commercials and public announcements.

JACKS AND PLUGS: Jacks are inputs and outputs on VCRs, etc. Plugs are the ends of connecting cords.

KELVIN: The unit of measurement which denotes the temperature of light and is normally expressed in degrees K. Used in relation to LNA's in satellite reception; the lower the number, the lower the noise in the picture.

KEY: A replacement part of one image with a second image. A keying camera (B & W) for example, looks at black and white lettering or some shape such as a circle, etc. The lettering or shape can be reversed and create a hole in another camera's picture. The information from a third camera can then be put in the hole.

KEY LIGHT: Main light from the front (usually the brightest) near camera.

KILOHERTZ: (KHz) Thousand cycles.

LASER: Coherent light beam that can be used to transport a TV signal from point to point. Affected by rain and snow. Must have line of sight or be used through fiber optics.

LAVALIER MIKE: Mike worn around the neck.

HOW TO SPEAK LOW POWER

A Glossary of LPTV Terms

LENS SPEED: The output of light a lens puts out. A 'fast' lens delivers more light than a slow lens.

LEVEL: Intensity of audio or video.

LICENSE: Final permit to broadcast following CP and actual contruction and submitting proof of performance. Necessary before full time broadcasting can begin.

LINE LOSS: The amount of signal lost going through the cable or 'line'.

LIVE: Telecasting while it is happening.

LNA: Term used by satellite installers for low noise amplifier, the electronic part that goes near the antenna to quickly boost a very weak reception.

LNC: Low noise amplifier as above that also includes a down converter that converts the RF frequency down to an IF frequency.

LO-BAND: Channels 2 through 6.

LONG SHOT: A picture taken a distance away.

LOTTERY: Proposed method of determining who gets an award when more than one want a channel and all else is equal.

LPFM: Low power FM translators with waivers to originate audio programming.

LPTV: Low power television.

MACRO LENS: Most zoom lenses have a position where they can be turned around to where they can focus on very close up items.

MATTE: An effect that blocks out a certain portion of a picture (see also 'Key'). Can also be colored to put a colored background behind a figure.

MATV: Master antenna system as used in apartments, hotels, etc. A cable system for a building (see also 'SMATV').

MAVICA: Electronic still camera; 50 stills on a small magnetic disc, made by Sony and available in 1983.

MDS: Multi-point distribution system. Normally, two microwave area channels allocated per city used primarily for pay TV, like H.B.O., operates on microwave (high) like frequency and requires a special down converter equipment to receive on a TV set. May or may not be scrambled. The Commission is considering allowing up to 4 or more MDS channels per city. License and transmitter owner must be different from programmer.

MEGAHERTZ: (MHz) Million hertz (cycles).

METER: Measurement equal to 39.45 inches.

MICROWAVE: Extremely high frequency range above UHF that is used to transport video point to point (see STL). Also used for remotes back to studio.

MINORITY: FCC definition means part of the black community, Hispanic, Asian and American Indian. Women, singles, gays, Scandanavian, etc., are not minorities by FCC definition.

MODULATOR: Takes a video input from a camera, etc., and uses it to shape the carrier output of a transmitter and puts it on a radio frequency (TV channel) so an ordinary TV set can receive the broadcast signal and reproduce the same picture. Any so-called transmitter after the modulator merely amplifies what the modulator generates.

MONITOR: TV set; usually one that will accept straight video.

MONOCHROME: Black and white.

MOS: Metal oxide semiconductor. Replaces camera tubes in some newer cameras.

MSO: Multiple station owner.

MULTIPLEXER: Optical system that allows several motion and slide projectors to project directly into one camera.

HOW TO SPEAK LOW POWER

A Glossary of LPTV Terms

MX: See mutually exclusive, below.

MUTUALLY EXCLUSIVE: Two or more people filing for the same channel in the same city. If both 'stay' on that channel, FCC will not even consider who 'wins' it for some long period of time. Eventually, there will be a hearing of some type. A lottery system may be used.

NAB: National Association of Broadcasters.

NCTA: National Cable Television Association.

NEUTRAL DENSITY FILTER: A filter that reduces the light entering a camera but does not change the color.

NI CAD: Nickel cadmium battery.

NOISE: Hiss or objectional sound. Noise in a picture results from low light, low signal levels, etc. Often referred to as 'snow' in a picture.

NTA: National Translator Association.

NTSC: U.S. color standard.

NULL FILL: Filling in blank spots with no signal directly below or close to a tower. Needed with certain antennas and patterns.

OFFSET: Usually means 10K cycles change in a TV channel from the usual frequency. Channel 4-, for example, would be 10K cycles lower than just the usual channel 4. Channel 4+ would be 10K cycles higher than usual. When channel 4 allocations are closer than usual, for example, one or both may be 'offset' to lessen possibility of interfering with each other. Many regular stations are offset and can be determined by looking up the original table of assignments. 8K cycles gives the maximum benefit from offset.

OMNI: Usually refers to an antenna that broadcasts all directions equally. An omni directional mike picks up sound from all directions equally.

OPAQUE PROJECTOR: Projects from cards, papers, etc., that are not transparent.

OSCILLOSCOPE: Electronic device that shows visually on a tube, signal patterns, etc., to assist in aligning equipment, etc.

OUT: Everything quit or cessation of audio.

PAPER HEARING: A proposed method of deciding who gets an award of a channel when two or more are wanting the same channel. To just have applicants file paper evidence as opposed to oral in person hearings with attorneys, etc.

PAPER MILL: An organization that just generates paper for applications, easiest to file engineering and does no legal representation or backing of applications' validity nor follow through. Charges the same or more than those providing complete application service.

PAN: Movement of camera left or right horizontally.

PAUSE: Button on VCR that allows leaving recorder on record while waiting etc.

PAY PER VIEW: Paying for an individual event, such as a fight.

PAY TV: Paying so much a month for certain channels.

PHOTO FLOODS: Special tungsten bulbs.

POLARIZATION: Refers to your signal broadcast horizontal or vertical. TV antennas in U.S. are traditionally horizontal. To keep from interfering with an adjacent channel that was too close you could broadcast vertically. Receiving antennas would need to be turned that way also. All TV in England is broadcast vertically. the 24 channels on a satellite are alternately horizontal and vertical to keep from interfering with adjacent channels. It would be an alternative to broadcast one direction (the direction that might or did interfere) vertically and then other directions horizontally. Some FM stations broadcast both ways which is sometimes referred to as circular. It would be technically feasible to use adjacent channels in the same city by vertical polarization, but you may have trouble convincing the FCC about that.

POLAR MOUNT: A mount for a satellite dish that tracks correctly with only adjustments east/west for different satellites.

P.R.: Public relations.

HOW TO SPEAK LOW POWER

A Glossary of LPTV Terms

PREFERENCE: An FCC idea to give a preference for certain things, such as being a minority (see minority). If two are equal and one is a minority, the channel would be awarded to the minority (see also Diversity Preference).

PROC AMP: An amplifier that stabilizes and rebuilds signals.

PROOF OF PERFORMANCE: What needs to be done between getting your station constructed and being issued a license for full time operation.

PROTECTED CONTOUR: An area of certain signal level around a station that no other station's signal is allowed to intrude upon.

PUBLIC NOTICE: When filing an application, you must run a local public notice (see rules) in a newspaper announcing the filing and pertinent information and where the public has access to the application.

QUALIFICATIONS: To qualify as an applicant for an LPTV license, you must be a citizen of the U.S., in good character, and be financially able to build it and keep it on for 90 days with no income. You do not have to have the money in hand but merely able to get it when and if needed.

QUARTZ LIGHTS: Special very bright light type that is efficient.

RABBIT EARS: The two long extendable dipoles that sit on a TV set or fastened to the back.

RASTER: Scanned or lit up area of a TV picture tube.

REAL TIME: Recorded in the time it took as opposed to an edited version or speeded up version.

RECEIVER: Ordinary TV set.

REMOTE: Any program originating outside the studio.

RESOLUTION: The camera or VCR reproduction capabilities measured in lines of detail. 250 lines of resolution capability of recorders and inexpensive cameras is about average.

RF: Radio frequency (TV broadcast frequency).

SCA: Subcarrier authorization (audio).

SCOPE: Short for oscilloscope (see oscilloscope).

SEG: Special effects generator.

SIGNAL: Information transported on electrical impulses.

SMATV: Satellite supplied master antenna system (see MATV).

S/N: Signal to noise ratio.

SOURCE: Origination of signal.

SPARKLIES: Snow on satellite reception caused by noise due to lack of signal.

SPECTRUM: Range of frequencies useable for broadcast purposes.

STL: Studio to transmitter microwave link that gets your picture and sound from the studio to the transmitter location. Requires a microwave 'dish' on both ends plus microwave transmitter and receiver.

STORY BOARD: A script with little drawings showing what is to be on the screen during that portion. Lists both visual and audio content together.

STV: Subscription television, usually referred to as pay television. Normally TV that is broadcast scrambled (encoded) so ordinary sets won't reproduce it without a special decoder device. A monthly charge is usually made for having and using the device to receive pay TV.

SUBCARRIER: Audio channel (or data) on a different spot in broadcast than normal home reception. STV encoded audio is often on subcarrier. Up to 20 audio channels can be carried on a subcarrier at the same time as regular TV broadcasts for background music for stores, etc.

SUCCESS IN LPTV: Accomplishing what you set out to do, such as bring better, more, or different varieties of TV to an area. Such as, making a profit or just paying the bills.

(Continued on back part of publication).

Q & A FROM PREVIOUS FCC RELEASES

Q: What happens to an application once it is filed?

A: There are three stages:

Tender, cut-off, and grant (or denial).

Q: Go ahead, start with tender.

A: When an application is submitted, it goes to the Broadcast License Division of the Broadcast Bureau. There, a preliminary review is made to see whether it meets basic threshhold criteria for acquiring a file number. These are:

-Was the engineering data properly signed and dated?

-Was the overall application properly signed and dated?

-Does the frequency requested appear to be available for application?

-Is the proposed equipment type approved, and does the number for the equipment correspond exactly to a number on the License Division list of type approved equipment?

-Are all of the lines and blocks filled in--that is, does the application appear to be complete?

An application not meeting one of these criteria is returned without action. An application meeting all of the criteria is given a file number, and is turned over the the Auxiliary Services Branch of the Broadcast Facilities Division for further action. No separate list of translator applications tendered is published by the Commission. There used to be a list of "accepted" applications published about the same time as the "cut-off" but that step now is abolished and merged with the cut-off procedures.

Q: Before we get to "cut-off," how would I find out that an application was on file?

A: At any given moment, you can't know all of the applications that might be on file. Applications are submitted to the FCC Secretary, and it may take a couple of days for them to arrive in Broadcast License. Others may be in the mail. But once an application is received by the License Division, a copy is placed in a public reading room in Room No. 239 at the Commission's main building in Washington, D.C.

Q: And the "cut-off" procedure?

A: Once an application arrives in the Auxiliary Services Branch, it receives preliminary legal and engineering review. Upon review, if the application appears to be complete and sufficient, it is placed on a "cut-off list." The law requires a period of at least 30 days during which an application is out on public notice. That period is available for other parties to submit an informal objection, a petition to deny, or an application that is mutually exclusive, that is, one that could not be granted if the application on the public list is granted first. The date specified as the close of the period for all of these submissions is referred to as the "cut-off date," hence the name, cut-off list. The Commission need not and almost invariably will not consider pleadings or additional applications if they are submitted after the cut-off date for an application on the list.

The Bureau's interim processing guidelines, cited earlier, said clearly that "Defective applications will be summarily returned without action." The review process continues even as the cut-off period runs, and a clear defect in basic qualification criteria will result in an application being returned up to or even after its cut-off date. In other words, the publication of an application on the cut-off list is not a statement that the Broadcast Bureau regards it as grantable. In fairness to other parties, it is essential during the interim that only complete and sufficient applications be permitted to reserve a place in line. The practice of "coaching" applicants and permitting liberal amendments will not be followed

TIERED PROCESSING AND WHAT'S FROZEN

How do you tell if the area you are interested in can currently be filed in? If you have a state map, for example, you could draw 56 mile circles (212 markets listed in our sheet elsewhere) around these major markets, everything outside that can then be currently filed in. The next tier, of course, will be those areas outside of only the top 100 markets. That will probably be 1984 or later.

If you would like a map of the entire country with the markets outlined for you, then you can order one from us for $10 (ICTV members, $5). This is on book-stock with newspaper size pages. We also have a full size wall map for $20 plus $5 for postage and handling.

Now, there will be some cities that will be right on the line. The maps are probably only accurate to about two miles. If you have the coordinates of your proposed tower site, we have an engineer that will do a computer printout of calculations of the exact distances to all major markets nearby. This printout calculation is $10, and you can use it in the front of your application to show your application is acceptable for filing under the current tier. If you just want to check a city to see if it is fileable now, we have the coordinates of every city center in the United States, so if you want to find out if fileable from city center to the major markets, that can be done very quickly for you, also for $10. That way, you can find out if it's okay to file on now before bothering to look for a transmitter site. If you are two miles short, for example, you would just look for a transmitter site from two miles outside of the center of town the opposite direction (or more).

PUBLIC NOTICE

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

31634

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

FCC 82-297
June 23, 1982

FCC Announces 90-Day Application Amendment Period for Low Power Television and Television Translator Applications

The Commission has specified a 90-day period - from June 24, 1982 to September 21, 1982 - for the amendment of all pending applications for new low power television (LPTV) broadcast stations.

To assist in the prompt and expeditious processing of additional, corrected or other information required to comply with the Commission's Report and Order, FCC 82-107, released April 26, 1982, a guide for application amendments is provided. Applicants are encouraged to utilize the guide in preparing and submitting amendments.

Based upon inquiries already received, this notice also includes frequently asked questions and answers related to the Report and Order.

Scope of Amendments

As indicated in Paragraph 56 of the Report and Order, an amendment period is being provided for all present applicants to complete and correct data on file and bring their applications into conformance with the final low power rules. Two types of amendments will be filed during the amendment period. In the first group will be amendments of technical and non-technical information required to render the application complete and accurate. In the second group will be amendments filed to bring the application into compliance with the technical and engineering standards of the rules. All such amendments are subject to an adequate showing by the applicant that the application involves engineering conflict with an existing broadcast station that precludes grant of the proposal without the tendered amendment. The amendment period is not being afforded applicants solely for the purpose of attempting to eliminate conflicts with other pending applications, and such amendments will be returned as unacceptable for filing. If an adequate showing is made, the "major change" provisions of Section 73.3572 of the Rules 1/ will be waived for amendments filed during the 90-day amendment period that show the proposed service areas in square miles currently on file and to be gained if amended, and the computed percentage of change, supported by a certification by the applicant that any proposed service area to be gained if amended would be less than 50% of the proposed service area currently on file, as calculated pursuant to the protected service contours specified in Section 74.707 of the Rules, as a result of any change, or combination thereof, in

(i) transmitting antenna system, including the direction of the radiation, directive antenna pattern or transmission line;
(ii) antenna height;
(iii) antenna location not exceeding 15 miles;
(iv) authorized operating power;
(v) community or area to be served

Form of Amendments

For each application to be amended, the applicant must provide the information contained on the attached "Application Amendment Guide" including the applicant's name (as it appears on the original application and if applicable, as amended), city, state, channel and file number (if known). Copies of this Public Notice, the "Application Amendment Guide," the list of geographic coordinates of top 212 market cities, and a transmittal page bearing an information label, are being mailed to all pending applicants. PLEASE USE THE INFORMATION LABELS provided to each applicant for all copies of amendments. Any information that is incomplete, erroneous or changed on the labels should be corrected. ANY AMENDMENTS RECEIVED THAT CONTAIN INCOMPLETE OR INCORRECT INFORMATION ARE SUBJECT TO BEING RETURNED OR DISMISSED.

1/ Section 73.3572 provides, in pertinent part, as follows:

* * * * *

In the case of low power TV and TV translator stations authorized under Part 74, [a major change] is any change in:

(i) frequency (output channel) assignment;
(ii) transmitting antenna system including the direction of the radiation, directive antenna pattern or transmission line;
(ii) antenna height;
(iv) antenna location exceeding 200 meters;
(v) authorized operating power; or
(vi) community or area to be served.

Application Amendment Guide

In order that amendments may be promptly and accurately associated with the application, it will be helpful to the staff if the enclosed application amendment guide is completed and returned with any amendment material for each application being amended.

Frequency Offset

Since the application form (FCC Form 346) does not elicit frequency offset information, any applicant proposing offset must so indicate by specifying "zero", "plus" or "minus" offset in the amendment.

Processing of New Applications

The amendment period required to afford an opportunity for applicants to complete and correct data on file and amend to comply with the new rules must be concluded before processing can continue because staff review of pending applications discloses that a substantial number appear to be incomplete or contain incorrect data. New applications can not be processed until necessary amendments to pending applications have been properly associated with the corresponding application and an evaluation of compliance with the new rules can be undertaken.

QUESTIONS AND ANSWERS

1. How will tiered processing system calculations be made?

   A. As indicated in an erratum to the Report and Order, the ranking of television markets by size will be determined according to the April 16, 1982 Public Notice encaptioned "Television Channel Utilization," Mimeo No. 3331. The source for television market community reference coordinates is "All Populated Places," from the United States Geological Survey. The coordinates of the 212 markets are listed in an appendix hereto. The tier status of each application will be determined by proximity of the transmitter site to the center of city coordinates of the nearest television market community. The term "a distance of more than 55 miles" means at least 55.5 miles, which rounded off to the nearest mile pursuant to Commission rules and policies would be 56 miles or more.

2. Will the current "freeze" on new applications and amendments continue?

   A. The freeze put in place on April 9, 1981 will continue as modified by the tiered processing approach. There will be three exceptions to the freeze: (i) applications meeting the Tier I definition of Appendix E to the Report and Order, (ii) applications for major amendment by existing translators seeking to change frequency from channels 70 through 83, and (iii) applications for major amendment by existing translators seeking to change frequency to resolve interference to or from full-service station. Applications received prior to the effective date of the new rules that met the freeze exempt criteria will be processed as Tier I freeze-exempt applications. Applications for minor changes in existing facilities received prior to the effective date of the new rules will continue to be processed as minor changes.

3. How should a translator licensee or permittee provide the required notice to the Commission when a change is made from translator operation to low power television operation?

   A. In a letter to the Secretary of the Commission, the licensee or permittee should identify by name, city, state, call sign and frequency of the facilities being changed, and certify that the licensee has read and understands the applicable low power television rul s.

For further information, contact Clay C. Pendarvis (legal) or Paul Marrangoni (engineering), (202) 632-3894.

Action by the Commission June 23, 1982. Commissioners Fowler (Chairman), Quello, Washburn, Fogarty, Jones, Dawson and Rivera.

- FCC -

Note from Lo-Power Magazine:

The following 2 sheets of forms can be photocopied direct from this publication and used. This is only to amend a present application if needed. This process will expire on September 21, 1982. Be sure and send three copies. We suggest sending four and asking that the fourth be dated received and returned for your records.

If you are just filing new applications, this notice and forms are not needed and/or are of no concern.

Regarding Form 346

This form is still good and there were only two pages slightly changed and can be photocopied right out of the rules booklet or the old form can be used.

Regarding Offset

Offset means a slightly different frequency so you won't interfere. There are four choices -- plus offset, minus offset, zero offset, and no offset. The difference between zero and no offset is that you must maintain certain frequency tolerances (more severe) and with no offset means you consider the distances okay with no possibility of interference, so you do not have to depend on close frequency tolerance to keep from interfering with a plus or minus full service station. Rules say you must explain how you are going to maintain the required tolerances. We use, "the transmitter manufacturer agrees to furnish equipment that will maintain the required tolerances."

DETACH AND FILE AS AMENDMENT TRANSMITTAL

United States of America
Federal Communications Commission
Washington, D. C. 20554

Approved by O.M.B.
3060-0124
Expires 9-21-82

APPLICATION AMENDMENT GUIDE TO APPLICATION FOR CONSTRUCTION PERMIT FOR TRANSLATOR OR LOW POWER TELEVISION BROADCAST STATION - FCC 346

1. Application Information As Now On File

Name of Applicant Application Reference No. _____

Street Address City State

Zip Code Telephone No. (include area code)

Application is for: ☐ Low Power Television ☐ TV Translator

(a) Channel No. (b) Community of License
City State

Offset: ☐ None ☐ Zero ☐ Plus ☐ Minus

2. Application Information As Amended, If Applicable

Name of Applicant

Street Address City State

Zip Code Telephone No. (Include area code)

Application is for:

(a) Channel No. (b) Community of License
City State

Offset: ☐ None ☐ Zero ☐ Plus ☐ Minus

3. Has the applicant reviewed the application to verify that all requested information in the application is complete and accurate? ☐ YES ☐ NO

4. Submit additional, corrected or other changed information required to comply with the Commission's Report and Order, FCC 82-107, released April 26, 1982, on FCC Form 346 or Exhibit No. ____, attached.

5. Has the FAA been notified of proposed construction, if antenna station or height is being amended? ☐ YES ☐ N
If Yes, give date and office where notice was filed.

NOTE: THE EXPEDITIOUS PROCESSING OF YOUR APPLICATION DEPENDS ON THE ACCURACY OF THIS INFO TION. PLEASE EXERCISE SPECIAL CARE TO ASSURE THE COMPLETE ACCURACY OF ALL INFORMATI

6. The following information may be submitted at the option of applicants. However, applications containing the requested information will be processed at a faster rate than applications not containing such information. In the latter case, the Commission's limited staff will be required to compute the data manually and processing will, therefore, require substantially more time.

Attach as Exhibit No. ____ an allocation study utilizing topographic maps or an accurate full scale reproduction thereof and a full scale exhibit of the enti: pertinent area to show the following:

(a) Normally protected and interfering contours for the proposed operation along all azimuths.

(b) Normally protected and interfering contours of existing stations and other proposed stations in pertinent areas with which prohibited overlap would result, as well as those existing stations and other proposals which require study to clearly show absence of prohibited overlap.

(c) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers, and operating or proposed facilities.

(d) Properly labeled longitude and latitude degree lines, shown across entire exhibit.

7. Has or will the applicant comply with the public notice requirement of Section 73.3580 of the Commission's Rules? ☐ YES ☐ NO

CERTIFICATION

I certify that the statements in this amendment are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signed and dated this day of , 19

Name of Applicant

Signature Title

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. he principal purpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The taff, consisting variously of attorneys, accountants, engineers, and application examiners, will use the information to determine whether the pplication should be granted, denied, dismissed, or designated for hearing. If all the information requested is not provided, the application ay be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing in- ormation. Accordingly, every effort should be made to provide all necessary information.

The FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, December 31, 1974, 5 U.S.C. 552(e)(3), and The aperwork Reduction Act, P.L. 96-511, December 11, 1980, 44 U.S.C. 3507.

FCC LIST OF CENTER OF CITY COORDINATES OF TOP 212 MARKETS

REFERENCE COORDINATES - TOP 212 TELEVISION MARKET CITIES

MKT. NO.	CITY	STATE	LATITUDE (D.MMSS)	LONGITUDE (D.MMSS)
1	New York	NY	40.4251	74.0023
2	Los Angeles	CA	34.0308	118.1434
3	Chicago	IL	41.5100	87.3900
4	Philadelphia	PA	39.5708	75.0951
5	San Francisco	CA	37.4630	122.2506
6	Boston	MA	42.2130	71.0337
7	Detroit	MI	42.2032	83.0339
8	Washington	DC	38.5342	77.0212
9	Cleveland	OH	41.2958	81.4144
10	Dallas	TX	32.4653	96.4734
10	Ft. Worth	TX	32.4331	97.1914
11	Pittsburgh	PA	40.2626	79.5946
12	Houston	TX	29.4547	95.2147
12	Galveston	TX	29.1756	94.4738
13	St. Louis	MO	38.3738	90.1152
14	Minneapolis	MN	44.5848	93.1549
14	St. Paul	MN	44.5721	93.0548
15	Miami	FL	25.4626	80.1138
16	Atlanta	GA	33.4456	84.2317
17	Tampa	FL	27.5650	82.2731
17	St. Petersburg	FL	27.4614	82.4046
18	Seattle	WA	47.3623	122.1951
18	Tacoma	WA	47.1511	122.2635
19	Baltimore	MD	39.1725	76.3645
20	Indianapolis	IN	39.4606	86.0929
21	Denver	CO	39.4421	104.5903
22	Portland	OR	45.3123	122.4033
23	Hartford	CT	41.4549	72.4108
23	New Haven	CT	41.1829	72.5543
24	Sacramento	CA	38.3454	121.2936
24	Stockton	CA	37.5728	121.1723
25	Milwaukee	WI	43.0220	87.5423
26	Cincinnati	OH	39.0943	84.2725
27	Kansas City	MO	39.0559	94.3442
28	San Diego	CA	32.4255	117.0923
29	Buffalo	NY	42.5311	78.5243
30	Nashville	TN	36.0957	86.4704
31	Providence	RI	41.4926	71.2448
32	Columbus	OH	39.5740	82.5956
33	Phoenix	AZ	33.2654	112.0424
33	Mesa	AZ	33.2520	111.4919
34	Charlotte	NC	35.1337	80.5036
35	Memphis	TN	35.0858	90.0256
36	New Orleans	LA	29.5716	90.0430
37	Greenville	SC	34.5109	82.2339
37	Spartanburg	SC	34.5658	81.5556
37	Asheville	NC	35.3603	82.3315
38	Oklahoma City	OK	35.2803	97.3058
39	Grand Rapids	MI	42.5818	85.4008
39	Kalamazoo	MI	42.1730	85.3514
40	Orlando	FL	28.3217	81.2246
40	Daytona Beach	FL	29.1238	81.0123
41	Wilkes-Barre	PA	41.1445	75.5254
41	Scranton	PA	41.2432	75.3946
42	Raleigh	NC	35.4619	78.3820
42	Durham	NC	35.5938	78.5356
43	Louisville	KY	38.1515	85.4534
44	Charleston	WV	38.2059	81.3758
44	Huntington	WV	38.2509	82.2643
45	Albany	NY	42.3909	73.4524
45	Schenectady	NY	42.4851	73.5624
45	Troy	NY	42.4342	73.4132
46	Dayton	OH	39.4532	84.1130
47	Harrisburg	PA	40.1625	76.5305
47	Lancaster	PA	40.0216	76.1821
47	York	PA	39.5745	76.4341
47	Lebanon	PA	40.2027	76.2442
48	Norfolk	VA	36.5048	76.1708
48	Portsmouth	VA	36.5007	76.1755
48	Newport News	VA	36.5843	76.2542
49	Salt Lake City	UT	40.4539	111.5325
50	Birmingham	AL	33.3114	86.4809
51	San Antonio	TX	29.2526	98.2936
52	Tulsa	OK	36.0914	95.5933
53	Greensboro	NC	36.0421	79.4732
53	High Point	NC	35.5720	80.0020
53	Winston Salem	NC	36.0559	80.1440
54	Wichita	KS	37.4132	97.2014
54	Hutchinson	KS	38.0339	97.5546
55	Flint	MI	43.0045	83.4115
55	Saginaw	MI	43.2559	83.5619
55	Bay City	MI	43.3540	83.5319
56	Richmond	VA	37.3313	77.2738
56	Petersburg	VA	37.1340	77.2408
57	Toledo	OH	41.3950	83.3319
58	Little Rock	AR	34.4447	92.1722
59	Shreveport	LA	32.3051	93.4451
59	Texarkana	TX	33.2530	94.0251
60	Knoxville	TN	35.5738	83.5515
61	Syracuse	NY	43.0253	76.0852
62	Mobile	AL	30.4139	88.0235
62	Pensacola	FL	30.2516	87.1301
63	Des Moines	IA	41.3602	93.3632
63	Ames	IA	42.0205	93.3711
64	Jacksonville	FL	30.1955	81.3921
65	Rochester	NY	43.0917	77.3657
66	Green Bay	WI	44.3109	88.0111
67	Roanoke	VA	37.1615	79.5630
67	Lynchburg	VA	37.2449	79.0833
68	Omaha	NE	41.1531	95.5615
69	Fresno	CA	36.4452	119.4617
69	Tulare	CA	36.1228	119.2047
69	Hanford	CA	36.1939	119.3841
69	Visalia	CA	36.1949	119.1728
70	Cedar Rapids	IA	42.0030	91.3838
70	Waterloo	IA	42.2934	92.2034
71	Springfield	IL	39.4806	89.3837
71	Decatur	IL	39.5025	88.5717
71	Champaign	IL	40.0659	88.1436
72	Johnstown	PA	40.5624	77.0311
72	Altoona	PA	40.3107	78.2342
73	Chattanooga	TN	35.0244	85.1835
74	Davenport	IA	41.3125	90.3439
74	Rock Island	IL	41.3034	90.3443
74	Moline	IL	41.3024	90.3054
75	Spokane	WA	47.3932	117.2530
76	Paducah	KY	37.0500	88.3600
76	Cape Girardeau	MO	37.1821	89.3105
76	Harrisburg	IL	37.4418	88.3226
77	Alberquerque	NM	35.0504	106.3902
78	South Bend	IN	41.4100	86.1500
78	Elkhart	IN	41.4055	85.5836
79	Portland	ME	43.3941	70.1521
79	Poland Spring	ME	44.0140	70.2136
80	Youngstown	OH	41.0559	80.3859
81	West Palm Beach	FL	26.4254	80.0313
82	Lincoln	NE	40.4800	96.4000
82	Hastings	NE	40.3510	98.2317
82	Kearney	NE	40.4158	99.0452
83	Jackson	MS	32.1755	90.1105
84	Johnson City	TN	36.1848	82.2113
84	Kingsport	TN	36.3254	82.3343
84	Bristol	VA	36.3547	82.1119
85	Springfield	MO	37.1255	93.1753
86	Springfield	MA	42.0605	72.3525
86	Holyoke	MA	42.1215	72.3700
87	Evansville	IN	37.5829	87.3321
88	Peoria	IL	40.4137	89.3520
89	Lexington	KY	38.0257	84.3001
90	Burlington	VT	44.2833	73.1245
90	Plattsburgh	NY	44.4158	73.2712
91	Tucson	AZ	32.1318	110.5533
92	Sioux Falls	SD	43.3300	96.4200
92	Mitchell	SD	43.4234	98.0146
93	Lansing	MI	42.4357	84.3320
93	Onondaga	MI	42.2639	84.3344
94	Greenville	NC	35.3640	77.2223
94	Washington	NC	35.3247	77.0309
94	New Bern	NC	35.0630	77.0240
95	Baton Rouge	LA	30.2702	91.0916
96	Huntsville	AL	34.4349	86.3510
96	Decatur	AL	34.3621	86.5900
97	Austin	TX	30.1601	97.4434
98	Ft. Wayne	IN	41.0750	85.0744
99	Columbia	SC	34.0002	81.0206
100	Rockford	IL	42.1616	89.0538
100	Freeport	IL	42.1748	89.3716
101	Fargo	ND	46.5238	96.4722
101	Valley City	ND	46.5524	98.0010
102	Waco	TX	31.3257	97.0847
102	Temple	TX	31.0553	97.2033
103	Colorado Springs	CO	38.5002	104.4915
103	Pueblo	CO	38.1516	104.3631
104	Madison	WI	43.0423	89.2404
105	El Paso	TX	31.4531	106.2911
106	Monroe	LA	32.3033	92.0709
106	El Dorado	AR	33.1227	92.3958
107	Duluth	MN	46.4546	92.0752
107	Superior	WI	46.4315	92.0614
108	Augusta	GA	33.2800	82.0100
109	Terre Haute	IN	39.2800	87.2450
110	Wichita Falls	TX	33.5449	98.2935
110	Lawton	OK	34.3631	98.2324
111	Wheeling	WV	40.0350	80.4316
111	Steubenville	OH	40.2211	80.3803
112	Salinas	CA	36.4040	121.3916
112	Monterey	CA	36.3601	121.5337
113	Joplin	MO	37.0503	94.3047
113	Pittsburg	KS	37.2439	94.4217

REF. NO.		STATE	LATITUDE (D.MMSS)	LONGITUDE (D.MMSS)
114	Savannah	GA	32.0500	81.0600
115	LaFayette	LA	30.1326	92.0111
116	Santa Barbara	CA	34.2524	119.4212
117	Amarillo	TX	35.1319	101.4951
118	Traverse City	MI	44.4547	85.3714
118	Cadillac	MI	44.1507	85.2404
119	Montgomery	AL	32.2130	86.1800
120	Beaumont	TX	30.0509	94.0606
120	Port Arthur	TX	29.5355	93.5543
121	Columbus	GA	32.2739	84.5916
122	Binghamton	NY	42.0555	75.5506
123	Sioux City	LA	42.3000	96.2400
124	Charleston	SC	32.4635	79.5552
125	Lubbock	TX	33.3440	101.5117
126	La Crosse	WI	43.4805	91.1422
126	Eau Claire	WI	44.4841	91.2954
127	Yakima	WA	46.3608	120.3017
128	Eugene	OR	44.0308	123.0508
129	Wilmington	NC	34.1332	77.5642
130	Wausau	WI	44.5733	89.3748
130	Rhinelander	WI	45.3812	89.2443
131	Topeka	KS	39.0254	95.4040
132	Bluefield	WV	39.1611	81.1321
132	Beckley	WV	37.4641	81.1118
133	Corpus Christi	TX	27.4801	97.2346
134	Rochester	MN	44.0118	92.2811
134	Austin	MN	43.4000	92.5828
134	Mason City	LA	43.0913	93.1203
135	Erie	PA	42.0745	80.0507
136	Columbus	MS	33.2944	88.2538
136	Tupelo	MS	34.1527	88.4212
137	Las Vegas	NV	36.1030	115.0811
138	Brownsville	TX	25.5405	97.2950
138	Harlingen	TX	26.1125	97.4145
138	Weslaco	TX	26.0933	97.5926
139	Columbia	MO	38.5706	92.2002
139	Jefferson City	MO	38.3436	92.1024
140	Albany	GA	31.3442	84.0921
140	Tallahassee	FL	30.2617	84.1651
140	Thomasville	GA	30.5011	83.5844
141	Boise	ID	43.3649	116.1209
141	Nampa	ID	43.3227	116.3345
142	Ft. Myers	FL	26.3825	81.5221
142	Naples	FL	26.0830	81.4742
143	Minot	ND	48.1357	101.1745
143	Bismarck	ND	46.4830	100.4700
143	Dickinson	ND	46.5245	102.4721
144	Quincy	IL	39.5608	91.2435
144	Hannibal	MO	39.4230	91.2130
145	Chico	CA	39.4343	121.5011
145	Redding	CA	40.3512	122.2326
146	Bangor	ME	44.4804	68.4642
147	Macon	GA	32.5026	83.3757
148	Reno	NV	39.3147	119.4846
149	Odessa	TX	31.5044	102.2202
149	Midland	TX	31.5950	102.0439
149	Monahans	TX	31.3539	102.5332
151	Utica	NY	43.0603	75.1359
151	Rome	NY	43.1246	75.2722
152	Alexandria	MN	45.5322	95.2238
153	Missoula	MT	46.5220	113.5935
153	Butte	MT	46.0014	112.3202
154	Bakersfield	CA	35.2224	119.0104
155	Abilene	TX	32.2655	99.4358
155	Sweetwater	TX	32.2815	100.2420
156	Medford	OR	42.1936	122.5228
157	Dothan	AL	31.1323	85.2326
158	Tyler	TX	32.2104	95.1803
159	Florence	SC	34.1143	79.4546
160	Elmira	NY	42.0523	76.4829
161	Billings	MT	45.4658	108.3013
162	Ft. Smith	AR	35.2309	94.2354
163	Idaho Falls	ID	43.2800	112.0200
163	Pocatello	ID	42.5217	112.2641
164	Watertown	NY	43.5633	75.5458
164	Carthage	NY	43.5841	75.3635
165	Clarksburg	WV	39.1650	80.2041
165	Weston	WV	39.0218	80.2803
166	Rapid City	SD	44.0450	103.1350
167	Hattiesburg	MS	31.1937	89.1725
167	Laurel	MS	31.4138	89.0750
168	Salisbury	MD	38.2138	75.3559
169	Meridian	MS	32.2151	88.4213
171	Alexandria	LA	31.1840	92.2642
172	Jonesboro	AR	35.5032	90.4215
173	Lake Charles	LA	30.1335	93.1302
174	Ardmore	OK	34.1027	97.0836
174	Ada	OK	34.4628	96.4041
175	Great Falls	MT	47.3023	111.1728
176	Cheyenne	WY	41.0800	104.4900
177	Gainesville	FL	29.3905	82.1930
178	Casper	WY	42.5200	106.1845
178	Riverton	WY	43.0130	108.2246
179	Marquette	MI	46.3237	87.2343
180	Panama City	FL	30.0931	85.3937
181	St. Joseph	MO	39.4607	94.5047
182	Roswell	NM	33.2339	104.3121
183	Biloxi	MS	30.2345	88.5307
184	Yuma	AZ	32.4331	114.3725
184	El Centro	CA	32.4731	115.3344
185	Eureka	CA	40.4808	124.0945
186	Mankato	MN	44.0949	93.5957
187	Palm Springs	CA	33.4949	116.3240
188	Grand Junction	CO	39.0350	108.3300
189	Tuscaloosa	AL	33.1235	87.3409
190	Jackson	TN	35.3652	88.4850
191	Anniston	AL	33.3935	85.4954
192	Greenville	MS	33.2436	91.0342
193	LaFayette	IN	40.2500	86.5230
194	Lima	OH	40.4433	84.0619
195	Twin Falls	ID	42.3347	114.2736
196	San Angelo	TX	31.2749	100.2612
197	Bellingham	WA	48.4535	122.2913
198	Bowling Green	KY	36.5925	86.2637
199	Harrisonburg	VA	38.2658	78.5209
200	Parkersburg	WV	39.1600	81.3342
200	Marietta	OH	39.2455	81.2718
201	Presque Isle	ME	46.4052	68.0059
202	Kirksville	MO	40.1141	92.3459
202	Ottumwa	IA	41.0015	92.2225
203	Zanesville	OH	39.5625	82.0048
204	Laredo	TX	27.3022	99.3026
205	Farmington	NM	36.4341	108.1305
206	Victoria	TX	28.4818	97.0012
207	Flagstaff	AZ	35.1153	111.3902
208	Selma	AL	32.2426	87.0116
209	North Platte	NE	41.0726	100.4554
210	Helena	MT	46.3534	112.0207
211	Alpena	MI	45.0342	83.2558
212	Miles City	MT	46.2430	105.5024
212	Glendive	MT	47.0619	104.4243

Data compiled from "Television Channel Utilization" Mimeo No. 3331, April 16, 1982, and "All Populated Places," United States Geological Survey. No responsibility for the accuracy of coordinates is assume Please direct any discrepancies to Nai Tam, 632-7010.

FCC DATA BASE

The UP TO hard copy we publish is put together from paper releases which we receive on individual sheets. Some applications we receive notice of two or three times. Others, perhaps 3% to 5%, not at all. Hence, they do not appear.

We now offer a microfiche with hundreds of pages of listings that include translators already licensed (and applied for) as well as LPTV. These microfiche are updated monthly and are complete and direct from FCC records. For $10.00, you can order from us on a one time (or regular monthly basis) a microfiche set by state and then by channel. This way you can look up a channel in your state, for example, and it will list by city, channel and alphabetical order who has filed for that channel.

The next microfiche, also available monthly, also direct from the FCC data base, is a listing by state and city. With this one, you look up the city and it tells you who has filed for that city.

Order both together for $20.00, or individually and state which you want. ICTV members, microfiche service is half price and we bill, all others cash in advance. ICTV members can be sent the previous month's microfiche free if you request them, and if we have them available (first ask first gets). If you want to keep up to date, Lo-Power magazine updates this with the new filings each month, so if you had one set of the microfiche, you can refer to it plus the latest magazine for later filings. That way, you do not have to order a new microfiche monthly.

If you do not have a microfiche reader, they can often be bought used for around $100. Or use your public library's microfiche reader at no charge. Just go to the library with your microfiche cards, do the research, and write down the pertinent information.

We also have on microfiche the data base of full service stations licensed, applications and CPs by state and channel for $10. A second microfiche of the same by state and city, also for $10; order direct from us.

TOP 212 MARKETS -- DRAW A 56 MILE RADIUS CIRCLE AROUND EACH OF THESE

For list of coordinates of Top 212, see adjacent sheet.

Alabama:
- Anniston 191
- Birmingham 50
- Decatur 96
- Dothan 157
- Huntsville 96
- Mobile 62
- Montgomery 119
- Tuscaloosa 189
- Selma 208

Arizona:
- Flagstaff 207
- Mesa 33
- Phoenix 33
- Tucson/Nogales 91
- Yuma 184

Arkansas:
- El Dorado 106
- Fayetteville 162
- Fort Smith 162
- Jonesboro 172
- Little Rock 58

California:
- Anaheim 2
- Bakersfield 154
- Chico 145
- Cotati 5
- El Centro 184
- Eureka 185
- Fresno 69
- Hanford 69
- Los Angeles 2
- Palm Springs 187
- Redding 145
- Sacramento 24
- Salinas/Monterey 112
- San Diego 28
- San Francisco 5
- Santa Barbara 116
- Santa Maria 116
- Stockton 24
- Tulare 69
- Visalia 69

Colorado:
- Colorado Springs 103
- Denver 21
- Grand Junction 188
- Pueblo 103

Connecticut:
- Hartford 23
- New Haven 23

District of Columbia:
- Washington 8

Florida:
- Daytona Beach 40
- Fort Myers 142
- Gainesville 177
- Jacksonville 64
- Miami 15
- Naples 142
- Orlando 40
- Panama City 180
- Pensacola 62
- St. Petersburg 17
- Tallahassee 140
- Tampa 17
- West Palm Beach 81

Georgia:
- Albany 140
- Atlanta 16
- Augusta 108
- Columbus 121
- Macon 147
- Savannah 114

Idaho:
- Boise 141
- Idaho Falls 163
- Nampa 141
- Pocatello 163
- Twin Falls 195

Illinois:
- Champaign 71
- Chicago 3
- Decatur 71
- Freeport 100
- Harrisburg 76
- Moline 74
- Peoria 88
- Quincy 144
- Rockford 100
- Rock Island 74
- Springfield 71

Indiana:
- Elkhart 78
- Evansville 87
- Fort Wayne 98
- Indianapolis 20
- Lafayette 193
- South Bend 78
- Terre Haute 109

Iowa:
- Ames 63
- Cedar Rapids 70
- Davenport 74
- Des Moines 63
- Mason City 134
- Ottumwa 202
- Sioux City 123
- Waterloo 70

Kansas:
- Hutchinson 54
- Pittsburg 113
- Topeka 131
- Wichita 54

Kentucky:
- Bowling Green 198
- Harrisburg 76
- Lexington 89
- Louisville 43
- Paducah 76

Louisiana:
- Alexandria 171
- Baton Rouge 95
- Lafayette 115
- Lake Charles 173
- Monroe 106
- New Orleans 36
- Shreveport 59

Maine:
- Bangor 146
- Poland Spring 79
- Portland 79
- Presque Island 201

Maryland:
- Baltimore 19
- Salisbury 168

Montana:
- Billings 161
- Butte 153
- Glendive 212
- Great Falls 175
- Helena 210
- Miles City 212
- Missoula 153

Nebraska:
- Hastings 82
- Kearney 82
- Lincoln 82
- North Platte 209
- Omaha 68

Nevada:
- Las Vegas 137
- Reno 148

New Mexico:
- Albuquerque 77
- Farmington 205
- Roswell 182

New York:
- Albany 45
- Binghamton 122
- Buffalo 29
- Carthage 164
- Elmira 160
- New York 1
- Plattsburg 90
- Rochester 65
- Schnectady 45
- Syracuse 61
- Utica 151
- Watertown 164
- Troy 45
- Rome 151

North Carolina:
- Asheville 37
- Charlotte 34
- Durham 42
- Greensboro 53
- Greenville 94
- High Point 53
- New Bern 94
- Raleigh 42
- Washington 94
- Wilmington 129
- Winston/Salem 53

North Dakota:
- Bismarck 143
- Dickinson 143
- Fargo 101
- Minot 143
- Valley City 101

Ohio:
- Cambridge 203
- Cincinnati 26
- Cleveland 9
- Columbus 32
- Dayton 46
- Lima 194
- Marietta 200
- Steubenville 111
- Toledo 57
- Youngstown 80
- Zanesville 203

Oklahoma:
- Ada 174
- Ardmore 174
- Lawton 110
- Oklahoma City 38
- Tulsa 52

Oregon:
- Eugene 128
- Medford 156
- Portland 22

Pennsylvania:
- Altoona 72
- Barr 41
- Erie 135
- Harrisburg 47
- Johnstown 72
- Lancaster 47
- Lebanon 47
- Philadelphia 4
- Pittsburgh 11
- Scranton 41
- Wilkes 41
- York 47

Rhode Island:
- Providence 31

South Carolina:
- Charleston 124
- Columbia 99
- Florence 159
- Greenville 37
- Spartanburg 37

South Dakota:
- Mitchel 92
- Rapid City 166
- Sioux Falls 92

Tennessee:
- Chattanooga 73
- Jackson 190
- Johnson City 84
- Kingsport 84
- Knoxville 60
- Memphis 35
- Nashville 30

Texas:
- Abilene 155
- Amarillo 117
- Austin 97
- Beaumont 120
- Brownsville 138
- Corpus Christi 133
- Dallas 10
- El Paso 105
- Fort Worth 10
- Galveston 12
- Harlingen 138
- Houston 12
- Laredo 204
- Lubbock 125
- Midland 149
- Monahans 149
- Odessa 149
- Port Arthur 120
- San Angelo 196
- San Antonio 51
- Sweetwater 155
- Temple 102
- Texarkana 59
- Tyler 158
- Victoria 206
- Waco 102
- Weslaco 138
- Wichita Falls 110

Utah:
- Salt Lake City 49

Vermont:
- Burlington 90

Virginia:	
Bluefield	132
Bristol	84
Harrisonburg	199
Lynchburg	67
Norfolk/Newport	48
Petersburg	56
Portsmouth	48
Richmond	56
Roanoke	67
Staunton	199
Washington:	
Bellingham	197
Seattle	18
Spokane	75
Tacoma	18
Yakima	127
West Virginia:	
Beckley	132
Bluefield	132
Charleston	44
Clarksburg	165
Huntington	44
Parkersburg	200
Weston	165
Wheeling	111
Wisconsin:	
Eau Claire	126
Green Bay	66
La Crosse	126
Madison	104
Milwaukee	25
Rhinelander	130
Superior	107
Wausau	130
Wyoming:	
Casper	178
Cheyenne	176
Lander	178
Riverton	178

MARKET LPTV VALUE

What will your license be worth? If you have a good channel, it will be worth initially about the same as an FM radio license, and later we feel they will be worth twice what an FM license is worth. Particularly in congested markets where the number of LPTV channels available is very limited. The average broadcast facility sells for around seven times net income, and some TV stations are going for 10 times or more. They will be selling initially 7 to 10 times their potential net income, but be aware that most people do not yet realize what the potential income of LPTV is. It is interesting to note that the Commission changed the final rules and now allow you to sell your LPTV station the day you start regular broadcasting (if you didn't get the license on account of an FCC generated preference). If you received the award because of a preference in a comparative hearing, such as a minority preference, you will have to wait one year to sell it.

HERE ARE JUST A FEW THINGS YOU CAN CARRY TO GET VIEWERS

!. CBS, ABC and NBC better quality and more dependabl than they can get from distant full service stations.

2. Premium movie channels, etc.

3. An all news channel with local inserts from the differen towns at different times.

4. Local programs of all types from all five towns, includin news, weather, sports and ads as well as public announce ments.

5. Religious or other local and national programmin they are not now receiving.

6. Local classified ad channels.

7. Pay per view events.

8. Anything they are not now able to get satisfactorily

HERE IS THE PRESENT COMPETITION

These are percentage of homes, not percentage of geography

3%	1 to 3 stations
7%	4 stations
10%	5 stations
13%	6 stations
10%	7 stations
8%	8 stations
11%	9 stations
38%	10 or more stations

(Primarily in the densely populated East.)

83% of set owners have color.
50% have two or more sets.
20% have CATV (cable).

It should be noted that many people that receive 10 stations do not receive 10 different sets of programs; they may receive the three networks and/or PBS from several directions or sources. The majority receive four networks of programs plus some independents that run mostly rerun syndicated shows formerly on the networks. Only CATV viewers get a wide choice of programming other than the three networks and PBS. However, 65% of cable systems are 12 channels or less, so the average American probably has a choice of five or six sets of programming in prime time at best.

COMPARE:

When only a few years ago (30 or so) there were only two or three radio stations in the major cities and maybe you received five or six stations total, and now with AM and FM, you can probably get 30 stations or more in many areas. They said all those stations will never make it. Well, you check and see why one of those radio licenses are now worth nearly a million or more each; it is because they are making money. How small a town can support a radio station? Some very small towns indeed, such as 2,000 people, support radio stations. You have an advantage with LPTV in that you can run great programming off the satellite totally unmanned so you can survive in towns smaller than can support a radio station.

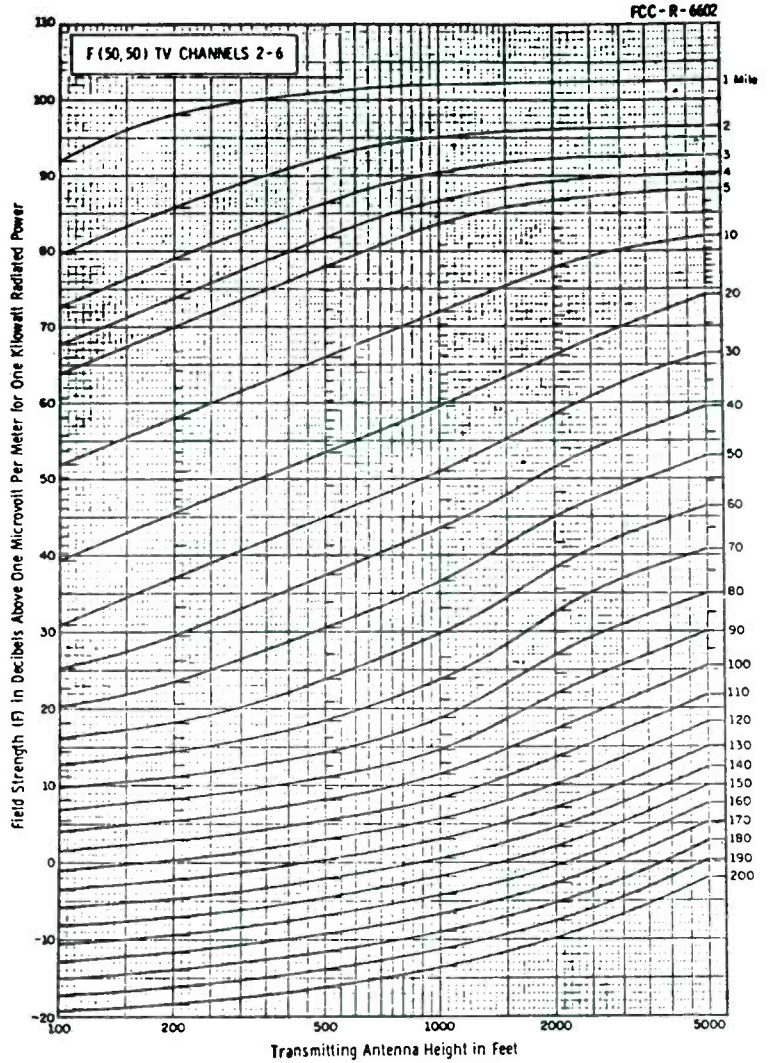
DECIBELS *vs.* POWER

Power Ratio	− db +	Power Ratio
1.0000	0	1.000
.9772	.1	1.023
.9550	.2	1.047
.9333	.3	1.072
.9120	.4	1.096
.8913	.5	1.122
.8710	.6	1.148
.8511	.7	1.175
.8318	.8	1.202
.8128	.9	1.230
.7943	1.0	1.259
.7762	1.1	1.288
.7586	1.2	1.318
.7413	1.3	1.349
.7244	1.4	1.380
.7079	1.5	1.413
.6918	1.6	1.445
.6761	1.7	1.479
.6607	1.8	1.514
.6457	1.9	1.549
.6310	2.0	1.585
.6166	2.1	1.622
.6026	2.2	1.660
.5888	2.3	1.698
.5754	2.4	1.738
.5623	2.5	1.778
.5495	2.6	1.820
.5370	2.7	1.862
.5248	2.8	1.905
.5129	2.9	1.950
.5012	3.0	1.995
.4898	3.1	2.042
.4786	3.2	2.089
.4677	3.3	2.138
.4571	3.4	2.188
.4467	3.5	2.239
.4365	3.6	2.291
.4266	3.7	2.344
.4169	3.8	2.399
.4074	3.9	2.455
.3981	4.0	2.512
.3890	4.1	2.570
.3802	4.2	2.630
.3715	4.3	2.692
.3631	4.4	2.754
.3548	4.5	2.818
.3467	4.6	2.884
.3388	4.7	2.951
.3311	4.8	3.020
.3236	4.9	3.090
.3162	5.0	3.162
.3090	5.1	3.236
.3020	5.2	3.311
.2951	5.3	3.388
.2884	5.4	3.467
.2818	5.5	3.548
.2754	5.6	3.631
.2692	5.7	3.715
.2630	5.8	3.802
.2570	5.9	3.890
.2512	6.0	3.981
.2455	6.1	4.074
.2399	6.2	4.169
.2344	6.3	4.266
.2291	6.4	4.365
.2239	6.5	4.467
.2188	6.6	4.571
.2138	6.7	4.677
.2089	6.8	4.786
.2042	6.9	4.898

Power Ratio	− db +	Power Ratio
.1995	7.0	5.012
.1950	7.1	5.129
.1905	7.2	5.248
.1862	7.3	5.370
.1820	7.4	5.495
.1778	7.5	5.623
.1738	7.6	5.754
.1698	7.7	5.888
.1660	7.8	6.026
.1622	7.9	6.166
.1585	8.0	6.310
.1549	8.1	6.457
.1514	8.2	6.607
.1479	8.3	6.761
.1445	8.4	6.918
.1413	8.5	7.079
.1380	8.6	7.244
.1349	8.7	7.413
.1318	8.8	7.586
.1288	8.9	7.762
.1259	9.0	7.943
.1230	9.1	8.128
.1202	9.2	8.318
.1175	9.3	8.511
.1148	9.4	8.710
.1122	9.5	8.913
.1096	9.6	9.120
.1072	9.7	9.333
.1047	9.8	9.550
.1023	9.9	9.772
.1000	10.0	10.000
.09772	10.1	10.23
.09550	10.2	10.47
.09333	10.3	10.72
.09120	10.4	10.96
.08913	10.5	11.22
.08710	10.6	11.48
.08511	10.7	11.75
.08318	10.8	12.02
.08128	10.9	12.30
.07943	11.0	12.59
.07762	11.1	12.88
.07586	11.2	13.18
.07413	11.3	13.49
.07244	11.4	13.80
.07079	11.5	14.13
.06918	11.6	14.45
.06761	11.7	14.79
.06607	11.8	15.14
.06457	11.9	15.49
.06310	12.0	15.85
.06166	12.1	16.22
.06026	12.2	16.60
.05888	12.3	16.98
.05754	12.4	17.38
.05623	12.5	17.78
.05495	12.6	18.20
.05370	12.7	18.62
.05248	12.8	19.05
.05129	12.9	19.50
.05012	13.0	19.95
.04898	13.1	20.42
.04786	13.2	20.89
.04677	13.3	21.38
.04571	13.4	21.88
.04467	13.5	22.39
.04365	13.6	22.91
.04266	13.7	23.44
.04169	13.8	23.99
.04074	13.9	24.55

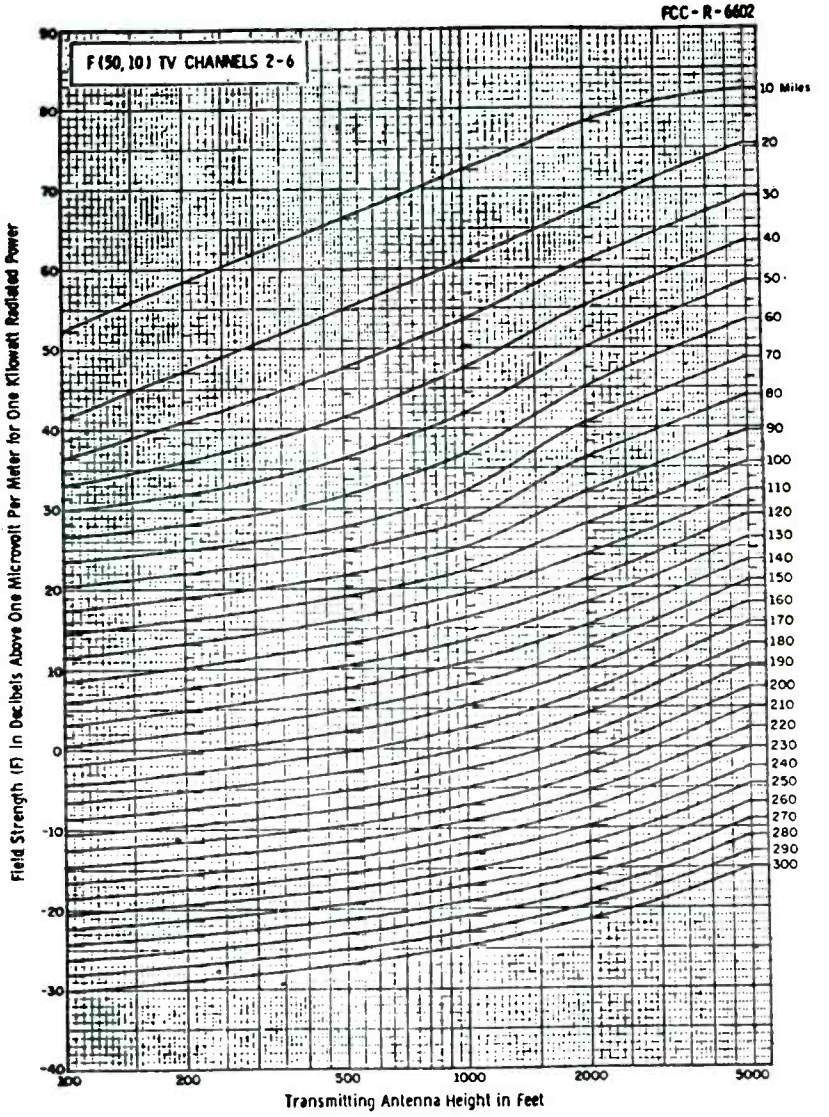
Power Ratio	− db +	Power Ratio
.03981	14.0	25.12
.03890	14.1	25.70
.03802	14.2	26.30
.03715	14.3	26.92
.03631	14.4	27.54
.03548	14.5	28.18
.03467	14.6	28.84
.03388	14.7	29.51
.03311	14.8	30.20
.03236	14.9	30.90
.03162	15.0	31.62
.03090	15.1	32.36
.03020	15.2	33.11
.02951	15.3	33.88
.02884	15.4	34.67
.02818	15.5	35.48
.02754	15.6	36.31
.02692	15.7	37.15
.02630	15.8	38.02
.02570	15.9	38.90
.02512	16.0	39.81
.02455	16.1	40.74
.02399	16.2	41.69
.02344	16.3	42.66
.02291	16.4	43.65
.02239	16.5	44.67
.02188	16.6	45.71
.02138	16.7	46.77
.02089	16.8	47.86
.02042	16.9	48.98
.01995	17.0	50.12
.01950	17.1	51.29
.01905	17.2	52.48
.01862	17.3	53.70
.01820	17.4	54.95
.01778	17.5	56.23
.01738	17.6	57.54
.01698	17.7	58.88
.01660	17.8	60.26
.01622	17.9	61.66
.01585	18.0	63.10
.01549	18.1	64.57
.01514	18.2	66.07
.01479	18.3	67.61
.01445	18.4	69.18
.01413	18.5	70.79
.01380	18.6	72.44
.01349	18.7	74.13
.01318	18.8	75.86
.01288	18.9	77.62
.01259	19.0	79.43
.01230	19.1	81.28
.01202	19.2	83.18
.01175	19.3	85.11
.01148	19.4	87.10
.01122	19.5	89.13
.01096	19.6	91.20
.01072	19.7	93.33
.01047	19.8	95.50
.01023	19.9	97.72
.01000	20.0	100.00
$10.^{3}$	30	10^{3}
$10.^{4}$	40	10^{4}
$10.^{5}$	50	10^{5}
$10.^{6}$	60	10^{6}
$10.^{7}$	70	10^{7}
$10.^{8}$	80	10^{8}
$10.^{9}$	90	10^{9}
$10.^{10}$	100	10^{10}

To figure cable loss, for example, look up dB loss per hundred feet from the cable manufacturer. Multiply by the number of feet, find total dB. Say total is 1.2 dB. Look at chart, top left at 1.2 dB. Reading to left is cable efficiency of 75.86%. Antenna gain example, one yagi 11 dB. Stacking two adds 3 dB or 14 dB. Look up 14 dB upper right. Reading on plus side, antenna gain is 25.12x. If you get past 20 dB gain, start over. For example, for 23 dB, figure 20 dB equals 100x, multiplied by 3 dB equals 200x gain (rounded). 25 dB equals 400x gain. One yagi, for example, 11 dB equals 12.5x. Two yagis stacked 14 dB equals 25x. Four yagis 17 dB equals 50x gain. Eight yagis 20 dB equals 100x gain. 16 yagis 23 dB equals 200x gain.



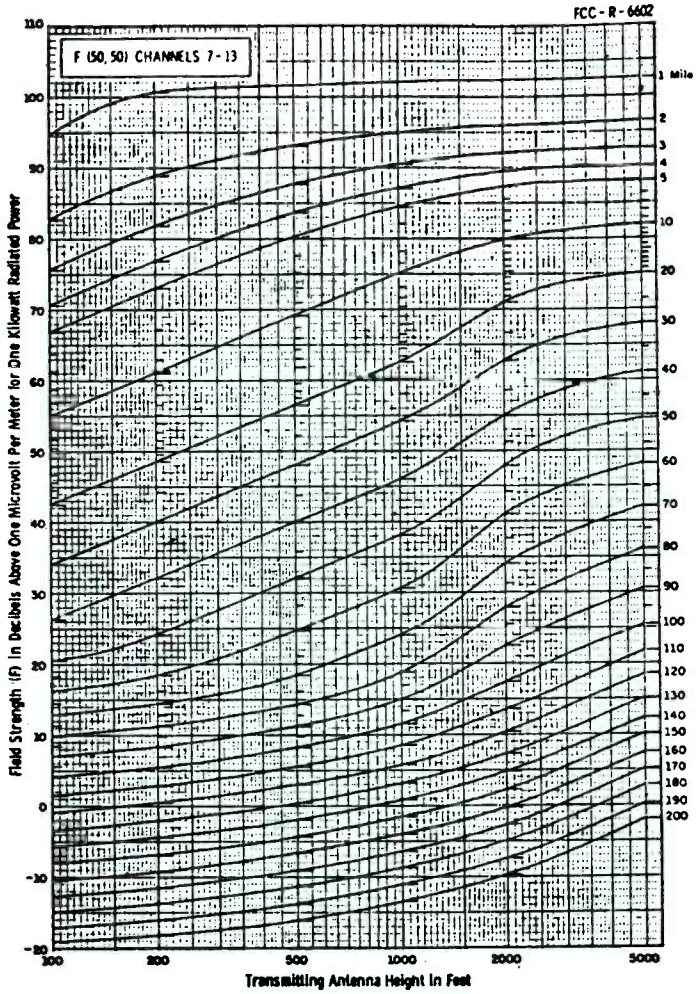
TELEVISION CHANNELS 2-6
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

FCC §73.699 FIGURE 9
(replacement)



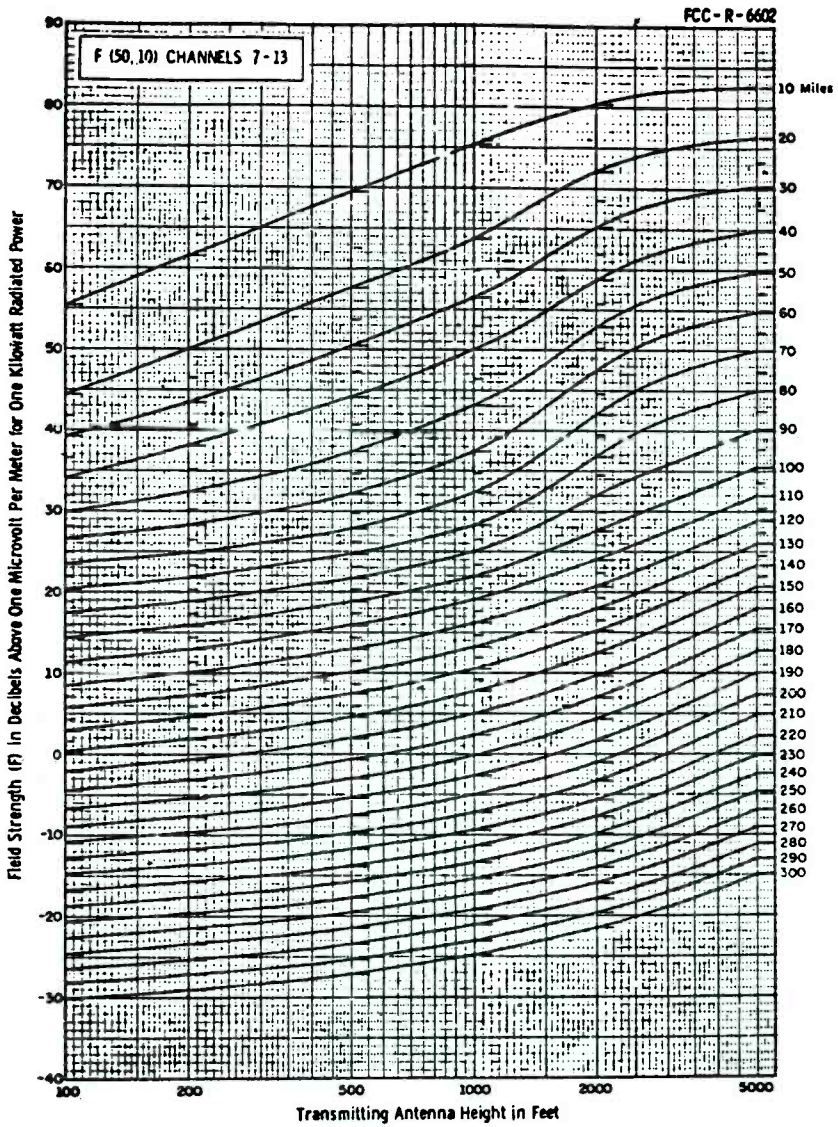
TELEVISION CHANNELS 2-6
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

FCC §73.699 FIGURE 9a
(new)



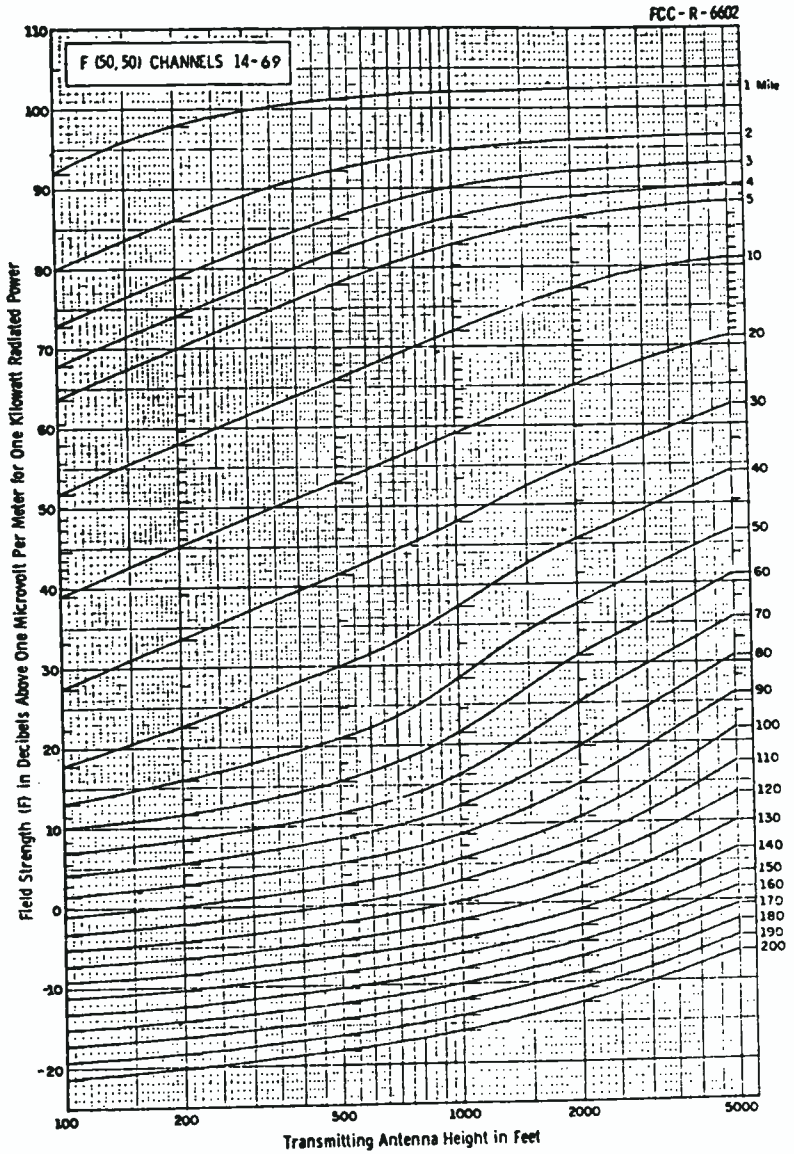
TELEVISION CHANNELS 7 - 13
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

FCC §73.699 FIGURE 10
(replacement)



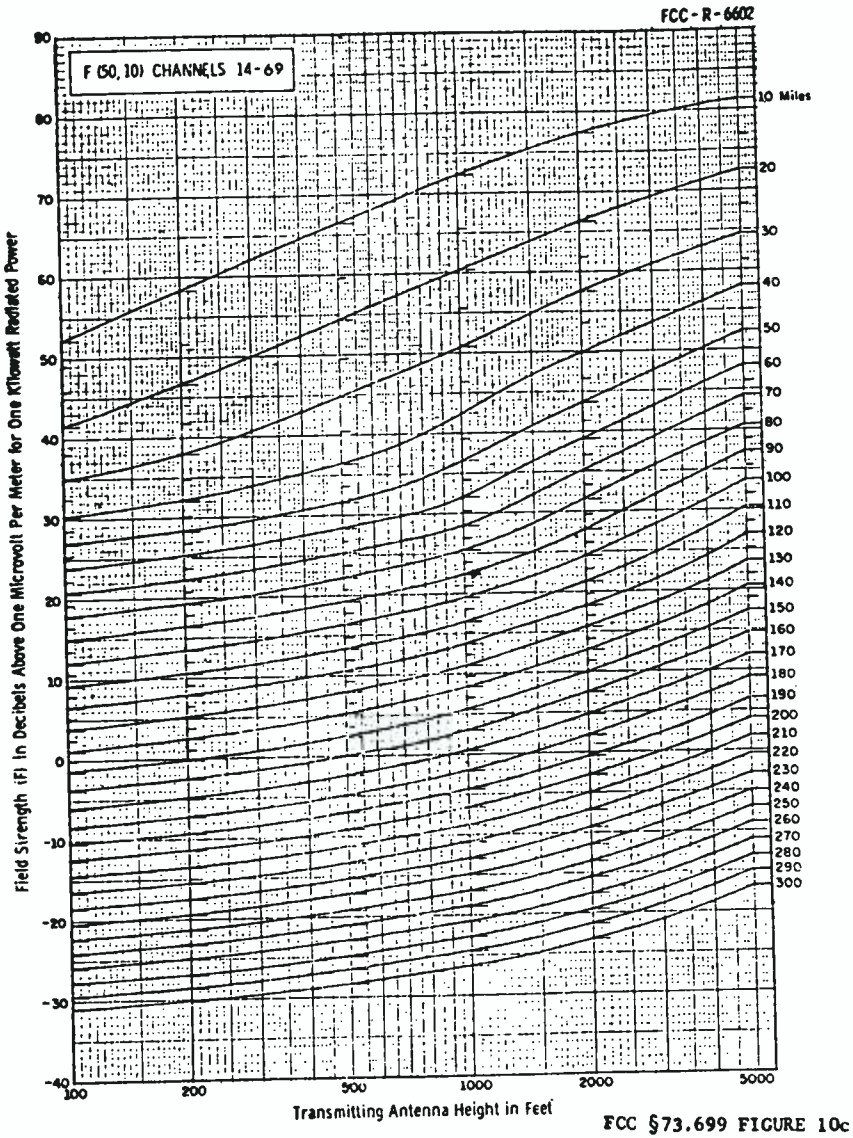
TELEVISION CHANNELS 7 - 13
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

FCC §73.699 FIGURE 10a
(new)



FCC §73.699 FIGURE 10b
(new)

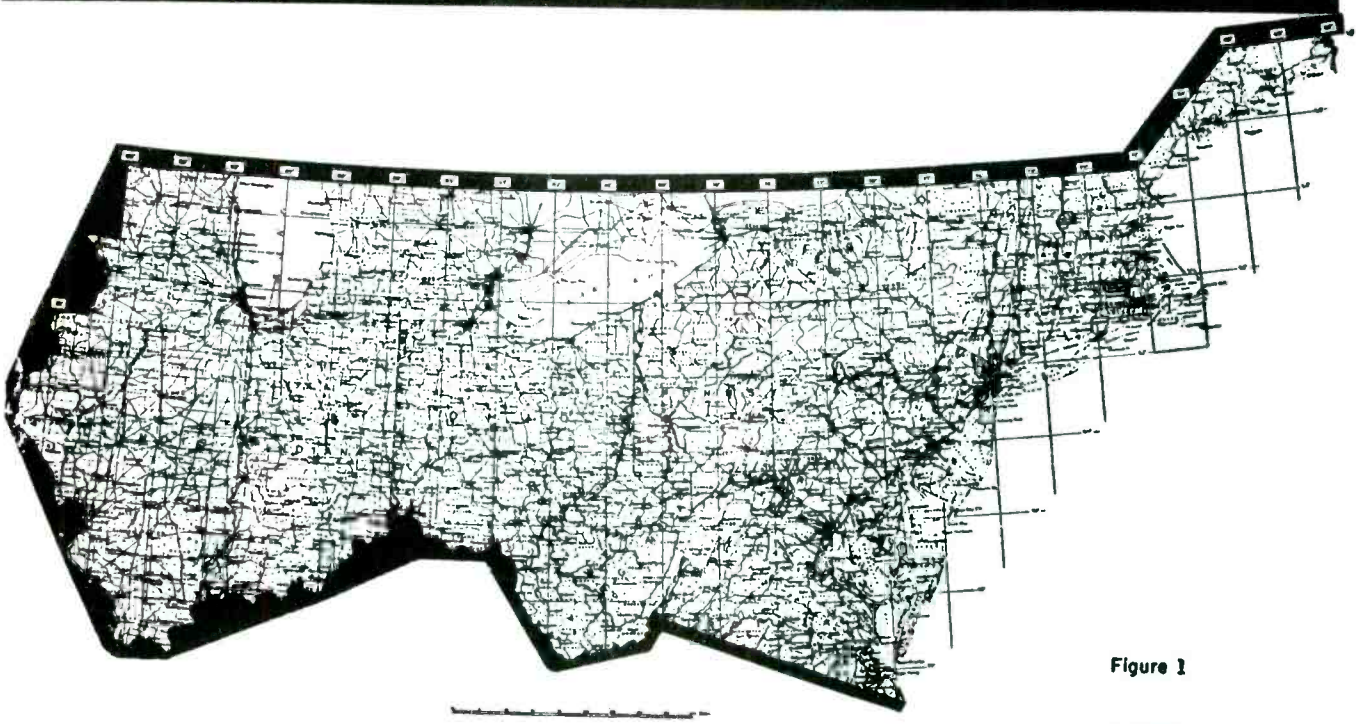
TELEVISION CHANNELS 14-69
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET



FCC §73.699 FIGURE 10c
(new)

TELEVISION CHANNELS 14-69
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

ZONE 1 AND ZONE 3

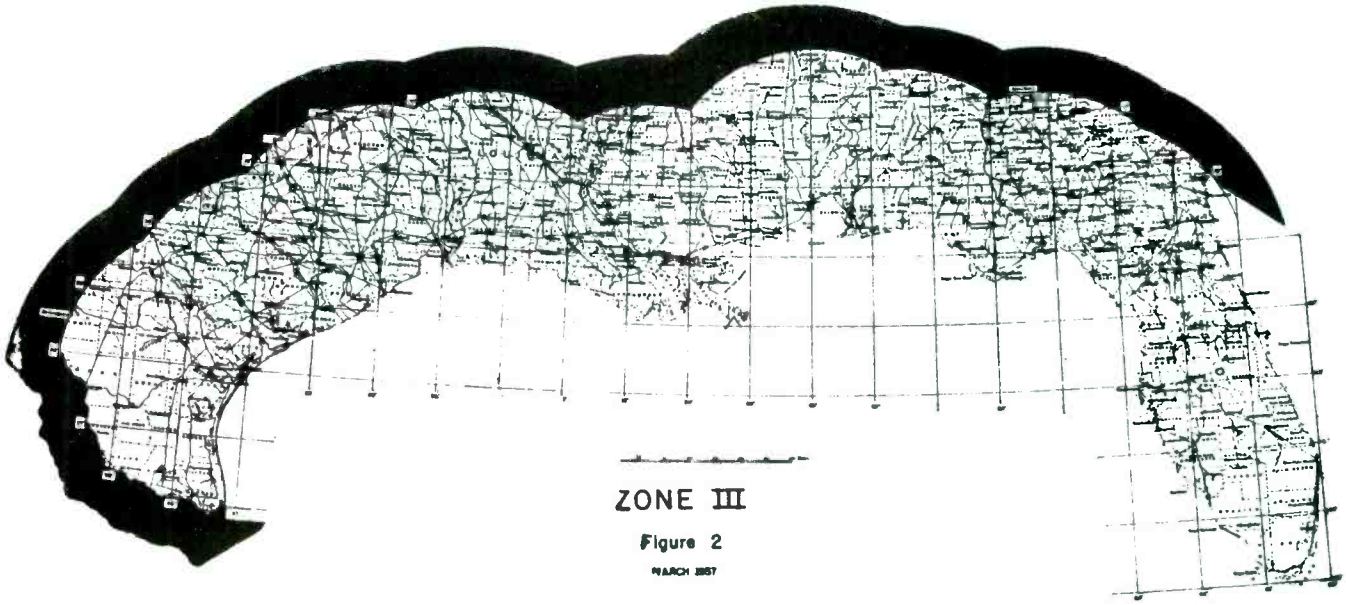


ZONE I.

Figure 1

Feb. 1954

When the rules refer to zones, here they are. Zone 1 above and Zone 3 below. All the rest of the country, including Alaska and Hawaii, come under Zone 2.



ZONE III

Figure 2

MARCH 1957

Appendix B

Instructions for FCC 346

Application for Construction Permit For Translator or Low Power Television Station

(FCC Form 346 attached)

General Instructions

A. This FCC form is to be used to apply for authority to construct a new translator or low power television broadcast station, or to make changes in the existing facilities of such a station. It consists of the following sections:

I. General Information
II. Legal Qualifications
III. Financial Qualifications
IV. Program Service Statement
V. Engineering Data and Antenna and Site Information
VI. Equal Employment Opportunity Program
VII. Certification.

An applicant for a change in facilities need not file Sections II, III, IV and VI.

B. Prepare and submit three copies of this form and all exhibits to: The Secretary, Federal Communications Commission, Washington, D.C. 20554.

C. Many references to FCC Rules (47 CFR) are made in this application form. Before filling it out, the applicant should have on hand and be familiar with current broadcast rules in:

(1) Volume I: Parts 0 ("Commission Organization"), 1 ("Practice and Procedure"), and 17 ("Construction Marking and Lighting of Antenna Structures").

(2) Volume III: Part 73 ("Radio Broadcast Services").

FCC Rules may be obtained through the Government Printing Office, Washington, D.C. 20402. Orders should be sent directly to the Government Printing Office (not through the FCC). The printed rules are sold on a subscription basis, which entitles the purchaser to receive subsequent amendments to the rule part purchased until and overall revised edition is printed. You may telephone the Government Printing Office at (202) 783–3238.

D. Public Notice Requirement:

(1) Section 73.3580 of the Commission's Rules requires that applicants for construction permits for new broadcast stations and major changes in existing facilities (as defined in Section 73.3572(a)(1) or 73.3573(a)(1) of the Rules) give local notice in a newspaper of general circulation in the community to which the station is licensed. This publication requirement also applies with respect to major amendments thereto as defined in Sections 73.3572(b) and 73.3573(b) of the Rules.

(2) Completion of publication may occur within 30 days before or after tendering of the application. Compliance or intent to comply with the public notice requirement must be *certified* in Section VI of this application. The information that must be contained in the notice of filing is described in Paragraph (f) of Section 73.3580 of the Rules. Proof of publication need not be filed with this application.

E. A Copy of this completed application and all related documents shall be made available for inspection by the public, pursuant to Section 73.3526 of the FCC Rules.

F. Replies to questions in this form and the applicant's statements constitute representations on which the FCC will rely in considering the application. Thus, time and care should be devoted to all replies, which should reflect accurately the applicant's responsible consideration of the questions asked. Include all information called for by this application. If any portions of the application are not applicable, so state. *Defective or incomplete applications will be returned without consideration.* Furthermore, inadvertently accepted applications are also subject to dismissal.

G. In accordance with Section 1.65 of the Rules, the applicant has a *continuing obligation* to advise the Commission, through amendments, of any substantial and significant changes in the information furnished.

Section I Instructions

A. The name of the applicant stated in Section I shall be:

(i) if a corporation, the *EXACT* corporate name;

(ii) if a partnership, the names of all partners, and the name under which the partnership does business;

(iii) if an association, the name of the individual(s) authorized to act on behalf of the association, and the name of the association;

(iv) if an individual applicant, the full legal name.

In all other sections of this form, the organization name alone will be sufficient for identification of the applicant.

B. In Section I use the following State abbreviations:

Alabama	AL
Alaska	AK
American Samoa	AS
Arizona	AZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
District of Columbia	DC
Florida	FL
Georgia	GA
Guam	GU
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Maryland	MD
Massachusetts	MA
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Montana	MT
Nebraska	NB
Nevada	NV
New Hampshire	NH
New Jersey	NJ
New Mexico	NM
New York	NY
North Carolina	NC
North Dakota	ND
Northern Mariana Islands	CM
Ohio	OH
Oklahoma	OK
Oregon	OR
Pennsylvania	PA
Puerto Rico	PR
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Trust Territory Of The Pacific Islands	TT
Utah	UT
Vermont	VT
Virginia	VA
Virgin Islands	VI
Washington	WA
West Virginia	WV
Wisconsin	WI
Wyoming	WY

Section II Instructions

A. As used in Section II, the words "party to this application" have the following meanings:

Individual Applicant: The applicant.

Partnership Applicant: All partners, including limited partners. If any partner is a corporation or other entity, the definitions set forth below will apply.

Corporate Applicant: All officers and directors, and all persons or entities who are the beneficial or record owners or have the right to vote any capital stock, membership or owner interest, or subscribers to such interests, shall be considered parties to this application. If any corporation or other legal entity owns stock in the applicant, its officers, directors and persons or entities who are the beneficial or record owners or have the right to vote any capital stock, membership or owner interest, or subscribers to such interest, of that entity shall also be considered parties to this application.

In the event the applicant has more than 50 stockholders, only officers and directors and persons or entities who are the beneficial or record owners or have the right to vote 1% or more of the capital stock, membership or owner interest, or subscribers to such interest shall be considered parties to this application. However, if such entity is a bank, insurance company, or investment company (as defined by 15 U.S.C. § 80a–3) which does not invest for purposes of control, the relevant stock, membership or owner interest is 5% or more. If any corporation or other legal entity owns 1% or more of an applicant with more than 50 stockholders, its officers, directors and all persons or entities who are the beneficial or record owners or have the right to vote 1% or more of the capital stock, membership or owner interest, or subscribers to such interest in the entity, shall also be considered parties to this

Any Other Applicant: All executive officers, members of the governing board and owners or subscribers to any membership or ownership interest in the applicant.

B. All applicants must comply with Section 310 of the Communications Act of 1934, as amended. Specifically, Section 310 proscribes issuance of a construction permit to an alien, the representative of an alien, a foreign government or the representative thereof, or a corporation organized under the laws of a foreign government. This proscription also applies with respect to any corporation of which any officer or director is an alien or of which more than 20% of the capital stock is owned or voted by aliens, their representatives, a foreign government or its representative, or by a corporation organized under the laws of a foreign country. This proscription could likewise apply to any corporation directly or indirectly controlled by another corporation of which (a) any officer is, (b) more than 25% of the directors are, or (c) more than 25% of the captial stock is owned and voted by aliens, their representatives, a foreign government or its

representative. The Commission may also deny a construction permit to a corporation controlled by another corporation organized under the laws of a foreign country.

C. The applicant must determine the citizenship of each officer and director. It must also determine the citizenship of each shareholder or else explain how it determined the relevant precentages. For large corporations, a sample survey using a recognized statistical method is acceptable for this purpose.

Section III Instructions

A. All applicants filing Form 346 must be financially qualified to effectuate their proposals. Certain applicants (i.e., for a new station, to reactivate a silent station, or if specifically requested by the Commission) must demonstrate their financial qualifications by filing Section III. DO NOT SUBMIT Section III if the application is for changes in operating or authorized facilities.

B. An applicant for a new station must attest it has sufficient net liquid assets on hand, or committed sources of funds to construct the proposed facility and operate for three months, without revenue. As used in Section III, "net liquid assets" the means lesser amount of the net current assets or of the liquid assets shown on a party's balance sheet, with net current assets being the excess of current assets over current liabilities.

C. Documentation supporting the attestation of financial qualification need not be submitted with this application but must be available to the Commission upon request. The Commission encourages that all financial statements used in the preparation of this application be prepared in accordance with generally accepted accounting principles.

D. It is Commission policy not to grant extension of time for construction on the basis of financial inability or unwillingness to construct.

Section VI Instructions

A. Applicants seeking authority to constuct a new low power television (LPTV) broadcast station, applicants seeking authority to obtain assignment of the construction permit or license of such a station, and applicants seeking authority to acquire control of an entity holding such construction permit or license are required to afford equal employment opportunity to all qualified persons and to refrain from discriminating in employment and related benefits on the basis of race, color, religion, national origin or sex. See Section 73.2080 of the Commission's Rules. Pursuant to these requirements, an applicant who proposes to employ five or more full-time station employees must establish a program designed to assure equal employment opportunity for women and minority groups (that is, Blacks not of Hispanic origin, Asian or Pacific Islanders, American Indians or Alaskan Natives, and Hispanics). This is submitted to the Commission as the Model EEO Program Form. If minority group representation in the available labor force is less than five percent (in the aggregate), a program for minority group members is not required. However, a program must be filed for women since they comprise a significant percentage of virtually all area labor forces. If an applicant proposes to employ less than five full-time employees, no EEO program for women or minorities need be filed.

B. Guidelines for developing an Equal Employment Opportunity program are set forth as a separate Model EEO program.

Lo-Power Editor's Note: The Commission is expected to approve a new form. In the meantime, Form 346 is to be used. Regarding the EEO information, see our issue of the rules, pages 33 through 38. Forms, when needed, can be photocopied direct and used.

Any applicant planning to employ less than five people at each station (channel) need not file an EEO form but must state in the application that the applicant plans to hire less than five employees.

The financial questionnaire, certification page 30 from our reproduction of the ruies, should be typed, marked yes on questions one and two, and the page labeled and dated as a financial Exhibit No. ———.

Other media interests (page 29) should also be filed as an exhibit, an entire page devoted to it and a narrative statement certifying that the applicant has no AM/FM or TV broadcast station license (or whatever the case). You must then list all of your other low power applications already filed. Also certify that you have no non-broadcast media of mass communications, no cable system, theatre, or printed publications, if such is the case.

LOCATING ANTENNA SITES


Dr. Thomas C. Durfey is chairman of the Dept. of Communication Arts at Oral Roberts University. Mr. Russell J. Krausfeldt is a communications major at the university.

Applicants for low-power TV sites should understand some of the basic engineering trade-offs

by Dr. Thomas C. Durfey and Russell J. Krausfeldt

LOW-POWER television has captured the imagination of broadcast enthusiasts by combining a low initial cost with virtually unlimited opportunities for the production and broadcast of new and innovative types of programming. Quite often, the creative persons who are attracted by the promise of low-power television lack technical knowledge to activate their ideas.

For those considering entering the low-power arena, it is not too late to examine some of the technical concerns necessary to complete an FCC application for a low-power television station.

Frequency Study

The first step in planning such a facility is a mandatory engineering frequency study. This study determines which television frequencies have no critically spaced stations, assignments, or authorizations likely to receive interference from the proposed facilities. Any channel determined not to be critical with respect to these criteria is thus available for filing. The nature and complexity of the frequency study often dictates retention of a consulting engineer to determine the available television frequencies.

An alternative method involves submitting the latitude/longitude coordinates of the proposed community to be served to a computer search service. "Dataworld" in Washington, D.C., is one such agency. Once the available frequencies have been located, many interrelated factors complicate selection of a single frequency.

For example, should an engineering study demonstrate that an acceptable vacant channel exists on both the UHF and VHF bands, the applicant immediately faces a crucial choice. Since the FCC allows translator facilities on either frequency band, the engineer and applicant must jointly determine which frequency band will best fit the applicant's overall objectives.

Generally, VHF channels require less powerful transmitters and larger, more expensive transmitting antennas than those required by UHF stations. However, since VHF channels are limited to 10 watts of power (as compared with 1,000 watts allowable on UHF channels), the signal of a VHF low-power station will not ordinarily propagate as well as the signal of a UHF station because it is more susceptible to man-made interference.

On the other hand, a 1,000-watt UHF transmitter can cost up to three times as much as a 100-watt VHF unit. In addition, the low-power applicant electing to serve a VHF-dominated market with a UHF station may face strong resistance based upon a traditional acceptance of the VHF service only.

Tower Facilities

An equally important task confronting the potential low-power applicant is the selection of broadcast-tower facilities. While the applicant's first impulse may be to construct a new tower specifically for the mounting of the new transmitting antenna, such policy has several drawbacks.

Of particular concern to new low-power applicants is the need to include extensive data relating the cost, location, and physical dimensions of the proposed construction. In addition, the entire proposal may be subject to indefinite delays as the mandatory "environmental impact statement" is studied by the governmental agencies.

The use of existing tower facilities through rental agreements is thus usually preferable. Existing tower facilities are abundant in most areas of the country with rental possibilities and costs based upon the height of the proposed antenna and the demand for these facilities. Agreements for the rental of existing tower facilities are especially suitable for UHF low-power stations owing to the moderate tower space, height requirements, and compact size of UHF broadcast antennas.

Broadcast Antenna

The critical companion to the broadcast tower is the broadcast antenna. Properly selected, an antenna can increase the primary coverage area of the low-power station while simultaneously including or excluding other areas from possible reception. This is made possible owing to a lack of effective radiated power (ERP) restrictions on low-power stations.

Thus, while a UHF low-power station may use a transmitter of 1,000 watts or less, a high-gain directional antenna mounted at an advantageous HAAT (Height Above Average Terrain) could raise the ERP of the station to 25,000 watts or above. The only practical limits are the installation's cost.

Equally important in the selection of a broadcast antenna is the height at which the antenna will be mounted on the tower. Consideration must be given the electrical loss characteristics of the transmission line used to connect the antenna array to the transmitter. This is one area in which the trade-offs relating to

different components must be carefully weighed. Signal strength gets lost in the transmission line or cable used to connect the transmitter to the antenna. Some of this signal loss can be reduced by keeping the transmitter-to-antenna distance short or by using a more expensive, longer cable type with a good efficiency factor (low loss of signal per unit length).

As an example, if an applicant were to select an antenna with a

As with any system, there is a point of diminishing returns, where the expense of more sophisticated equipment buys only a negligible increase

power gain of 21.3, using a transmission line with a length efficiency factor of .40 (to reach a height of 600 feet), and a transmitter of 1,000 watts, the effective radiated power would equal transmission line length efficiency X antenna power gain X transmitter output or ERP = .40 X 1.00 (8,250 watts, about average in this case). If the same applicant were to halve the antenna height, substitute a more expensive transmission line with a length efficiency factor of .75 (to reach a height of 300 feet, a very good line indeed), select a less-expensive antenna with a power gain of only 13.0, and retain the same 1,000-watt transmitter, the ERP would equal .75 X 12.0 X 1.00 or 9,000 watts (a similar, although slightly better, figure).

While halving the antenna height would have some impact on the coverage area not indicated by the ERP, this example demonstrates the trade-offs involved in the selection of a transmission system. In the case of these examples, the cost of the length of gas-filled line necessary to achieve the line efficiency cited in the second case may prove to be twice the saving from the substitution of a cheaper antenna. As with any system, there is a point of diminishing returns where the expense of a more sophisticated antenna or transmission line buys only a negligible increase in the anticipated coverage area.

Ideally, the most advantageous tower location for a low-power UHF transmitting antenna is atop a tall building that has been built on a mountain or overlook directly above the community to be served. This ideal situation is improved if a high-gain antenna is used and is connected to a transmitter located but a few feet away, inside the top floor of the building.

Such prime locations are not always available. Instances may occur in which the tower location and antenna height must be compromised in order to avoid possible interference from a short-spaced co-channel or adjacent channel station. Costs and relative advantages need to be studied carefully before making final decisions in this critical area.

Basic Understanding Needed

The possibilities of low-power television are exciting indeed. Hundreds of religious broadcasters with low-power applications are already on file with the FCC in Washington. Undoubtedly hundreds more have felt unwilling or underqualified to venture into this new medium.

It can safely be concluded that while the actual preparation of the low-power application is best reserved for the professional consulting engineer, the principles and approaches used to prepare the low-power proposal can and should be understood by the willing applicant.

HOW TO FIND A TOWER SITE

First of all, many of us are filing for a license in a city far away. We want a license there, but, we do not want to do the following:

1. Spend money or time going there now.
2. Spend money to build a tower.
3. Buy any property.
4. Commit ourselves to anything.

Yet we want to file for a license in a city. One of the paper hucksters' tricks when pressed to file an application is to file on:

1. Someone elses tower without permission.
2. Some hill or site like, 5 miles north of the center of town, etc. with no permission, even no checking to see if it is available.

There idea is to get it filed, collect $4,000 and maybe amend the application later if they should happen to get a legitimate site.

The way you do it, preferably, is like this: Get a book on all the FM stations (we loan them to ICTV members), and start with FM stations. Call each one and tell them you are filing a low power TV application in their city. You are looking to lease some high tower space, and what do they have available that they would consider leasing. If they say they have a high tower in a high above average terrain location and maybe interested in leasing space, then you can say something like the following. 'What I need now is permission to file on your antenna site. If and when I ever get a construction permit, then I will come back and negotiate a contract with you if you are interested at that time. This licensing process may take a year to five years; nobody knows. What I need from you now is the coordinates of your tower, the height, approximately where on the tower you may have space for us, the height above sea level at the site,

and so on as that.' You may inquire if the tower is a big and sturdy one, is it pretty loaded already, and how much it can handle, etc.

Just between you and me, the going rate for tower leasing (and space in the shack) is anywhere from $50 a month to $500 a month, depending upon how big the tower is, where you are on the tower, and how much you load it. A 300 foot up tower is much more expensive.

Now, if you run out of FM radio stations, I suggest you call the yellow page operator in the vicinity (dial 1, plus area code, and then 555-1212 as usual and ask for a yellow page operator). Tell her you want all the listings under two way radio servicing, and call them. They all work on every high site in the county and know about all the others. Tell them what you are doing and ask if they know of any tower sites available or high locations. Very often they own some and they almost always know of some place or possibility. Usually they know how much the owner wants for space, etc. Always try to be located in the direction most people have their antenna pointed. They probably won't turn it around just for your station.

Next bet is tall buildings, grain elevators, or water towers. The Chamber of Commerce usually can tell you these if the two way radio people couldn't answer that question, but almost always they'll tell you what's there. About one out of three cities will let you on the water tower (just ask for permission to cite the tower in the application and negotiate the price and official permission later).

Best bet, of course, is a hill or mountain. Very often you can find a hill or mountain fairly close to most populated areas. Remember, a spot 100 feet higher than the rest of the area is just as good as a 100 feet taller tower.

The most important thing that will determine your coverage is not power but height. It is by far the most important. Spend your skills, effort, time and money on

1. High antenna mounting.
2. High antenna mounting.
3. High antenna mounting.

If we listed a number four priority, I suppose the next priority would be antenna gain and cable efficiency and last, transmitter power.

If you have a high mountain antenna site picked out on forest service land, the rental is some formula like $50 per year or 1% of the value of the equipment you have on the hill, whichever is most. They are getting very particular where they let you on and have designated certain mountains, etc. that they call electronic sites. Call the forest service office in the area if you are interested in and ask for whoever handles the electronic sites. They often will tell you they don't have any more room. This means they don't want any more towers, but if you ask who owns the present equipment on their electronic sites and run them down, you can almost always lease space. Just ask for permission to cite their location in your application and negotiate when and if you get a construction permit.

The Bureau of Land Management, which owns much western land, operates the same way, but has a lot more formalities to go through unless you can get the names of people that already have something on the hill.

AM radio stations will sometimes work something out to lease space, but many AM radio stations have what is known as a 'hot' tower, which means it is isolated from the ground and fed RF that way. Others are not 'hot' to ground, but you detune the tower when you go on it with additional equipment and it has to be retuned. The AM engineer will tell you what the situation is with a particular tower. AM towers are often tall but are more complicated to get on than FM towers. FM towers sometimes lose the top 1/3 in FM antenna array which puts you way down the tower which is not true on AM towers.

If you go on a mountain top, you can often get by with a telephone pole or three or four. We have filed some with a tripod of 80 foot poles with a small building built at the top for the transmitter. If you are in a heavy wind and ice load area, you could build a two story with the top story fiberglass enclosure around the antenna (a radome, so to speak).

ADDITIONAL HEIGHT OF LITTLE IMPORTANCE

Just getting off the ground 50 feet will do nicely on most mountain tops. When you are up several thousand feet above average terrain, a hundred foot tower doesn't benefit you much more. The advantage of mountains is height, but, unfortunately, they are often 30 miles or so out of town. To get back to town, you need every bit of power you can get. By having the transmitter in a building at the top of the pole, you have practically no cable loss. By going into an antenna array (400x highly directional antenna gain arrays can cost as little as $800) with extremely high gain (as much as 800x), you can, with no cable loss, get some fantastic amounts of ERP directed in a 20 degree wide beam toward your coverage area.

We designed one with the 10 watt VHF transmitter (about the size of a large typewriter) to be installed in a refrigerated box on the walkway of a water tower. This gives you near full power with little cable loss. That one, we planned to eventually install two side by side transmitters so that if one failed, it switched to the second standby unit automatically. This was in Arizona desert, so severe weather other than heat was not a problem in servicing them.

Very rarely does an omni antenna make sense. Omni means equal all the way around. Usually there are some areas where there are a lot of people and other directions where there are few people. Shape your antenna radiation pattern to put the heaviest signal where the most viewers are. Unless you are in the exact middle of your market equally all the way around, I would seriously question engineering that gives you an omni antenna. Only a tiny percentage of translators use omni. Maybe that tells you something. To get a decent gain on UHF omni antennas often costs you $12,000 and up. Spreading it all around 360 degrees in equal proportions, even at best, means you don't go anywhere particularly well.

True, other antenna patterns take a lot more effort, thinking, planning, etc. but will give a lot more viewers for your money. If you just want to turn out paperwork and filings, then of course, just putting down an omni antenna will save you a lot of time. If you are serious about making a buck with a small investment, you better do some directional high gain antenna work.

We lean toward combinations of yagi antennas. Well over 70% of present translators appear to be using yagi directional antennas (or color logs, which are related). The mass producers of paperwork (filings) and engineers used to doing full service stations usually specify omnis. The Washington engineers' reason that full power engineers are used to omni antennas is because in full service, you are licensed for a maximum of radiated power (ERP). Therefore, to get the most coverage for a full service station, they need to get you that maximum allowable power all the way around (360 degrees, which means omni). With low power, your only limitation is on transmitter power. With the little power allowed, you have to focus **every bit** where the most viewers are to get decent coverage levels, and rarely are they equally sorted all the way around.

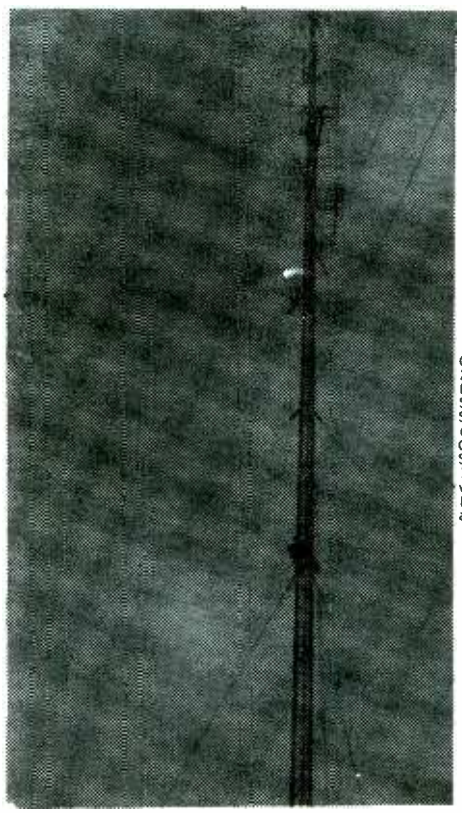
FAA Lighting Requirements

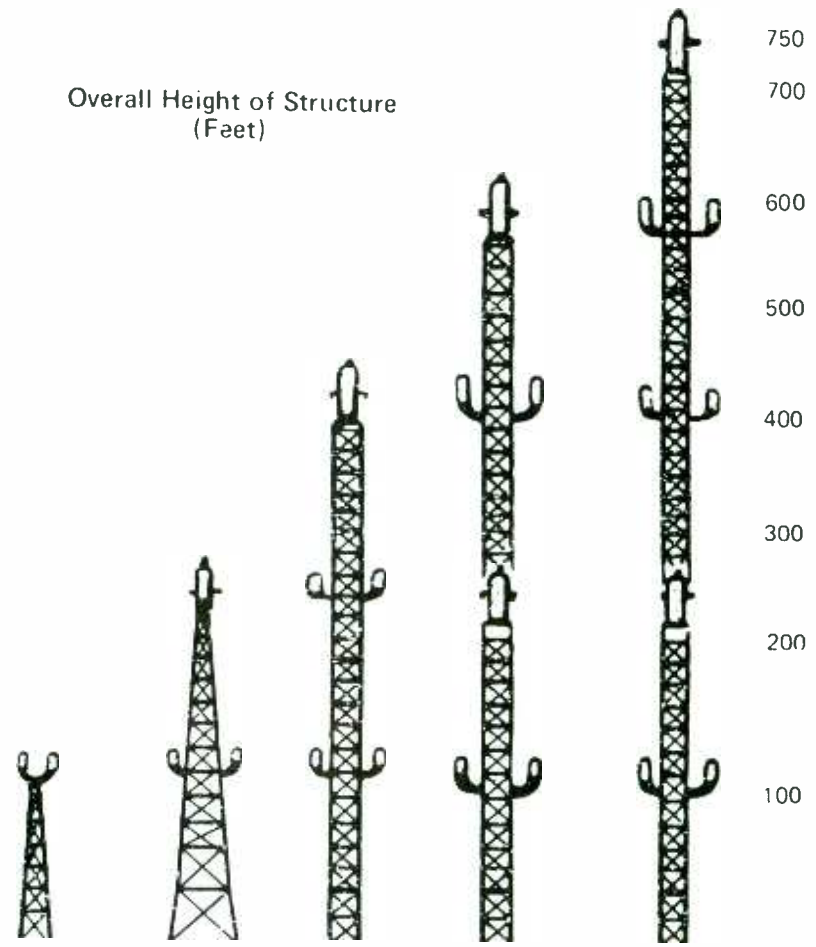
This chart illustrates the requirements for the standard lighting of antenna towers and supporting structures in accordance with "Indicated paragraphs of FCC Form 715 and FCC Rules Part 17", and "FAA Standards for Marking and Lighting Obstructions to Air Navigation, Nov. 1, 1953."

Aeronautical study by the FCC and FAA may determine that other than standard lighting is required for a specific tower installation. The FCC Construction Permit will specify the required lighting for each installation and should be carefully checked for this information.

DAILY INSPECTION
FCC Rule 17.37 requires that the licensee... (1) shall make an observation of the tower lights at least once each 24 hours, either visually or by observing an automatic. . . indicator or alternatively (2) shall provide an automatic alarm system.
Hughey & Phillips Lamp Failure Indicator systems meet (1) above, and Automatic Alarm systems meet (2) above.

*FCC Form 715 Paragraph 21 states "All lights shall burn continuously or shall be controlled by a light sensitive device. . ."





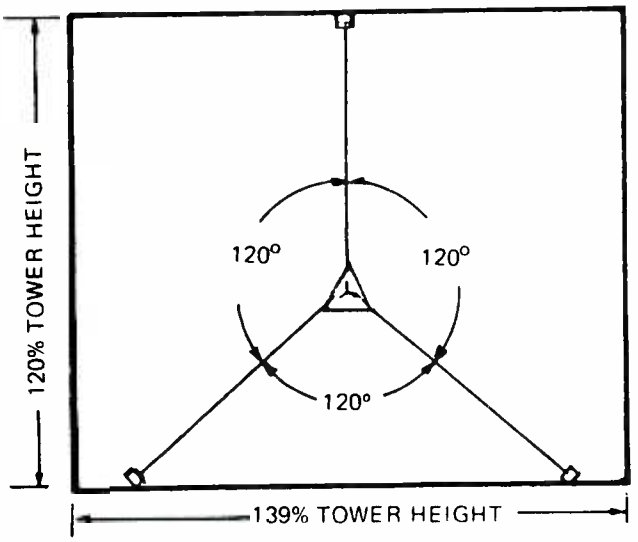
2(17.24) "A-1"	3,11,21* (17.25) "A-2"	3,12,21* (17.26) "A-3"	3, 4, 13, 21* "A-4"	3, 5, 14, 21* "A-5"
OVERALL HEIGHT 21 to 150 FT. FCC/No. 2, FAA Spec. "A-1" Standard lighting requires 1 Double Obstruction Light. See Bulletin HPS-111. For Microwave Towers see Bulletins HPS-117 and HPS-129.	OVERALL HEIGHT 151 TO 300 FT. FCC/No's. 3, 11, 21, FAA SPEC. "A-2". Standard lighting requires 1 Beacon, 2 Obstruction Lights, and Beacon Flasher. Photo-Electric Control is required* See Bulletin HPS-112 For Microwave Towers, see Bulletins HPS-118 and HPS-130	OVERALL HEIGHT 301 TO 450 FT. FCC/No's. 3, 12, 21, FAA SPEC. "A-3". Standard lighting requires 1 Beacon, 4 Obstruction Lights, and Beacon Flasher. Photo-Electric Control is required*. See Bulletin HPS-113. For Microwave Towers see Bulletins HPS-119 and HPS-131	OVERALL HEIGHT 451 to 600 FT. FCC/No's. 3, 4, 13, 21, FAA SPEC. "A-4". Standard lighting requires 2 Beacons, 6 Obstruction Lights (8 for square towers), and Beacon Flasher. Photo - Electric Control is required* . . . See Bulletin HPS-104.	OVERALL HEIGHT 601 to 750 FT. FCC/No's. 3, 5, 14, 21, FAA SPEC "A-5". Standard lighting requires 2 beacons, 9 Obstruction lights (12 for square tower), and Beacon Flasher Photo - Electric Control is required" . . . See Bulletin HPS-105

Regulations from Hughey and Phillips Literature.

Area Required for Guyed Tower

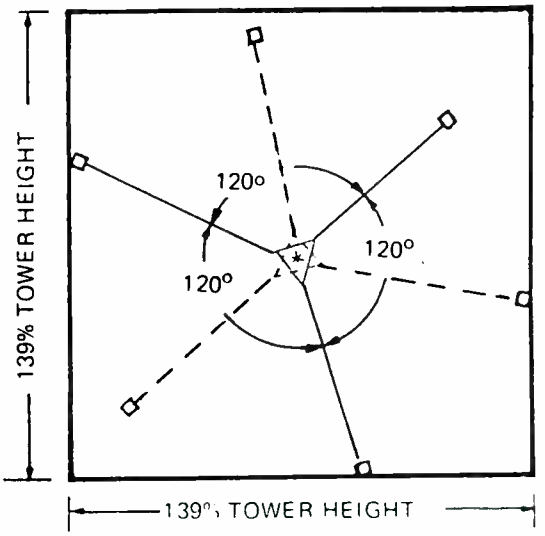
MINIMUM AREA

This is minimum area required, but does not permit orientation of tower into the best position for path angle.



RECOMMENDED AREA

This is the preferred area for it allows orientation of the tower in any location to obtain the best position for path angle.



Tower Height	Minimum Area	Optimum Area
100′	120′ x 139′	139′ x 139′
120′	144′ x 167′	167′ x 167′
140′	168′ x 195′	195′ x 195′
160′	192′ x 222′	222′ x 222′
180′	216′ x 250′	250′ x 250′
200′	240′ x 278′	278′ x 278′
220′	264′ x 306′	306′ x 306′
240′	288′ x 334′	334′ x 334′
260′	312′ x 362′	362′ x 362′
280′	336′ x 390′	390′ x 390′
300′	360′ x 418′	418′ x 418′
320′	384′ x 445′	445′ x 445′
340′	408′ x 472′	472′ x 472′
360′	432′ x 500′	500′ x 500′
380′	456′ x 528′	528′ x 528′
400′	480′ x 556′	556′ x 556′
420′	504′ x 584′	584′ x 584′
440′	528′ x 612′	612′ x 612′
460′	552′ x 639′	639′ x 639′
480′	576′ x 667′	667′ x 667′
500′	600′ x 695′	695′ x 695′
520′	624′ x 723′	723′ x 723′
540′	648′ x 751′	751′ x 751′
560′	672′ x 778′	778′ x 778′
580′	696′ x 806′	806′ x 806′
600′	720′ x 834′	834′ x 834′

Chart information from Fort Worth tower literature.

FCC TECHNICAL DATA REFERRED TO IN NEW RULES

47 CFR Part 73

[BC Docket No. 78-253; FCC 81-369]

Inquiry Into Future Role of TV Translators and Low-Power Television Broadcasting in National Telecommunications Systems

AGENCY: Federal Communications Commission.

ACTION: Further notice of proposed rule making.

SUMMARY: This document seeks comment on additional technical standards for TV translators and low-power television stations. In view of the great numbers of applications that have been and probably will continue to be filed, the Commission finds it necessary to adopt a mode of exclusivity and interference analysis that easily may be automated. A prohibited contour overlap approach is proposed herein.

DATES: Comments must be filed on or before September 15, 1981, and reply comments must be filed on or before October 15, 1981.

ADDRESS: Federal Communications Commission, Washington, D.C. 20554.

FOR FURTHER INFORMATION CONTACT: Molly Pauker, Broadcast Bureau, (202) 632-7792, or Gordon Godfrey, Broadcast Bureau, (202) 632-9660.

SUPPLEMENTARY INFORMATION:
Adopted: July 30, 1981.
Released: August 18, 1981.

Background

In the matter of an inquiry into the future role of TV translators and low-power television broadcasting in the National Telecommunications System.

1. On August 8, 1978, the Commission adopted a *Notice of Inquiry* (68 F.C.C. 2d 1525) initiating this proceeding. The *Notice* addressed a range of issues concerning the operation of television translators and their potential for use as low-power TV broadcast stations.

2. The analysis of the record accumulated in response to the *Notice of Inquiry*, along with the results of research and studies sponsored by the Commission, led to the adoption of a *Notice of Proposed Rulemaking* on September 9, 1980 (45 FR 69178, October 17, 1980). This *Notice* proposed rules for a low-power television service. This service would be provided by sophisticated TV translators operating on a secondary noninterference basis to full-service TV stations.

3. The *Notice* indicated that during the pendency of the rulemaking proceeding, translator applicants, justifying waiver of the necessary rules, could be granted authority to operate with low-power features. Between the adoption of the *Notice of Proposed Rulemaking* and April 9, 1981, over 5,000 translator applications were filed. Many, if not most of these applications, were accompanied by waiver requests to permit operation with low-power features rather than as translators. In order to permit the staff to begin processing the number of applications on file, the Commission voted to discontinue accepting further translator applications (except in special circumstances) on April 9, 1981. *See* F.C.C. 81-173.

4. The Commission's technical review of translator applications has in the past focused on two areas: the secondary nature of the service provided by the translator (translators must not cause interference to service furnished by full-service stations)[1] and the relationship of one translator station to another (translators must not cause interference to service furnished by another translator)[2]. Previously, this review has been accomplished through a combination of manual and machine (computer) effort. Much has been left to engineering judgment in processing applications, including the standard for determining interference between translators.

5. For small numbers of applications in predominantly rural areas, the present examination procedure is adequate. Where thousands of applications (and the resulting exclusivities) are concerned, however, the burden of the examination process must be borne by a computer if the staff resources of the Commission are not to be overtaxed. In light of the apparent demand for low-power service, we believe it is essential that we remove as much of the engineering judgment from the processing of applications as is possible. Greater reliance upon specific quantitative criteria for determining the presence or absence of interference will facilitate our ability to employ greater automation in the processing of applications.

Proposal

6. Since the adoption of the April 9th *Order*, the Commission's staff has considered a number of different means of processing the 5000 translator applications now on file. The purpose of this *Further Notice of Proposed Rulemaking* is to solicit comment on the method described herein. The proposal is not intended to be and will not be used as an interim standard.

7. The Commission is proposing to prohibit the overlap of certain signal strength contours. These contours would be calculated using the horizontal radiation pattern of the antennas, the maximum effective radiated power (ERP) and the radiation center height above average terrain (HAAT) along the radial of interest. Processing applications using the contour overlap method is somewhat less flexible than case-by-case analysis, which permits engineering judgment on specific claims and is thus most spectrally efficient. However, the proposed system does offer advantages in that it easily can be automated, and it offers a means by which the technical acceptability of a proposal easily can be predicted. Its chief disadvantage is that low-power assignments, once made, may be "locked-in" to their initial operating facilities by other low-power assignments made at a later date. This occurs because only the existing protected contour (determined using existing power, antenna height, antenna directivity characteristics, etc.) is afforded protection. No room for future growth is provided as it is with regular TV anf FM assignments through the respective Tables of Assignment.[3] In addition, low-power stations established on the basis of providing protection to a nearby full-service station operating with less than maximum facilities may find themselves receiving additional interference should the full-service station decide to increase its operating facilities. Also, because of the uncertainties inherent in propagation predictions and their secondary status, it should be recognized that some low-power stations granted licenses by the Commission might be forced to shut down in the event that their operation results in interference to a full-service station that otherwise cannot be eliminated. The Commission recognizes these aspects of the processing

[1] Our present rules contain assignment standards for VHF and UHF translators that are designed to protect the service provided by full-service TV stations. Mileage separations are specified for UHF-TV translators in relation to full-service stations (*see* § 74.702(c) and (d)). No minimum distances are specified for VHF-TV translators. They are permitted on any VHF channel provided co-channel and adjacent channel interference is not caused to full-service stations. *See* § 74.702(b).

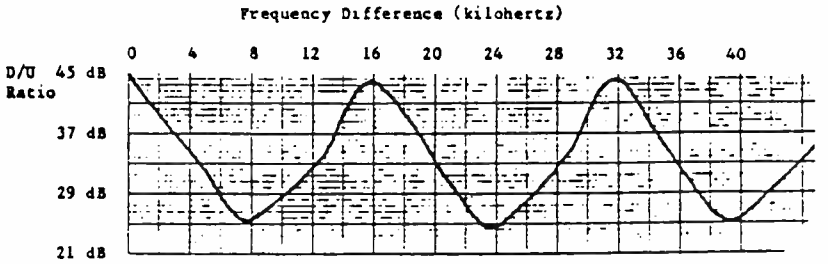
[2] The rules contain only broad restrictions concerning the protection of one translator's service area from interference caused by another translator. § 74.702(e) merely states that translator assignments that obviously would result in interference will not be made.

would be desirable to apply the UHF overlap criteria without requiring a showing that there is no channel on which the full-service distance separations are met. We request comments on whether or not Part 74 of our Rules should be amended to delete the mileage requirements and incorporate the prohibited overlap criteria. With respect to low-power VHF applications, in the *Notice*, we did not suggest any changes in the unstructured manner in which VHF translators have been processed. Currently, the processing guideline is in § 74.703(a) of the Rules: "An application for a new television translator station or for changes in the facilities of an authorized station will not be granted where it is apparent that interference will be caused." We now propose technical assignment standards to permit automated VHF application processing. Accordingly, we request comments on the following guidelines for determining where it is "apparent that interference will be caused."

9. For the full-service VHF and UHF television station protected contour we propose to use the predicted Grade B. This concept has proved extremely useful in that it affords a measure of certainty in our allocation scheme that could not otherwise be achieved. However, in view of the fact that this proceeding has given rise to unprecedented demand for traditional translator service, as well as for the proposed new low-power service, in the interest of compiling a complete record, we request comments on the desirability and feasibility of attempting to protect service received from full-service stations outside the Grade B contour, either on an *ad hoc* basis or otherwise. For the first adjacent channel VHF desired-to-undesired signal ratio (D/U ratio), we propose to use –6dB for determining interference from a lower adjacent channel and –12dB for an upper adjacent channel. These values are taken from a staff report entitled *A Review of the Technical Planning Factors for VHF Television Service*, F.C.C. OST/RS 77–01, by Gary S. Kalagian (1977), National Technical Information Service No. 266341. For the co-channel interference ratio two values were proposed in the *Notice* for UHF showings, 45dB for non-offset or 28dB for stations with carrier frequencies offset by 10 or 20 kHz. For full-service VHF station protection, use of the same ratios is proposed.

10. Two factors have not been included in previous protection ratio considerations. We request comments on incorporating a receiving antenna front-to-back ratio, and a nonstandard offset factor, or both, into the protection ratios. Receiving antenna front-to-back ratios traditionally have been treated as a "safety factor" which would permit the antenna adjustments needed to minimize interference coming from several directions, and generally would allow the actual interference to be no worse than the prediction. We believe it is reasonable to assume that people located near a station's Grade B contour will be using outdoor, directional receiving antennas. Some recent studies have helped define average front-to back ratios for currently available antennas. Values for low VFH channels are 14.9dB,[4] 13.7dB[5] and 11.6dB.[6] Values for high VFH channels are 14.2dB, 16.7db [5] and 10.6dB.[6] Values for UFH antennas are 11.6dB,[4] 13.4dB [5] and 15.6dB.[6] Commenting parties are requested to take these studies into account, as well as CCIR Recommendation 419 [7] and any other available studies to provide support for particular values.[8]

11. Offset carriers result in a stationary fine pattern of interference, which is, to most people, less objectionable than the moving bars or flickering pictures that are characteristic of non-offset co/channel interference. Sutides have shown that the effectiveness of offset carriers depends on the relationship between the offset



It can be seen from the above that 10 kHz and 20 kHz frequency offsets provide some of the advantages of carrier offset operation. However, in situations where an offset to only one station is needed, an offset frequency from 5 to 11 khz from 20 to 26 kHz or from 36 to 42 kHz, etc., would be equally effective.

12. If a low-power station is set up without concern for the offset frequency, there is a chance that it would still fall into an effective range, *i.e.*, one that would minimize interference. If it does not, and interference results, it should be possible to reduce the problem significantly if the low-power carrier frequencies can be altered by 5-to-6 kHz. However, we note that the frequency tolerance for most translator stations, 0.02% of the carrier frequency, ranges from 11 kHz on Channel 2 to 160 kHz on Channel 69. If a low-power frequency tolerance of 2-to-3 kHz can be maintained, the co-channel iterference might be eliminated permanently. Because it is a secondary service, a low-power station is responsible for eliminating interference to the reception of full-service stations. Comments addressing the ability of low-power stations to utilize this situation, appropriate adjustments to the nonoffset co-channel protection ratio and the feasibility of these carrier adjustments and frequency tolerances would be very helpful in our consideration of this factor.

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[4] *Television Receiving Antenna System Component Measurements*, by R. G. FitsFerrell, R D. Jennings and J. R. Juroshek; NTIA Report 79–22, June, 1979.

[5] *Program to Improve UHF Television Reception*, by W. R. Free, J. A. Woody and J. K. Daher, Georgia Institute of Technology, Engineering Experiment Station, Project No. A.-2475, September, 1980.

[6] *Engineering Aspects of Television Allocations:* Report of the Television Allocation Study Organization (TASO) to the Federal Communications Commission, March 16, 1959.

[7] Recommendation 419 *Directivity of Antennas in the Reception of Broadcast Sound and Television;* CCIR XIIIth Plenary Assembly Volumne XI, Geneva, 1978, specifies front-to-back ratios of 6dB for low VHF reception, 12dB for high VHF reception and 16dB for VHF reception.

[8] Other studies the Commission is aware of are *Performance of VHF-TV Receiving Antennas*, by A. C. Wilson, NBS Report 6099, National Bureau of

frequency (the difference between stations' carrier frequencies) and the TV system line frequency.[9] For the U.S. television system, 525 lines per frame and 30 frames per second are transmitted. The line frequency is therfore, nominally 15.750 lines per second (15.75kHz). Offset carrier operation works best when the offset frequency is equal to an odd number times one-half the line frequency (7.9 kHz, 23.6 kHz, 39.4 kHz etc.). Offset carriers offer little advantage over non-offset operation when the offset frequency is an even multiple of one half the line frequency (0 kHz, 15.8 kHz, 31.5 kHz, etc.) This relationship may be illustrated as follows:

Proposed Low-Power and Translator Protection

13. We now address standards for determining when two low-power or translator applications are mutually exclusive. Logically, these criteria also must be used for protecting existing translators and low-power stations. In light of the past practice of processing applications without specific standards for protecting existing translator stations, we wish to be careful to avoid declaring mutually exclusive two applications that, in fact, would result in stations that could co-exist. Basically, we propose to do this be establishing a relatively high value for the protected field strength.

14. We begin by examining the situation where two full-service, maximum power, maximum height stations are located at the minimum required co-channel separations (and using an interference ratio of 28dB–F(50,50) desired to F(50, 10) undesired), the following protected field strengths result:

	Channels 2-6(dBu)	Channels 7-13(dBu)	Channels 14-69(dBu)'s
Zone 1	62.0	67.6	84.2
Zone 2	63.8	69.6	80.1

For a 500 foot antenna height, 20kW ERP UHF low-power station in Zone 1, the protected contour would extend approximately seven miles. For 100 watt ERP, 500 foot HAAT VHF low-power stations the protected contours would extend approximately six miles for Channels 7 to 13 and seven miles for Channesl 2 to 6.

15. If a low-power station protects a full-service co-channel station located at a distance of less than about 120 miles, interference from the full-service station will limit service from the secondary low-power station to less than the above distances. This situation is typical for VHF channels in general and for UHF channels in eastern and mideastern regions (also for southern California) where many of the current applications request authorization. In the regions outside Zone 1, the density of authorized full-service UHF stations is moderate in the south and very low in the western mountain States (where translators usually have had noise-limited service areas). Where full-service stations are not prevalent, the relative need to obtain a wider service area and prospects for obtaining it are greater. We propose the following protected signal contours in an effort to strike an equitable balance among the above considerations: 62 dBu for Channel 2 to Channel 6 stations, 68 dBu for Channel 7 to Channel 13 stations, 84 dBu for Channel 14 to Channel 69 stations located within Zones 1 and 1A and 74 dBu for Channel 14 to Channel 69 stations located elsewhere.[10] We encourage comments upon appropriate zone definitions and protected contour values. Comments are welcome on the use of zones to deal with the anomolous propagation in southern California and along the Gulf coast. For full-service television, the Commission established zone 3 along the Gulf of Mexico and requires greater milage separations between stations there.

16. For UHF low-power to low-power permitted desired-to-undesired ratios, we propose to use many of the values for protecting full-service stations contained in the table in Paragraph 56 of the *Notice*. Of course, we would use alternate values if comments persuade us to use different values for full-service protection. We intend to use the adjacent channel, sound image and picture image ratios from the table (–15dB, –23dB and –6dB D/U respectively), for determining mutual exclusivity between applications, we feel we should apply the image overlap criteria 14 and 15 channels below the application channel as well as 14 an 15 channels above it. Similarly, we would apply the oscillator requirement 7 channels above and below the application channel. We propose to use non-overlapping protected contours (0 dB D/U ratio) for the oscillator requirement. We recognize that one out of each pair of applications separated by 7, 14 or 15 channels only would receive interference, and would not cause it. We request comments on other ways to deal with this situation (for example, should we have no mutual exclusivity criteria for applications 7, 14 and 15 channels apart and only require that applicants not cause interference to existing translators and low-power stations on relevant channels?). We propose to use no intermodulation protection standards; translators have been engineered to operate successfully on second adjacent channels for years, and we expect applicants to continue to exercise care in selecting a channel and choosing operating parameters.

17. For our proposed co-channel D/U ratio, we believe use of the full-service ratios is reasonable. However, we are currently inclined to incorporate some receiving antenna fromt-to-back ratio and random carrier offset factors into the low-power to low-power protection. *See* Paragraphs 10–12, *supra*. We invite comments on appropriate values as well as on the question of whether or not low-power protection values should be the same as full-service protection values.

18. For VHF low-power to low-power ratios, we propose to use the same ratios as those proposed for protecting full-service VHF stations, with their derivation in Paragraph 9 above.

Proposed Land Mobile Protection

19. In 1970, the Commission adopted a *First Report and Order* in Docket 18261, 43 F.C.C. 2d 325, permitting stations in the Land Mobile Radio Service to operate on specified UHF television channels between 14 and 20 in the ten largest urban areas in the country. In 1974 (*Fifth Report and Order* in Docket 18261, 48 F.C.C. 2d 360) the sharing was extended to three additional urban areas. The land mobile channel assignments are as follows:

City	Channels	Community reference coordinates (degrees, minutes, seconds NL/WL)
Boston, Massachusetts	14, 16	42-21-24/71-03-24
Chicago, Illinois	14, 15	41-52-28/87-38-22
Cleveland, Ohio [1]	14, 15	41-29-51/81-41-50
Dallas, Texas	16	32-47-09/96-47-37
Detroit, Michigan [1]	15, 18	42-19-48/83-02-57
Houston, Texas	17	29-45-26, 95-21-37
Los Angeles, California	14, 20	34-03-15/118-14-28
Miami, Florida	14	25-46-37/80-11-32
New York, New York	14, 15	40-45-06/73-59-39
Philadelphia, Pennsylvania	19, 20	39-56-58/75-09-21
Pittsburgh, Pennsylvania	14, 18	40-26-19/80-00-00
San Francisco, California	16, 17	37-46-39/122-24-40
Washington, D.C.	17, 18	38-53-51/77-00-33

[1] No agreement has been reached with Canada regarding land mobile stations in these cities.

The Commission decided that no new full-service TV station would be permitted on the same channel as a land mobile assignment within 212 miles of the land mobile city coordinates. No new full-service TV station would be permitted on a first adjacent channel

Standards, Boulder, Colorado, May 26, 1960; and *Measurement of UHF Television Receiving Antennas*, by W. R. Free and R. S. Smith, Georgia Institute of Technology, Engineering Experiment Station, Project Number A-2066, February, 1978.

[9] For example, see the RCA report entitled *A study of Co-channel and Adjacent Channel Interference of Television signals, Part 1*, January 1950. A copy of this report will be placed in the Docket of this proceeding.

[10] *See* §§ 73.205 and 73.609 of the Commission's Rules.

within 140 miles of the land mobile city coordinates. Where existing television stations were closer than those distances, the land mobile stations were required to protect them.

20. Where the land mobile channel assignment is not limited to protect a full-service TV station, the base station may be located up to 50 miles from the reference point of the land mobile city. The mobile stations must operate within 30 miles of the associated base. These distances, plus desired-to-undesired signal ratios, were used to derive the 212-mile and 140-mile distances to protect an assumed TV station Grade B contour.

21. The 212- and 140-mile distances establish a maximum television field strength that land mobile operations must tolerate. Normally, the land mobile protected contour will be 80 miles from the land mobile city coordinates. Assuming that a full-service station would be allowed to operate with 5 Megawatts ERP and an antenna height of 2,000 feet above average terrain, the permitted F(50,10) field strength at the protected contour is 52 dBu for a co-channel station and 76 dBu for a station on a first adjacent channel. Low-power stations would not be permitted to exceed these values at the protected contour.

22. In 1970, when land mobile UHF sharing began, several full-service television stations were operating near co-channel or adjacent channel land mobile allocations. The new land mobile stations were required to protect the existing full-service TV stations by locating base stations at least 90 miles from adjacent channel TV stations and 120 miles from co-channel TV stations (New York and Cleveland Channel 15 and Detroit Channel 16 were considered special cases, where base stations were to be permitted less than 120 miles but at least 90 miles from co-channel TV stations). Because mobile stations must operate within 30 miles of their associated base, they may not be closer than 60 miles to an adjacent channel television station or 90 miles to a co-channel TV station.

23. The land mobile protected contour, normally 80 miles from the city coordinates, will be less than 80 miles in the directions of protected full-service television stations. The protected contour should include only those areas where mobile stations may be located, that is, more than 60 miles from adjacent channel protected stations and 90 miles from co-channel protected stations. As an example, Channel 16 is a land mobile assignment in Boston. Television Station WHED–TV operates on Channel 15 in Hanover, New Hampshire, approximately 109 miles northwest of Boston. Land mobile stations must protect Station WHED–TV by not operating within 60 miles of it. Therefore, they may not be more than 49 miles northwest of Boston along the radial toward WHED–TV, and the land mobile protected contour would only extend that far in that direction.

24. In Docket 20368 (*Report and Order*, 60 F.C.C. 2d 463 (1976)), the Commission decided to allow use of UHF television Channel 17 in the Gulf of Mexico for an Offshore Radio Telecommunications Service (ORTS). This service, to provide communications for offshore oil rigs, is restricted to a zone that extends from West Longitude 87° 45′ to West Longitude 94° 00′. Shore stations are permitted in this service, but they are restricted, as are offshore base and mobile stations, to provide protection to two television allocations, Channel 17 in Bude, Mississippi, and Channel 18 in Lake Charles, Louisiana.

25. All ORTS stations are required to locate at least 120 miles from Bude (coordinates 31° 22′ 19″ N. and 90° 45′ 05″ W.) and 80 miles from Lake Charles (coordinates 30° 13′ 45″ N. and 93° 12′ 52″ W). Connected arcs, south of the communities, 120 miles from Bude and 80 miles from Lake Charles, form most of the northern ORTS protected contour. North-south lines at longitudes 87° 45′ and 94° 00′ form the east and west protected contours respectively. The eastern segment of the northern protected contour is not defined by these four lines. We propose to draw a line due west from coordinates 30° 25′/ 87° 45′ to the intersection with the 120 mile Bude arc. This latitude was chosen to be between two and ten miles north of the shore line in order to protect permitted shore stations that may locate in that area (a search of a recent frequency list revealed no currently authorized ORTS stations there).

26. The low-power permitted field strength at the protected contour will be based on the Bude, Mississippi, station for the co-channel and the Lake Charles, Louisiana, station for the first adjacent channel situation. A 5 Megawatt ERP, 2,000 foot HAAT UHF television station would have an F(50,10) 55 dBu signal at 120 miles and an F(50,10) 68 dBu signal at 80 miles. Low-power channel 17 stations will be limited to 55 dBu F(50,10) field strength at the protected contour and Channel 16 and 18 stations will be limited to 68 dBu F(50,10) field strength at the protected contour.

27. In general, low-power Channel 17 applicants need not be concerned if they are located more than 45 miles from the ORTS protected contour and Channel 16 and 18 applicants need not be concerned if they are located more than 30 miles from the ORTS protected contour. Also, Channel 14–21 applicants more than 130 miles from any co-channel land mobile assignment city and more than 100 miles from any adjacent channel land mobile assignment city should be clear. Somewhat larger distances may be required if an ERP of more than 30 kW or an effective antenna height of more than 1000 feet is anticipated.

28. We request comment upon whether the values proposed for land mobile protection are appropriate.

Procedural Matters

29. *Regulatory Flexibility Act-Initial Analysis.* a. *Reason for action.* In view of the unexpectedly great numbers of TV translator and low-power applications currently on file and those additional applications anticipated when the present moratorium is lifted, additional technical standards are necessary to facilitate low-power application processing.

b. *The objective.* The Commission's present rules do not contain precise standards for determining mutual exclusivity between proposed TV translator stations. The present mode of processing, which leaves much to engineering judgment, is not feasible for use with large numbers of competing applications, particularly in major markets. The standards proposed in this *Further Notice* would make automated processing possible.

c. *Legal basis.* Action as proposed is pursuant to Section 303(f) of the Communications Act of 1934, as amended, which charges the Commission to make regulations to prevent interference between stations.

d. *Description, potential impact and number of small entities affected.* The technical standards proposed will provide guidelines for all potential applicants in preparing their applications as to the circumstances in which their proposed operations would be considered mutually exclusive with full-service TV stations, existing translator stations and other applications. An engineering analysis currently is required as part of all translator applications. The proposed standards would establish criteria for the engineering analysis; however, it is not anticipated that this would increase the burdens attendant on preparation of the engineering section of the application.

The entities affected would include all present and potential low-power and TV translator applicants. However, the categories of present and potential small-entity applicants that would be required to comply with the proposed technical standards include small communications businesses and entrepreneurs, small nonprofit organizations, educational institutions and community groups, local tax districts desiring to establish low-power facilities and consulting engineers. Consulting engineers often are employed to prepare the engineering analyses for applicants. Presumably, the fee charged for this service would reflect the cost of

preparing the engineering proposal in conformity with the technical standards It is not anticipated that the standards will increase the expense of the engineering study, however.

In sum, adoption of technical standards for determining mutual exclusivity is expected significantly to ease the application processing burdens for this agency. In turn, this could greatly reduce the time it takes to process each application, which would benefit all applicants. The engineering analysis required under the proposal is not significantly more burdensome than that currently required of all translator applicants.

e. *Recording, record keeping and other compliance requirements:* None.

f. *Federal rules that overlap, duplicate or conflict with this rule:* None.

g. *Any significant alternatives minimizing impact on small entities and consistent with stated objective.* The Commission's present translator processing mode or use of mileage separations are the alternatives to these proposals. As stated, it is not efficient to continue our present mode of processing, in light of the great numbers of new applications being filed, and this mode of processing is inconsistent with the objective of automated processing. Mileage separations would result in inefficient spectrum allocation in a service in which many licensees do not use maximum facilities.

30. Comments must be filed on or before September 15, 1981. Reply comments must be filed on or before October 15, 1981. Pursuant to applicable procedures set forth in § 1.415 of the Commission's Rules, interested persons may file comments and reply comments by the dates indicated. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. In reaching its decision, the Commission may take into consideration information and ideas not contained in the comments, provided that such information or a writing indicating the nature and source of such information is placed in the public file, and provided that the fact of the Commission's reliance on such information is noted in the Report and Order. In accordance with the provisions of § 1.419 of the Commission's Rules, an original and five copies of all statements, briefs or comments filed shall be furnished the Commission. Responses shall be available for public inspection during business hours in the Commission's Public Reference Room, Room 239, in its headquarters in Washington, D.C.

31. The contact people for further information regarding this proceeding are Molly Pauker, Broadcast Bureau (202) 632–7792 and Gordon Godfrey, Broadcast Bureau (202) 632–9660. However, members of the public should note that for purposes of this nonrestricted notice and comment rule making proceeding, *ex parte* contacts are permitted from the time that the Commission adopts a notice of proposed rule making until the time a public notice issued indicating that a substantive disposition of the matter is to be considered at a forthcoming meeting or until a final order disposing of the matter is adopted by the Commission, whichever is earlier. In general, an *ex parte* presentation is any written or oral communication (other than formal written comments or pleadings and formal oral arguments) between a person outside the Commission and a Commissioner or a member of the Commission's staff that addresses the merits of the proceeding. Any person who submits a written *ex parte* presentation must serve a copy of that presentation on the Commission's Secretary for inclusion in the public file. Any person who makes an oral *ex parte* presentation addressing matters not fully covered in any perviously-filed written comments for the proceeding must prepare a written summary of that presentation on the day of the oral presentation, that written summary must be served on the Commission's Secretary for inclusion in the public file, with a copy to the Commission official receiving the oral presentation. Each *ex parte* presentation described above must state on its face that the Secretary has been served, and must also state by docket number the proceeding to which it relates. *See generally* § 1.1231 of the Commission's Rules, 47 CFR 1.1231.

32. Authority for the above action is contained in Section 303(f) of the Communications Act of 1934, as amended, and § 1.421 of the Commission's Rules.

Federal Communications Commission.

William J. Tricarico,

Secretary.

Appendix A.—*Co-Channel and Adjacent Channel Full-Service Television Stations To Be Protected by Land Mobile Stations Using UHF Channels 14 to 20*

TV call	Channel	City and State	Protected coordinates (latitude/longitude)
KPBS-TV	15	San Diego, CA	32°41'48"/116°56'10"
WATR-TV	20	Waterbury, CT	41°31'02"/73°01'00"
WFAN-TV	14	Washington, DC	38°57'17"/77°00'17"
WDCA-TV	20	Washington, DC	38°57'49"/77°06'18"
WICD	15	Champaign, IL	40°04'11"/87°54'45"
WJJY-TV	14	Jacksonville, IL	39°45'52"/90°30'29"
WANE-TV	15	Ft. Wayne, IN	41°05'35"/85°10'42"
WNDU-TV	16	South Bend, IN	41°36'20"/86°12'44"
WBOC-TV	16	Salisbury, MD	38°24'15"/75°34'45"
WQMU-TV	14	Mt. Pleasant, MI	43°34'24"/84°46'21"
WHED-TV	15	Hanover, NH	43°42'30"/72°09'16"
WJAN	17	Canton, OH	40°51'04"/81°16'37"
WCTF	19	Cleveland, OH	41°21'19"/81°44'24"
WMUB-TV	14	Oxford, OH	39°30'26"/84°44'09"
WHIZ-TV	18	Zanesville, OH	39°55'42"/81°59'08"
WSYE-TV	18	Elmira-Corning, NY	42°06'20"/76°52'17"
WHP-TV	21	Harrisburg, PA	40°20'44"/76°52'09"
WJNL-TV	19	Johnstown, PA	40°19'47"/78°53'45"
WLYH-TV	15	Lancaster, PA	40°15'45"/76°27'49"
WPHL-TV	17	Philadelphia, PA	40°02'30"/75°14'24"
WOEX	16	Pittsburgh, PA	40°26'46"/79°57'51"
WNEP-TV	16	Scranton, PA	41°10'58"/75°52'21"
WTAP-TV	15	Parkersburg, WV	39°20'50"/81°33'56"
WMTV	15	Madison, WI	43°03'01"/89°29'15"

LOW POWER TELEVISION (LPTV) FACT SHEET
(BC DOCKET NO. 78-253)

An Inquiry into the Future Role of Low Power Television Broadcasting and Television Translators in the National Telecommunications System.

CHRONOLOGY OF SIGNIFICANT EVENTS

August 8, 1978.....Notice of Inquiry issued initiating LPTV proceeding.
September 9, 1980.....Notice of Proposed Rulemaking adopted.
April 9, 1981.....FCC votes to stop accepting applications (freeze imposed).
May 14, 1981.....First LPTV application granted.
July 30, 1981.....Further Notice of Proposed Rulemaking adopted.
March 4, 1982.....Report and Order adopted. Effective date: 30 days from date of publication in Federal Register.

The Notice of Proposed Rulemaking proposed to authorize a new broadcast service consisting of very low powered television stations. The principal rule change proposed was that TV translators, permitted only to rebroadcast simultaneously the programming of a full service station, would be allowed to originate programs to an unlimited extent and/or conduct subscription TV (STV) operations.

The Report and Order authorizes the LPTV service and sets forth the rules that will apply to low power application processing and to licensing of stations. The adoption of the LPTV rules has resulted in an overwhelming number of inquiries from you, the public. You want to know:

(1) What is a LPTV Station?

(2) May I apply for one or more stations?

(3) How will LPTV applications be processed?

(4) Will I be able to get new programs in my community?

We would like to answer some of your questions, expecially those most frequently asked. For this reason, the FCC's Consumer Assistance and Small Business Division has prepared this fact sheet. We hope you find it helpful. Should you have a question not addressed here, let us know. Our address is FCC Consumer Assistance Division, 1919 M Street, N.W., Room 252, Washington, D.C. 20554; our phone number is (202) 632-7000.

APPLICATION PROCESSING: BACKGROUND

Before the final LPTV rules were adopted, translator applications, including many requesting waiver of the rules to permit low power features (program origination and/or subscription TV), were accepted by the FCC. These interim applications were to be granted on a conditional basis, subject to the outcome of the rulemaking.

FREEZE IMPOSED: FREEZE-EXEMPT APPLICATIONS BEFORE LPTV RULES ADOPTED

On April 9, 1981, faced with a 5,000 interim application backlog, the FCC stopped accepting TV translator and LPTV applications, EXCEPT those meeting one of the following 3 criteria:

(1) TV translator or LPTV applications proposing to serve areas that currently receive fewer than two full service commercial TV stations;

(2) Applications for major amendment by existing translators seeking to change frequency from channels 70 through 83; and

(3) Applications for major amendment by existing translators seeking to change frequency to resolve interference to or from full-service stations.

FREEZE STILL IN EFFECT: EXCEPTIONS ONCE NEW RULES BECOME EFFECTIVE

The freeze imposed on April 9, 1981 had NOT been lifted. The exceptions to the freeze are changed somewhat. Exception (1) above pertaining to proposals to serve areas currently receiving fewer than two full-service stations has been eliminated. In its place, any prospective applicant meeting TIER I (see below) qualifications will be considered to be freeze-exempt. Exceptions (2) and (3) above have not been changed.

LPTV APPLICATION PROCESSING UNDER THE FINAL RULES: TIERS

To reduce the application backlog, and to expedite service to rural areas, pending applications and freeze-exempt applications will be grouped in 3 categories by market size: TIERS I, II, III. The 3 tier classifications will be defined in terms of the FCC's ranking of TV market size as contained in the Public Notice "Televisinn Channel Utilization" dated March 25, 1981, mimeo number 07820. This report ranks markets from one to 212. For purposes of tiered processing, we define the boundary of a market as a 55-mile circle centered about the reference coordinates of the principal market city or town. The 55-mile radius is roughly equivalent to the predicted Grade B coverage area of a full service UHF TV station operating at maximum power. Thus, each tier will consist of the following applications:

TIER I.....Applications proposing to locate the transmitting antenna more than 55 miles from all cities in the 212 ranked TV markets.

TIER II.....Applications proposing to locate the transmitting antenna more than 55 miles from all cities in markets 1 through 100.

TIER III.....Applications proposing to locate the transmitting antenna within 55 miles of a city in markets 1 through 100.

THE MOST RURAL APPLICATIONS WILL BE PROCESSED FIRST. Applicants falling into the TIER I category, defined as most rural, will be freeze-exempt. Only when processing of TIER I applications is completed will processing of TIER II applications begin. The same holds true for TIER III. The freeze will be lifted ONLY for the limited purpose of receiving competing applicatons to the applications in each tier, at the time that the tier is being processed. This is required by the FCC's cut-off procedures. Only when processing of the backlog is fully completed will it be feasible to lift the freeze completely. Until that time, any applications submitted that do not belong in the tier then being processed WILL BE RETURNED.

COMPARATIVE PROCEDURES AND CRITERIA

Q. ARE THERE ANY "PREFERENCES" OR COMPARATIVE MERITS UNDER THE LPTV RULES?

A. The comparative criteria in mutually exclusive LPTV cases will be:

(1) Diversification of control of the media of mass communications,

AND (2) Over 50 per cent minority ownership *

EXAMPLES:

(1) Diversification Criterion Example: An applicant who does not own a broadcast facility or any other media interest would prevail over an applicant who already owns a radio

(2) Minority Ownership Criterion Example: An application with over 50 per cent minority ownership interest would be granted if it were mutually exclusive with an application by a non-minority group.

* DEFINITION OF MINORITY: male and female Blacks, Hisoanics, American Indian Asian-Americans and Pacific Islanders, American Eskimos and Aleuts. Women who do n fit under this definition do NOT qualify for a comparative merit under the new LP rules. Also, "ethnic" ownershio (e.g. Italian-Americans, Hungarian-Americans) does NC constitute minority ownership for purposes of the LPTV comparative criteria.

The Commission believes that the application of these two comparative criteria will he further one of the main objectives of the LPTV service: facilitating entry by groups a individuals that are new to the broadcast industry.

Q. WHAT IF AN APPLICATION IN ONE TIER IS MUTUALLY EXCLUSIVE WITH AN APPLICATION IN ANOTHER TIER? THAT IS, WHAT IF THERE ARE APPLICATIONS IN DIFFERENT TIERS COMPETING AGAINST EACH OTHER?

A. If an application in TIER I is mutually exclusive with an application in TIER II, then the TIER I application will not be processed until the TIER II apolication is being processed. Similarly, an application in TIER II that is mutually exclusive with an application in TIER III will have to wait until the processing of TIER III. This means that some rural applications may have to wait until the processing of more urban applications.

Q. HOW WILL THE COMMISSION DECIDE BETWEEN/AMONG COMPETING OR MUTUALLY EXCLUSIVE APPLICATIONS?

A. When two or more applications are mutually exclusive, or when a challenge to the basic qualifications of an applicant cannot be resolved by staff action, the subject application(s) will be designated for a comparative hearing. The Commissioners will apply the comparative criteria.

SECONDARY STATUS AND INTERFERENCE

Q. I HAVE HEARD THAT LPTV STATIONS HAVE SECONDARY SPECTRUM PRIORIT TO FULL SERVICE STATIONS. WHAT DOES THIS MEAN?

A. It means that LPTV stations:

(1) May not cause interference to existing full service stations (LPTV stations must correct any interference caused),

(2) Must accept interference from full service stations,

(3) Must yield to changes in facilities of existing full service stations AND

(4) Must yield to new full service stations where interference occurs.

Q. DO SIMILAR RULES APPLY WHEN CABLE/LPTV INTERFERENCE IS INVOLVED?

A. Between cable systems and LPTV stations, a "first in time, first in right" policy applies where there is interference at the cable headend or the output channel of a cable system using a converter. In other instances of cable/low power interference, the cable operator is responsible for correcting the interference.

Q. WHAT ABOUT LAND MOBILE/LPTV INTERFERENCE?

A. LPTV stations are being authorized on a secondary basis to land mobile stations sharing UHF channels 14 through 20 with broadcast uses. LPTV stations must correct whatever interference they cause to these land mobile stations or cease operation.

CHANNEL SELECTION

Q. ON WHAT CHANNEL COULD I OPERATE A LPTV STATION?

A. Low power stations may operate on any available VHF or UHF channel, provided that they do not cause objectionable interference to full service stations, to other translators or low power stations or to land mobile stations that share frequencies with broadcast uses. Low power channels are to be allocated on a demand basis. There is no table of allotments and no channels are reserved solely for noncommercial use. Applicants select a channel and provide engineering information as required on the application.

POWER LIMITS

Q. WHAT POWER LIMITS ARE AUTHORIZED?

A. Low Power TV stations and translators will be limited to 10 watts VHF and 1,000 watts UHF. VHF LPTV stations operating on channels in the TV Table of Assignments may use 100 watts.

MULTIPLE AND CROSS-OWNERSHIP RULES

Q. MAY I OWN MORE THAN ONE LPTV STATION?

A. The LPTV rules do NOT impose any limit on the number of low power stations that may be owned by any one entity.

Q. WHAT IF I ALREADY OWN A RADIO STATION, TV STATION, CABLE TV SYSTEM, OR NEWSPAPER?

A. Current broadcast licensees, cable operators and newspapers may own LPTV stations.

Q. ARE THE THREE MAJOR COMMERCIAL NETWORKS ALLOWED TO OWN LPTV STATIONS?

A. The three national commercial networks -- NBC, CBS and ABC -- may own LPTV stations.

Q. DOES THE FCC'S "ONE-TO-A-MARKET" RULE APPLY TO THE LPTV SERVICE?

A. The one-to-a-market rule, which prohibits commonly-owned stations in different services with overlapping contours, does NOT apply to the LPTV service. This means:

(1) An entity may own both an AM radio station and a LPTV station in the same market;

(2) An entity may own both an FM radio station and a LPTV station in the same market;

(3) An entity may own both a full service TV station and a LPTV station in the same market.

Q. DOES THE FCC'S "DUOPOLY" RULE APPLY TO THE LPTV SERVICE?

A. The duopoly rule, which prohibits commonly-owned stations in the same service with overlapping contours, does NOT apply to the LPTV service. This means that an entity may own more than one LPTV station in the same community.

PRINTED MATERIAL RELATED TO THE LPTV RULEMAKING

To learn more about the LPTV rules adopted, you should study:

(1) Report and Order

The order discusses the final rules for the low power television service. The LPTV rules will be effective 30 days from the date that the Report and Order is published in the Federal Register. You can find the Federal Register in most public or law libraries. If you do not have access to a Federal Register, you may purchase a copy of the Report and Order from the Downtown Copy Center, 1114-- 21st Street, NW., Washington, D.C. 20037; Phone (202) 452-1422 or from any of the distributors included on the attached list. The Report and Order will NOT be given out by the FCC.

(2) FCC Rules

The new rules for low power and translator stations will be found in Part 74, Subpart G, Volume III of the Commission's Rules. The FCC rules for broadcast stations are found in Part 73, Subpart E, Volume III. The Commission's Rules (Title 47, Code of the Federal Regulations) may be found in law libraries or may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402; Phone (202) 783-3238. The FCC Rules CANNOT be obtained from the FCC.

If you would like to study the background information, you should obtain:

(3) Notice of Proposed Rulemaking (NPRM)

The NPRM discusses the proposed rules for the LPTV service. It can be found in the Federal Register, Volume 45, page 69178, October 17, 1980.

(4) Further Notice of Proposed Rulemaking (Further NPRM)

The Further NPRM discusses the technical standards for the LPTV service. It can be found in the Federal Register, Volume 46, page 42478, August 21, 1981.

HOW TO FIND A COMMUNICATIONS ATTORNEY AND ENGINEER

We suggest that you consider the following:

(1) Attorneys and consulting engineers specializing in broadcasting are listed in both Television Factbook and Broadcasting Yearbook, available in most public libraries or from:

Television Factbook, 1836 Jefferson Place, N.W., Washington, D.C. 20036; Phone: (202) 872-9200.

Broadcasting Yearbook, 1735 DeSales Street, N.W., Washington, D.C. 20036; Phone: (202) 638-1022.

(2) Broadcast trade publications often contain advertisements by consulting engineers or the following associations may be contacted:

Association of Federal Communications Consulting Engineers, P.O. Box 19333, 20th Street Station, Washington, D.C. 20036.

National Translator Association, 36 South State Street, Suite 2100, Salt Lake City, Utah 84111; Phone: (801) 237,2623, Paul H. Evans, Executive Secretary.

FINANCIAL SHOWING: CERTIFICATION

Q. WHAT FINANCIAL QUALIFICATIONS MUST AN APPLICANT SHOW?

A. The FCC has simplified the showing required to demonstrate financial ability to a certification requirement. A LPTV applicant must certify (that is, answer "yes" or "no") that sufficient net liquid assets are on hand or are available from committed sources to construct and operate the requested LPTV station for three (3) months without revenue.

CONSTRUCTION OF LPTV STATION

Q. HOW MUCH TIME DO I HAVE TO CONSTRUCT MY LPTV STATION ONCE MY CONSTRUCTION PERMIT (CP) IS GRANTED?

A. Construction must be completed and the station must be operational within twelve (12) months of issuance of the authorization, or the CP must be turned back to the FCC. This requirement will be strictly enforced by the Commission. In fact, the FCC envisions no extensions of time with regard to this rule, the only possible exception being documented evidence of unforeseen and unavoidable delay in delivery of equipment that was contracted for properly.

SELLING A LPTV CONSTRUCTION PERMIT (CP)

Q. WHAT HAPPENS IF I WANT TO SELL MY LPTV CONSTRUCTION PERMIT?

A. A LPTV CP may not be sold for any amount in excess of the actual expenses incurred in obtaining the low power CP.

SELLING A LPTV STATION: "TRAFFICKING"

Q. WHAT HAPPENS IF I WANT TO SELL MY LPTV STATION AFTER I RECEIVE MY LICENSE?

A. The Commission has imposed a one-year "trafficking" rule on LPTV stations. This means that a LPTV licensee cannot sell his/her station until one year from the date the license is issued.

ORIGINATION OF PROGRAMMING

Q. DO I HAVE TO ORIGINATE PROGRAMMING ON MY LPTV STATION? IF SO, TO WHAT EXTENT?

A. LPTV stations are permitted to originate programming to an unlimited extent but are not required to originate any programming. Program origination includes any transmission other than simultaneous rebroadcast from a full service station.

STATION MANAGEMENT

Q. MUST A LPTV STATION HAVE A LICENSED OPERATOR ON DUTY?

A. If a LPTV station originates programming, it would be required to have a licensed operator on duty. That is, an operator must be in continuous attendance during all local originations. The statutory exemption from the operator-in-attendance requirement for translators whose primary function is rebroadcast remains in effect.

EQUAL EMPLOYMENT OPPORTUNITY (EEO)

Q. DO THE COMMISSION'S RULES AND POLICIES GOVERNING EEO APPLY TO LPTV STATIONS?

A. The FCC's EEO rules and policies apply to all LPTV stations. Section 73.2080 of the FCC Rules imposes an EEO reporting requirement on all stations with five or more full-time employees.

PROGRAM-RELATED RULES

Q. WHAT ARE THE LPTV RULES RELATING TO PROGRAMMING AND PROGRAM CONTENT?

A. LPTV stations will be subject to a minimum of program-related regulations:

(1) There is no ascertainment requirement.

(2) There are no prescribed amounts of nonentertainment programming or local programming.

(3) There are no limits on commercialization.

(4) There are no minimum hours of operation required.

But the statutory prohibitions on the broadcast of obscene material, lotteries, plugola and payola, and the obligation to run licensee-conducted contests fairly, do apply to the LPTV service. The Fairness Doctrine and rules mandating access for political candidates and victims of personal attacks apply in a sliding scale, to the extent that the LPTV station's origination capability permits. The copyright laws apply to LPTV stations. This means that consent from the copyright holder must be obtained for program rebroadcast and commercial substitution.

SUBSCRIPTION TV (STV) SERVICE

Q. MAY MY LPTV STATION CONDUCT ITS OWN STV OPERATION?

A. LPTV stations may provide STV (pay) programming. The "complement-of-four" rule does not apply to the low power service (this rule prohibits STV in markets where there are fewer than four other free stations). And there are no minimum hours of free programming required. Decoders may not be sold to subscribers; they must be leased to them.

MANDATORY CARRIAGE RULES

Q. MUST A CABLE TV SYSTEM CARRY THE SIGNAL OF MY LPTV STATION?

A. A cable TV system will not be required to carry the signal of a LPTV station, but may do so if it chooses, on the basis of private negotiation.

HOW TO APPLY FOR A LOW POWER TV STATION

Application must be made on FCC Form 346, and you must submit an original and 2 copies to the FCC, Office of the Secretary, William J. Tricarico, Washington, D. C. 20554. Copies of Form No. 346 may be obtained from Room B-10 of the Commission's headquarters, 1919 M Street., N. W., Washington, D.C. 20554, or from the Consumer Assistance and Small Business Division, Room 252; Phone: (202) 632-7000.

PUBLIC NOTICE OF THE FILING OF A LPTV APPLICATION

You must comply with the public notice requirements of the Commission's Rules, Section 73.3580, Volume III.

LPTV APPLICATIONS PLACED ON "CUT-OFF" LISTS

All LPTV applications are subject to the FCC's "cut-off" procedures as outlined in section 73. 3572, Volume III of the Commission's rules. These cut-off procedures involve issuance of a public notice or list informing all interested parties that competing apolications or objections to the listed applications may be filed by a date given in the notice. Copies of cut-off lists may be purchased from the Downtown Copy Center of from any of the distributors included on the attached list.

March 18, 1982

FILE FOR SEVERAL CHANNELS AT EACH LOCATION

Under the new rules, you can file for as many channels as you want at any one location. We recommend you file for every channel available at each location or at least every VHF channel (see Report No. 7; How to Run a Wireless Cable TV System; $25.00). This will do several things for you:

1. It will help eliminate people filing on top of you in that city.
2. It will make it impossible for others to get one for an additional year on the easy channels even if you should decide you don't want to put them all on the air when it is granted and you have to decide.
3. It will make it possible for you to run several channels with several channels of income with very little extra overhead.
4. By the time you get on with all of them, there will be many program suppliers calling on you (300 coming on the satellites in the next few years).

Instead of three different people running three satellite receivers, three tower sites, three studios, three staffs, three sales forces for three different stations, one person owning all three can make good money, where as three competing in a small market, none may make a profit. So, if they see you coming in and filing in that town with three applications, they'll file elsewhere.

Regarding number one, let's say you file for three channels in a town. There are usually more channels available, so if someone comes in and files for the same exact three on top of you, you have a good case that this person doesn't want a station. They just want to get paid off or delay you. If they file for the same three, you refile for a new three. The first three will be in comparative hearings, etc. for a long period and they won't get a license, and you won't either, but you should make it on the second set of three. So, I'd say you better than triple your chances of not getting filed on top of when you file three or more.

Let us say you are in a farm area. You put on an all news channel so a farmer can come in from out in the field and catch up on the news at any time. You merely insert commercials in this one (four per hour). The second channel, you run ad supported programmed off the satellite, do local news, weather, sports, etc. and insert commercials. The third channel you put on a premium STV movie service.

The cost of running three? Probably only about 1 1/2 times the cost of running one. Income? Probably about three times what you would have with just one. Cost to build? About twice as much as one would cost. Use one satellite receiver, one studio, etc.

When you are filing, we find it is little additional effort when you plan to do three or five or whatever number of channels (applications) from the same site at the same time.

MULTIPLE OUTPUTS

There are only so many channels available, and when you want to do two or three communities from one mountain top or whatever, we suggest instead of filing for and using up three different channels in the three different towns, that you do all three or five, for example, from the same tower by requesting a full 10 watts (or 1000 watts UHF) for each community. These are called multiple outputs and make sense. The Commission has licensed in the past up the eight outputs from the same tower on the same channel. They cannot overlap outputs to result in more gain at any point than you'd get with just one.

MULTIPLE OUTPUTS ARE LESS EXPENSIVE

The first output of say 10 watts VHF to serve your principal community will cost you in the $5,000 range. The second 10 watt output to feed antennas aimed at a distinct and different community. That 10 watt transmitter will only cost you about $1,700 additional. The same for the third, fourth, etc.

YOU CAN GET INTO A LOT OF ANTENNAS

Phasing these all together is a problem, but solvable. Let's say you apply for four channels and you want to serve four communities with four different outputs on each channel. That means you are feeding 16 antenna arrays. You can, in some cases, combine antenna useage when the channels are close together, such as, two to six, or seven to thirteen, or two UHF channels not more than a couple channels apart.

USING MANY OUTPUTS ON MANY CHANNELS WILL OVERLOAD MANY TOWERS

When you are on mountain tops and can use telephone type pole arrangements with walk ways at the top, this will work out very inexpensively. Small steel towers would be overloaded.

BUILDING YOUR OWN TOWER

Building your own tower is nice but require a lot of money and time, because if it is very big, you have to file environmental impact statements, aeronautical clearances, etc. You are better off leasing space initially, unless you can go the poles on a hill route.

CABLE CONSIDERATIONS

Many low loss cables when you buy them from transmitter manufacturers can cost you up to $10 a foot or more. They have to stock it, unroll, measure, cut, reroll, and ship it to you. A lot of expensive handling. We suggest you specify the same exact specification and make of cable in all of your applications so you can buy it direct from the manufacturer in 2,000 foot rolls at closer to a dollar a foot. When you are on several 300 foot or more towers, this can make a tremendous difference in cost.

Some say you should buy absolutely the lowest loss cable you can afford, which again is a trade off. If a cable has 89% efficiency in a given situation, and you can spend $1,500 more for one that has 91% efficiency, the question is, is it worth it? Can you better use that $1,500 somewhere else?

When you make out your program exhibit, you must certify that you will comply with 73.3580 and run a public notice as required. It needs to be run once including information stated here in 73.3580.

§ 73.3580

(g) An applicant who files an application or amendment thereto for a TV or FM translator station or an FM booster station must give notice of this filing in a daily, weekly or biweekly newspaper of general circulation in the community or area to be served. The filing notice will be given immediately following the tendering for filing of the application or amendment, or immediately following notification to the applicant by the FCC that public notice is required pursuant to §§ 73.3671, 73.3572, 73.3573 or 73.3578.

(1) *Notice requirements for these applicants are as follows:*

(i) In the newspaper at least once during a 2-week period; or.

(ii) If there is no newspaper published or having circulation in the community or area to be served the applicant shall determine an appropriate means of providing the required notice to the general public, such as posting in the local post office or other public place. The notice shall state:

(A) The name of the applicant, the community or area to be served, and the transmitter site.

(B) The purpose for which the application was filed (such as an application for a new translator station, for authority to make changes in an existing translator station, for assignment or transfer of control).

(C) The date when the application or amendment was filed with the FCC.

(D) The output channel or channels on which the station is operating or proposes to operate and the power used or proposed to be used.

(E) In the case of an application for changes in authorized facilities, the nature of the changes sought.

(F) In the case of a major amendment to an application, the nature of the amendment.

(G) A statement that the station engages in or intends to engage in rebroadcasting, and the call letters, location and channel of operation of each station whose signals it is rebroadcasting or intends to rebroadcast.

(h) Within 7 days of the last day of publication in a newspaper or broadcast of the notice required by paragraphs (c), (d) or (g) of this section, the applicant shall file a statement with the FCC (in triplicate if filed pursuant to paragraphs (c) or (d); original only, if filed pursuant to paragraph (g)), setting forth the dates on which the notice was published, the newspaper in which the notice was published, the text of the notice, and/or, where applicable, the dates and times that the notice was broadcast and the text thereof. When public notice is given by other means, as provided in paragraph (g) of this section, the applicant shall file, within 7 days of the giving of such notice, the text of the notice, the means by which it was accomplished, and the date thereof.

(i) Paragraphs (a) through (h) of this section apply to major amendments to license renewal applications. See § 73.3578(a).

[44 FR 38504, July 2, 1979]

§ 73.3584 Petitions to deny.

(a) Any party in interest may file with the FCC a petition to deny any application (whether as orginially filed or if amended so as to require a new file number pursuant to §§ 73.3571(j), 73.3572(b), 73.3573(b) or 74.3574(b)) for which local notice pursuant to § 73.3580 is required, provided such petitions are filed prior to the day such applications are granted or designated for hearing; but where the FCC issues a public notice pursuant to the provisions of §§ 73.3571(c), 73.3572(c) or 73.3573(d), establishing a "cut-off" date, such petitions must be filed by the date specified. In the case of applications for renewal of license, petitions to deny may be filed at any time up to the last day for filing mutually exclusive applications under § 73.3516(e). Petitions to deny shall contain specific allegations of fact sufficient to show that the petitioner is a party in interest and that a grant of the application would be *prima facie* inconsistent with the pubic interest, convenience and necessity. Such allegations of fact shall, except for those for which official notice may be taken, be supported by affidavit of a person or persons with personal knowledge thereof. Requests for extension of time to file petitions to deny applications for new broadcast stations or major changes in the facilities of existing stations or applications for renewal of license will not be granted unless all parties concerned, including the applicant, consent to such requests, or unless a compelling showing can be made that unusual circumstances make the filing of a timely petition impossible and the granting of an extension warranted.

(b) The applicant may file an opposition to any petition to deny, and the petitioner a reply to such opposition in which allegations of fact or denials thereof shall be supported by affidavit of a person or persons with personal knowledge thereof. The times for filing such oppositions and replies shall be those provided in § 1.45 except that as to a petition to deny an application for renewal of license, an opposition thereto may be filed within 30 days after the petition to deny is filed, and the party that filed the petition to deny may reply to the opposition within 20 days after the opposition is due or within 20 days after the opposition is filed, whichever is longer. The failure to file an opposition or a reply will not necessarily be construed as an admission of any fact or argument contained in a pleading.

(c) Untimely petitions to deny, as well as other pleadings in the nature of a petition to deny, and any other pleadings or supplements which do not lie as a matter of law or are otherwise procedurally defective, are subject to return by the FCC's staff without consideration.

[44 FR 38506, July 2, 1979; 44 FR 40890, July 13, 1979]

§ 73.3587 Procedure for filing informal objections.

Before FCC action on any application for an instrument of authorization, any person may file informal objections to the grant. Such objections may be submitted in letter form (without extra copies) and shall be signed. The limitation on pleadings and time for filing pleadings provided for in § 1.45 of the rules shall not be applicable to any objections duly filed under this section.

[44 FR 38507, July 2, 1979]

Action on Applications

§ 73.3591 Grants without hearing.

(a) In the case of any application for an instrument of authorization, other than a license pursuant to a construction permit, the FCC will make the grant if it finds (on the basis of the application, the pleadings filed or other matters which it may officially notice) that the application presents no substantial and material question of fact and meets the following requirements:

(1) There is not pending a mutually exclusive application filed in accordance with paragraph (b) of this section;

(2) The applicant is legally, technically, financially, and otherwise qualified;

(3) The applicant is not in violation of provisions of law, the FCC rules, or established policies of the FCC; and

(4) A grant of the application would otherwise serve the public interest, convenience and necessity.

AMENDING PRESENT APPLICATIONS

It appears that if you have an application in cutoff (if I understand this correctly), you could amend the application (if you have a reason) without it being a major amendment as it usually would be, resulting in starting over, and it would then appear you would be guaranteed no opposing application (if you picked an unfiled for channel) since it would not have to go through cutoff again.

The only time or case you can change channels is that you discovered a conflict with a present broadcast service.

This temporary rule change, good to September 21, 1982, simply allows you to make what is normally considered major changes in your application without going back to the bottom of the pile, providing it is to correct a conflict you have discovered with another existing broadcast service. Remember, many of the paper mill applications were not checked against conflicts with translators. Now is the time, to straighten those applications out. If you paid $4,000 to have them filed, it would seem they should make good on straightening them out at no additional cost. But you'll have to discover they need straightening out to be processed.

If you want to amend by filing the extra engineering that is supposed to get you expedited processing, now would be a good time to do that. (ICTV members, engineering for fast processing on old applications, $250. $350 in some cases.) One Washington law firm is charging $600 just to go over applications filed by a highly huckstered paper mill and tell these applicants, who already paid an exorbitant price, what needs to be done to straighten them out. Actually, straightening them out, they tell us, is an additional fee.

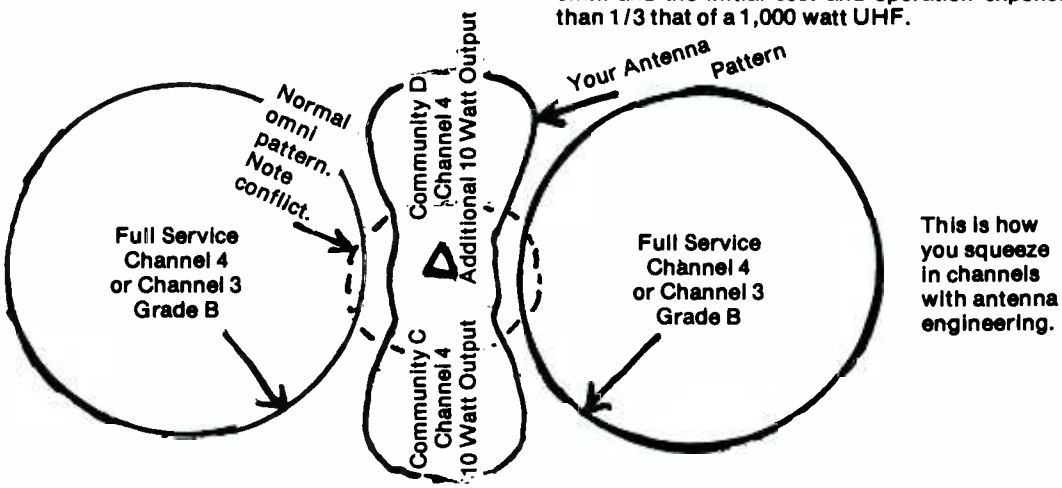
ANTENNA PATTERNS

The big advantage you have to make up for the low power limitations on transmitter power, is you have no limitations on antenna gain and height. Most of the paper mill people file omni antenna patterns because it's easy and only takes file omni antenna patterns because it's easy and only takes a few minutes to do. The subsequent interference calculations a UHF antenna with half-way respectable gain that costs $13,000. It usually has about 10x or 15x gain.

If most of the population is one or two directions from your tower site, all of that power going other directions could probably be better used where most of the population is.

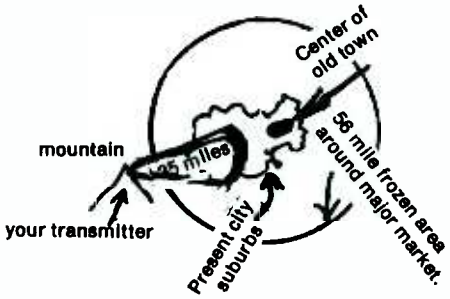
You can, with antennas under $1,000, get a gain of 200x or more in a pattern 20 degrees wide. You could split your power and go two directions at 20 degrees wide and still have 10x the power you had those directions with the best omnis. You could serve one community one direction, and file for a second output on the same channel and have a full 1,000 watts both ways. The second output on the same channel does not cost but a fraction of what the first output costs. 1,000 watts on a hill with a short cable can give you 200,000 watts in a 20 degree wide pattern. You have some gain and radiation at other angles, too, and often the side angles, even then, are almost as good as the omni was.

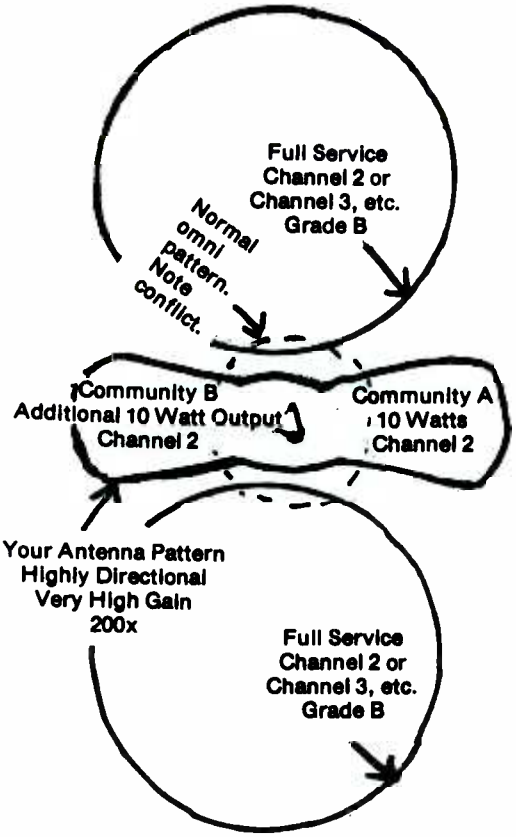
Here is an example on VHF of how you can squeeze in two VHFs in an area under the new rules by doing an engineering showing. There is nothing to keep you from running the same programming on two channels. Remember two channels, 10 watts, configured this way on VHF will equal or exceed your expected coverage of a 1,000 watt UHF omni and the initial cost and operation expense will be less than 1/3 that of a 1,000 watt UHF.



Remember, this takes as much as $350 more worth of engineers' time to do all the showings to squeeze these in. However, that sure beats paying $50,000 more for a UHF transmitter that eats electricity at $300 a month (compared to under $5 each output on VHF). The UHF 1,000 watt transmitter has a tube that also regularly fails and needs replacing. The VHF are all solid state. Most TV viewers are tuning between channels 2 and 13 regularly, and if you fall in there, they will stop at your channel far more often than they would at a UHF spot on the dial. Therefore, we feel VHF is your best bet when available, particularly if you can work out high power with high gain antenna arrays which will easily override any manmade noise on VHF. Channel 2 to 6 high gain antenna arrays are very large and can be mounted on only very sturdy towers or mountain top telephone pole arrangements. 200x antenna gain VHF 2 to 6 arrays are priced at around $3,000, and would, as we said, be unwieldy and very large. Channels 7 to 13 and UHF 200x antenna gain are much smaller and are under $1,000.

Here's how to cover major markets now.





If you superimpose these two, you would see you have squeezed in two very high ERP VHF LPTV stations in an area where there was supposedly no VHF channels available. True, there were none available easily specifying a VHF channel with omni antennas.

HOW TO COVER A MAJOR MARKET NOW

Remember, under the current freeze, your radiation pattern can go anywhere you file for, it is only your transmitter location that has to be 56 miles from the center of a major market.

Some cities are nearly 30 miles long, and remember that city center used as coordinates was the center many years ago, not the present physical center. So very often you will find large cities with a suburb very near the 56 mile edge. Get on a mountain at the 56 mile edge, shoot in a 20 degree wide very high gain, high power arrangement, and you can put a grade B in 35 miles into a major market. Warning, do not file for a channel that conflicts with present applications inside the 56 mile circle. If you do, you will be mutually exclusive with them and have to wait years for processing. When the proposed rules first came out, they said you must file for the highest UHF channel available. Therefore, most of the applications for LPTV in the major markets on file now are for high UHF channels, and there are often low UHF channels that were never filed for. File for those low channels to avoid conflict, since there are no restrictions on use of the lower UHF channels in the new rules.

THE ROUND ROBIN LOCAL NETWORK

In the multiple channel wireless cable configuration allowed under the new rules, we suggest if you are filing for rural areas that you file for all VHF channels in your town. Hopefully you will wind up with at least two of these channels with licenses. When you file in your home town or the main town, you may want to consider a whole network of low power stations. You may have ready financing for only two LPTV stations. If you file for 100 you do not need financing for 100 because you and I know there are going to be so many mutual exclusives you will be lucky if you get 50 even in the most rural areas. You only have to have financing for the one or two. When you get licensed on those two, then you need to arrange financing on one or two more so you keep ahead of your CPs.

When setting up several channels from the same studio, tower, etc., remember that you can expand that coverage out to almost as good as a full service station with five translators in a circle around the originating station. You may find your major towns are all in a row down a highway or line of some kind. Then we suggest a two way string. Originate with one channel at town A. Put translator repeaters in towns B, C, D, and E. Going back the other way, originate your second channel in town E with repeaters going back the other way. If you are going to do a third channel, originate it in town C and go both ways. In each channel you cover five towns or areas with one LP and four less expensive translators. If one or more of these channels are scrambled at night, for example, you have scrambled pay TV in all five towns but need only one studio encoding device. You can originate news, etc., or any local event of the three major towns and all the other towns will be able to see it. You can do all of your commercial production in one town and send it down to all of the others for taping and use later for insertion, etc., after normal broadcast hours. You can, on each channel (you run all three), tell viewers what is on the other two channels at any time point.

You can use one sales crew to sell ads in all five towns. You can use one production studio to do major commercial productions and studio productions and you can get by with one remote van and crew.

Your income from the combination of channels and the 'local area' network will allow you to do some major things in small towns and make it all economically feasible because most of your viewers come from repeating translators which are $1,500 cheaper than LP transmitters. You will have three times the income in each town because you have three channels but very little additional operating overhead more than you would have if you just had one channel in each town.

Let us say you have a three channel, five hop town network. The town that has the originating LP station might be an investment (you determine) of say $25,000. The four repeaters can be added for another $25,000, so you have a five town system for $50,000, or $10,000 per town. If you put in a three channel network, you would have an investment of $30,000 per town. If each town and surrounding rural area has about 1,000 homes, you have a 5,000 home base which, at $200 per home business per channel, including advertising and subscription income, data and interactive (estimated average), you would have a potential of $1 million a year business at a profit estimated at $25 or more per home per channel, you would have $125,000 yearly profit on an initial investment of $150,000. Whether you do this well will depend on how many other channels are available, how many are on cable TV and how is your competitive reception of other channels.

If you are running a lot of area networking of this type of local events and news, etc., from these towns, including local sports, the cable systems will be forced by public demand to put you on the cable system.

Other towns further out than your normal range may finance translators to carry your programs out further through donations and/or taxes. Cable systems in these outlying towns may pick your channel up outside your normal range and carry your channel or vacant or added channels on their cable systems, too. So what you are carrying will have somewhat to do with your total coverage, also.

HOW TO SPEAK LOW POWER

A Glossary of LPTV Terms

SUPER 8: Consumer motion picture type format.

SWITCHER: Device used to switch video from camera to camera, VTR, satellite TVRO, etc.

SYNC: Abbreviation for synchronization.

SYNCHRONIZATION: Timing pulses which lock all the cameras and TV sets into the same place on a TV screen at the same time (see genlock).

TABLE OF ASSIGNMENTS: Master plan of FCC, made years ago, listing what channels could be applied for, for regular TV stations in each city.

TBC: Short for time base corrector.

TELETEX: Name usually referred to carrying text on TV channels usually during the VBI and is reproduced by special equipment. Same text by telephone line is videotex.

TERRAIN SHIELDING: If you have a 5,000 foot range of mountains between your city and a regular station, you will have no signal from that station because it won't go over. This is called terrain shielding. You should be able to use that same channel. However, if it is less than the usual specified mileage, the FCC has in the past refused to license because of no procedure to actually check the terrain shielding. They are now admitting it is possible but claim they do not have the personnel to consider it. The FCC claims they do not have time to bother to take into consideration people shielded from TV by mountains and they are just out of luck.

TIERED CHANNELS: Running several channels (see wireless cable) at the same time and offering different tiers (number of channels) for different monthly charges.

TIERED PROCESSING: Processing rural applications outside of 212 major markets as one tier. Those in the smallest 120 markets next, and the third tier when those are completed will include the top 100 markets.

TIME BASE CORRECTOR: Corrects timing and sync amplitude of video from tape recorders, etc. Corrects the condition that causes skewing at the top, etc., from 1/2 inch VCRs. TBCs operate on either analog or digital. The latter has more correcting ability but is also far more expensive.

TRANSLATOR (Pure): Receives a TV channel and does not demodulate it, but simply 'moves' it over to another channel, boosts it thousands of times and rebroadcasts it. Designated by the FCC as a term for a rebroadcast classification with certain rules (see also booster).

TRANSPARENCY: Slides and overheads projected through transparent items.

TRANSPONDER: Translator on a satellite that receives a microwave signal on one frequency and rebroadcasts it to earth on another frequency.

TRUCK: Lateral movement of a TV camera dolly.

TYPE ACCEPTANCE: Usuall refers to transmitters and encoding devices submitted by manufacturers to the FCC testing labs. After testing and the FCC engineers decide it meets their predetermined specifications, it is given a listing as 'type accepted' and can be used by applicants for that specific purpose. A manufacturer who has a new piece of equipment that has not yet been approved but submitted to use the new equipment, you can ask in your application for a waiver on the grounds it has been submitted for type acceptance.

UHF: Ultra high frequency; channels 14 through 69.

UHF TABOOS: (not applicable to VHF) Includes prohibitions on two adjacent channels; 15 channels below the requested channel, etc., etc., (see rules).

UMATIC: Sony's 3/4 inch VCR format.

VBI: Vertical blanking interval; 25 lines blacker than black below the visable picture used for synchronization of the TV set and camera. Visable when you roll the picture up as a black bar. Can also carry data and several channels of teletex or other alpha numeric displays, such as closed captioning.

(Continued from front part of publication).

HOW TO SPEAK LOW POWER

A Glossary of LPTV Terms

VCR: Video cassette recorder.

VHF: Very high frequency; channels 2 through 13.

VHS: Most popular standard of format for 1/2 inch VCRs in U.S. About 80% of VCRs in U.S. are VHS. Beta is Sony's system and is the most popular worldwide.

VIDEO BAND: A term that refers to the spectrum and bandwidth of the output of a TV camera or directly off the heads of a VCR.

VIDEO: Picture information.

VIDEO MONITOR: TV set that will connect to straight video input.

VIDICON: Least expensive of TV camera tubes. Has been obsoleted by newer improved types that do not lag or images do not tend to stick as much as a vidicon.

VOICE OVER: This is a narrator talking over the picture usually added later.

VTR: Video tape recorder.

VIDEOTEX: (See teletex) Same type information carried on telephone lines is called videotex.

VU METER: Measures and indicates visually, audio levels.

WAIVER: Asking the FCC to disregard some specific rule now in force and to allow you to disregard it.

WHEEZE: AGC audio system turns up audio when no voice is present.

WHITE BALANCE: By putting something white in front of a color camera, the balance can be adjusted making other colors correct. Some cameras will make their own adjustment when positioned for white balancing. The white cord is used as a reference to get a camera adjusted to the right color balance.

WIPE: Replacement of one image by another. Does not fade, but one picture follows a wipe line.

WIRELESS CABLE TV: Running cable type services on several channels of low power by one operator offering tiers of service at different prices by scrambling (encoding).

ZOOM LENS: A lens that allows enlarging or reducing the scope of the picture. Less expensive cameras usually have 6 to 1 enlargement; more expensive cameras, 12 to 1 ratio.

Television Advertising Terms

ADI: Area of dominant influence. A group of counties in which the largest share of viewing is in home television stations. Each county is on only one home market. An arbitron term.

AFFILIATE: Station that carries one specific network's programs.

BLACKOUT: No local broadcast of a sports event because it is not sold out in its home market.

CHURN: Subscribers going on and off a subscription or cable service.

CO-OP ADS: Part paid for by a national advertiser and part by a local advertiser. Appliance store pays part, for example, and the refrigerator manufacturer each pay for part of a local spot.

DEMOGRAPHICS: Audience breakdown of interest to advertisers, such as age of viewers, income, education, etc.

DIRECT RESPONSE ADVERTISING: Ads that generate immediate response, such as telephone numbers or box numbers to respond to immediately.

FREQUENCY: The number of times a viewer or home watched an ad or program.

LOCAL ADS: Ads placed and paid for totally by a local merchant to reach people in his community.

P.I. ADS: Per inquiry. Station receives no payment other than a commission on sales of items advertised.

SHARE: Percentage of homes tuned into one certain station of the total turned on sets.

TARGET AUDIENCE: The type of audience an advertiser wants to most effectively move whatever he is selling.

TELEVISION HOUSEHOLDS: A house with any TV in any condition.

Decisions , Decisions

CHOICES/DECISIONS

WHAT TYPE OF STATION ARE YOU GOING TO RUN?

☐ 1. Ad supported
☐ 2. STV
☐ 3. Combination of 1 and 2

HAVE YOU CONSIDERED RUNNING AT LEAST 3 LPTV STATIONS IN YOUR MARKET AT THE SAME TIME

☐ 1. 3 ad supported stations
☐ 2. 3 STV - wireless cable tiered system
☐ 3. 3 combinations of the above

IF YOU DECIDE YOUR LPTV STATION IS GOING TO BE AD SUPPORTED - DECIDE IF YOU ARE GOING TO:

☐ 1. Just insert commercials in satellite programming
☐ 2. Insert commercials plus some taped local programming replaces some satellite programming
☐ 3. Regular local weekly shows and programming; live news, weather, sports and other daily shows plus commercial insertions

WHEN YOU DECIDE IF YOU ARE 1,2 OR 3 ARE YOU LOCALLY PRODUCING ALL OF:

☐ 1. Commercials
☐ 2. Taped local shows
☐ 3. Daily live news, weather, sports, live sports events, etc.

Or should you farm or contract out production of 1,2 or 3?

IF YOU ARE GOING TO BE AD SUPPORTED, ARE YOU AFTER:

☐ 1. As many total viewers as possible; program whatever gets the biggest number
☐ 2. Targeted at some special segment of the market, such as the elderly, college students, women, sports fans, etc.

Do not try to out General Motors, General Motors.

WHAT DO YOU DELIVER THAT YOUR MARKET FULL SERVICE COMPETITION DOESN'T?

☐ 1. Better quality picture reception
☐ 2. Specialty narrowcasting programs not available, such as all religious, all news, women's channel, etc.
☐ 3. Considerable localcasting not available until now
☐ 4. Combination of 1, 2 and 3

WHAT ARE YOUR PRIMARY GOALS?

Pick one, and rate all in declining order (1st choice, 2nd choice, etc.)

☐ 1. Make as much money possible as soon as possible
☐ 2. Bring better TV to the community and have the station be self supporting
☐ 3. Be a factor in influencing life in your community
☐ 4. Give local people a TV voice and help do away with the local media monopoly
☐ 5. Make a steady income over the long run
☐ 6. Develop a chain of stations

HOW DO YOU PROPOSE TO MANAGE YOUR LPTV STATION?

☐ 1. Contract out everything
☐ 2. Close personal management and attention to everything
☐ 3. Hire a local person to manage operation and you personally be an absentee manager
☐ 4. Hire local operation management for day to day operation and you locally just do business management

WHAT TV PROGRAMMING ARE YOU GOING TO HAVE THAT CABLE SUBSCRIBERS ARE GOING TO DEMAND YOUR LOCAL CHANNEL BE ON THE CABLE SYSTEM?

☐ 1. Local news, weather, sports and other local 'information' shows
☐ 2. Local live sports and other events from schools, etc.
☐ 3. National programming not on the cable
☐ 4. Combinations of the above
☐ 5. Other

WHAT ARE YOU GOING TO HAVE OR DO THAT GIVES YOU MORE VIEWERS AND AD INCOME THAN OTHER LPTV STATIONS THAT MAY COME IN YOUR MARKET?

☐ 1. Better network affiliation
☐ 2. Established, viewers, advertisers, local programs, etc., before they get on
☐ 3. Better channel (on the dial)
☐ 4. Better tower site and coverage
☐ 5. More local programming
☐ 6. Other

WHAT ARE YOU PLANNING ON INVESTING IN GETTING YOUR STATION ON?

☐ 1. As much as it takes to do it first class
☐ 2. Whatever it takes to do a fairly creditable job without breaking me
☐ 3. Whatever I can afford to do to get it on decently and add the frills later
☐ 4. Bare bones; getting it working as inexpensively as possible and see what the local response is and add niceties as it generates the income warranting it. See how other LPTV stations do.

DO YOU PLAN ON DOING MOST OF THE HANDS ON GETTING IT OPERATING?

☐ 1. Everything necessary myself
☐ 2. Hire some local inexperienced help
☐ 3. Hire and move in experienced personnel
☐ 4. Contract out part of construction and startup
☐ 5. Contract out all setup and startup

IF YOU GET A C.P. SOON, ARE YOU IN A HURRY TO GET IT ON?

☐ 1. Want to get on and see how the concept works so I can do some more if it is well received
☐ 2. Beat everyone else in my market
☐ 3. Take the time necessary to get it on without a big sweat and extra expense to rush it
☐ 4. No hurry; let's wait and see how the other LPTV stations are doing

WITH MY SUBSCRIPTION CHANNEL, I WILL LEASE DECODERS THROUGH:

- ☐ 1. Hired, on the payroll, personnel
- ☐ 2. Subcontract installation
- ☐ 3. Self installation through dealers and pay them for installation
- ☐ 4. Other

MY AIM IS TO GET AN LPTV LICENSE AND:

- ☐ 1. I'll decide what I want to do with it when and if I get a license
- ☐ 2. I can make up my mind now what I want to do with an LPTV station; see the rest of this portion
- ☐ 3. I'll just sell it when I get it built and let somebody else worry about it
- ☐ 4. I'll just lease the whole station operation out to someone else

IF YOU DECIDED TO RUN AN STV/LPTV STATION, HOW ARE YOU GOING TO GET INCOME?

- ☐ 1. Donations
- ☐ 2. Simple encoding system
- ☐ 3. Fairly sophisticated encoding system
- ☐ 4. Expensive addressable system
- ☐ 5. Whatever I can get by with initially, get secure crack proof system when they become available at low cost
- ☐ 6. Other

I HAVE DECIDED TO GO SUBSCRIPTION

MY VIEWS REGARDING DOING ANYTHING LOCAL ARE:

- ☐ 1. None; just repeat the satellite channel
- ☐ 2. Add local programming during the day with commercial inserts, etc.
- ☐ 3. Do some local sports on STV with no ads and pay for the rights to do the programs
- ☐ 4. Other

THE FAST WAY INTO LOW POWER BROADCASTING

There are about 4,000 operating translators in the U.S. They are the same as LPTV except the source of programming. A big part of this number are operated by rather loose knit groups of individuals operating on a volunteer basis for better TV in their community. Most have fund raising drives to pay their operating and maintenance expenses. About 20% of the served population donate and 80% freeload. Most of the volunteers are tired of running fund raising drives.

Many have translators bringing in two distant stations of the same network. In many cases, they would be glad to dispose of this extra translator for a few bucks that they can use to pay operating expenses or to build another new translator for some channel they want more.

There ususally is one single person that is the authority or does most of the work on the local translator operating and fund drives, etc. To find out who they are, contact the major TV repair shop in the community (they are often the same person). The sale of the translator to you will result in an additional channel or network or better TV than they have now. The money can be used to improve or pay for their other channels. So this move is good for everybody in the community.

Remember, what you are buying basically is a license, so if the equipment turns out to be still useable by adopting it, that's a bonus. Many translators are old tube types you probably would want to replace and the older models of transitorized also often have not been approved by the Commission for use with a modulator. A modulator is necessary (about $2,000) to convert to LPTV use since the translator was taking an incoming channel and converting it to another channel. With LPTV use, you do not have an incoming channel, only video input. The modulator and transmitter portion must have been approved together (type accepted) by the Commission. To find out if it has, get the make and model and call the manufacturer and ask.

Some communities support translators with county funds (taxes). This group is probably going to be harder to deal with.

FREEZE
WHERE YOU CAN'T FILE NOW

There is now a freeze in filing applications inside of a 55 mile circle of the top 212 markets. Currently you can file outside of these 55 mile circles with your transmitter outside the 55 mile radius. You can, however, radiate and cover anywhere inside that circle, but your transmitter itself must be outside the circle. This processing area and unfrozen area is called Tier One, everything 55 miles outside of the 212 top markets. After they catch up, it will be changed to accept filings inside everything except the top 100 markets' associated 55 mile circles. This will be called Tier Two and is estimated to be as long as 1984 before it is reached.

The 55 mile circles are drawn from the listed center of the listed town, not the present station's transmitter site. (Often as much as 40 miles out of town.) Remember, also, it is not the physical center of the present city, but a center point determined years ago when perhaps the city was much smaller and shaped.

You can make your own very accurate map by getting the large U.S. Government geological survey maps, available in large maps at most map shops by individual state (about $8.00). Each major city has the official center point listed with a white dot. Draw your own 55 mile exact circles with a compass, then you will know exactly where the 55 mile line falls. We have the coordinates of the center of all the major markets and an arrangement with a local computer engineer here that will give you a printout sheet showing the exact distance between your site (send the exact coordinates) and he will send by return mail an exact distance to the tenth of a mile to all the major markets in your area (fee for this is $12.50; ICTV members, $10.00; send it in care of this publication). You will then (if it's all outside of 55 miles) be able to use this as an exhibit when you file showing your location is okay to file now. If it is obviously outside you wouldn't need to do this, of course, but to know for sure, when you are close to the line, this is one way to find out at reasonable cost. It is also one way to convince the Commission it is currently acceptable if it is right on the line. Just put a sheet on the front of your application stating the attached application is acceptable for Tier One filing and processing, since it is more than 55 miles outside of the major markets. Attached Figure one, it is an engineering exhibit showing the exact distance from this application to the listed coordinates or center of the nearly major markets. The third tier will be all areas in the U.S., including inside the 55 miles of the top 100 major markets restricted in Tier Two. This is estimated to be as long as 1985 before these areas will be available for processing.

This is all due to a combination of overwhelming demand for low power licenses, and an archaic, bureaucratic licensing system of broadcast regulation.

CALLING THE FCC

CALLS FOR INFORMATION

There are often times when you need something clarified. The time and cost of writing a letter and then maybe waiting weeks for a reply make the telephone call the only way to go.

Our experience in calling the FCC indicates you get referred to a number and then they refer you to another person and you get put on hold umpteen times. Sometimes you can be referred to 3 or 4 different people and still not get an answer. Trying to get information by phone can be expensive, frustrating and maddening. However, if you have the correct number to start with, it really helps. So we have gone to some trouble to dig up the most common useful numbers for LPTV applicants on the next page.

IF YOUR APPLICATION IS HUNG UP

Many times you will notice others' applications have been through cutoff and licensed that were filed at the same time or later than yours. If calling direct does not clear up why your application is hung up, call your Senator or Congressman and ask for the person in their office who handles telecommunications matters. These people usually have many good contacts inside the Commission that they can rely on. Ask that person to see what they can find out and ask them to see what they can do with their FCC contacts to get your application moving and expedited. Get your town's mayor to write or call on any and every other person that may have some political clout.

Some of the people I have talked to that have gotten fast service on a CP say they did a considerable amount of this. Some even made trips to Washington and called on the FCC departments involved personally as well as stopping to see their Congressmen and Senators as to what they could do to help. Apparently the squeaking wheel still gets the grease. You may be able to do a lot of good by telephone on getting your application expedited, too. Do not call for expediting until normal time has expired.

RULE INTERPRETATIONS

It is often hard to find out how a rule is interpreted and policy sometimes changes. Some things they won't give you definite answers, but you can ask what generally happens when so and so is filed, etc.

WILL CALLING HELP?

Expect to make several calls to get what information etc. you want or need. The party that supposedly can help you seems to be away from their desk a lot. They will promise to return your call but as much as 50% of the time do not do so.

You can check on the status of your application or find out more about requirements of filing your application but there are many things they won't tell you or are prohibited by law from telling you. They can give you timetable, deadline and freeze information but will not tell you what has been filed, etc.

CALLING CAN HELP

If you are West coast, call before 8 a.m. and save considerably on your phone call. A phone call can be a good investment but call between 8:30 and 5:30 EST. Do not be bashful. Contact the people that can get things moving. Try not to call late in the day or late Friday. Be courteous but be definite in explaining what you want.

ICTV MEMBERS

Contact the Scottsdale office when you have problems or delays you cannot overcome. We have a Washington, D.C. representative that can do some leg work at the Commission for you when nothing else works.

If you do not know which department to call to get the information you want, call this number:

(202) 632-7000 and 632-7260
Consumer Assistance Office
and Small Business
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

TWX 710-732-0610

FCC - LPTV INFORMATION

MOST USED NUMBERS FOR LPTV INFO

TO GET ANSWERS ON: PHONE:

All numbers are area code 202 unless stated otherwise

General info and/or referral on who to contact
Consumer Assistance Office 632-7000
Recording of Daily News Releases 632-0002
Administrative Manuals 632-7533
Alien Restricted Permits 632-7240
Application Status/LPTV 632-6334
Annual Employment Report (Form 395) (CC) 632-7500
Broadcast Bureau LPTV 232-3894
Call Letters (Signs)
Other than Amateur or CB 632-7111
Call Sign Policy 653-8144
Cases in Court 632-7112
Charts and Tables (OST) 653-8162
Citizenship Requirements for Licenses
General Inquiries (GC) 632-6990
Commercials/TV & Radio 632-7551
Conflict of Interest Interpretations (GC) 632-6990
Construction Permit for TV 632-6357
Copy Contractor (Downtown Copy Center) 452-1422
Engineering Surveys Field Strength (OST) 632-7080
Equipment Acceptance
Laboratory .....(301) 725-1585
Equipment Authorization .....(301) 725-1585
Existing Stations and Minor Changes for TV 632-6357
Ex Parte Rules (Interpretations of) (GC) 632-6990

Fairness Doctrine 632-7586
FCC Rules (Legal Interpretation of)(GC) 632-6990
FM Services
Advertising Questions and Comments 632-7551
Construction Permit Applications 632-6908
Translators/Boosters 632-3894
Forms Distribution
By form number only 632-7272
General form requests 632-7000
Frequency Allocation Charts and Tables (OST) 632-7025

Hearing Calendar (ALJ) 632-7680

IFTS
Application Preparation 632-7505

Inspection of Stations 632-7014
Intercity Relays 632-7698

Legal Information
Interpretation of Rules 632-6990
Library 632-7100
Locator/Personnel 632-7106

MDS Licensing 632-6430

Oral Arguments (ED) 632-7535
Point-to-Point Microwave
Private (PRB) 632-7291
Programming/Broadcast TV 632-7551

Rebroadcast
FM 632-6908
TV 632-6357
Rules/General Inquiries 632-6990

Secretary, Office of 632-6410
STLs/Studio-Transmitter Links 632-7698
Subscription TV 632-7792

Towers/Painting and Lighting 632-7521
TV Services
Advertising Questions and Comments 632-7551
Assignment and Transfer Applications 632-9356
Engineering Questions/LPTV 632-3894
STLs, Remote Pickups, Intercity Relays, Translator Relays/ Engineering rules for 632-7698
Translators, Boosters/ Engineering rules for 632-3894

Wireless Microphones
Licensed (BB) 632-7505
Non-licensed (OST) 653-8247

To call you Congressman or Senator:

Call (202) 224-3121.

Ask for Representative ———————
of ——————— (your state)
Ask for Senator ———————
of ——————— (your state)

If you do not know your Representative call the above number and tell them your state and city and that you want to be connected with the Representative for your area.

MORE LPTV NUMBERS

THE COMMISSION (As of June 10, 1981)
Mark Fowler, Chairman 632-6600
Joseph R. Fogarty 632-7227
Anne P. Jones 632-7007
James H. Quello 632-7557
Henry M. Rivera 632-6996
Stephen A. Sharp* 632-7117

*Stephen A. Sharp is the new Commissioner appointee not yet approved as this is assembled.

Other Federal Agency Information — **Start with this toll free number**
'800' Information (some agencies have toll-free numbers) .....(800) 555-1212

Congressional Committees
House Subcommittee on Telecommunications 225-9304
Senate Subcommittee on Communications 224-0411

Government Printing Office
Orders 783-3238

U.S. Copyright Office
Public Information 287-8700

Field Location and Facilities
District Offices

Atlanta, GA .....(404) 881-3084/5

Atlanta, GA .....(404) 881-3084/5
(Recorded information) .....(404) 881-7381

Baltimore, MD .....(301) 962-2728/9
(Recorded Information) .....(301) 962-2727

Beaumont, TX .....(713) 838-0271 x317

Boston, MA .....(617) 223-6609 (PS)
(ENF & ENGR) .....(617) 223-0689
(Recorded Information) .....(617) 223-6607/8

Buffalo, NY .....(716) 846-4511/2
(Recorded Information) .....(716) 856-5950

Chicago, IL .....(312) 353-0195/6
(Recorded Information) .....(312) 353-0917

Cincinnati, OH .....(513) 521-1790
(Recorded Information) .....(513) 521-1716

Dallas, TX .....(214) 767-0761
(Recorded Information) .....(214) 767-0764

Denver, CO .....(303) 837-5137/8
(Recorded Information) .....(303) 837-4053

Detroit, MI .....(313) 226-6078/9
(Recorded Information) .....(313) 226-6077

Honolulu, HI .....(808) 546-5640

Houston, TX .....(713) 226-5624/5
(Recorded Information) ...(713) 226-4306/7

Kansas City, MO .....(816) 926-5111
(Recorded Information) ..... (816) 356-4050

Long Beach, CA .....(213) 426-4451
(Recorded-PS) .....(213) 426-7886
(Recorded-ENF) .....(213) 426-7995

Miami, FL .....(305) 350-5542
(Recorded Information) .....(305) 350-5541

New Orleans, LA .....(504) 589-2095/6
(Recorded Information) .....(504) 589-2094

New York, NY .....(212) 620-3437/8
(Recorded-ENF) .....(212) 620-3435
(Recorded-PS) .....(212) 620-3436

Norfolk, VA .....(804) 441-6472
(Recorded Information) .....(804) 461-4000

Philadelphia, PA .....(215) 597-4411/2
(Recorded Information) .....(215) 597-4410

Pittsburgh, PA .....(412) 823-3380
(Recorded Information) .....(412) 823-3553

Portland, OR .....(503) 221-4114
(Recorded Information) .....(503) 221-3097

St. Paul, MN .....(612) 725-7810
(Recorded Information) .....(612) 725-7819

San Diego, CA .....(714) 293-5478
(Recorded Information) .....(714) 293-5460

San Francisco, CA .....(415) 556-7701/2
(Recorded Information) .....(415) 556-7700

San Juan, Puerto Rico .....(809) 753-4008

Savannah, GA .....(912) 232-4321 x320

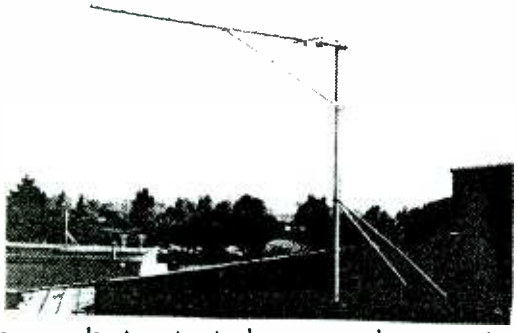
Seattle, WA .....(206) 442-7653/4
(Recorded Information) .....(206) 442-7610

Tampa, FL .....(813) 228-2872
(Recorded Information .....(813) 228-2605

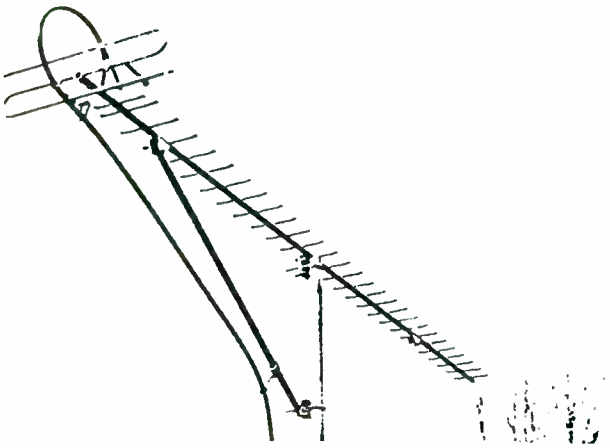
Washington, D.C. .....(301) 436-7591
(Recorded Information) .....(301) 436-7590

PS - Public Service.
ENF - Enforcement.
ENGR - Engineering.

INCREASE COVERAGE 70%



When you plan to get out a long way and cover a wide area with your station and work hard to develop an antenna pattern for your transmitter, remember, in low power, the other end (receiving end) is even more important that what you are doing. Handle this right and increase your range 70%.



UHF Long John antenna above is very high gain for home reception. Antenna is also good for transmitting highly directional.

You have some rather definite limitations as to what you can do with low power on your end, but remember, there is no limitation on what you can do on the receiving end.

In UHF, getting an outdoor antenna above the average houses and trees is almost crucial very far from the transmitter.

INVESTING IN PROMOTING BETTER RECEIVING ANTENNAS GETS VIEWERS

You save tens of thousands of dollars in cost by using a low power transmitter. Full power UHF stations often draw $5,000 a month electric bills and large dollars for tube replacement. This is the continued price they pay for coverage. You can well afford to invest a little money on the customers' receiving installation to get coverage. Buy receiving antennas such as the long john yagi (made to respond mainly to your channel) in large quantities which will give you at least a 60% discount. Sell them direct through advertising, or better yet, to installing dealers etc. that you give free promotion ads in exchange for their selling these antennas for cost. They get some installation business and with this type of antenna, you get viewers way past your normal reception area. Absorb a big part of the cost and sell these for far less than they cost you. Also buy antenna amplifiers (necessary on tall fringe area home receiving towers) in quantity and sell those for cost or less. If you can get some made that are purposely peaked out on your channel or channels along with the cut channel yagi, this customer will get far better reception on your channel than on any competitive channels that come on later. Remember, each viewer is worth $25 or more of advertising income per year, so spending money on a low noise pre amp that makes up for the line loss (extreme at UHF) on the way into the house, is an investment in viewers. When you sell your station, a new buyer figures each viewer is worth $200 or more. A

YOU HAVE THE LOWEST INVESTMENT PER HOME SMALL ADDITIONALS ADDS MORE HOMES

cable system has an investment of over $1,000 per home. If a viewer is worth $200 to a buyer, he is also worth $200 to you, so if you spend(or lose on cut for your channel antenna and low noise amplifier equipment) out of pocket $20 on an antenna sale in order to pick up fringe viewers not available otherwise, by all means, plan to do so. Say that a good UHF antenna and low noise amplifier retail for $90 (no mast or installation), you buy them in large quantities for $40 and sell at $20 to installers who agree to sell them for that. They will sell some to do-it-yourselfers and not make a dime, but over half will opt for towers and installations, which means dollars to them. You also do free commercials for them about their installing antennas (in proportion to how many antennas of yours they are getting out there). The viewer gets good television reception, tells his neighbor. You get additional viewers, the dealers make a buck, advertisers get more for their money, and everbody comes out great because you showed up with an LPTV station.

EVERYBODY DOES BETTER BECAUSE YOU STARTED A LOW POWER STATION AND MANAGE IT FOR EVERYONE'S BENEFIT

There is a great deal of interest and excitement when a new channel comes on, and before and just after coming on is the time to promote, promote, promote the viewing of your channel. Even if you have to borrow money at a high interest figure, getting these additional viewers is crucial to your long range success and will be paid back many time in additional advertising and/or su bscription income.

ICTV Alliance will be working out a purchase at large discounts for home antennas for fringe viewers. Cooperative buying can bring prices way down.

SUCCESS IN LOW POWER IS NOT HOW MUCH MONEY YOU INVEST. SUCCESS IS HOW SMART YOU OPERATE.

What BARRON'S magazine had to say about LPTV

Airwaves of the Future?

Low-Power TV Boasts High-Powered Potential

By THOMAS G. DONLAN

MILLARD V. OAKLEY'S television station opens this month in Cookeville, Tenn. Cookeville is not one of your major markets—it's not even one of the 212 officially recognized TV markets. And Oakley, although he holds interests in four radio stations in the Tennessee Valley, scarcely ranks as a media magnate. But this country lawyer is a pioneer: his television station is something brand new in broadcasting.

When Oakley's WO7BM fires up its transmitter, he and 50,000 or so potential listeners will be taking the first step into a new era. WO7BM is one of the first low-power television stations. It will broadcast with 100 watts of power instead of the five million some conventional television stations use. Oakley had to accept the power limit in order to get on the air, since a full power outlet in Cookeville probably would interfere with stations in Chattanooga or Knoxville or Nashville.

The power restriction, however, also provides an economic advantage. Building a conventional station can run $2.5 million or more and operating one takes a large, expensive staff. Building WO7BM is costing Oakley about $60,000, and he expects to run it for as little as $30,000 a year. Numbers like these, among other things, have made low-power television a hot topic for individual investors and big corporations. It's also made them a potential competitor for newspapers, radio stations and conventional television.

With a cheap low-power station, Cookeville will enjoy local television, since Oakley will be able to take advertisements from Cookeville merchants paying what they can afford to reach potential customers. And there's something more, something that makes the low-power game seem high-powered in Cookeville, Tenn., or Bemidji, Minn., or Ukiah, Calif., or Watertown, N.Y., or any of the other two dozen isolated communities where the Federal Communications Commission has authorized the first such stations. Most of the FCC's programming restrictions don't apply to low-power stations, so WO7BM can offer pay television, which usually is offered only in big cities. Oakley thinks he might be able to attract 2,000 to 3,000 subscribers, clearing $10 a month from each. That could make WO7BM more profitable, for its size, than even the most lucrative full-service station. "If you make ten bucks a subscriber, you wouldn't do all that bad," Oakley reasons. "I believe this is where the action's going to be. Every town is going to have one."

Already, there's somebody in every town who wants to build one. Many hope that low-power television will offer a chance to open new stations in big cities. They look at the spaces on the TV dials, like Channel 6 in New York City, that are kept blank to avoid interference with other conventional stations, and they start to dream of big bucks. There are 34 applications on file for low-power slots in the Big Apple. A couple of dozen more large applicants are hot to serve cities in the suburbs like Hempstead and Yonkers, N.Y., and Hackensack, N.J.

> One low-power TV rule will be simple: if the stations interfere with conventional ones, they'll go off the air.

Most applicants in big cities, however, will lose. Though there are five vacant channels on VHF between Channel 2 and Channel 13, plus many more on UHF between Channel 14 and Channel 83, engineers feel even a low-power station would interfere with some full-power channels. And an FCC lawyer says one low-power television rule will be simple: "If they interfere, they go off the air."

Each usable channel in every big city has multiple applicants and, last year, the FCC was overwhelmed by applications, in part because it charges no filing fee. Millard V. Oakley was filing not only for channels in Tennessee, but also for stations in New York, San Francisco, New Orleans and Washington, D.C. "It looked like a good crap game, so I filed to see what would happen," he says. Lots of people were willing to play. So were many of the nation's largest companies. NBC and ABC filed. Communications equipment companies, such as Graphic Scanning, filed. Programming companies, including Turner Broadcasting, filed. Newspaper companies—Gannett, Harte Hanks, and Scripps Howard — filed. And even companies with no connection to the business, such as Federal Express, filed.

The largest filing was for 141 stations by a Prescott, Ariz., outfit called Neighborhood TV Inc., which turns out to be financed by a venture capital arm of Sears, Roebuck. Owners of Neighborhood TV say they want to create a fourth network, concentrating on wholesome entertainment. (They deny what some skeptics believe, that Sears wants to use all those low-power stations for a video catalog.) Other big applicants include religious programmers. Dr. Jimmy Allen, head of American Christian Television Service, has applied for 106 stations, hoping to get around the high price of commercial television time. A Southern Baptist, Dr. Allen says, "Many of our congregations are paying astronomical prices for one hour of access a week." As a minister in San Antonio a few years ago, he paid $55,000 a year for Sunday morning broadcasts. American Christian Television Service is among the 51 applicants for a channel in that Texas city.

In all, 6,593 applications had been filed by April 10, 1981, the day the FCC cried, "Enough, already!" and put a freeze on new applications, except for those in the most distant rural areas. (This loophole is letting in about 100 applications a month. That's twice as many as the FCC staff can resolve each month, so the backlog is mounting.) The agency has asked Congress to buy it a new computer and hire 15 people to run it, but FCC lawyer Molly Pauker warns applicants not to expect miracles. "The 6,000-case backlog would grow to 20,000 if the freeze were lifted," she says. "It will take to 1985 or 1986 just to do the technical processing." The commission then will have to decide among dozens of competitors for each of the 1,000 new stations that Pauker eventually expects to see authorized. The FCC wants to use a lottery. But, it and Congress disagree about how to set one up.

Even the low-power television rules are being delayed. Last month, Pauker presented a draft to the commission, which voted unanimously to accept them, with just a few changes. Pauker is supposed to go back and rewrite her draft to accommodate the commissioners' comments, but she has been shifted to a new job. That leaves the rules in bureaucratic limbo. "Until the document is released, it's not an official commission action," Pauker says. "And it can't be released because I have too much to do. I take full responsibility." A little more money for the FCC would help, she adds, noting that the new federal budget calls for a $12-million cut in agency funds that would result in the loss of 260 jobs.

All this delay comes as unpleasant news for some of the people trying to carve a niche in low-power television. EMC Inc. of White Haven, Pa., is the current sales leader in what is now the very small business of constructing television transmitters of the type that will be used by low-power TV stations. EMC officers told *The Wall Street Journal* that the company could sell $70 million worth of equipment in the next two years if the FCC grants 1,000 licenses.

The company hopes to boost profits from $1.7 million this year to $7 million next year, a projection that fueled a rise in EMC stock from under $6 a share last year to about $19 last week. Unfortunately, most of that new business and new profit depends on a schedule the FCC probably can't meet. And low-power television forces aren't overly impressed by the fact that 70% of applicants told the FCC they would use EMC equipment, noting that the applicants had to mention a company in business at the time of filing. "When this finally starts, there'll be a lot of people coming in to compete, the Japanese will be in like locusts," says Ike Blonder of Blonder-Tongue Inc. in Old Bridge, N.J., a firm that makes commercial television and radio components.

Another business, however, may be of the greatest importance to low-power television, just as it is to cable TV or any other new video technology: programming.

"The key to the success of any station is what you put on the screen," observes Gene Mater, senior vice president of the CBS broadcast group. "Whether you talk about low-power, or direct-broadcast from satellite, or microwave-distribution or cable—none of those systems brings with it an automatic amount of programming." CBS has ignored low power for that reason, although rivals NBC and ABC have filed for a complement of stations in major markets. "We say low-power [is] designed as a community-service type of thing and that wasn't the way to go for CBS," Mater says.

Neighborhood TV Inc., however, had networking in mind. The Arizona company financed by Sears filed its 141 applications in the hope of creating an instant network to compete with the Big Three by offering programs based on old-fashioned, small-town American values. Neighborhood TV President Marshall M. Carpenter complains that the enormous

Continued on Page 28

Page 28

AIRWAVES OF THE FUTURE?

Continued from Page 13

backlog at the FCC has made a joke of his dream. "Our plans were all predicated on delivering our 'Americana' programs to a sufficiently large audience to garner large enough commercial advertising revenues to generate competitive, quality programming," he says.

FCC rules for divvying up the licenses seem to favor local ownership instead of chains. Carpenter isn't very hopeful about assembling a low-power network from individually owned stations. "It'd be like getting 70 kids to sing in unison," he says. He'll try that, though, if he can't get the FCC to reconsider.

Carpenter sounds a warning: "Without a network, the stations that are granted will have to be unabashedly and perhaps 100% subscription TV — pay TV—in order to survive." But that may not seem so dire to Americans starving for—and willing to pay for—recent movies and better programming. In fact, cable television operators report that it's pay TV that sells the service and makes it profitable in city after city. John Boler, who owns a lower-power television station in Bemidji, Minn., says that it sold out of 500 pay-TV decoders in the first month of operation and had to order more. (The decoders unscramble the scrambled signals that cable-less pay-TV systems use to transmit their programs.) That success comes despite the fact that his channel competes with a cable system in downtown Bemidji, diminishing his potential market for pay by one fourth and leaving him only 30,000 viewers to court. Nevertheless, he insists that pay TV is going to put him in the black before the end of the year and finance a sizable local programming effort for daytime broadcasting.

Boler's lesson hasn't been lost on other rural broadcasters. "We are virtually swamped with inquiries," says John Calvetti of SelecTV in Los Angeles, which sells movies and special events for use by subscription television stations. "I have had to get a word-processing unit to reply to these people."

Calvetti notes that, regardless of what his word processor tells those people, they're going ahead with low-power television, even though it's obvious that many of them "have little experience in broadcasting and no experience in pay TV."

But experience comes with time, and time is on the side of low-power television. ■

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Low-Power TV May Prove High-Power Ad Medium . . . or May Not

WASHINGTON, DC—Having been swamped with thousands of license applications, the Federal Communications Commission has granted approval to about 35 low-power TV stations across the country. Hundreds more will be granted over the next several years. It would seem that a new video medium is in the works.

But is it? No one is quite sure what the programming or advertising implications are of the prospective new stations, all beaming a signal stretching no more than 10-15 miles. On one hand, low-power offers the prospects of truly local narrowcasting, precisely the promise heralded by cable TV. On the other hand, it may mean the establishment of new national networks, with satellite-fed programming that in no way resembles the localism once intended.

TV analyst Bill McGee expects low-power TV to "give radio and newspapers fits" as the medium catches on. But he cautions that predictions are risky at this point.

Analysis

And the outlook, already murky, is further complicated by other new broadcasting developments. Two weeks ago, for example, the FCC relaxed its rules on pay-TV, voting to strip away the provisions that authorized pay-TV stations only in cities that already have at least four commercial television outlets. This ruling, the commission said, is likely to mean a few dozen more pay-TV stations around the country. But it also may mean hard times for low-power entrepreneurs in at least some markets, where many are planning conventional ad-supported, over-the-air programming during the day and subscription TV at night. At issue is whether many markets can support more than one pay service.

Everyone now is taking a look at just what the future may hold for low-power, particularly in terms of advertising dollars. "Our feeling is that when any kind of new media comes along, we'll take a look at it," says Norm Varney, vice president/new media at J. Walter Thompson, New York. "You have to. The people who are making a mistake are the people who are saying it will go away. Of course, we're not jumping in. There's no reason to jump in yet."

Others in advertising seem to agree, especially because the FCC is granting licenses in the most rural areas first. It will be three years or so before the scramble is on for spots in large metropolitan areas. And some broadcast veterans, who have followed closely the fate of low-power television, say privately that the medium has no future in urban markets. The only real potential for major ad buys, they claim, are nationwide low-power networks, which may never materialize.

In small and medium-sized communities, though, LPTV may create something of an advertising revolution. One broadcasting veteran, who for years has been involved with the ins and outs of buying time (and who asked not to be identified), said LPTV may be a major thorn in the side of radio stations, newspapers and network affiliates in smaller markets. He noted that LPTV could realize considerable profit from local retailers who are unable to afford current advertising rates and are not interested in having their message beamed beyond the city line. The local pizza shop suddenly will be able to afford both the production costs—a minicam shooting the front or inside of his store—and the time. Suburban politicians are also likely to spend their dollars on LPTV, he says, as they won't have to purchase useless, metro-wide time.

Also part of the potentially profitable mix—which could, in the right markets, include subscription TV—may be reruns of syndicated shows. Programs like "M*A*S*H" which have bolstered the economic health of independent stations.

Although the field of LPTV entrepreneurs remains small, it will grow steadily, according to Bill McGee, president of the San Francisco-based Broadcast Marketing Co. "It will bring in a lot of retail accounts," McGee says. "It will take a good bit of selling, but I personally think these LPTV stations will give radio and newspapers fits."

According to one study McGee cites in a soon-to-be-released book, the 450 or so LPTV stations on air by the end of 1986—assuming projections hold true—could generate $500 million in total revenues, 25 percent of that from advertising. The remainder would come from subscription-TV revenues.

Noting the uncertainty of LPTV's future, McGee says, "It's kind of like a dart board at this stage for anybody to project. There are so many 'ifs' in there." —*Alan Green*

ABC has been reported to be working on a micro-miniature hard-copy printer the size of two stacked cigarette packages that will be designed to sell for under $30 and be addressable. The printer would print out information carried during the TV station's vertical blanking interval or on a subcarrier audio. Printed information could be anything from personal messages to stock market reports.

We have been telling you that data will be one of your biggest sources of income. This is an example of the hardware under development.

Reprinted with permission of Publishers' Auxiliary/June 14, 1982

LPTV: 'It's a hoax,' says communications executive

PHILADELPHIA—Steve Effros, executive director of the Community Antennae Television Association, told the Suburban Newspapers of America convention here that newspaper publishers were probably wasting their time in their scramble for low-power television licenses.

"Personally, I think it's a hoax," he said. "I don't believe LPTV, with the exception of a few specific markets, will ever be a significant communications force."

Effros pointed out that ultra-high frequency television also was seen originally as a potential bonanza, and that many UHF licenses now are going begging—many of them in areas where low-power TV licenses now are being fought for.

Low-power television, Effros contended, merely was an election-year effort by the Carter administration to bring more members of minority groups into broadcasting. "Don't forget how this thing started," he said. "It was a political ploy when it started."

ABC has worked out a simple STV system with Sony. The idea is to broadcast scrambled current movies after normal hours. A device that tunes into the station turns on at station command a VCR which tapes the movie for you. If you are a subscriber, the movie will then play back through a decoder (supplied at a monthly charge) anytime you want to view the movie.

Teletext rules still to come

WASHINGTON—Two issues of considerable interest to low-power television aspirants—including newspapers—still await separate treatment by the Federal Communications Commission.

FCC staffers estimate that this summer will see final rules on teletext transmission, which effectively adds a second station to the license.

Teletext uses the "vertical blanking interval" (the dark line that appears on a TV screen when the vertical hold goes out of whack) to transmit characters. A newspaper publisher could use teletext to transmit news and classified ads to customers without using up the more visual (and lucrative) possibilities of his main channel.

The FCC said in its May 18 LPTV report and order that the rules for teletext use by LPTV stations will be included in that still-pending general teletext proceeding.

LPTV licensees will be able to operate a subscription service—broadcasting a scrambled signal that must be unscrambled on the subscriber's set by a decoder—without separate licensing procedures. LPTV consultant Parry Teasdale said he could furnish no hard statistics, but it was his impression that a "majority" of LPTV license applicants were interested in operating a subscription service.

However, while the FCC's separate rulemaking on subscription television is pending, operators will only be able to lease decoders to subscribers—not sell them.

This means the operator must take responsibility for maintenance and repair of the decoders. In fact, said Teasdale, most STV operations are set up by separate companies that offer a turnkey package to licensees, including maintenance.

NEW BOOKS AVAILABLE FOR LOAN TO ICTV MEMBERS

The TV Engineering Handbook

This thing is bigger than 2 Sears' Roebuck catalogs. Weighs a bundle, and handbook is a misnomer. Postage bill on this thing is considerable, but members can keep it for 2 weeks. We suggest you request low book rate postage.

Video Basics

A book that will help you get past the fundamentals of home type video. Easy to understand. 8 1/2 x 11 3/4 inch thick. One week loan, members pay postage only.

Video User's Handbook

Hardbound book; a little more advanced. Help you get basic info on what you may want in setting up your own production equipment. One week loan. Members pay postage only. Request either low book rate or first class.

A reporter called the magazine office the other day saying that he was doing research for an article on low power. He said he had spent considerable time at the FCC to check to see what percentages of applicants were in what category.

He said his research and checking indicated that the largest group of applicants for low power would be present full service broadcasters. Next largest, he found, were people that had radio interests already, and the third largest was newspaper chains.

This backs our previous concern that low power was not resulting in new voices as originally conceived, but was merely being taken over by the present concentrated media control.

Listing of LPTV applications since the June issue

ARIZONA

Douglas
28 100w The Sun Network, Inc. 5/12/82

Flagstaff
9 10w Seattle Community TV 5/18/82

Hardy
24 100w Faith Productions, Inc. 6/23/82

Parker
2 10w Hale Communications, Inc. 5/28/82

Prescott
13 10w The Sun Network, Inc. 6/23/82

Safford
8 10w Harlan L. Jacobsen 5/28/82
11 10w Harlan L. Jacobsen 5/28/82

Show Low
8 10w The Sun Network, Inc. 5/12/82

Tucson
27 100w Black Coalition for MD 5/12/82

ARKANSAS

Jonesboro
47 1kw Local Power TV, Inc. 5/27/82

Paragould
28 100w Black Coalition for MD 5/28/82

CALIFORNIA

Barstow
41 100w Arnold N. Applebaum 5/27/82
55 100w Black Coalition for MD 5/28/82
55 100w Response Brdcst. Corp. 5/28/82

Cloverdale
25 1000w Response Brdcst. Corp. 5/28/82

Devore
67 100w Suzanne Schott 5/28/82

Independence
12 10w Black Coalition for MD 5/12/82

Joshua Tree
8 10w Black Coalition for MD 5/12/82

Lakeport
25 100w Lakeport Publishing Co. 5/12/82
27 100w Black Coalition for MD 5/12/82
27 100w Lakeport Publishing Co. 5/12/82
41 100w Lakeport Publishing Co. 5/26/82

Mammoth
5 10w Black Coalition for MD 5/12/82

Ridgecrest
19 1000w Arnold N. Applebaum 5/27/82

Santa Barbara
14 1kw The Sun Network, Inc. 5/12/82
24 100w S. Coast Community TV 6/14/82
26 100w Carter Brdcst. Group 5/12/82
26 1kw The Sun Network, Inc. 5/12/82
38 100w Am. Translator Develop. 5/12/82
38 1kw Arnold N. Applebaum 5/12/82
38 100w Black Coalition for MD 5/12/82
38 100w Carter Brdcst. Group 5/12/82
38 1kw Orion Brdcst. Group 5/12/82
38 1kw The Sun Network, Inc. 5/12/82
67 100w S. Coast Community TV 6/14/82

COLORADO

Cedaredge
7 10w Collis Michael Callihan 5/27/82
38 100w Collis Michael Callihan 5/27/82
40 100w Collis Michael Callihan 5/27/82

Coaldale
59 100w Black Coalition for MD 5/12/82

Cortez
30 100w Collis Michael Callihan 5/27/82

Cotopaxi
57 100w Black Coalition for MD 5/12/82

Durango
5 10w SW Community TV 6/4/82
39 1000w Durango Herald, Inc. 5/28/82
39 1kw SW Radio Enterprises, Inc. 5/27/82

Gunnison
13 10w Black Coalition for MD 5/12/82

Howard
61 100w Black Coalition for MD 5/12/82

Steamboat Springs
34 1kw Kemmerly & Kemmerly 5/12/82

Vail
39 1000w Kemmerly & Kemmerly 5/27/82

FLORIDA

Key West
28 100w The TV Group, Inc. 5/28/82

Miami
13 10w Hispanoamericana de TV 5/18/82

Naples
68 1kw Bernard L. Turner 5/10/82

Newberry
23 1000w Weather Center Intn'l 5/28/82
33 1kw SW Radio Enterprises 5/27/82

Vero Beach
7 10w Russell Communications 5/12/82
46 100w The TV Group, Inc. 6/4/82
60 1kw SW Radio Enterprises 5/27/82

GEORGIA

Douglas
53 100w Black Coalition for MD 5/12/82

Dublin
4 10w Arthur C. Broadbooks 6/23/82

Rome
56 100w TV Local, Inc. 5/18/82

Sylvester
56 100w Black Coalition for MD 5/12/82

Waycross
49 100w Black Coalition for MD 5/12/82
55 1000w SW Radio Enterprises 5/28/82

IDAHO

Burley
23 100w Telecrafter Corp. 6/23/82

Twin Falls
9 10w Russell Communications 5/12/82

ILLINOIS

Caberry
10 10w Black Coalition for MD 5/28/82
10 10w Katy Communications, Inc. 5/27/82

Cookeville
46 100w Black Coalition for MD 5/28/82

La Salle
51 100w Black Coalition for MD 5/28/82

Watseka
13 10w Black Coalition for MD 5/12/82
13 10w Iroquois County Brdcst. 5/12/82

INDIANA

Geneva
52 1kw Muselman/Muselman 5/27/82

IOWA

Mt. Pleasant
17 1kw Mount Pleasant News 5/27/82

Ottumwa
5 10w Carlos Ortiz 6/23/82
7 10w Carlos Ortiz 6/23/82
9 10w Carlos Ortiz 6/23/82
11 10w Carlos Ortiz 6/23/82
13 10w Carlos Ortiz 6/23/82
21 1kw Blacks Desiring Media 6/23/82
30 1kw Blacks Desiring Media 6/23/82
42 1kw Orion Brdcst. Group 5/12/82
51 100w Lee Enterprises 5/27/82

KANSAS

Clay Center
19 100w Clay Center Publishing 5/27/82
22 100w Clay Center Publishing 5/27/82

Emporia/Hartford/Olpe
8 10w Rural TV Service, Inc. 5/27/82
9 10w Rural TV Service, Inc. 5/27/82
10 10w Rural TV Service, Inc. 5/27/82
11 10w Rural TV Service, Inc. 5/27/82
12 10w Rural TV Service, Inc. 5/27/82

Iola
14 100w Telecrafter Corp. 6/23/82
55 100w Iola Register Publishing 5/27/82

Salina
44 1000w Harris Enterprises 5/28/82

Seneca
52 1kw Kanza Brdcst. Inc. 5/12/82

KENTUCKY

Albany
9 10w Twin Lakes Communications 5/12/82

Campbellsville
4 10w Taylor County Brdcst. Co. 5/28/82

MAINE

Presque Island/Caribou
14 100w Local Power Television 6/4/82

MARYLAND

Cresaptown
16 100w Derrick Communications 6/23/82

MASSACHUSETTS

Dennis
58 1kw Bogner Brdcst. Equip. 5/27/82
67 1kw Bogner Brdcst. Equip. 5/27/82

MICHIGAN

Hancock
22 1000w Copper Star TV, Inc. 6/23/82

Ironwood
24 1000w Ironwood Range S. Stat. 6/23/82

MINNESOTA

Canby
34 1000w Hometown TV Inc. 5/27/82
47 1000w Hometown TV Inc. 5/27/82

Montevideo
4 10w Hometown TV Inc. 5/27/82
17 1000w Hometown TV Inc. 5/27/82

Morris
12 10w Morris Sun and Tribune 6/23/82
13 10w Hometown TV Inc. 5/27/82
21 1000w Hometown TV Inc. 5/27/82

New Ulm
55 100w Black Coalition for MD 5/27/82

MISSISSIPPI

Beatrice
30 1kw George County Times 6/23/82
38 1kw George County Times 6/23/82
40 1kw George County Times 6/23/82
43 1kw George County Times 6/23/82
51 1kw George County Times 6/23/82
53 1kw George County Times 6/23/82

Biloxi
16 100w Free State Brdcst. 6/4/82
27 100w Free State Brdcst. 6/4/82
35 100w Free State Brdcst. 6/4/82
48 1000w Gulf Publishing Co. 6/4/82

Booneville
53 100w Free State Brdcst. 6/4/82

Corinth
47 100w Free State Brdcst. 6/4/82

MISSOURI

Chillicothe
39 1kw Kanza Brdcst., Inc. 5/12/82

Steelville
56 1000w Steelville Telephone 5/1/82

MONTANA

Drummond
7 10w Black Coalition for MD 5/12/82

Kalispell/Whitefish
35 100w Lawrence P. O'Shaughnessy 5/28/82

Livingston
31 100w Telecrafter Corp. 6/23/82

Miles City
18 100w Telecrafter Corp. 6/23/82

NEBRASKA

Chadron
24 1000w Chadron Newspapers 5/27/82

Falls City
46 1kw Kanza Brdcst., Inc. 5/12/82

NEVADA

Ely
26 1000w Donrey, Inc. 5/12/82

Tonopah
17 100w Black Coalition for MD 5/27/82

NEW JERSEY

Cape May
3 10w Erausquin & Ortiz 6/23/82
11 10w Erausquin & Ortiz 6/23/82
13 10w Erausquin & Ortiz 6/23/82

NEW MEXICO

Alamogordo
61 100w N. Berke & L. Rubin 5/27/82
61 100w SW Radio Enterprises 5/28/82

Albuquerque
64 1000w Quote...Unquote, Inc. 5/17/82

Bayard
47 100w Black Coalition for MD 5/12/82
47 100w BT Brdcst. Comp. 5/12/82

Clayton
55 100w Black Coalition for MD 5/28/82

Clovis
9 10w N. Berke & L. Rubin 5/12/82
9 10w BT Broadcasting Comp. 5/12/82
9 10w Russell Communications 5/12/82
36 1000w N. Berke & L. Rubin 5/27/82
44 1000w N. Berke & L. Rubin 5/27/82
51 100w Black Coalition for MD 5/28/82
51 1000w Response Brdcst. Corp. 5/28/82
51 1000w SW Radio Enterprises 5/28/82

Farmington
9 10w N. Berke & L. Rubin 5/12/82
9 10w BT Broadcasting Co. 5/12/82
9 100w Orion Brdcst. Group 5/12/82
9 10w Russell Communications 5/12/82
47 1000w Christian Brdcst. Comm. 5/27/82
50 1000w N. Berke & L. Rubin 5/27/82
50 1000w Orion Brdcst. Group 5/27/82
50 1000w SW Radio Enterprises 5/28/82

Gallup
34 1000w N. Berke & L. Rubin 5/27/82
42 1000w N. Berke & L. Rubin 5/27/82

Lordsburg
59 100w Black Coalition for MD 5/12/82
61 100w Black Coalition for MD 5/12/82

Raton
56 100w Black Coalition for MD 5/28/82

Ruidoso
30 1kw Ruidoso Video 6/23/82

Santa Rosa
52 100w Black Coalition for MD 5/28/82

Silver City
2 10w BT Broadcasting Comp. 5/12/82
2 10w Russell Communications 5/12/82
8 10w Russell Communications 5/12/82
47 100w N. Berke & L. Rubin 5/12/82
58 100w N. Berke & L. Rubin 5/27/82

Taos
57 100w Black Coalition for MD 5/12/82
57 100w BT Broadcasting Comp. 5/12/82
57 100w El Crepusculo, Inc. 5/12/82

Truth or Consequences
54 100w Black Coalition for MD 5/28/82

Tucumcari
53 100w Black Coalition for MD 5/12/82
53 100w BT Broadcasting Comp. 5/12/82

NEW YORK

Bridgehampton
29 1000w Raymond Wesnofske 5/27/82
39 1000w Raymond Wesnofske 5/27/82
47 100w Raymond Wesnofske 5/27/82

East Hampton
31 1kw East End Brdcst. Corp. 6/23/82
32 100w Windmill Brdcst. Inc. 5/27/82

Manorville/Riverhead
39 1000w NY Institute of Tech. 6/21/82

Park City/Kimball Junction/Snyderville
45 100w Apex TV 5/27/82

Sagaponack
29 100w Black Coalition for MD 5/27/82
32 100w Black Coalition for MD 5/27/82
36 1000w B'nai B'rith Brdcst. 5/27/82
39 100w Black Coalition for MD 5/27/82
62 100w Black Coalition for MD 5/27/82

Southampton
45 1kw John D. Schwartz 6/4/82

NORTH CAROLINA

Brasstown
13 10w Black Coalition for MD 5/12/82

Canton
44 1kw WWIT, Inc. 6/23/82

East Fayetteville
10 100w Geo Starke Comm. 5/10/82

Kinston
59 1000w The Band B Partnership 5/25/82

Manteo
8 10w Rollins Enterprises 5/12/82

Southern Pines
3 10w Cornell's Radio & TV Serv. 6/23/82
7 10w Cornell's Radio & TV Serv. 6/23/82
10 10w Cornell's Radio & TV Serv. 6/23/82
12 10w Cornell's Radio & TV Serv. 6/23/82

NORTH DAKOTA

Edgeley
8 10w Dennis C. Anderson 6/23/82

OHIO

Bryan
19 100w Bryan Publishing Co. 6/23/82

Lima
8 10w Amos Press, Inc. 5/26/82
8 10w Black Coalition for MD 5/12/82
8 100w Orion Brdcst. Group 5/12/82
8 10w Russell Communications 5/12/82

Montpelier
16 100w Bryan Publishing Co. 6/4/82

Nelsonville
43 1kw Nelsonville TV Cable 6/4/82
69 1000w Videocom 6/23/82

OKLAHOMA

Altus
40 100w Black Coalition for MD 5/28/82

Alva
29 100w Black Coalition for MD 5/28/82

Clinton
23 100w Black Coalition for MD 5/28/82

Guymon
50 100w Black Coalition for MD 5/12/82

Hobart
27 100w Black Coalition for MD 5/28/82

Holdenville
15 100w OPEC 6/23/82

Hugo
54 100w Black Coalition for MD 5/28/82

Idabel
44 100w Black Coalition for MD 5/12/82

Madill
50 100w Black Coalition for MD 5/12/82

Poncas City
12 10w Russell Communications 5/28/82

Poteau
2 10w Rural TV Service 5/27/82
3 10w Rural TV Service 5/27/82
6 10w Rural TV Service 5/27/82
7 10w Rural TV Service 5/27/82
8 10w Rural TV Service 5/27/82
9 10w Rural TV Service 5/27/82
10 10w Rural TV Service 5/27/82
11 10w Rural TV Service 5/27/82
12 10w Rural TV Service 5/27/82
13 10w Rural TV Service 5/27/82

Weatherford
24 1kw KWEY, Inc. 6/4/82

Woodward
28 100w Black Coalition for MD 5/12/82
59 100w OKTV Systems 5/28/82
67 100w OKTV Systems 5/28/82

OREGON

Baker
20 100w Telecrafter Corp. 6/23/82

Bend
8 10w Amer. Trans. Dev. Corp. 5/27/82

Cottage Grove
49 100w South Lane TV, Inc. 6/23/82

The Dalles
26 100w Telecrafter Corp. 6/23/82

La Grande
33 100w Telecrafter Corp. 6/23/82

Monument
10 10w Black Coalition for MD 5/12/82
12 10w Black Coalition for MD 5/12/82

Prairie City
10 10w Black Coalition for MD 5/12/82

Prineville
39 100w Telecrafter Corp. 6/23/82

PENNSYLVANIA

Bellefonte
29 1kw Eastern Brdcst. Corp. 5/12/82

Chambersburg
7 1000w FGBF1 5/28/82

State College
29 1kw B'nai B'rith Brdcst. 5/12/82

Williamsport
32 100w Black Coalition for MD 5/27/82

RHODE ISLAND

Bradford
32 100w Barrett, Dunn, & Ray 6/23/82

SOUTH DAKOTA

Philip
69 100w Black Coalition for MD 5/12/82

TENNESSEE

Jackson
2 10w Prot. Episcopal Church 6/23/82
6 10w WTJS, Inc. 5/28/82
38 100w Black Coalition For MD 5/28/82
38 1000w Orion Brdcst. Group 5/27/82
38 1kw SW Radio Enterprises 5/27/82

Selmer
6 10w WDTM, Inc. 5/27/82

TEXAS

Bryan
7 10w Carlos Ortiz 6/23/82
9 10w Carlos Ortiz 6/23/82
11 10w Carlos Ortiz 6/23/82
13 10w Carlos Ortiz 6/23/82
28 100w Black Coalition for MD 5/12/82

Buffalo
12 -- Amer. Translator Dev. Co. 5/27/82

Carrizo Springs
2 10w Carlos Ortiz 5/19/82
3 10w Carlos Ortiz 5/19/82
4 10w Carlos Ortiz 5/19/82
5 10w Carlos Ortiz 5/19/82
6 10w Carlos Ortiz 5/19/82
7 10w Carlos Ortiz 5/19/82
8 10w Carlos Ortiz 5/18/82
9 10w Carlos Ortiz 5/18/82
10 10w Carlos Ortiz 5/18/82
11 10w Carlos Ortiz 5/18/82
12 10w Carlos Ortiz 5/18/82
13 10w Carlos Ortiz 5/18/82
55 100w Black Coalition for MD 5/27/82

Crockett
5 10w Amer. Translator Dev. Co. 5/27/82

Del Rio
2 10w Del Rio Television Serv. 5/18/82
3 10w Del Rio Television Serv. 5/18/82
6 10w Del Rio Television Serv. 5/18/82
8 10w Del Rio Television Serv. 5/18/82
9 10w Del Rio Television Serv. 5/18/82
10 10w Russell Communications 5/28/82
10 10w Del Rio Television Serv. 5/19/82
11 10w Del Rio Television Serv. 5/19/82
12 10w Del Rio Television Serv. 5/19/82
13 10w Del Rio Television Serv. 5/19/82
55 100w SW Radio Enterprises 5/19/82

Dennison
9 10w Russell Communications 5/28/82

Fairfield
41 1000 w Navarro College 6/23/82

Jacksonville
4 10w Betsy Jane Shivery 6/4/82
5 10w Black Coalition for MD 5/27/82

Lufkin
3 10w Carlos Ortiz 5/19/82
4 10w Carlos Ortiz 5/19/82
6 10w Carlos Ortiz 5/19/82
7 10w Carlos Ortiz 5/19/82
8 10w Carlos Ortiz 5/18/82
10 10w Carlos Ortiz 5/18/82
11 10w Carlos Ortiz 5/18/82
12 10w Carlos Ortiz 5/18/82
13 10w Carlos Ortiz 5/18/82

Nacogdoches
3 10w Carlos Ortiz 5/19/82
4 10w Carlos Ortiz 5/19/82
6 10w Carlos Ortiz 5/19/82
7 10w Carlos Ortiz 5/19/82
11 10w Texan Brdcst. Co. 6/23/82
13 10w Texan Brdcst. Co. 6/23/82

Palestine
2 10w Black Coalition for MD 5/12/82
4 10w Amer. Translator Dev. 5/27/82

Rio Grande/Roma
9 10w Carlos Ortiz 5/28/82
10 10w Carlos Ortiz 5/28/82
11 10w Carlos Ortiz 5/28/82
12 10w Carlos Ortiz 5/28/82
13 10w Carlos Ortiz 5/28/82

Rio Grande City
55 100w Black Coalition for MD 5/27/82

Snyder
7 10w BT Broadcasting Co. 5/12/82

Trove
6 10w Jeffrey L. Ward 6/4/82

Tyler
2 10w Carlos Ortiz 5/10/82
3 10w Carlos Ortiz 5/18/82
4 10w International Brdcst. Net. 5/27/82
4 10w Carlos Ortiz 5/18/82
4 10w Russell Communications 5/28/82
5 10w Carlos Ortiz 5/18/82
6 10w Carlos Ortiz 5/18/82
8 10w Carlos Ortiz 5/18/82
9 10w Carlos Ortiz 5/19/82
10 10w Carlos Ortiz 5/19/82
11 10w Carlos Ortiz 5/19/82
12 10w Carlos Ortiz 5/19/82
13 10w Carlos Ortiz 5/19/82
45 100w Carter Broadcasting 5/12/82
51 100w Black Coalition for MD 5/27/82
54 100w Black Coalition for MD 5/12/82
57 1000w SW Radio Enterprises 5/28/82
67 1kw Orion Brdcst. Group 5/10/82

Uvalde
2 10w Amer. Translator Dev. 5/27/82

Victoria
3 10w Condado de Victoria TV 6/23/82
5 10w Condado de Victoria TV 6/23/82
9 10w Russell Communications 5/28/82
11 10w Condado de Victoria TV 6/23/82
13 10w Condado de Victoria TV 6/23/82

Winnsboro
16 100w Echo Publishing Co. 6/23/82

UTAH

Cedar City/Cedar Canyon
10 10w Russell Communications 5/12/82
22 100w Russell Communications 5/28/82

St. George
14 100w Russell Communications 5/28/82

VIRGINIA

Charlotte Amalie
43 1kw SW Radio Enterprises 5/27/82

Harrisonburg
49 100w Shenandoah Valley LPTV 6/23/82

Onancock
46 1000w Center for Excellence 5/28/82

Winchester
21 1kw Shenandoah Valley LPTV 6/23/82
48 100w SW Radio Enterprises 5/27/82

WASHINGTON

Aberdeen
39 100w Donrey, Inc. 5/12/82
55 100w Response Brdcst. Corp. 5/28/82

Bellingham
59 100w SW Radio Enterprises 5/27/82

Eastsound/Ferndale
44 100w Response Brdcst. Corp. 5/28/82

Ephrata
15 100w Telecrafter Corp. 6/23/82

Moses Lake
36 100w Telecrafter Corp. 6/23/82

Wenatchee
53 100w Telecrafter Corp. 6/23/82

WISCONSIN

Land O Lakes
16 1000w Land of Lakes S. Stat. 6/23/82

WYOMING

Cheyenne
33 100w Telecrafter Corp. 6/23/82
44 1000w Orion Brdcst. Group 5/27/82
44 1000w SW Radio Enterprises 5/28/82

Ethete
7 10w Shoshone & Arapahoe Bus. 6/23/82
9 10w Shoshone & Arapahoe Bus. 6/23/82

Laramie
21 100w Telecrafter Corp. 6/23/82

Rawlins
7 10w Russell Communications 5/28/82

Riverton
17 100w Telecrafter Corp. 6/23/82

Sheridan
16 1000w SW Radio Enterprises 5/28/82
21 100w Telecrafter Corp. 6/23/82

NEW LPTV TRANSMITTER MANUFACTURER

Satcom, the TVRO manufacturer, is developing and plans to be ready to deliver by late 1982, low cost, low power VHF and UHF transmitters.

UHF units are currently under test for submission to the FCC labs for type acceptance.

Satcom hopes to price the new transmitters at 10 to 15% under present similar transmission equipment currently available. For more information, contact: Satcom, 1756 Junction Avenue, San Jose, California, 95112.

The make of transmission equipment can be changed without notifying the FCC as long as they are type accepted. Expect other manufacturers to also announce new LPTV transmission products soon.

ICTV

ICTV member cost fees on application help are now like this (we farm out much of this for you):

Site distance to top markets, $10
Only channel search, $100
Fast processing engineering exhibit on old application, $250 to $400
Prepare new application with easy channel availability, $250
Prepare new application, tight spacing under the new rules $350
Prepare new application including fast processing engineering exhibit, $350 to $500

ICTV

Membership Information

Independent Community Television Alliance

- ☐ Local Power Hot Line - 50 hours a week.
- ☐ Subscription - Monthly Lo Power Magazine
- ☐ Co-Op Group Purchases of Equipment
- ☐ Expedited Washington Research Information
- ☐ Collective Lobbying for the Little Guy in LPTV.
- ☐ Washington Follow-up on Applications
- ☐ Verbal Phone Access to Commission Data Base - 6 Days a Week
- ☐ Use of Instructional "How To" Video Tapes (1 week) Members pay only for shipping, handling, record keeping.

INSTRUCTIONAL "HOW TO" VIDEO TAPES AVAILABLE
(Use for one week; members pay only for shipping, handling, record-keeping.)

• Techniques of Using One Camera	1 hour
• Setting Up a Studio	30 minutes
• Television Tape Production	45 minutes
• Lighting for Television	25 minutes
• Multiple Camera Techniques	30 minutes
• Shooting Video "Basics"	60 minutes
• How to Shoot a Sports Event	20 minutes
• How to Broadcast a Local Wedding	20 minutes
• How to Broadcast a Church Service	20 minutes
• How to Set Up a Video Tape Business	20 minutes
• Shooting Local Commercials for Cable or LPTV	20 minutes
• LPTV Crash Course	12 hours
• LPTV Crash Course "B"	10 hours
• Subscription TV	17 minutes
• World's Smallest Full Service TV Station	35 minutes
• The New *Mavica* "Still Camera"	17 Minutes

Tapes Under Development:
- Investing in Low Power TV

BOOKS AND MANUALS -- LOANED FOR TWO WEEKS, FREE TO MEMBERS

- ★ How to File Under the New LPTV Rules
- ★ How to Run a Successful Low Power Television Station
- ★ Printout of Applications and Cutoffs to Date
- ★ Color TV Studio Design and Operation
- ★ Videotape Production and Communication Techniques
- ★ Designing and Maintaining a Small Television Studio
- ★ Television Production Handbook
- ★ Video User's Handbook
- ★ TV Engineering Handbook (very large and heavy book)

Members free one week use of each tape

•••WE DO A COMPLETE RURAL AREA VHF LPTV FCC APPLICATION FOR YOU!
•Members Price: $250 Non-Members: $450

FREE APPLICATION ASSISTANCE HOTLINE FOR MEMBERS - 6 DAYS A WEEK

ICTV

Independent Community Television Alliance

Below is my application for membership in ICTV. I have deducted $_____ for which I have already paid Lo-Power Publishing for publications and enclose a check for $_____ the two totalling $250.00 for my one-year membership.

7432 E. Diamond. Scottsdale. AZ 85257

Membership Application

Individual(s) to contact: _____ Name _____ Position

_____ _____

Company _____

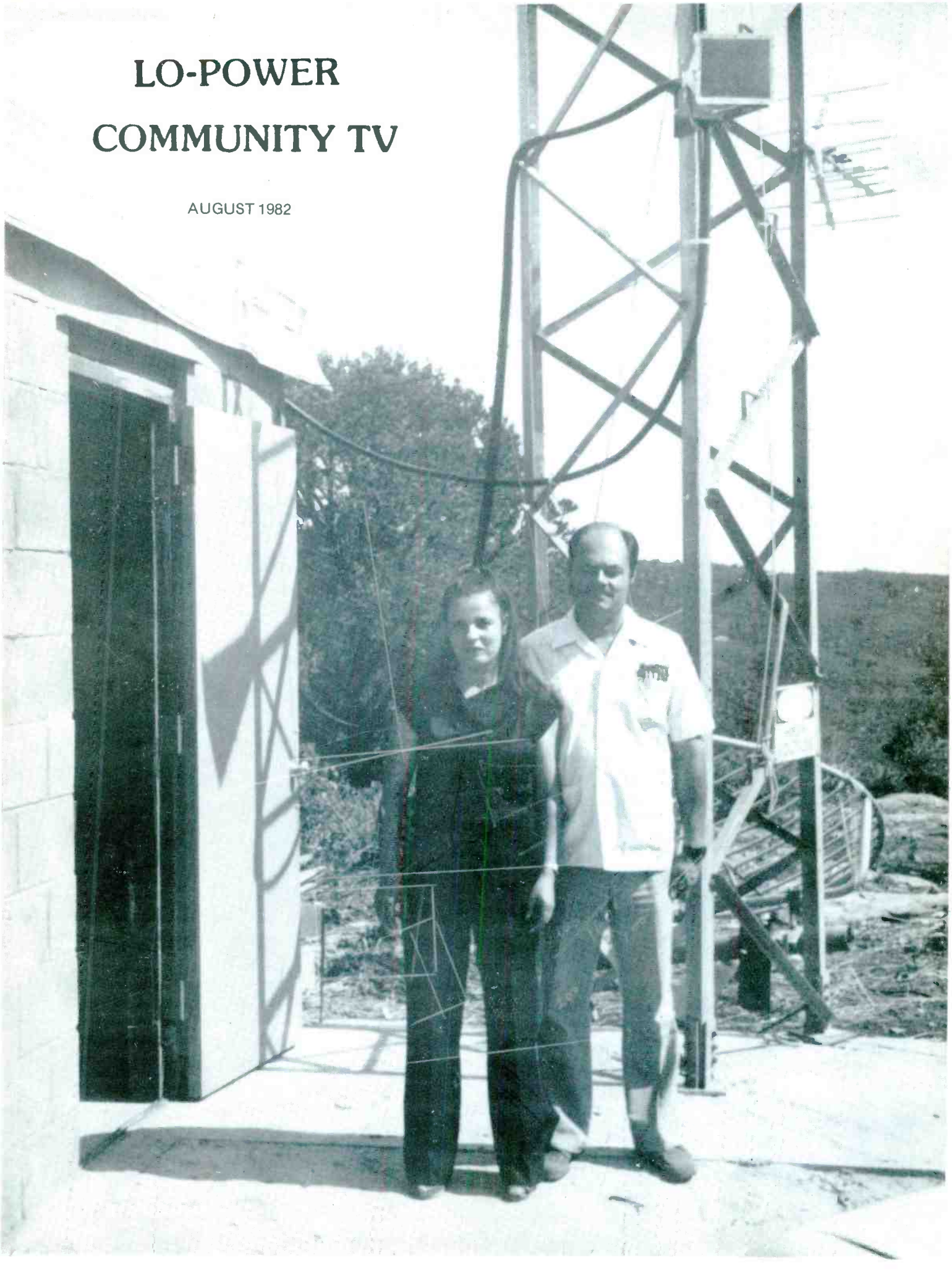
Address _____

City _____ State _____ Zip Code _____

Phone ( )

LO-POWER COMMUNITY TV

AUGUST 1982



WHATS HAPPENING....????

In this issue, we have included three forms that may be helpful in filing or amending your application. Photocopy them directly from the magazine. The new notice enclosed is important to those of you considering amending. If you will be processed in tier one by hand, you may want to do the extra engineering (forget that for tiers two and three) for expedited processing. In doing it, you will discover for sure whether your application meets all criteria under the new rules. Our new manual on doing your own engineering for expedited processing is now available by first class mail. It was written for us by a professional engineer, and those using it so far seem to be able to figure out the requirements, and do it without too much trouble. $20 first class C.O.D. phone orders rushed right out. $10 to ICTV members. Beats paying $1,000 per application. Other than the fast processing requirement, no amending should be necessary unless there was something wrong with your application in the first place.

Most are doing the amending work now but not filing it until the last moment so competitors for the same channel can't copy it.

The newly licensed stations are starting to come on the air.

Alamogordo, New Mexico, reported on here, and we plan a story on a new VHF LPTV operating STV in the next issue.

Do not forget, we have crash courses coming up in late September in Phoenix, and late October in Las Vegas. The Phoenix course is in connection with a newspaper convention, and the October 30-31 course in Las Vegas will proceed the translator convention on November 1-3. Get your reservations in early. Most of the manufacturers will be in town for that, so you can visit manufacturers exhibits and do both in one trip.

The Commission will drive a publisher crazy. First, we produced a map at great time expenditure with 55 mile circles around the exact center of the 212 top markets. Then they came out with a ruling that said that it meant more than 55 miles, which would have to be 55.5 miles to be 'more' than 55 miles, and that in FCC language had to be rounded out to even miles, that meant 56 miles. Now why didn't they just say 56 miles in the first place? So we start over and produce a map with 56 mile circles and now they say informally that 55.5 mile circles will be okay after all.

We have held some of our publications press runs up for long periods of time trying to get clarification and final interpretation, but apparently with the FCC, nothing is final. It makes it difficult to publish anything timely in quantity for future use and sale, when it becomes obsolete before it comes off the press.

Lo-Power Community Television Magazine is published twelve times per year. Sample copies are $5, subscription $50 per year. Intended to supply needed information on Low Power Television at reasonable cost. Copyright 1982 © Lo-Power Community TV.

Postmaster, send address changes to **7432 E. Diamond, Scottsdale, AZ 85257.** Telephone, **(602) 945-6746**. Application to mail at second class rates applied for at the main post office at Scottsdale, AZ 85257. USPS 601-370 Issue #16

About Magazine Delivery:

To mail the magazine first class costs us over $200 more per issue than second class. We already often spend more producing the magazine than we take in and have mailed many of our issues first class. The $200 extra postage is better spent producing the magazine and staying in business than paying $200 additional first class postage when there is little or no rush news.

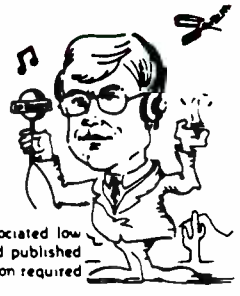
However, the post office is giving you and us terribly slow magazine delivery service and only you can do something about it. We are putting in each issue in the editorial our mailing date of each issue. If you are getting it more than 10 days to two weeks after the mailing date, then you should help get some action from the post office by filing a written complaint.

You may obtain a 'Consumer Service Card' (Postal form 4314-C) from your local post office. Fill it out, noting the mailing date printed in the editorial, plus the date of delivery, and mail one copy directly to the Postmaster General in Washington, D.C. inside a separate envelope. The address label below will facilitate your complaint to the Postmaster General:

Mr. William Bolger
The Postmaster General
U.S. Postal Department
475 L'Enfant Plaza
Washington, D.C. 20260

AUG 4 1982

$5.00 sample copy
$50.00 per year



Lo-Power Community Television magazine and associated low power manual and other publications are edited and published by Harlan L. Jacobsen to bring together the information required to make the concept of low power television work

NEXT ISSUE.....
ANOTHER STORY WITH PHOTOS OF ANOTHER LPTV STATION ON THE AIR.

About our cover . . .
Pete and Sarah Warren
Channel 63,
Alamagordo, New Mexico

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

releases and texts 202/632-0002.

July 23, 1982

Further Guidance for Applicants Amending Low Power Television and Television Translator Applications

In response to comments and inquiries by applicants and their consultants, this notice provides clarifications, corrections and additional information regarding the Commission's June 23, 1982 Public Notice, entitled "FCC Announces 90-day Application Amendment Period for Low Power Television and Television Translator Applications," to aid applicants in amending their applications.

Using information filed by applicants, the Commission has mailed copies of the Public Notice to virtually all low power television and television translator applicants. Since a number of mailings have been returned as undeliverable at the addresses contained in Commission files, all applicants failing to receive the Public Notice by mail or other means should contact the Consumer Assistance and Information Division, Washington, D.C. 20554, telephone (202) 632-7260, at once to obtain a copy in order to comply with the terms of the Public Notice and the new low power rules within the 90-day amendment period.

In accordance with the instructions for FCC Form 346 for filing low power television and television translator applications and amendments, three (3) copies of all amendments and exhibits, including the "Application Amendment Guide" must be submitted.

Amendments involving frequency (output channel) assignment changes will not be afforded waiver of the "major change" provisions of Section 73.3572 of the Commission's Rules, under the terms specified in the Public Notice for certain other amendments.

Applicants who have specified power in excess of 10 watts VHF now seeking to amend to reduce maximum power to 10 watts or less VHF to comply with the new rules need not submit a showing that the application involves engineering conflict with an existing broadcast station.

To aid manual application processing, the optional showing submitted by applicants pursuant to Paragraph 6 of the "Application Amendment Guide" must conform fully with the study specifications contained in that paragraph. However, not all applicants have to submit the optional showing during the 90-day amendment period to aid in faster processing. Only Tier I applications that have appeared on a cut-off list, and if amended, would not be subject to the "major change" provisions of Section 73.3572 due to the nature of the amendment, should submit the optional showing by the end of the 90-day amendment period. Tier I applications that have not been cut-off may submit the optional study at any time on or before the application cut-off date. Since the optional showing will only aid in manual processing, and automated processing is scheduled to commence by mid-1983, Tier II and Tier III applicants should not prepare the optional showing.

The following reference coordinates for cities in the top-212 television markets, attached to the Public Notice, should be substituted for incorrect coordinates:

MKT. NO.	CITY	STATE	LATITUDE	LONGITUDE
72	Johnstown	PA	40.1936	78.5520
132	Bluefield	WV	37.1611	81.1321

For further information, contact Clay C. Pendarvis, (legal) or Paul Marrangoni (engineering), (202) 632-3894.

PROTECT YOUR LOW POWER TV APPLICATIONS

NEW DEMANDS

In its Public Notice the FCC gave 90 days to amend all engineering to conform to the final LPTV rules. After that any change of:

a) antenna pattern or transmission line
b) antenna heigth
c) antenna location exceeding 200 meters
d) operating power
e) or community to be served

will be considered a major change.

A major change forces an applicant back to the beginning of the processing line and through a new cut-off list.

These new rules make it imperative that the serious LPTV applicant have all engineering modifications prepared with the utmost care, prior to September 21, 1982.

CHECK THE SERVICE YOU USE

The FCC Rules clearly State
" . . . field strength is calculated from the proposed effective radiated power (ERP) and the antenna heigth above average terrain (HAAT) in pertinent directions.
(Emphasis added)

Many low power consulting firms do not use complete terrain data when calculating protected and interfering radiation patterns.

The Commission demands that the heigth above average terrain for each individual radial be calculated for speedy processing.

Amendment computations which ignore HAAT and assume flat terrain are useless.

The FCC states in its new amendment guide, "NOTE: THE EXPEDITIOUS PROCESSING OF YOUR APPLICATION DEPENDS ON THE ACCURACY OF THIS INFORMATION."

GAIN COMPETITIVE ADVANTAGE

By fully amending your LPTV application, and providing carefully prepared engineering exhibits, you may enhance your competitive position. Many of the applications filed under the preliminary rules will violate the new more exacting standards. Many of your opponents will penny wise and pound foolish. They'll not take the time to carefully amend.

ATD's computer takes the doubt out of processing. If there are minor conflicts with the new rules, your antenna pattern or heigth can be adjusted, transmitter power amended, or even a slightly different antenna location found. Your opponents who do not correctly amend their applications may be thrown out of the processing line, increasing your chances for a construction permit greatly!

COMPUTERIZATION: Secret to Low Cost Amending

ATD uses one of the nation's most powerful computers to keep the costs far below what others charge.

Advantages to you:

- Computer Accuracy
- FCC Acceptability
- Clearly Prepared Exhibits
- Low Cost

ATD ENGINEERING

Call Toll Free
1-800-431-1953 extension 816
In New York 1-800-942-1935 extension 816
or 303/444-0011

When you are considering a certain town for a LPTV site, take your camera to the tower site or sites you are considering and take a panoramic picture. The above photo is four overlapped shots in a panoramic view of Lake Havasu City, Arizona. These shots are valuable to an engineer in determining the antenna pattern. It would be helpful if we had marked West on the above photos.

The next photo strip is four shots of Farmington, New Mexico. Note that I shot one a little high, but that's okay. You just overlap them and take a ruler and a razor blade to make a straight edge top and bottom. To shoot these, start at the right extreme end of the population area you want to cover. Notice some hill, pole or landmark that barely makes it in the viewfinder on the left side. Rotate to the left (hand held is okay) and barely include that landmark again only in the extreme right of the viewfinder. Keep doing this all the way around if there is population in all directions. Make a note of some landmark that is directly north, west, etc. so you can mark it when you get the photos back. The photos here are color and you can see all the houses. We made them small but you can visualize how to overlap the photos.

You will find this a valuable help to your engineer or to yourself when it comes time to determine your antenna pattern. It may take three photos or as many as twelve if you need to go all the way around, allowing for overlaps.

AP Laserphoto

Model shows new camera

Newest Sony color camera uses no film

TOKYO (AP) — The Sony Corp. unveiled a color camera today that uses magnetic video disks instead of film.

The camera looks like a conventional one but produces electronic signals on a tiny magnetic disk that can then be shown on a television screen. They will be able to be made into color photographs when Sony completes work on a printer that is still being developed.

The new system was demonstrated to the foreign press in Tokyo by Akio Morita, Sony's chairman and chief executive.

Morita aimed the novel camera at a model. In a short time, he announced that he had taken 50 pictures, which were promptly shown on two large color television screens.

The camera, which Sony calls "Mavica" for magnetic video camera, works on electromagnetic principles of video. After an image comes through the lens, it is converted into electronic signals by a solid-state imager Sony calls a CCD, or charge-coupled device. The signals are then recorded on a magnetic disk called the "Mavipak" that weighs slightly more than a third of an ounce.

Each magnetic disk can store up to 50 color pictures. The disks can be removed from the camera at any time and re-inserted later for further picture-taking without danger of recording over previous images, Morita said. Sony says recorded material can be erased from the disk and the disk re-used.

Images recorded on the disks can be displayed instantly on a home TV set, but this requires a specially designed playback unit. Through another specially designed adaptor, the camera can be used to take moving pictures when hooked to Sony's Betamax videotape recorder.

Morita said the camera will reach the consumer market in 18 to 24 months. It will sell for about $650 in Japan, he said.

The reusable magnetic disks will sell for about $2.60 each, and the viewing apparatus needed to show the image on a televison screen would go for $215, he said.

New camera a snapshot of things to come

FOR LPTV USE:
SAVES OWNING A SLIDE PROJECTOR
SAVES JAMMED OR BENT SLIDES
SAVES FILM COSTS AND MOUNTING
SAVES OWNING COSTLY MULTIPLEXER
SAVES CARRYING TWO CAMERAS

Sony's new camera can be the greatest technological development yet for LPTV stations, particularly the small town station operator.

The camera, making the production of "still slides" instantaneous and cheap, also can be used as a regular tv camera, all in a 1.75 lb., $650 package that even includes a 4 to 1 zoom lens. This camera is almost the size of the standard 35 mm SLR camera, but instead of using expensive film that requires developing and mounting, this uses a reusable disc for stills and connects to a standard VCR for regular full motion television.

The Mavica name comes from Magnetic Video Camera. Kodak claims they have been working on similar electronic cameras, but anaylsts state Kodak has been in no hurry to introduce them because they were making so much money selling film.

The still camera mode will be terrific for shooting "slides" for LPTV broadcast use, particularly product or "classified commercials." The playback unit for tv is set at $200. Price on the 50 shot disc is estimated at $2.65. You will be able to show any of the 50 in any sequence and reuse the disc again and again by erasing. The resolution (sharpness) on stills exceeds many standard tv cameras.

For LPTV use the discs can be mailed, dubbed onto VCR' tape or transmitted over ordinary telephone lines using a modem. Two minutes per picture are required.

We plan to show a video tape of this new camera demonstrated in use at the crsh course shown will be the camera used for still and the 50 exposure magnetic disc. The receiver converter will be shown as well as transmission of "stills" by telephone. Use of the Mavica as a full motion camera will also be shown.

We have said before, do not worry or concern yourself about studio equipment. Developments are coming so fast that by the time you get a license and your transmitter installed, the studio developments will be revolutionized even further. Anything you consider or oder now in studio equipment will be obsolete by the time you actually need it.

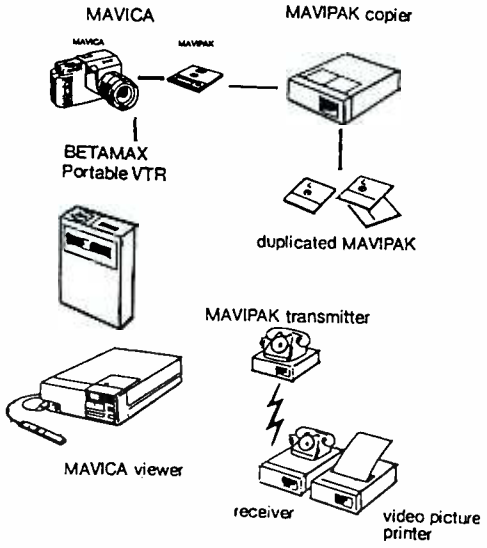
Sony expects to be fully marketing this camera worldwide within 8 months. Contact Sony Products Co., 9 W. 57th St., New York, NY 10019. 212-371-5800.

MAVICA IDEAL FOR LPTV

Hold off buying ----

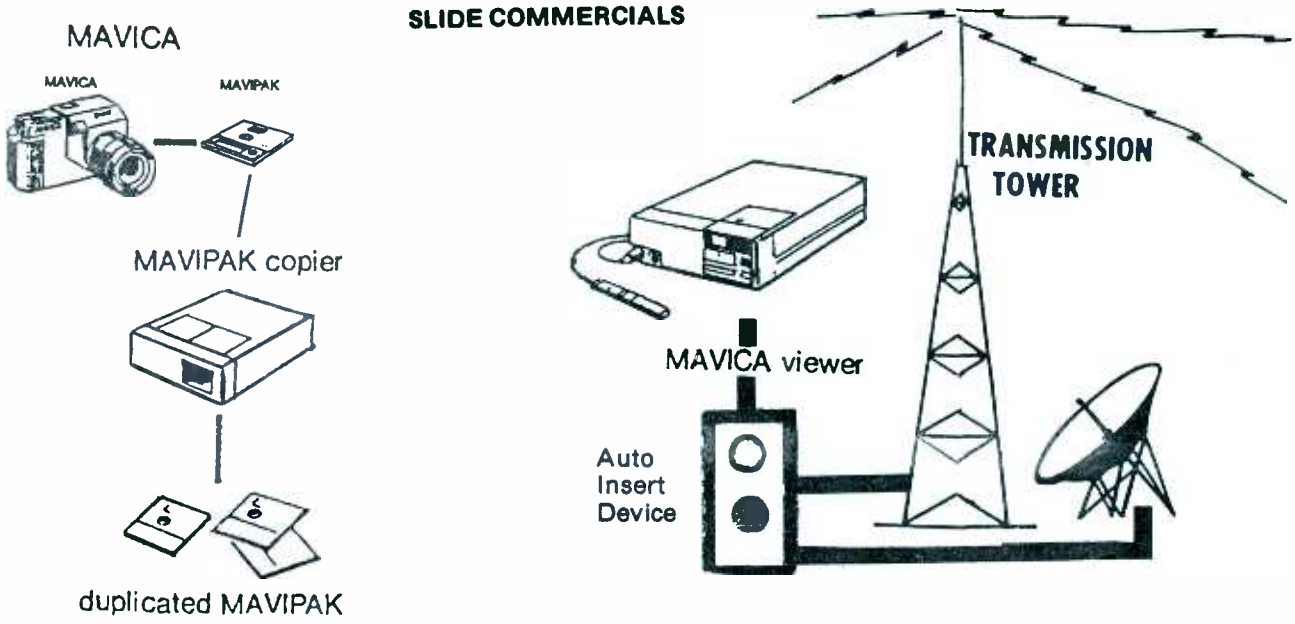
Slide projectors
Dark room -- slide production equipment
Multiplexer
Multiplexer TV camera
Slide Carousels
ENG equipment
Standard slide camera

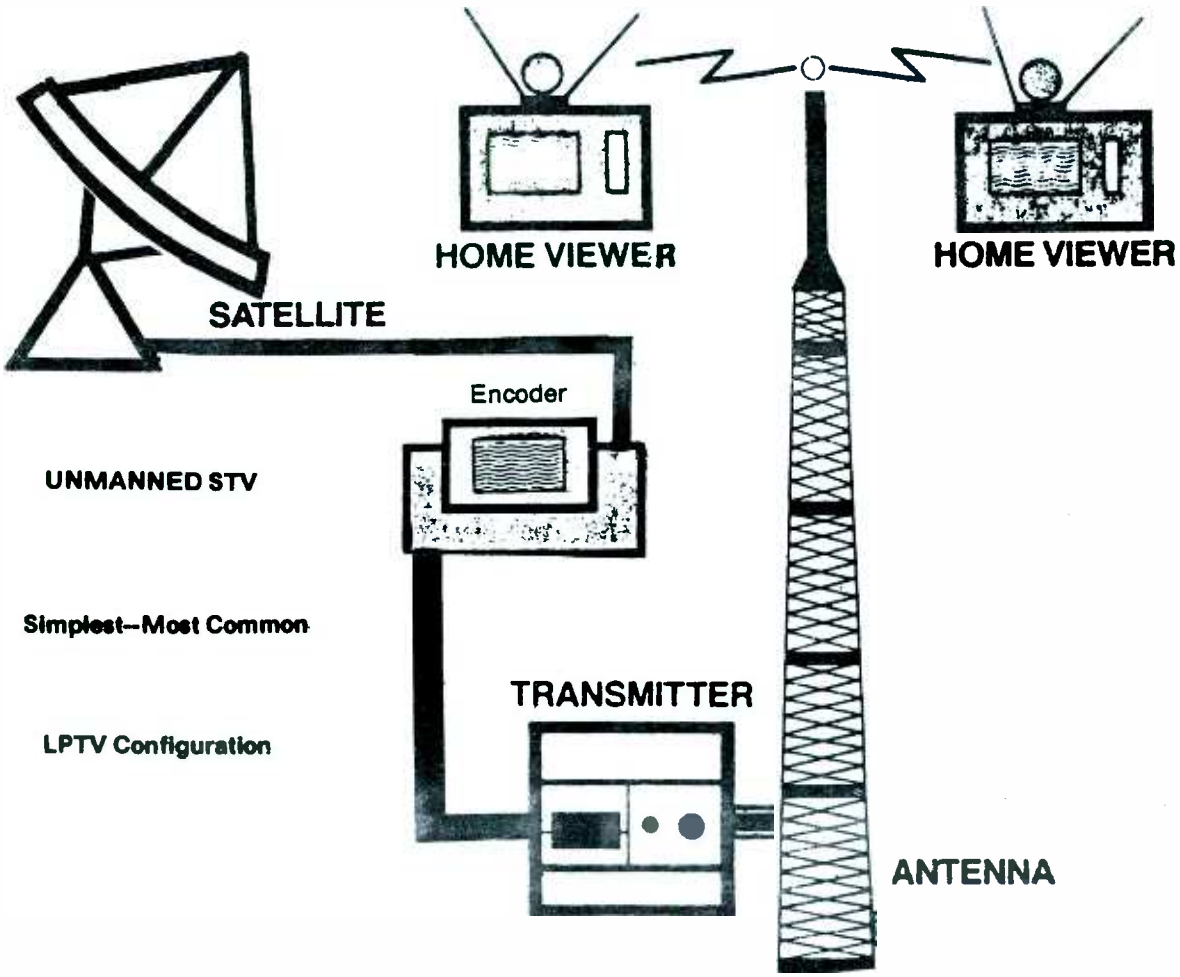
You will not need any of the above. In early 1983, they will all be obsolete.



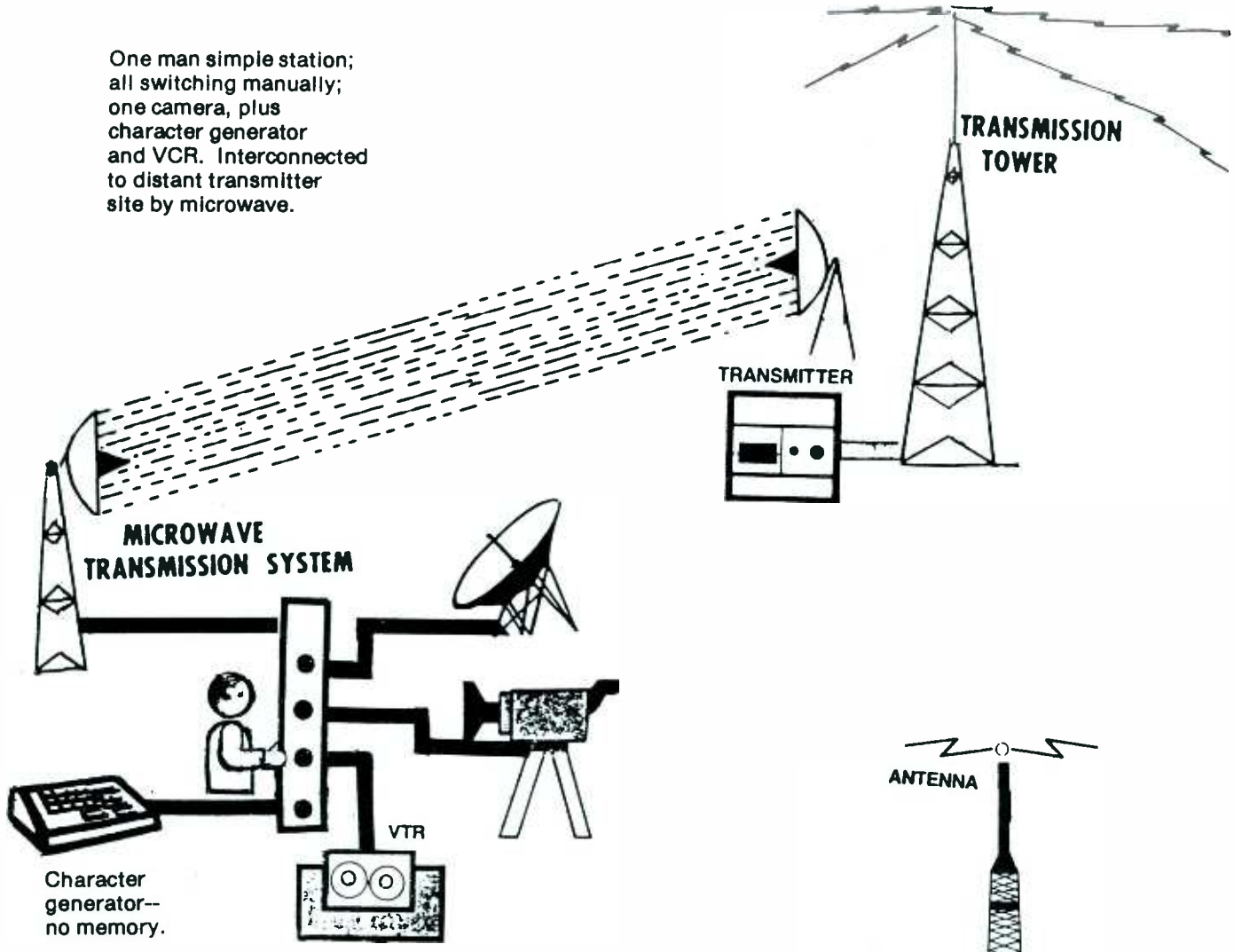
The Mavica slide viewer acts as a 'TV Camera' and reproduces the slide with standard video. This unit, along with a standard studio or ENG camera will work ideally together. Go to a slide while you get a different shot lined up with the single standard camera. The telephone device will allow a reporter or ad salesman to send a slide into the studio by telephone in two minutes at one time which can be printed out hard copy at the studio or put on another Mavipak disk. For on the air reproduction, ideal for news, ads, station breaks, and automated commercial insertion using an audio cassette and Mavica slides. Part of this and the preceding page appeared in a last year's magazine, but we believe everyone should know about it, especially new readers. The entire setup will sell with camera and playback unit for under $1,300 and can also be used as a full motion camera with a standard TV recorder. This is revolutionary. ICTV members, ask for a VHS tape on this unit.

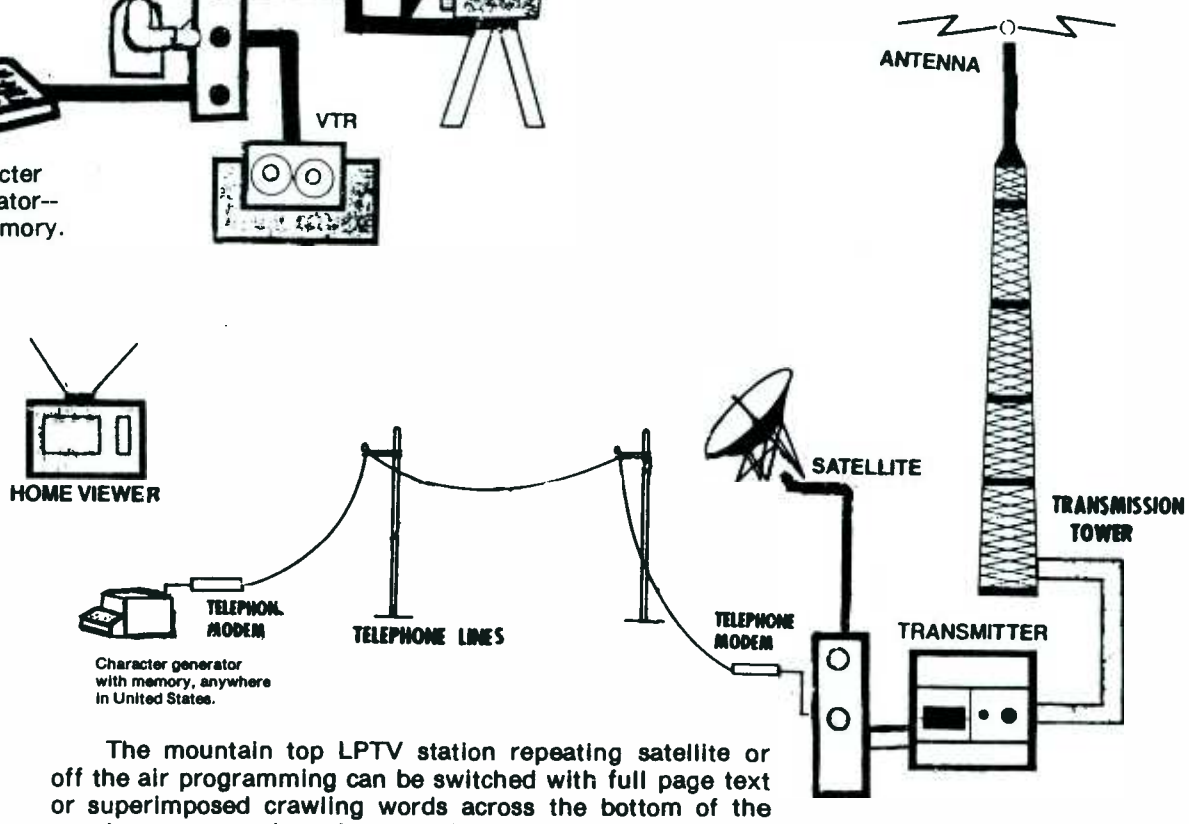
INSERTING MAVICA STILLS, ELECTRONIC SLIDE COMMERCIALS





One man simple station; all switching manually; one camera, plus character generator and VCR. Interconnected to distant transmitter site by microwave.

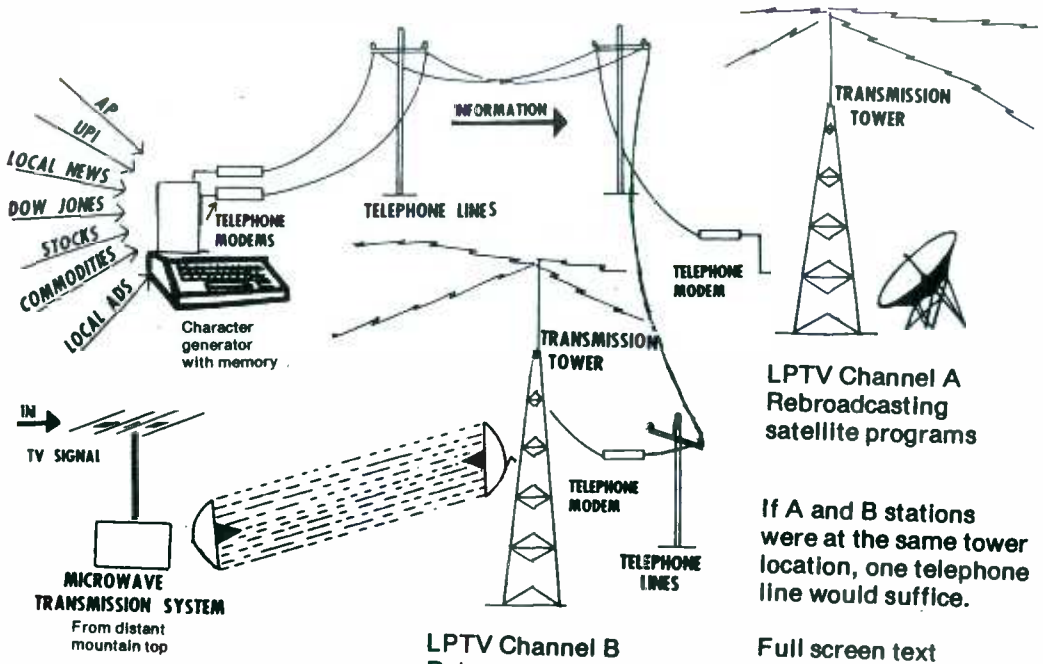




The mountain top LPTV station repeating satellite or off the air programming can be switched with full page text or superimposed crawling words across the bottom of the regular programming picture. Audio announcements can be carried on the same telephone line and replace the incoming audio programming.

UNMANNED STATION

Text inserted thru telephone line interconnect

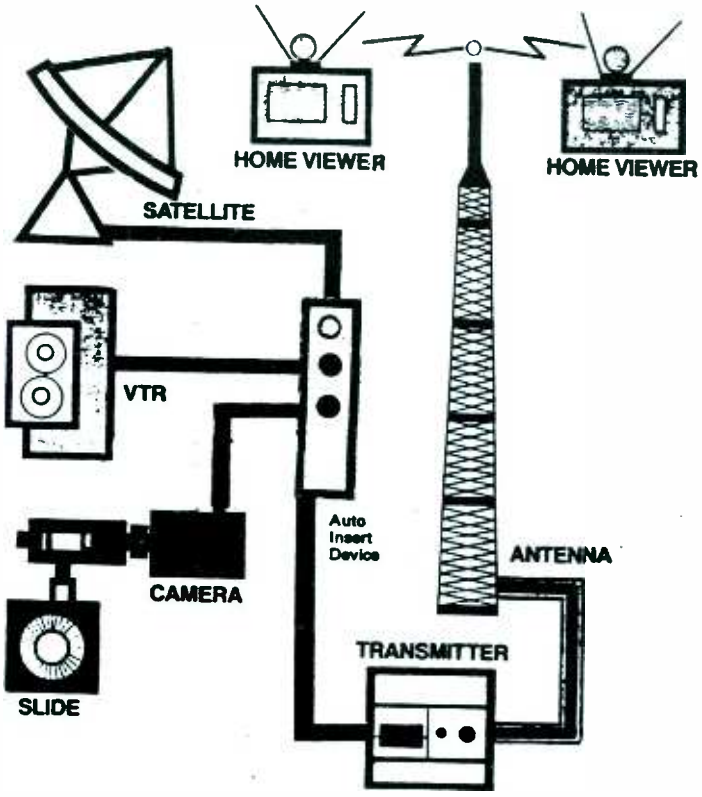


LPTV Channel A
Rebroadcasting
satellite programs

If A and B stations were at the same tower location, one telephone line would suffice.

LPTV Channel B
Rebroadcasting distant
off the air station

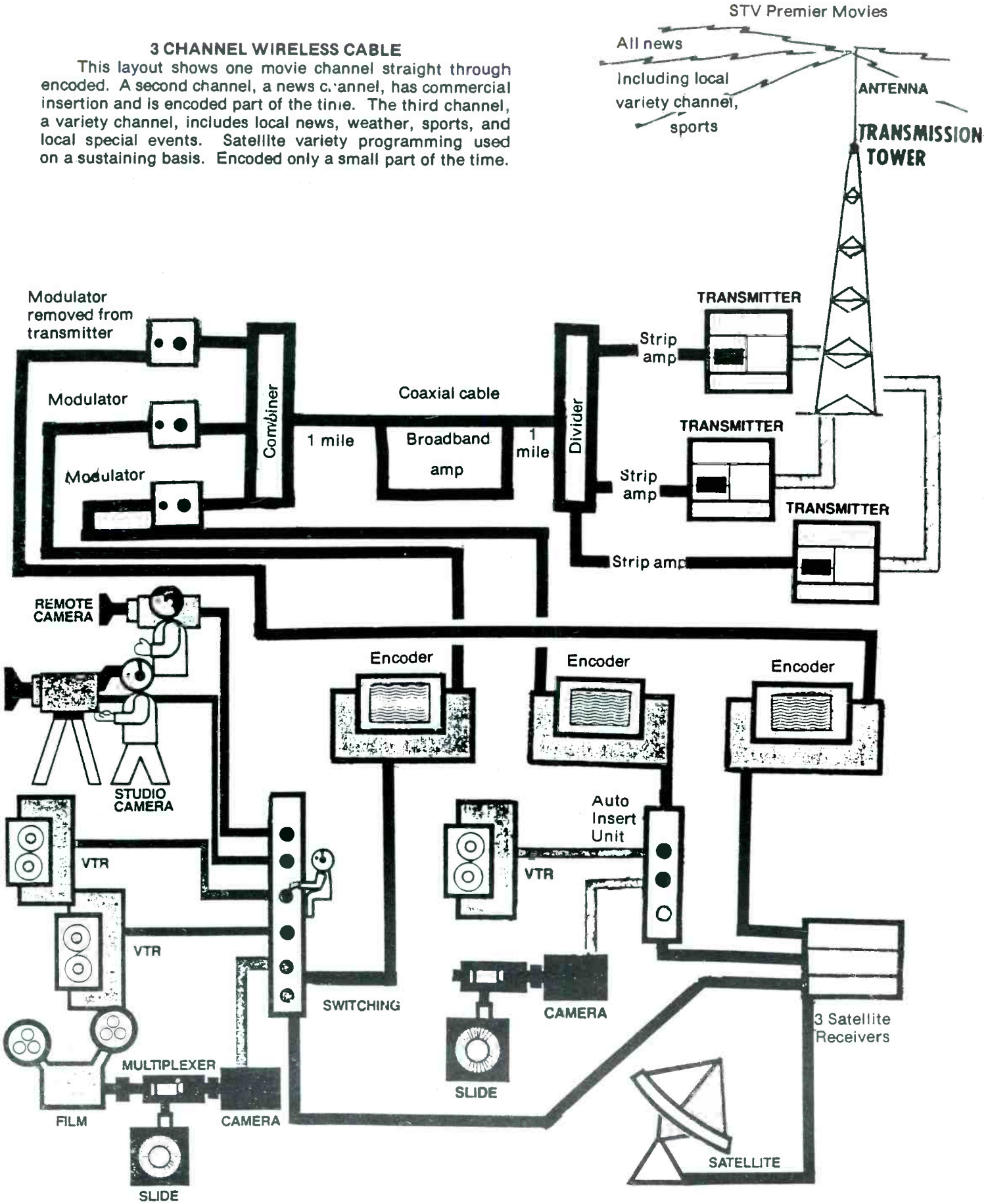
Full screen text replacing picture or crawl across bottom added by telephone line from anywhere in the United States.

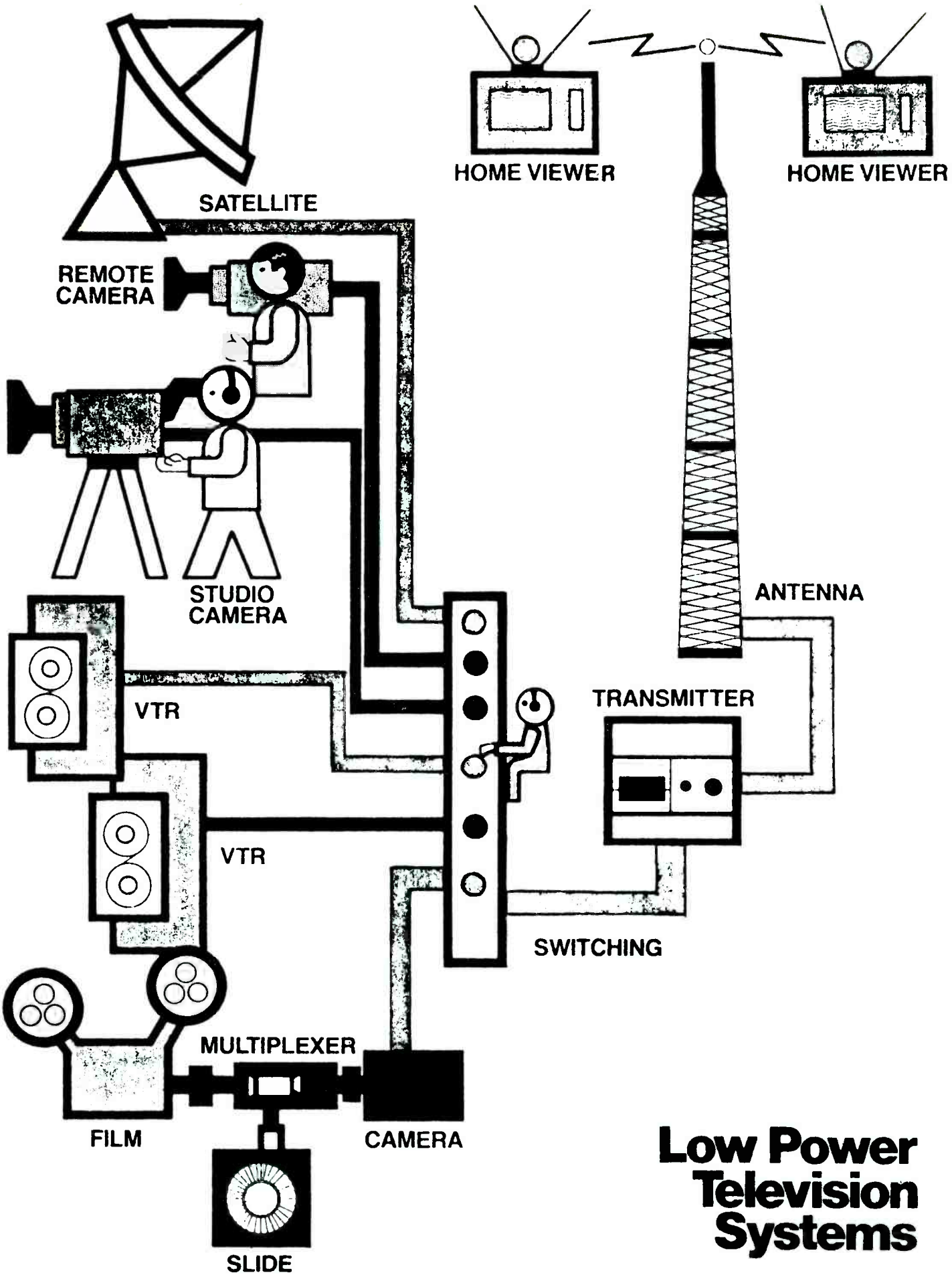


Totally automated station; inserts local ads, announcements; programs automatically at preset times. Cued by change in network picture during preset time windows.

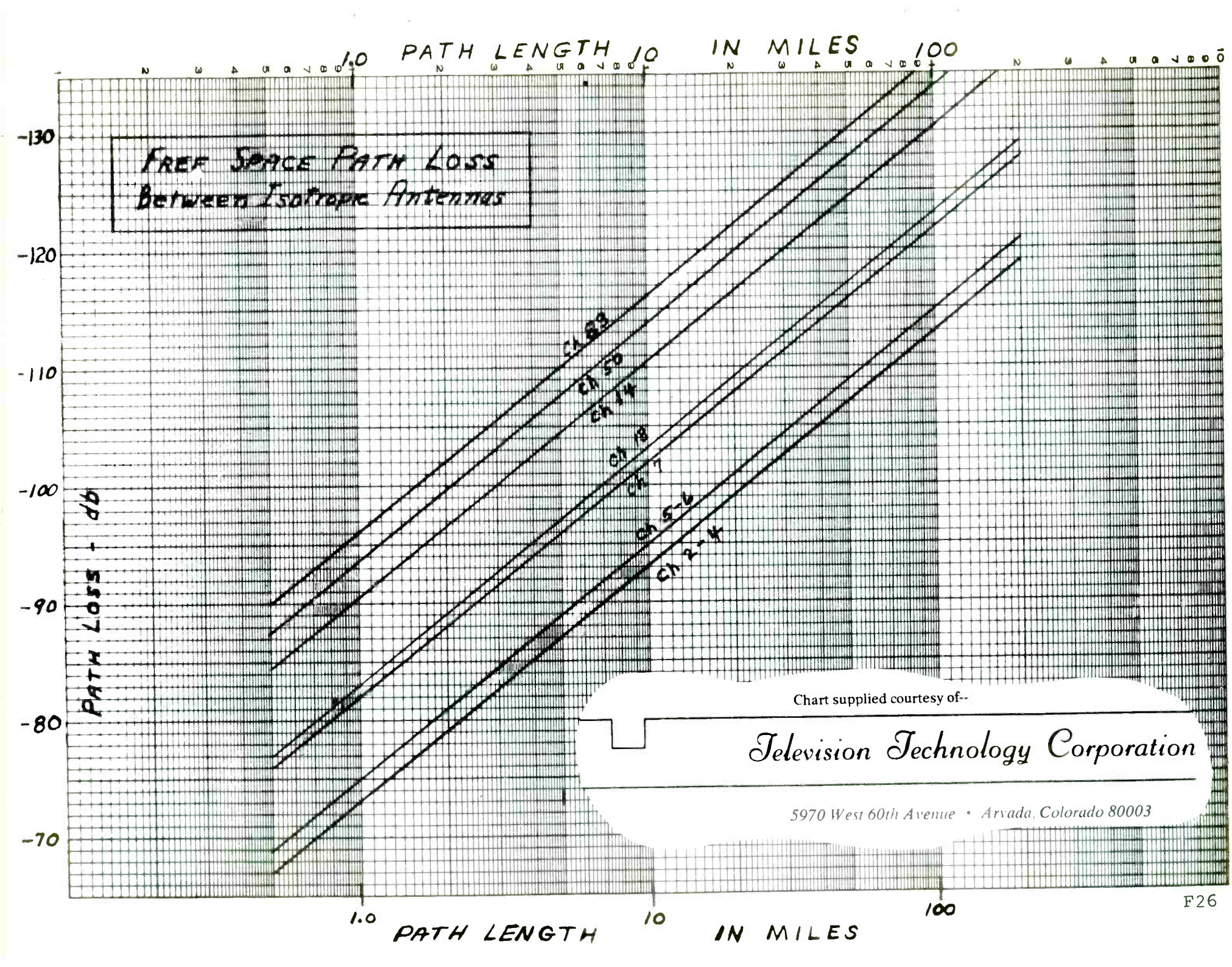
3 CHANNEL WIRELESS CABLE

This layout shows one movie channel straight through encoded. A second channel, a news channel, has commercial insertion and is encoded part of the time. The third channel, a variety channel, includes local news, weather, sports, and local special events. Satellite variety programming used on a sustaining basis. Encoded only a small part of the time.





Low Power Television Systems


PATH LENGTH IN MILES
1.0
10
100
FREE SPACE PATH LOSS
Between Isotropic Antennas
-130
-120
-110
-100
-90
-80
-70
PATH LOSS - db
Ch 83
Ch 50
Ch 14
Ch 8
Ch 7
Ch 5-6
Ch 2-4
Chart supplied courtesy of--
Television Technology Corporation
5970 West 60th Avenue • Arvada, Colorado 80003
F26
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PATH LENGTH IN MILES

Airwaves of the Future?

Low-Power TV Boasts High-Powered Potential

By THOMAS G. DONLAN

MILLARD V. OAKLEY'S television station opens this month in Cookeville, Tenn. Cookeville is not one of your major markets—it's not even one of the 212 officially recognized TV markets. And Oakley, although he holds interests in four radio stations in the Tennessee Valley, scarcely ranks as a media magnate. But this country lawyer is a pioneer: his television station is something brand new in broadcasting.

When Oakley's WO7BM fires up its transmitter, he and 50,000 or so potential listeners will be taking the first step into a new era. WO7BM is one of the first low-power television stations. It will broadcast with 100 watts of power instead of the five million some conventional television stations use. Oakley had to accept the power limit in order to get on the air, since a full power outlet in Cookeville probably would interfere with stations in Chattanooga or Knoxville or Nashville.

The power restriction, however, also provides an economic advantage. Building a conventional station can run $2.5 million or more and operating one takes a large, expensive staff. Building WO7BM is costing Oakley about $60,000, and he expects to run it for as little as $30,000 a year. Numbers like these, among other things, have made low-power television a hot topic for individual investors and big corporations. It's also made them a potential competitor for newspapers, radio stations and conventional television.

With a cheap low-power station, Cookeville will enjoy local television, since Oakley will be able to take advertisements from Cookeville merchants paying what they can afford to reach potential customers. And there's something more, something that makes the low-power game seem high-powered in Cookeville, Tenn., or Bemidji, Minn., or Ukiah, Calif., or Watertown, N.Y., or any of the other two dozen isolated communities where the Federal Communications Commission has authorized the first such stations. Most of the FCC's programming restrictions don't apply to low-power stations, so WO7BM can offer pay television, which usually is offered only in big cities. Oakley thinks he might be able to attract 2,000 to 3,000 subscribers, clearing $10 a month from each. That could make WO7BM more profitable, for its size, than even the most lucrative full-service station. "If you make ten bucks a subscriber, you wouldn't do all that bad," Oakley reasons. "I believe this is where the action's going to be. Every town is going to have one."

Already, there's somebody in every town who wants to build one. Many hope that low-power television will offer a chance to open new stations in big cities. They look at the spaces on the TV dials, like Channel 6 in New York City, that are kept blank to avoid interference with other conventional stations, and they start to dream of big bucks. There are 34 applications on file for low-power slots in the Big Apple. A couple of dozen more large applicants are hot to serve cities in the suburbs like Hempstead and Yonkers, N.Y., and Hackensack, N.J.

> One low-power TV rule will be simple: if the stations interfere with conventional ones, they'll go off the air.

Most applicants in big cities, however, will lose. Though there are five vacant channels on VHF between Channel 2 and Channel 13, plus many more on UHF between Channel 14 and Channel 83, engineers feel even a low-power station would interfere with some full-power channels. And an FCC lawyer says one low-power television rule will be simple: "If they interfere, they go off the air."

Each usable channel in every big city has multiple applicants and, last year, the FCC was overwhelmed by applications, in part because it charges no filing fee. Millard V. Oakley was filing not only for channels in Tennessee, but also for stations in New York, San Francisco, New Orleans and Washington, D.C. "It looked like a good crap game, so I filed to see what would happen," he says. Lots of people were willing to play. So were many of the nation's largest companies. NBC and ABC filed. Communications equipment companies, such as Graphic Scanning, filed. Programming companies, including Turner Broadcasting, filed. Newspaper companies—Gannett, Harte Hanks, and Scripps Howard — filed. And even companies with no connection to the business, such as Federal Express, filed.

The largest filing was for 141 stations by a Prescott, Ariz., outfit called Neighborhood TV Inc., which turns out to be financed by a venture capital arm of Sears, Roebuck. Owners of Neighborhood TV say they want to create a fourth network, concentrating on wholesome entertainment. (They deny what some skeptics believe, that Sears wants to use all those low-power stations for a video catalog.) Other big applicants include religious programmers. Dr. Jimmy Allen, head of American Christian Television Service, has applied for 106 stations, hoping to get around the high price of commercial television time. A Southern Baptist, Dr. Allen says, "Many of our congregations are paying astronomical prices for one hour of access a week." As a minister in San Antonio a few years ago, he paid $55,000 a year for Sunday morning broadcasts. American Christian Television Service is among the 51 applicants for a channel in that Texas city.

In all, 6,593 applications had been filed by April 10, 1981, the day the FCC cried, "Enough, already!" and put a freeze on new applications, except for those in the most distant rural areas. (This loophole is letting in about 100 applications a month. That's twice as many as the FCC staff can resolve each month, so the backlog is mounting.) The agency has asked Congress to buy it a new computer and hire 15 people to run it, but FCC lawyer Molly Pauker warns applicants not to expect miracles. "The 6,000-case backlog would grow to 20,000 if the freeze were lifted," she says. "It will take to 1985 or 1986 just to do the technical processing." The commission then will have to decide among dozens of competitors for each of the 1,000 new stations that Pauker eventually expects to see authorized. The FCC wants to use a lottery. But, it and Congress disagree about how to set one up.

Even the low-power television rules are being delayed. Last month, Pauker presented a draft to the commission, which voted unanimously to accept them, with just a few changes. Pauker is supposed to go back and rewrite her draft to accommodate the commissioners' comments, but she has been shifted to a new job. That leaves the rules in bureaucratic limbo: "Until the document is released, it's not an official commission action," Pauker says. "And it can't be released because I have too much to do. I take full responsibility." A little more money for the FCC would help, she adds, noting that the new federal budget calls for a $12-million cut in agency funds that would result in the loss of 260 jobs.

All this delay comes as unpleasant news for some of the people trying to carve a niche in low-power television. EMC Inc. of White Haven, Pa., is the current sales leader in what is now the very small business of constructing television transmitters of the type that will be used by low-power TV stations. EMC officers told *The Wall Street Journal* that the company could sell $70 million worth of equipment in the next two years if the FCC grants 1,000 licenses.

The company hopes to boost profits from $1.7 million this year to $7 million next year, a projection that fueled a rise in EMC stock from under $6 a share last year to about $19 last week. Unfortunately, most of that new business and new profit depends on a schedule the FCC probably can't meet. And low-power television forces aren't overly impressed by the fact that 70% of applicants told the FCC they would use EMC equipment, noting that the applicants had to mention a company in business at the time of filing. "When this finally starts, there'll be a lot of people coming in to compete, the Japanese will be in like locusts," says Ike Blonder of Blonder-Tongue Inc in Old Bridge, N.J., a firm that makes commercial television and radio components.

Another business, however, may be of the greatest importance to low-power television, just as it is to cable TV or any other new video technology: programming.

"The key to the success of any station is what you put on the screen," observes Gene Mater, senior vice president of the CBS broadcast group. "Whether you talk about low-power, or direct-broadcast from satellite, or microwave-distribution or cable—none of those systems brings with it an automatic amount of programming." CBS has ignored low power for that reason, although rivals NBC and ABC have filed for a complement of stations in major markets. "We say low-power [is] designed as a community-service type of thing and that wasn't the way to go for CBS," Mater says.

Neighborhood TV Inc., however, had networking in mind. The Arizona company financed by Sears filed its 141 applications in the hope of creating an instant network to compete with the Big Three by offering programs based on old-fashioned, small-town American values. Neighborhood TV President Marshall M. Carpenter complains that the enormous

Continued on Page 28

AIRWAVES OF THE FUTURE?

Continued from Page 13

backlog at the FCC has made a joke of his dream. "Our plans were all predicated on delivering our 'Americana' programs to a sufficiently large audience to garner large enough commercial advertising revenues to generate competitive, quality programming," he says.

FCC rules for divvying up the licenses seem to favor local ownership instead of chains. Carpenter isn't very hopeful about assembling a low-power network from individually owned stations. "It'd be like getting 70 kids to sing in unison," he says. He'll try that, though, if he can't get the FCC to reconsider.

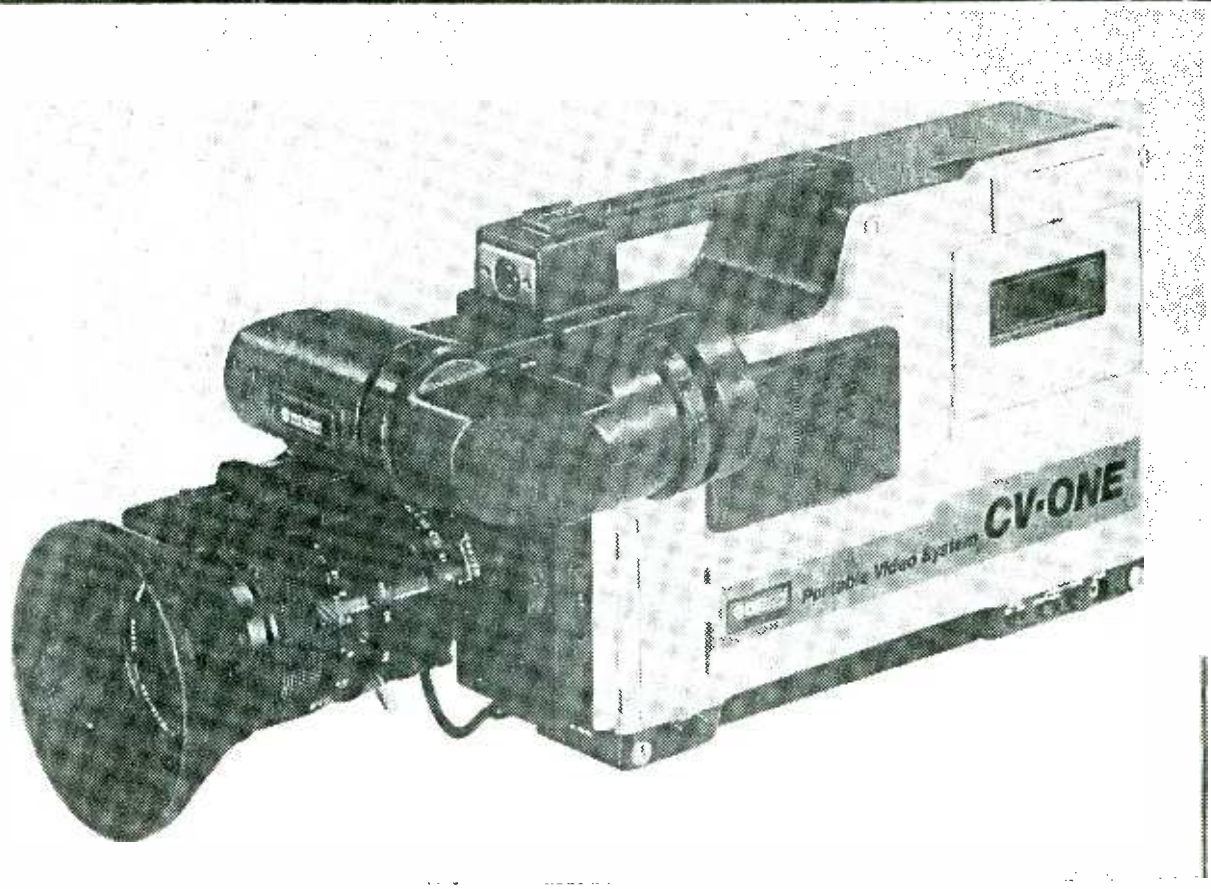
Carpenter sounds a warning: "Without a network, the stations that are granted will have to be unabashedly and perhaps 100% subscription TV — pay TV—in order to survive." But that may not seem so dire to Americans starving for—and willing to pay for—recent movies and better programming. In fact, cable television operators report that it's pay TV that sells the service and makes it profitable in city after city. John Boler, who owns a lower-power television station in Bemidji, Minn., says that it sold out of 500 pay-TV decoders in the first month of operation and had to order more. (The decoders unscramble the scrambled signals that cable-less pay-TV systems use to transmit their programs.) That success comes despite the fact that his channel competes with a cable system in downtown Bemidji, diminishing his potential market for pay by one fourth and leaving him only 30,000 viewers to court. Nevertheless, he insists that pay TV is going to put him in the black before the end of the year and finance a sizable local programming effort for daytime broadcasting.

Boler's lesson hasn't been lost on other rural broadcasters. "We are virtually swamped with inquiries," says John Calvetti of SelecTV in Los Angeles, which sells movies and special events for use by subscription television stations. "I have had to get a word-processing unit . . . to reply to these people."

Calvetti notes that, regardless of what his word processor tells those people, they're going ahead with low-power television, even though it's obvious that many of them "have little experience in broadcasting and no experience in pay TV."

But experience comes with time, and time is on the side of low-power television. ■

THE FUTURE



The CV One is a look into what you are going to be seeing in low power equipment in two years. This big broadcast equipment and the above camera probably would set you back more than the cost of your low power station. This camera uses 1/4 inch tape cassettes, the size of audio cassettes. This camera is full broadcast fidelity and is one of the first cameras to use no camera pick up tube. It uses what is known as a MOS (metal oxide semiconductor). The current drain on its self contained battery is only 14 watts. There is no second person to carry a recorder with this unit, and the camera is very lightweight.

Look for 1/4 inch tape to be the standard in a few years. Right now, despite Technicolor's low cost 1/4 inch home unit, we advise not getting into 1/4 inch until the industry sets a standard so you can transfer tapes from one make of a machine to another. Other new cameras use a solid state device called a CCD (charge coupled device) instead of a camera tube. Both of these solid state devices are very low current drain and the camera does not streak when on bright spots like a tube camera. Manufacturer of the above camera is Nippon Television Network Corporation, 14 Niban-Cho, Chiyoda-Ku, Tokyo 102, Japan.

If you are not informed and up-to-date, you may invest in expensive equipment that is replaced by better equipment at a fraction of the cost. We keep an eye on what's new for low power and keep you informed in Lo-Power magazine.

We advise, know what is available, what is on the way or coming out and do not commit yourself on any electronic equipment other than transmitter until the last minute. Changes and prices are all better equipment and lower prices. So waiting is an advantage. Buy inexpensive items to start. Get by with make do and the high prices now will be far cheaper when you really need it and have the income to warrant its investment. Starting out with big stuff now and you will be paying on equipment that is obsolete and you still owe more than you can buy the later better stuff for.

THE ELECTRONIC FUTURE - BETTER AND LESS EXPENSIVE.

LO-POWER TV 7432 E. Diamond, Scottsdale, AZ 85257
Area Code 602, Telephone 945-6746

Lo-Power TV is edited and published by Harlan L. Jacobsen, who started out in TV renting in 1950. In 1955, he started a closed-circuit TV Station supplying the only Television to a town of 8000 by cable. Jacobsen has 12 years experience in Cable TV and small systems operation, and 10 years as publisher of other periodicals. Jacobsen is enthusiastic about the new low-power opportunities, and has applied for low-power channels himself.

Membership Information

$250.00 for one-year membership.

- ☐ How to Run a Successful LPTV Station $30.00 parcel post, book rate.
- ☐ How to Run a Successful LPTV Station $33.00 by first class mail.
- ☐ How to Run a Wireless Cable System $25.00.
- ☐ Bemidji, The First LPTV Station; $5.00.
- ☐ World's Smallest Full Service TV Station $5.00.
- ☐ FCC LPTV Reference Book; $8.00.
- ☐ The Yuma Local Ad Channel; $3.00.
- ☐ How to do Your Own Engineering for the Faster Processing; $20.00 parcel post, book rate.
- ☐ How to do Your Own Engineering for the Faster Processing; $21.00 first class.
- ☐ The LPTV Income that has Nothing to do with the Picture; $20.00.
- ☐ Setting up a Low Cost Studio; $25.00.
- ☐ How to Sell, Produce and Make a Buck with LPTV Advertising; $20.00.
- ☐ Freeze Area Map, Wall Size; $20.00 plus $5.00 for shipping.
- ☐ Freeze Area Map, 16 page newspaper size; $10.00, no charge for first class.

ICTV

Independent Community Television Alliance

- ☐ Local Power Hot Line - 50 hours a week.
- ☐ Subscription - Monthly Lo Power Magazine
- ☐ Co-Op Group Purchases of Equipment
- ☐ Expedited Washington Research Information
- ☐ Collective Lobbying for the Little Guy in LPTV.
- ☐ Washington Follow-up on Applications
- ☐ Verbal Phone Access to Commission Data Base
- ☐ Use of Instructional "How To" Video Tapes

Prepare new application with easy channel availability, $250

Prepare new application, tight spacing under the new rules $350

Prepare new application including fast processing engineering exhibit, $350 to $500

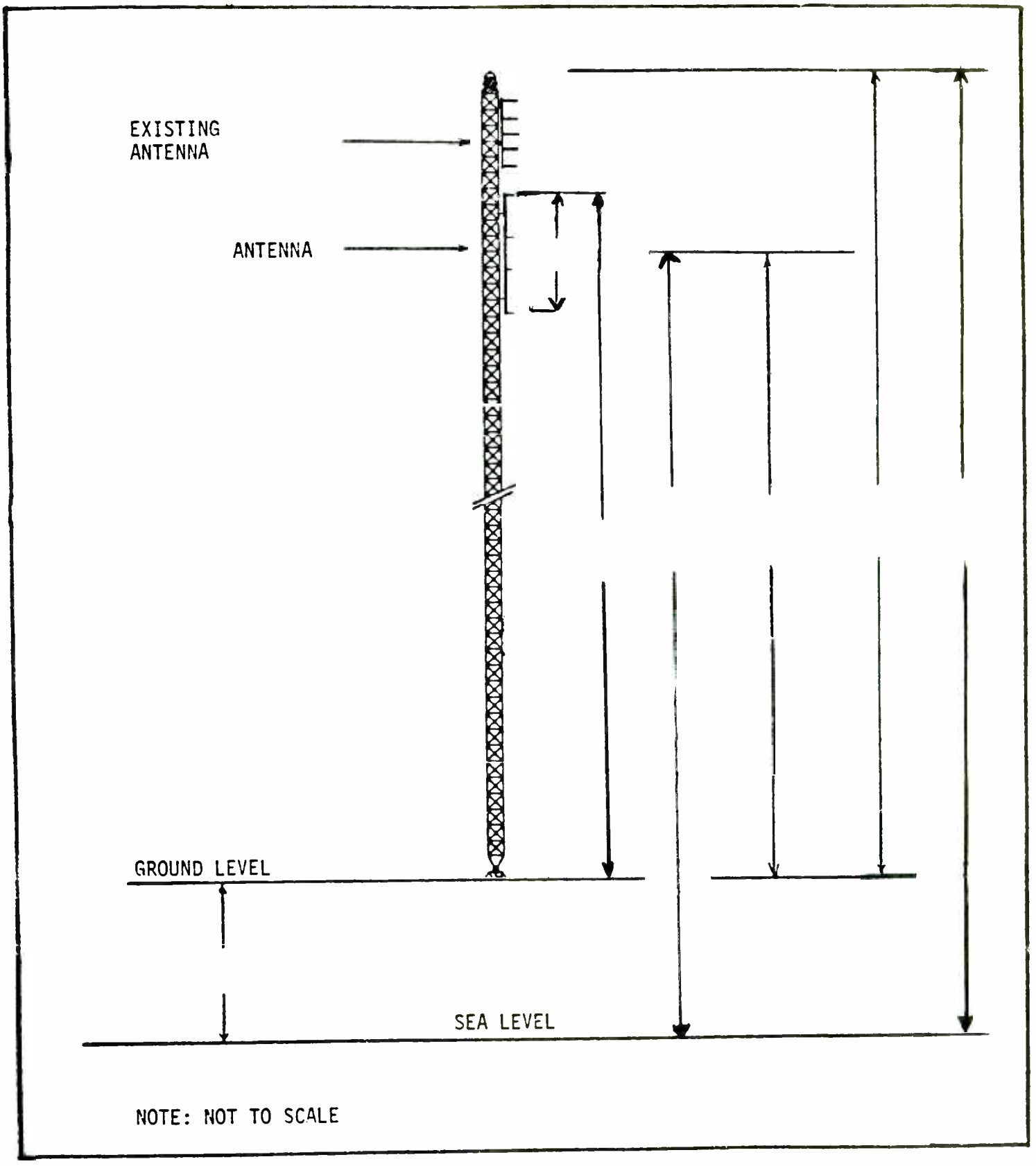
- ☐ **Please add my subscription to Lo Power Community TV Magazine. I enclose $50.**
- ☐ I/we wish to obtain more information or attend a crash course

To: Lo Power Community Television, 7432 E. Diamond, Scottsdale, AZ 85257:

Name _____ **Title** _____

Organization _____

City/State/Zip _____ **Telephone** _____



NOTE: NOT TO SCALE

EXHIBIT

DIVERSITY OF INTERESTS

Channel

Date

	YES	NO
Does the applicant or any party to this application have any interest in or connection with the following:		
(a) an AM, FM or TV broadcast station?	____	____
(b) a broadcast application pending before the FCC?	____	____
(c) other non-broadcast media of mass communications, e.g. cable television, theatres and printed publications.	____	____

If the answer to any of the questions in 5 is yes, state in Exhibit No. _____ the following information:

(i) Name of party having such interest;
(ii) Nature of interest or connection, giving dates;
(iii) Call letters of stations or file number of application, or docket number;
(iv) Location

MINORITY OWNERSHIP

Is the applicant over 50 percent minority owned? ____ Yes ___ No

If the answer is yes, state in Exhibit No. _____ for each minority owner:

(i) Name, address and percentage of ownership;

(ii) Minority group (e.g., Black not of Hispanic origin, Asian or Pacific Islander, American Indian or Alaskan native, and Hispanic).

EXHIBIT

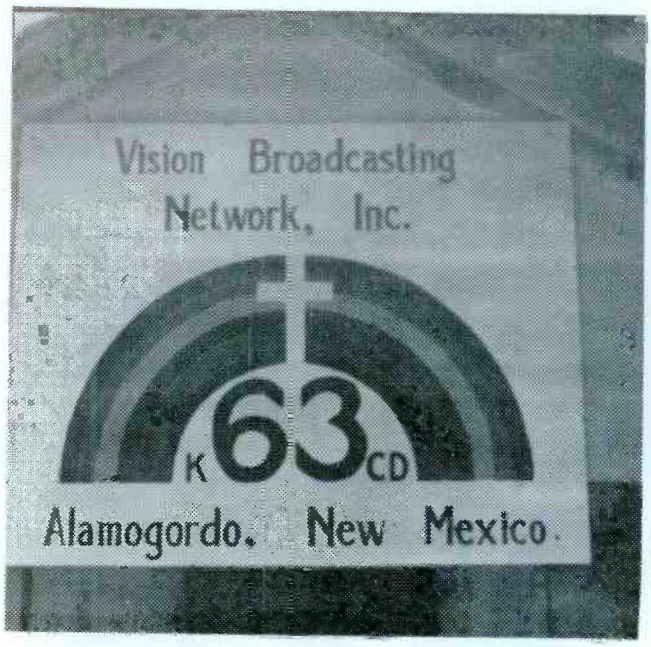
Channel, City, State

Date

FINANCIAL QUALIFICATIONS

NOTE: If this application is for a change in an operating facility, do not fill out this section.

	YES	NO
1. The applicant certifies that sufficient net liquid assets are on hand or are available from committed sources to construct and operate the requested facilities for three months without revenue.	☐	☐
2. The applicant certifies that: (a) it has a reasonable assurance of a present firm intention for each agreement to furnish capital or purchase capital stock by parties to the application, each loan by banks, financial institutions or others and each purchase of equipment on credit; (b) it can and will meet all contractual requirements as to collateral, guarantees, and capital investment; (c) it has determined that a reasonable assurance exists that all such sources (excluding banks, financial institutions and equipment manufacturers) have sufficient net liquid assets to meet these commitments.	☐	☐



We visit New Mexico's first low power TV station.

Channel 63 -- 400 12th Street, Alamogordo, New Mexico.

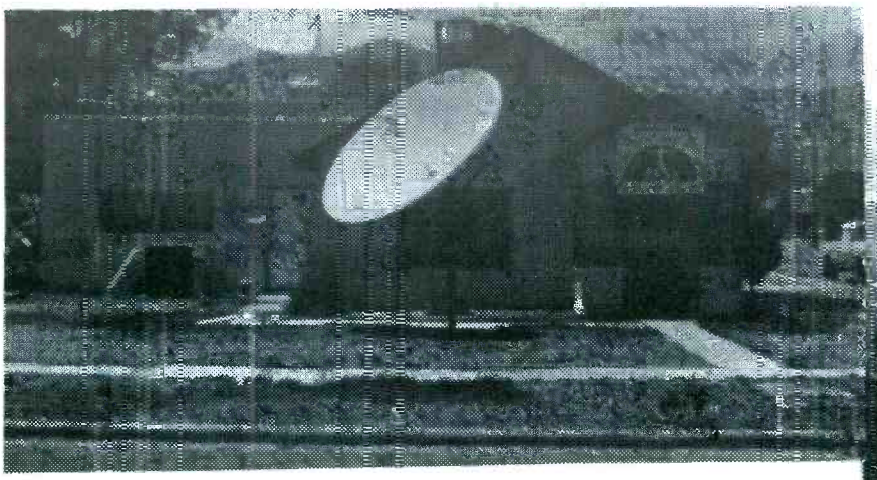
Alamogordo, New Mexico, is in the southern end of the state about 65 miles north of El Paso, Texas. Located on a flat plain near White Sands National Monument, the 27,000 population city at 4,100 feet is at the base of a 9,000 foot mountain range rising abruptly from the flat plain. A nearby air force base adds to the population with very little rural population. The city has a cable system and is served by 11 translators. All of the translators are located on the same mountain top, about 8 miles from the center of town.

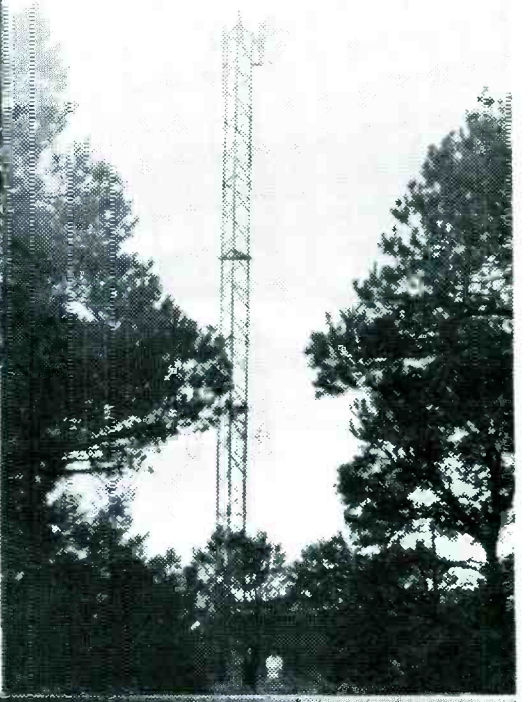
This story is about the first low power station on the air in New Mexico, Channel 63 in Alamogordo. The new Alamogordo UHF low power channel is licensed to Sarah Diaz Warren. Sarah's husband, Pete Warren III, an engineer from El Paso makes this first New Mexico LPTV station work. They have several other applications in other cities pending. Primary source of programming carried by the station is an independent Channel 14 off the air from El Paso. Occasional use of a satellite pickup allows additional religious shows to be carried. The station is primarily a religious oriented station but is carrying considerable traditional, independent type programming from El Paso and local commercial insertion is used as a source of revenue. Channel 14 in El Paso gives them an advance schedule and prints out which commercials can be replaced with Alamogordo spots. No local news, weather or sports are planned. The production studios are used primarily for 'Alamogordo Live', a three-hour religious telecast on Saturday nights from 9 to 12 p.m.

Station management reports the 'donation' support has been somewhat disappointing, but the ad income has gone easier than expected.

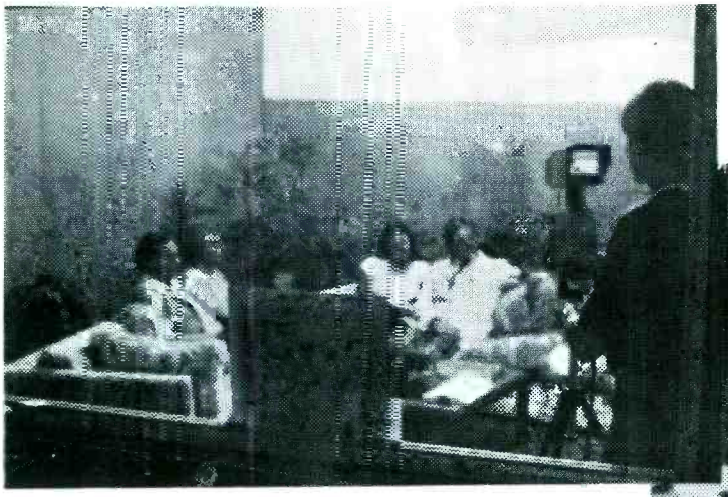
A solid state STV microwave link, covering the 8 miles to the transmitter site failed on installation and a tube type microwave system has been installed and operates satisfactorily. The modulator detects microwave delivered video input at the transmitter site and switches in, replacing the off the air antenna input from El Paso.

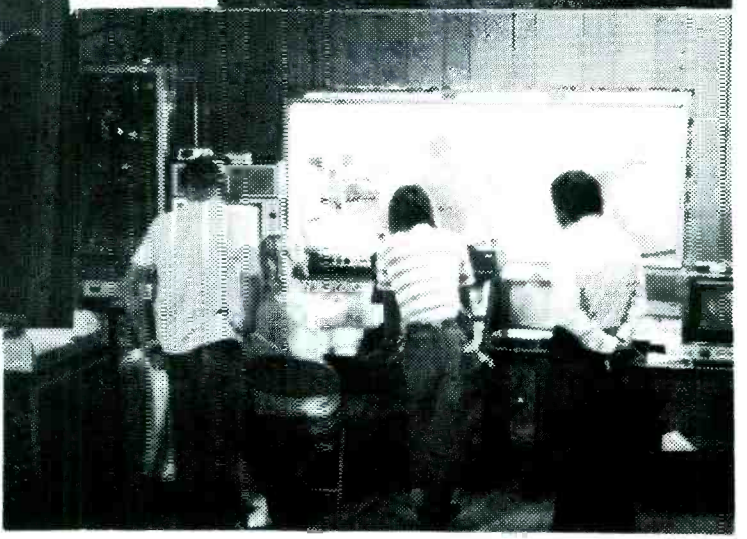
The Television Technology transmitter is 100 watt output (maximum allowed due to proximity to Mexico). With a power split of 75% to a highly directional Anixter-Mark UHF dish directed to Alamogordo, delivers nearly 10,000 watts ERP to the community 8 miles away and 5,000 feet below. A city grade level is delivered at Alamogordo and the air base. 25% of the power is directed to a Scala Paraflecter, and that serves another direction aimed at outlying communities. The high gain UHF open parabola transmitting dish used is an Anixter-Mark. The 80 foot supporting tower supporting tower is a Fisher. Transmission line is Cablewave. The satellite receiver is Microdyne and the receiving dish is Prodelin. Two Sony single tube model 1800 cameras are used. The switcher is a J & D. 1/2 inch Beta and associated editor are being used with good results. A Texas Instruments computer has been programmed for use as a character generator. The transmitter building and tower have been built large enough to accommodate several additional low power stations for other Alamogordo applicants. The local newspaper has received a CP for a VHF and Pete is handling the engineering for that one, as well.





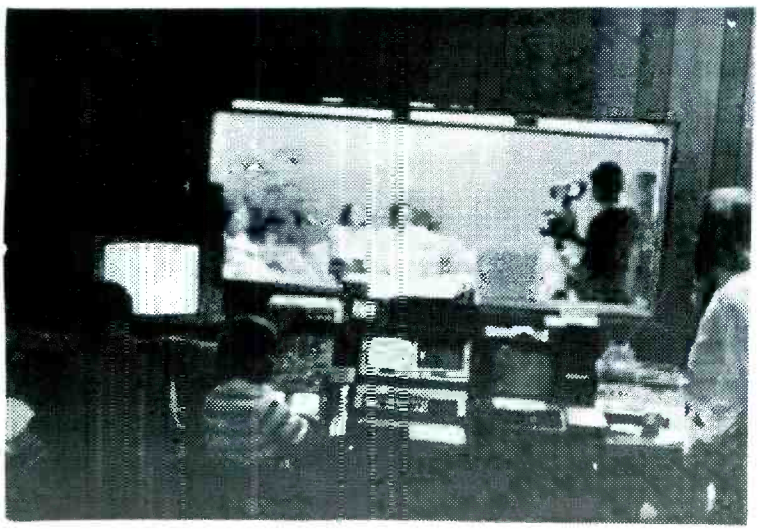
The studio is located at 400 12th Street in an older residential neighborhood. The former residence has large rooms.





Studio is separated from control room by a large sheet of glass.

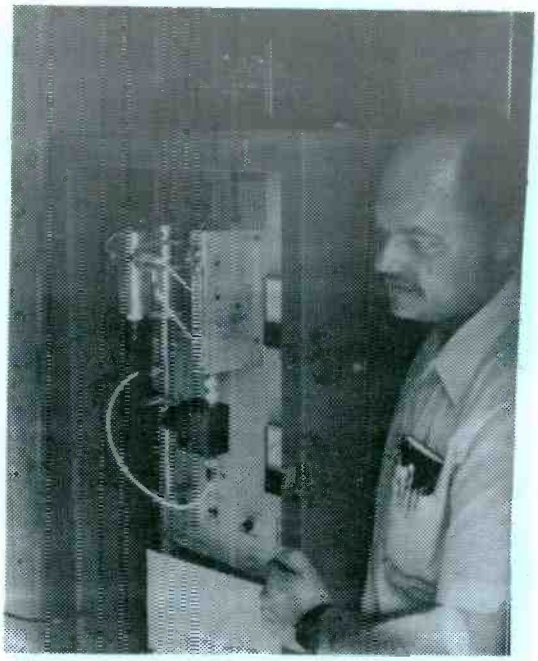
A riser with wood paneling behind it comprised one 'set'. The other shown here consisted of a large davenport.



Volunteer helpers were everywhere during the live Saturday night local religious show. Two 16 millimeter projectors and slide facilities were not yet in operation, but studio construction was nearing completion.

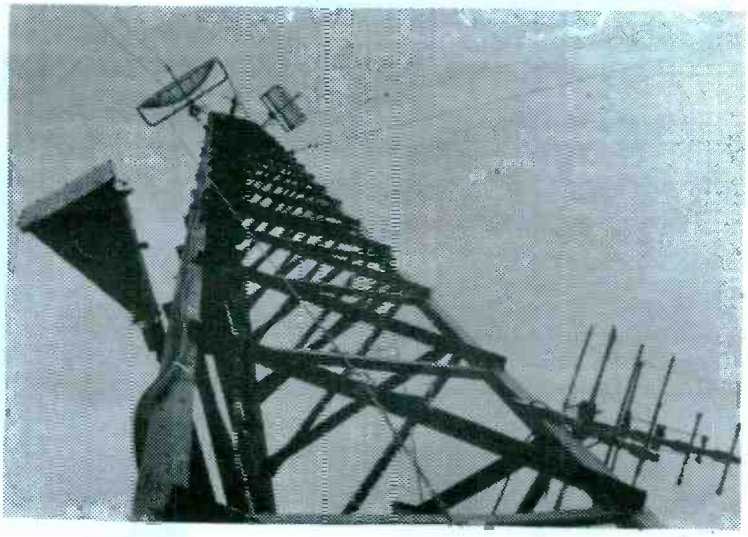
The control room is also a large room, almost as large as the studio.

Small STL microwave dish on the roof, shown here along side regular UHF antennas, sends video and audio to transmitter site.



Pete Warren is shown here with the 100 watt Television Technology Transmitter.

The 80 foot Fisher tower supports two highly directional antennas on the mountain top.



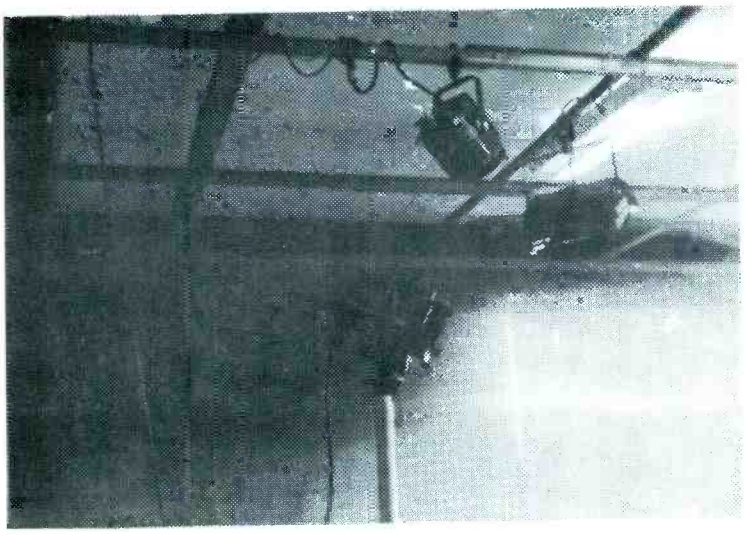
The high gain open bar parabola dish at top left supplies nearly 10,000 watts ERP to Alamogordo, even with 25% of the power split off to the Scala Paraflector, top of the Fisher tower on the right. The small UHF antenna at the very bottom right is used to pick up Channel 14 from El Paso. Horn, bottom left, is home brew microwave receiving horn.

Alamogordo lies over 5,000 feet below the transmitter site and is approximately 8 air miles away, but 1 1/2 hours away by road.

The microwave pickup horn used here in place of a receiving dish works very adequately. Plastic covers the open end.

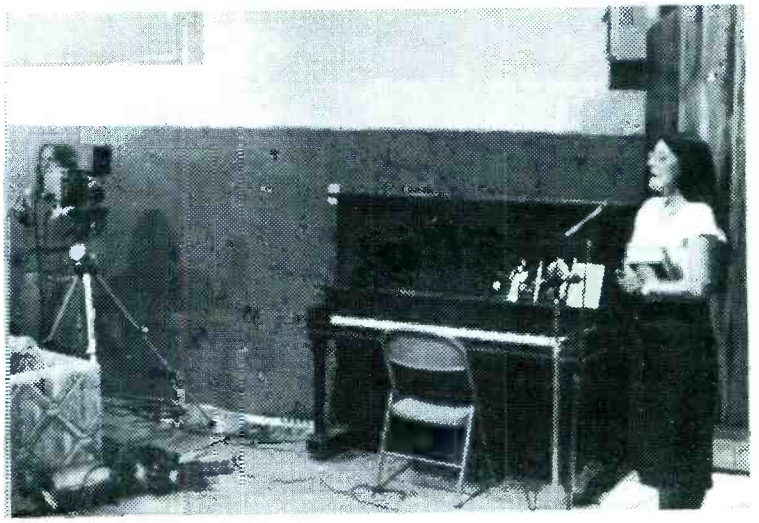
The construction permit was granted February 6, 1982, and operation of Channel 63 began July 3. The cable system will be carrying the local station on Channel 28 by the end of July. We visited the station and took these photos July 17, 1982.

Oscilloscope showing waveform top right, is a help in determining correct camera setup. Three monitors below switcher are for three cameras.



A large metal grid is used near the ceiling for fastening lights. The electricians had not yet rewired the building with the heavier service needed, and large extension cords were everywhere headed for an outlet with a different circuit breaker.

Wheeled dollies were not used. Tripods were picked up and moved. Visable microphones were used exclusively. On camera people had difficulty (despite volunteers pointing every which way) determining what camera they were on due to lack of tally lights on the cameras. Considerable audio difficulties may have been less difficult to correct if audio equipment had been equipped with visual meters, etc.



Large color monitor left is TV set picking up the off the air signal.

Channel 63 in Alamogordo operates its transmitter technically as a translator part of the time and as a low power station the minority part of the time.

Technically speaking, the incoming Channel 14 is not demodulated down to video and audio and recombined through the modulator (some deterioration in that process, however slight) but merely hetrodynes (moves over frequency wise) the Channel 14 up to Channel 63. Television Technology transmitters go hetrodyne to an intermediate frequency (I.F.) that is the same on nearly all translator channel conversions. The modulator is built to supply an input at this intermediate frequency. When the modulator detects video from the microwave, it switches on and switches off the conversion input from Channel 14.

Pete Warren files applications and does engineering work for religious stations as well as application work and engineering for others. You may contact Pete at Satellite Technology for Christ at 3100 N. Stanton, El Paso, Texas 79902.

RE: NEW MANUAL

HOW TO FILE

Our goal in writing this 'How to File' manual is not to make a TV engineer out of you in one volume or a practicing communication attorney. Our goal is to cut away the mystery so that you can comprehend what filing an LPTV application is all about.

You may, as a result of going through this, decide you will want somebody else to do your entire application or you may decide if you really work at it you can do as good as anyone else. You may decide if you're going to be in the LPTV business, you are going to save your money to invest in equipment, and you're either going to do the paperwork yourself or you're going to not be in the business.

There are people right now who have LPTV licenses that bought our earlier manual and filed their own applications. You can do it, too.

You may decide you need some help along the line when you get hung up or for certain portions. If you decide to hire someone to do your entire application, than just by reading this manual, you will probably know more about the LPTV filing than many people that have paid up to $10,000 to have an application filed and still know nothing about the process.

One of the great shocks to me was that after reading my first manual, some of our readers were conned into paying as much as $4,000 each. One paid a total of $60,000 for 15 applications.

In most things, the more you pay, the more you get. In LPTV applications, I'd say not always, but more often than not. the more you pay, the less yo u get. There are people making a business out of huckstering people into 'investing' in filing applications at around $4,000 each. This one firm in particular turns applications out almost each identical on easy to file UHF channels with an easy to file omni antenna pattern. The equipment they specify lists at $80,000 just for the antenna and transmitter. They tell the applicant and FCC that the entire station will cost $55,000.

They file with antennas on towers without getting permission from the tower owner. They file in ficticious places like, 'one mile north of town', where they have no permission to lease space or anything else. They file on lightweight towers, showing a heavy antenna that would collapse the entire lightweight tower.

If someone files on top of your application, when it comes to a comparative hearing, to back up the application, they will refer you to some legal firm at extra cost, and they say all we do is file applications.

They ignore VHF channels available at low cost if you use a little creative engineering and practically mimeograph applications with omni UHF. They ignore translators in operation and filed and available in the FCC data base, and many have had their applications bounced because of conflict with translators they never checked on.

Many people belive that since they have filed so many applications, that to get speedy or fast service, they need to pay this firm a lot of money. The contrary is actually true. Check on the reputations of these 'Paper Mill' hucksters at the Commission, the manufacturers and other long time people in the industry. They will all tell you that if you want almost automatic derail at the Commission, have one of these paper hucksters file your application for you.

We have started an association for little guys where we take responsibility for filing applications for you. Frankly, we do not charge you enough to come out in many cases and we do not do applications to make a living or to get rich. We set out to help 'little guys' file and we only got into helping because we found many people didn't want to knuckle down to doing their own application completely. They were still being ripped off after reading our how to manual, so I have been rather upset about that.

I agree that filing an application or even paying $4,000 is probably a good investment if you know what you want to do with a license. However, it is an even better investment when you can get a better designed station and faster action when you file it yourself free at best or at a cost of a few hundred dollars.

You do not need to have enough money to build 100 stations to file for 100. You only need to have financing to be able to build one.

There are many bootstrap methods to creatively finance building a chain. One example would be to put one on the air, sell it immediately (you can sell them the minute you are on the air and licensed), and use the money to build two or three more. Build and sell them, and on and on. There are lots of other ways too, which is another whole book.

Right now, the name of the game is getting you some valuable LPTV licenses without much of any investment other than your getting in there and sticking to it. Some I know two years later are still waiting for the right town or the FCC to do this and/or that. They are always going to file tomorrow. They remind me of the story of the painter who wasn't going to paint until he found the perfect scene to paint. He searched and searched for years and then one day he found the perfect scene to paint and only then he found out he really didn't know how to paint. File some and play the odds. Many remote rural areas that look worthless today may become the most valuable because you have customers no one else can touch. Remember, you are not obligated to build any TV station. You can sit on a construction permit for at least a year. In the past, most full service TV station construction permit grantees were granted renewal after renewal, some even up to eleven years. You can always turn a construction permit back in any time you decide you do not want to build it; you are not obligated. You can sell a construction permit only for what you have invested in the license, usually considered up to $5,000. But once you get it on the air, unless you were granted a license because of a preference (minority, etc.), you can sell it immediately for whatever you can get.

Even in a small town, a radio station license is worth $50,000 and up. Full service TV station licenses are worth many times more. Some have recently sold for as much as $200 million. The average TV station in 1981 made over $1 million in profit, keeping over 20¢ for each dollar they took in. The big city FM licenses are now worth over $1 million. An LPTV license, it is estimated, will be worth more than a radio station license in the same city. So if you want to know what your LPTV license will be worth, find out what a radio license in your city will be worth.

In many small towns, I believe, the first guy on who ties up a big percentage of STV subscribers or advertisers etc., has a valuable property. The second and third guys coming on can make it, but have to be innovative. The guy with the customers has the valuable station. A broadcast property usually sells for seven times yearly income, or more.

THERE ARE PLENTY OF GREAT PLACES

Our suggestion, file lots of places and play the odds. Remember, many people that have filed in certain towns ahead of you, have no intention of rushing to get them on. Many plan to sit on the construction permits. If i were granted all I have personally filed for myself, for example, it would take me two years just to get them all on the air if they were all granted the same day. So, in a lot of those cities someone else is going to beat me on because I can't be everywhere but believe me, I'll play my most valuable cards first. You will too, but to get some cards to play, you have to file some.

THERE WILL BE OVER 50,000 -- GET IN NOW

What I am saying is, do not be discouraged because you are getting into filing late. You have as good a chance of getting on early as most.

To file an application is about like doing your income tax. It takes a lot of getting yourself motivated and a lot of gearing up and wading through a lot of gobbly gook fine print. Even then you are not sure you did it right or how it will turn out.

TRANSLATOR PEOPLE FILED THEIR OWN

Remember, there are over 4,000 translators now licensed and broadcasting. They are identical to low power stations, except for the fact that translators, rebroadcast full service TV broadcast stations, and LPTV stations will run mostly off the satellite programmers and local originations, or act as LPTV part of the time and translators part of the time, anyway, the majority of those 4,000 translators were licensed from applications they filed themselves or with just a little help from the manufacturers or friends. They didn't pay anyone big (or little) money to file an application for them. You do not have to either. Once you get your head geared up to do applications and do one, the next dozen are relatively easy in comparison. So, good luck . . . . . .

YOUR SUCCESS WILL DEPEND ON DECISIONS YOU MAKE NOW

That is why, even if you have someone do all your applications for you, you need to at least understand enough so you can judge whether they are designing for your best interests or are merely doing an application that is easy for them to do but expensive for you later.

YOU CAN DO IT YOURSELF

You may want to look up all the possible interfering channels (we recommend the latest FCC data base on microfiche) and have mileage separation tabulations done for you between coordinates. The magazine lists later applications and ICTV members can call for latest. We have a firm here that will do mileage separations for you for $15 per case. Send your tower site coordinates and the call letters, city and coordinates of all co-channel and adjacent stations within the mileage range of concern, along with the same data on translators (you can look them up on microfiche) that need to be considered, and they will give you a computer printout of all the mileage calculations which you can use to file with your application. Send it directly to us, and we will see that you get prompt same day turn around in the mail service.

You may want to hire someone else to do that whole operation for you entirely. looking them up or having it done by a computer. Current best price on that type of channel search printout is $100, but by the time you read this, it may have gone up to $125 (rumored). If you would like it done in Phoenix, send it directly here and we will see it is expedited. We also know that an east coast engineering firm that we can call for you and get same day service on channel search if we receive your coordinates. Remember, they need the exact coordinates of where you propose locating your transmitter.

If you have trouble figuring out your transmitter antenna pattern and selection, give us a call with information on how many degrees wide and how many miles long you want to cover and your height above average terrain and your channel number. The same goes for transmission line loss and antenna gain. The transmitter manufacturer will help you, too.

Even if you use outside help when you get hung up, you should not spend more than $150. Once you do one application, you can photocopy it and have over half the pages done for your next application. If filing for more than one channel on the same tower site, one computer channel search will do you for all channels at the same location.

IT'S NATURAL FOR MANY OTHERS IN THE BUSINESS NOT TO LIKE US

We educate people about low power with information at low cost.

The people that sell similar information and consulting fees do not like us too well because their income is dependent on would be applicants not knowing something and feeling they should pay someone a big fee.

They would prefer it all remain a mystery to the potential filers for broadcast licenses.

Our goals in starting were to help make it possible for the little guy to get in and get some new voices in the communities instead of all the media still being controlled by the same old handful. We are appalled to see that it has been reset up for the low power concept to be eventually almost entirely taken over by the present big broadcasters and networks. The majority of applicants are already big broadcaster connected. One example is, in one of the largest cities in a rural western state, one person owns the major newspaper, a radio station, the only full service TV station in town, and is now applying for low power. If he doesn't get the license because of the diversity preference, he will just buy out whoever does get it.

Application Filings Released by FCC in July

ALABAMA

Andalusia			
22	1kw	Blacks Desiring Media	
24	1000w	Blks Desiring Media	7/01/82
30	1000w	Blks Desiring Media	7/12/82
46	1000w	Blks Desiring Media	7/01/82
49	1kw	Blks Desiring Media	
49	100w	Free State B.cstg.	7/13/82
51	1000w	Blks Desiring Media	7/12/82
54	1000w	Blks Desiring Media	7/12/82
57	1000w	Blks Desiring Media	7/01/82
59	1000w	Blks Desiring Media	7/01/82
Brilliant			
2	10w	Tom Lester	7/20/82
Demopolis			
19	100w	Linda D. Clevenger	7/20/82
21	100w	Linda D. Clevenger	7/20/82
27	100w	Linda D. Clevenger	7/20/82
50	100w	Linda D. Clevenger	7/20/82
58	100w	Linda D. Clevenger	7/20/82
Evergreen			
25	100w	Free State B.cstg.	7/12/82
Florence			
12	100w	Amer. Transl. Dev.	7/19/82
49	1kw	Tel-Radio Prop.	
56	100w	Russell Communic.	7/19/82
57	100w	Linda D. Clevenger	7/12/82
Georgiana			
23	100w	Free State B.cstg.	7/14/82
Jackson			
19	100w	Free State B.cstg.	7/12/82
27	100w	Free State B.cstg.	7/14/82
31	100w	Free State B.cstg.	7/13/82
Monroeville			
17	100w	Free State B.cstg.	7/14/82
25	100w	Free State B.cstg.	7/13/82
28	100w	Free State B.cstg.	7/13/82
Sheffield			
46	100w	Linda D. Clevenger	7/20/82
48	100w	Linda D. Clevenger	7/09/82
65	1000w	Don Kimbrell	7/13/82
Sanford			
67	1000w	Destin Commun. TV	7/14/82
Thomasville			
15	100w	Linda D. Clevenger	7/20/82
31	100w	Linda D. Clevenger	7/20/82
39	100w	Linda D. Clevenger	7/12/82
48	100w	Linda D. Clevenger	7/09/82
Tuscumbia			
59	100w	Linda D. Clevenger	7/20/82

ARIZONA

Flagstaff			
20	100w	Linda D. Clevenger	7/21/82
24	530w	Response B.cstg.	7/14/82
24	100w	Buenaventure Inc.	7/07/82
26	530w	Response B.cstg.	7/19/82
48	100w	Linda D. Clevenger	7/21/82
Florence			
7+	10w	Superior Publish.	7/19/82
35	100w	Superior Publish.	7/19/82
Lake Havasu			
3	10w	Russell Communic.	7/09/82
Prescott			
14	1kw	Eddie Robinson	7/12/82
26	100w	Linda D. Clevenger	7/21/82
29	100w	Buenaventure Inc.	7/20/82
45	100w	Linda D. Clevenger	7/21/82

ARKANSAS

Augusta			
17	1kw	ABC Minority Inc.	6/09/82
Batesville			
22	100w	Linda D. Clevenger	7/20/82
26	100w	Linda D. Clevenger	7/20/82
45	100w	Linda D. Clevenger	7/09/82
55	100w	Linda D. Clevenger	7/20/82
57	100w	Linda D. Clevenger	7/21/82
61	100w	Linda D. Clevenger	7/20/82
Berryville			
19	1kw	Carroll Cty. Nspr.	7/12/82
Crossett			
42	1kw	Blks Desiring Media	7/12/82
Eureka Springs			
19	1kw	Laramai Publ. Inc.	7/12/82
50	1kw	Tier III Media Inc.	7/15/82
Harrison			
47	1kw	Rupert E. Phillips	7/12/82
Hope			
35	1kw	Blks Desiring Media	7/12/82
Jonesboro			
27+	1kw	Amer. Christian TV	7/21/82
Milo			
34	1kw	Ashly County Publ.	7/19/82
Mountain Home			
60	1kw	Rupert E. Phillips	7/12/82
Mountain View			
9	10w	Stone County Newsp.	7/07/82
Paragould			
25	100w	Linda D. Clevenger	7/20/82
41	100w	Linda D. Clevenger	7/20/82
49	100w	Linda D. Clevenger	7/20/82
51	100w	Local Power TV Inc	7/09/82
53	100w	Linda D. Clevenger	7/20/82
Russellville			
8	10w	Blks Desiring Media	
9	10w	Blks Desiring Media	7/01/82
15	100w	Blks Desiring Media	7/01/82
21	100w	Blks Desiring Media	7/01/82
23	100w	Blks Desiring Media	7/01/82
25	100w	Blks Desiring Media	7/12/82
27	100w	Blks Desiring Media	7/13/82
31	100w	Blks Desiring Media	7/12/82
33	100w	Blks Desiring Media	7/01/82
43	100w	Blks Desiring Media	7/12/82
49	100w	Blks Desiring Media	7/01/82
51	100w	Blks Desiring Media	7/01/82
53	100w	Blks Desiring Media	7/01/82
55	100w	Blks Desiring Media	7/01/82
59	100w	Blks Desiring Media	7/01/82
Searcy			
41	1kw	Indep. Satell. Syst	7/07/82
44	1kw	Indep. Satell. Syst	7/14/82
50	1kw	Indep. Satell. Syst	7/07/82
53	1kw	Indep. Satell. Syst	7/12/82
63	1kw	Indep. Satell. Syst	6/09/82
Springdale			
21	1kw	Blks Desiring Media	7/14/82
27	1kw	Blks Desiring Media	7/12/82
50	1kw	Blks Desiring Media	7/01/82
52	1kw	Blks Desiring Media	
Yellville			
7	10w	Marion County Newsp	

California

Arroyo Grande			
31	1kw	Erwin Scala B.cstg	
Edwards			
19	1kw	Blks Desiring Media	7/13/82
Laguna Beach			
3	10w	The Sun Network Inc	7/07/82
Nelson			
49	1kw	Nelson Minority Inc	7/20/82
Oroville			
45	100w	Linda D. Clevenger	7/20/82
49	100w	Linda D. Clevenger	7/20/82
53	100w	Linda D. Clevenger	7/20/82
61	100w	Linda D. Clevenger	7/20/82
Placerville (etc.)			
43	1kw	TV Tech. Systems	7/19/82
San Luis Obispo			
2	10w	The Sun Network Inc	6/09/82
19	1kw	Eddie Robinson	7/07/82
54	1kw	Market-Graphics Inc	7/12/82
Sonora			
25	1kw	Finnigan Communic.	7/20/82
Santa Barbara			
8	10w	The Sun Network Inc	
14	1kw	Orion B.cstg.	7/12/82
21	1kw	Arnold N. Applebaum	7/12/82
24	100w	S. Coast Comm. TV.	7/12/82
32	1kw	Arnold N. Applebaum	7/12/82
67	100w	S. Coast Comm. TV.	7/12/82
Santa Maria			
39	1kw	Blks Desiring Media	7/12/82
South Lake Tahoe			
16	100w	Tahoe Daily Trib.	
37	1kw	Tahoe Daily Trib.	7/20/82
45	1kw	Tahoe Daily Trib.	7/20/82
50	1kw	Tahoe Daily Trib.	7/20/82
Tahoe City			
34	1kw	Tahoe Daily Trib.	7/15/82
39	1kw	Tahoe Daily Trib.	7/15/82
47	1kw	Tahoe Daily Trib.	6/30/82
56	1kw	Gavilan Communic.	7/09/82
Windsor			
69	1kw	Community T.V.	7/14/82

COLORADO

Alamosa			
12	10w	Buenaventura Inc.	7/20/82
Cortez			
24	200w	Cortez Minority	
28	200w	Colorado Ethnic	
58	200w	Montezuma B.cstg.	7/13/82
Trinidad			
23	1kw	S.W. Community TV	7/14/82
Vail			
33	1kw	Drew & Drew, Atty.	7/20/82

FLORIDA

Crystal River			
24	100w	Linda D. Clevenger	7/20/82
27	100w	Linda D. Clevenger	7/20/82
54	100w	Linda D. Clevenger	7/20/82
56	100w	Linda D. Clevenger	7/20/82
58	100w	Linda D. Clevenger	7/20/82
60	100w	Linda D. Clevenger	7/20/82
Destin			
25	1kw	Destin Community TV	7/01/82
34	1kw	Destin Community TV	7/01/82
38	1kw	Destin Community TV	6/30/82
50	1kw	Destin Community TV	6/30/82
58	1kw	Destin Community TV	6/30/82
Ft. Pierce			
47	1kw	Norman S. Grudman	6/09/82
Hamassassa Springs			
12	10w	Bl. Coalition/Media	1/07/82
Key West			
26	100w	Linda D. Clevenger	7/21/82
52	100w	Linda D. Clevenger	7/21/82
Melbourne			
7	10w	Market-Graphics Inc	7/12/82
19	1kw	Norman S. Grudman	7/01/82
21	1kw	Norman S. Grudman	7/15/82
29	1kw	Market-Graphics Inc	7/12/82
32	1kw	Market-Graphics Inc	7/12/82
Ocala			
68	1kw	Amer. Christian TV	7/09/82
Okeechobee			
51	1kw	Number 1 TV inc	7/01/82
Perry			
38	100w	Linda D. Clevenger	7/21/82
52	100w	Fackelman & Smith	7/20/82
56	100w	Linda D. Clevenger	7/21/82
59	100w	Linda D. Clevenger	7/21/82
Sebring			
22	1kw	Robert J. Keefe	7/14/82
Vero Beach			
47	1kw	Amer. Christian TV	7/09/82
59	1kw	Market-Graphics Inc	7/12/82

GEORGIA

Athens			
25	1kw	Blks Desiring Media	7/01/82
52	1kw	Market-Graphics Inc	7/12/82
54	1kw	Market-Graphics Inc	7/09/82
Brunswick			
25	1kw	Blks Desiring Media	7/12/82
31	1kw	Blks Desiring Media	7/01/82
31	1kw	Complexicable LPTV	7/07/82
44	1kw	Complexicable LPTV	7/12/82
Lula			
14	1kw	Community Television	7/14/82
22	1kw	Community Television	7/14/82
24	1kw	Community Television	7/14/82
Hazelhurst			
57	1kw	Stone Broadcasting	7/14/82

St. Simons Island
41 1kw Destin Community TV
49 1kw Destin Community TV 6/09/82
57 1kw Destin Community TV 6/09/82

Tifton
16 100w Linda D. Clevenger 7/21/82
51 100w Linda D. Clevenger 7/21/82
56 100w Linda D. Clevenger 7/21/82
60 100w Linda D. Clevenger 7/21/82

Valdosta
22 1kw Complexicable LPTV 7/09/82
32 1kw Complexicable LPTV 7/09/82

Waycross
29 1kw Amer. Christian TV 7/20/82

IDAHO

Lewiston
20 1kw Blks Desiring Media 7/14/82
23 1kw Blks Desiring Media 7/01/82
39 1kw Blks Desiring Media 7/09/82
41 1kw Blks Desiring Media 7/12/82
47 1kw Blks Desiring Media 7/12/82
49 1kw Blks Desiring Media 7/01/82

Sandpoint
16 100w Statesman-Examiner 7/12/82

Twin Falls
21 100w Linda D. Clavenger 7/20/82
23 100w Linda D. Clavenger 7/09/82
25 100w Linda D. Clavenger 7/09/82
27 100w Linda D. Clavenger 7/21/82
31 100w Linda D. Clavenger 7/20/82
33 100w Linda D. Clavenger 7/21/82
43 100w Linda D. Clavenger 7/20/82
59 100w Linda D. Clavenger 7/21/82

ILLINOIS

Centralia
26 1kw Blks Desiring Media 7/01/82
32 1kw Blks Desiring Media 7/01/82
34 1kw Blks Desiring Media 7/12/82
50 1kw Blks Desiring Media 7/12/82

Fairfield
14 100w Linda D. Clavenger 7/20/82
43 1kw Wayne County Press 7/09/82

Kankakee
18 1kw FM Television LTD 7/15/82

LaSalle
38 100w Linda D. Clavenger 7/12/82

Rendota
25 100w Linda D. Clavenger 7/20/82
28 100w Linda D. Clavenger 7/20/82
30 100w Linda D. Clavenger 7/20/82
50 100w Linda D. Clavenger 7/20/82
59 100w Linda D. Clavenger 7/20/82

Jacksonville
6 10w Richard C. Wessell 7/19/82

South Jacksonville
33 1kw Richard C. Wessell 7/01/82
45 1kw Richard C. Wessell 7/19/82

Streator
41 100w Linda D. Clavenger 7/20/82

Watseka
54 100w Linda D. Clavenger 7/20/82

INDIANA

Monticello
57 1kw Tippecanoe B.cstg 7/19/82

Portland
23 100w Linda D. Clavenger 6/09/82
31 100w Linda D. Clavenger 7/21/82
57 100w Linda D. Clavenger 7/21/82
61 100w Linda D. Clavenger 7/20/82

Remington
30 100w Linda D. Clavenger 7/21/82

Rensselaer
13 100w Linda D. Clavenger 7/21/82
22 100w Linda D. Clavenger 7/22/82
24 100w Linda D. Clavanger 7/22/82
26 100w Linda D. Clavenger 7/21/82
34 100w Linda D. Clavenger 7/21/82

Wabash
25 100w Linda D. Clavenger 7/20/82
41 100w Linda D. Clavenger 7/20/82
51 100w Linda D. Clavenger 7/20/82

IOWA

Dubuque
22 1kw Blks Desiring Media 7/01/82
28 1kw Blks Desiring Media 7/01/82
28 1kw FM Television LTD 7/01/82
30 1kw Blks Desiring Media 7/01/82
34 1kw Blks Desiring Media 7/01/82
46 1kw Blks Desiring Media 7/01/82

Ottumwa
58 100w Russell Communic. 7/19/82
65 1kw Local Power TV Inc 7/07/82

Spencer
5 10w Blks Desiring Media 7/01/82
7 10w Blks Desiring Media 7/01/82
24 1kw Blks Desiring Media 7/01/82
26 1kw Blks Desiring Media 7/01/82
59 1kw Blks Desiring Media 7/01/82

KANSAS

Abilene
5 10w Walls Newsp. Cons'l 7/02/82

Colby
4 100w Colby Publishing Co 7/02/82

Emporia
14 100w Russell Communic. 7/12/82

Liberal
2 10w Head Communic. Inc 7/12/82

Manhattan
3 10w Southwind Comm. Inc 7/19/82

Salinas
5 10w Southwind Comm. Inc 7/19/82
6 10w Russell Communic. 7/09/82

KENTUCKY

Betsy Layne
8 10w Dewey Lee Atkins 7/12/82
10 10w Dewey Lee Atkins 7/12/82

Corbin
12 10w Clearvision Comm 7/19/82

Hopkinsville
23 1kw Kentucky New Era 6/09/82
41 1kw Kentucky New Era 6/09/82

Lebanon
6 10w Centr Kentucky Comm 7/12/82

LOUISIANNA

Leesville
16 1kw James Anning 7/14/82

Morgan City
17 1kw Blks Desiring Media 7/12/82
22 1kw Blks Desiring Media 7/12/82

MAINE

Caribou
15 100w Saco River Comm 7/19/82
17 100w Saco River Comm 7/19/82
19 100w Saco River Comm 7/19/82

Presque Isle.
51 100w Weiner B'cstg Co 7/19/82

MARYLAND

Cumberland
52 1kw Lawrence Smith 7/19/82

Halfway
29 1kw Blks Desiring Media 7/12/82
41 1kw Blks Desiring Media 7/12/82

Kettering
48 1kw Central B'cstg. Co 7/15/82

Rolla
19 100w Russell Communic. 7/19/82

MASSACHUSETTS

Harwick
23 1kw Sturgeon Corp 7/07/82

Hyanis
8 10w Louis Maisel 7/20/82
33 100w Cape Cod B'cstg 7/14/82

Nantucket
17 1kw Katy Comm. Inc 7/07/82

MINNESOTA

Camby
12 10w Kaercher Publ. Inc. 7/13/82

Chisholm
27 1kw FM Television LTD 7/15/82

Fergus Falls
17 100w JoAnn P. Hotz 7/19/82

Foxhome
28 100w JoAnn P. Hotz 7/19/82

Granite Falls
28 100w Midwest B'cstg 7/01/82

Jackson
16 1kw Worth. Daily Globe 7/09/82

Kimball
48 1kw FM Television LTD 6/30/82

Ortonville
18 1kw Blks Desiring Media 7/13/82
35 1kw Kaercher Publ. Inc. 7/09/82

Willmar
27 100w W. Centr. Christ. 7/07/82
38 1kw Williams B'cstg. 7/07/82

Worthington
29 1kw Worth. Daily Globe 7/12/82

Windam
35 1kw Worth. Daily Globe 7/07/82

MISSISSIPPI

Batesville
43 100w Free State B'cstg. 7/14/82
55 100w Free State B'cstg. 7/14/82

Biloxi
11+ 10w Kuhlmann B'cstg. 7/19/82
12 100w Amer. Transl. Dev. 7/19/82
49 1kw Amer. Christ. TV 7/09/82
51 100w Russell Communic. 7/19/82
59 100w Linda D. Clevenger 7/19/82
66 100w Russell Communic. 7/19/82

Brookhaven
25 100w Free State B'cstg. 7/15/82
42 100w Free State B'cstg. 7/15/82
47 100w Free State B'cstg. 7/15/82
54 1kw S.W. Publish. Inc. 7/01/82

Camdenton
52 1kw Tier III Media Inc 7/01/82

Clarksdale
26 1kw Blks Desiring Media
28 1kw Blks Desiring Media
34 1kw Blks Desiring Media 7/13/82
39 100w Free State B'cstg. 7/15/82
44 1kw Blks Desiring Media 7/01/82
47 100w Free State B'cstg. 6/30/82
60 100w Free State B'cstg. 6/30/82

Kosciusko
46 100w Free State B'cstg. 7/14/82
48 100w Free State B'cstg. 7/13/82

Louisville
25 100w Free State B'cstg. 6/30/82
55 100w Free State B'cstg. 7/12/82

Laurel
51 1kw Amer. Christ. TV 7/21/82

McComb
14 100w Free State B'cstg. 7/15/82
20 100w Free State B'cstg. 6/30/82
23 100w Free State B'cstg. 7/12/82
41 1kw Wyatt Emmerich 7/14/82
48 1kw Wyatt Emmerich 7/14/82

Monticello
52 100w Free State B'cstg. 6/30/82

Natchez
35 100w Free State B'cstg. 6/30/82
53 1kw Amer. Christ. TV 7/12/82
58 1kw Blks Desiring Media 7/13/82

Oxford
51 100w Free State B'cstg. 7/15/82

MISSOURI

Ft. Leonard Wood
24 1kw Blks Desiring Media
32 1kw Blks Desiring Media 7/12/82
45 1kw Blks Desiring Media
48 1kw Blks Desiring Media 7/12/82
50 1kw Blks Desiring Media 7/13/82

Houston
7 10w Robert L. Davis 7/12/82

Sedalia
25 1kw Sedalia Democ. Co 7/01/82

St. Robert
4 10w Sowers Publ. Inc 7/12/82

West Plains
32 1kw Robert L. Davis

MONTANA

Belgrade/Bozeman
28 100w Telecrafter Corp 7/13/82

Glendive
22 100w Telecrafter Corp 7/09/82

Red Lodger
17 100w Telecrafter Corp 7/09/82

Scobery
15 1kw Blks Desiring Media 7/14/82
17 1kw Blks Desiring Media 7/12/82
25 1kw Blks Desiring Media 7/12/82
33 1kw Blks Desiring Media 7/13/82
36 1kw Blks Desiring Media
38 1kw Blks Desiring Media 7/14/82
41 1kw Blks Desiring Media 7/12/82
44 1kw Blks Desiring Media 7/01/82
46 1kw Blks Desiring Media 7/12/82
49 1kw Blks Desiring Media
54 1kw Blks Desiring Media 7/14/82

NEBRASKA

Alliance
19 100w West. Publ. Co 7/07/82
35 1kw Alliance Publ. Co 6/09/82

Scottsbluff
16 1kw West. Publ. Co. 7/09/82

NEVADA

Elko
20 1kw Tahoe Daily Trib. 7/14/82

Carson City
15 100w Channel 5 B'cstg 7/07/82

Incline Village
63 1kw Tahoe Daily Trib. 6/30/82
66 1kw Tahoe Daily Trib. 7/14/82
68 1kw Tahoe Daily Trib 6/30/82

Las Vegas
15 1kw Connin Communic. 7/20/82

NEW HAMPSHIRE

Concord
47 1kw Blks Desiring Media 7/12/82
57 1kw Market-Graphics Inc 7/14/82
59 1kw Market-Graphics Inc 7/12/82

Hillsboro
58 1kw Blks Desiring Media

Laconia
30 1kw N.E. Comm. Corp. 7/01/82

North Conway
18 1kw N.E. Comm. Corp. 7/01/82

NEW JERSEY

Atlantic City
15 1kw Market-Graphics Inc 7/12/82
21 1kw Atlantic County TV 7/01/82
24 1kw Atlantic County TV 7/15/82
36 1kw Atlantic County TV 7/01/82
44 1kw Atlantic County TV 7/01/82
46 1kw Atlantic County TV 7/15/82
55 1kw Atlantic County TV 7/01/82
69 1kw Atlantic County TV 7/01/82

Ventnor
18 1kw Blks Desiring Media 7/12/82
26 1kw Blks Desiring Media 7/01/82

NEW MEXICO

Alamogordo
5 10w Buenaventura Inc 7/19/82
35 100w Russell Communic 7/09/82

Carlsbad
15 1kw Carlsbad Publ Co 7/12/82
19 1kw Carlsbad Publ Co

Clovis
16 1kw Buenaventura Inc 7/19/82

Deming
19 100w Ken Walt Green 6/09/82

Farmington
25 100w Linda D. Clavenger 7/20/82
25 100w Buenaventura Inc 7/20/82
27 200w Response B'cstg. 7/19/82
27 100w Linda D. Clavenger 6/09/82
29 100w Linda D. Clavenger 7/20/82
31 100w Linda D. Clavenger 7/20/82
31 200w Aninas Minor, B'cst 7/21/82
33 100w Linda D. Clavenger 7/20/82
39 100w Buenaventura Inc 7/20/82
47 200w San Juan B'cstg Co
49 100w Linda D. Clavenger 7/20/82
52 200w Minor. Transl. Inc
61 100w Linda D. Clavenger 7/20/82

Gallup
17 100w Buenaventura Inc 7/19/82

Hobbs
12 10w S.W. Community TV 6/09/82
47 1kw S.W. Community TV 7/14/82
51 1kw S.W. Community TV 7/14/82

Los Alamos
43 1kw William H. Graham 7/07/82

Raton
12 10w Buenaventura Inc 7/20/82

Santa Fe
17 1kw Payvision Communic 7/07/82
21 1kw Payvision Communic 7/12/82
35 1kw Market-Graphics 7/12/82
39 1kw Payvision Communic 7/07/82

Ruidoso
28 100k Ken & Walt Green 7/12/82

Taos
3 10w El Crepusculo Inc 7/19/82
28 100w Buenaventura Inc 7/10/82
38 100w El Crepusculo Inc 7/19/82

NEW YORK

Bridgehampton
51 1kw Raymond Wesnofske 7/19/82
57 1kw Raymond Wesnofske 7/12/82

Massena
20 1kw Blks Desiring Media 6/30/82
22 1kw Blks Desiring Media 6/30/82
26 1kw Blks Desiirng Media 7/12/82
42 1kw Blks Desiring Media 6/30/82
47 1kw Blks Desiring Media 7/12/82
51 1kw Blks Desiring Media 6/30/82

Olean
17 1kw Blks Desiring Media 7/01/82
20 1kw Blks Desiring Media 7/12/82
22 1kw Blks Desiring Media 7/01/82
25 1kw Blks Desiring Media 7/01/82
33 1kw Blks Desiring Media 7/01/82
38 1kw Blks Desiring Media 7/01/82
41 1kw Blks Desiring Media
43 1kw Blks Desiring Media 7/12/82
49 1kw Blks Desiring Media 7/12/82
51 1kw Blks Desiring Media 7/01/82
54 1kw Blks Desiring Media
59 1kw Blks Desiring Media 7/12/82

Poughkeepsie
48 1kw Wide Area Comm. Co 7/09/82

Watertown
41 100w R.H. Park B'cstg

North Carolina

Benson
57 1kw Campbell University 7/09/82

Burnsville
6 10w J. Ardell/R.K. Sink 7/19/82

Clinton
23 1kw Destin Community TV 6/09/82
25 1kw Destin Community TV 7/12/82

Fayetteville
26 1kw Market-Graphics 7/12/82
48 1kw Market-Graphics 7/12/82
56 1kw Market-Graphics 7/12/82

Monteo
4 10w J. Frost & L. Morr. 6/09/82

Pine Hurst
24 1kw Destin Community TV 7/14/82
31 1kw Destin Community TV 7/14/82
52 1kw Destin Community TV

Renoir
24 1kw R. L. Bush Jr. 7/07/82

Roanoke Rapids
21 1kw L. F. Amburn Jr. 7/07/82
44 1kw Market-Graphics Inc 7/12/82

Rockingham
52 1kw Richmond County Jour 7/14/82

St. Pauls
69 1kw Ellis Barbour 7/12/82

Southern Pines
50 1kw L. F. Amburn Jr. 7/12/82

North Dakota

Corrington
10+ 10w Harlan L. Jacobsen 7/20/82
13+ 10w Harlan L. Jacobsen 7/20/82

Grand Forks
23 1kw Blks Desiring Media 7/01/82
25 1kw Blks Desiring Media 7/01/82
51 1kw Blks Desiring Media 7/01/82
53 1kw Blks Desiring Media 7/01/82

Jamestown
2- 10w Harlan L. Jacobsen 7/20/82
32 10w Harlan L. Jacobsen 7/20/82

Windsor
32 1kw Cable Services Inc 7/07/82

OHIO

Ashland
59 100w Ashland B'cstg. 7/01/82

Bucyrus
15 1kw Blks Desiring Media 7/12/82
52 1kw Blks Desiring Media 6/30/82
54 1kw Blks Desiring Media 7/12/82
58 1kw Blks Desiring Media 7/12/82

Lima
18 100w Tel-Radio Comm Prop
55 1kw Freedom Newspapers 7/20/82

Montpelier
16 100w Bryan Publ. Co. 7/21/82

Nelsonville
43 1kw Nelsonville Cable 7/14/82

Portsmouth
21 1kw Barrett, Dunn & Ray 7/09/82

OKLAHOMA

Allen
2 10w OPEC 7/19/82

Altus
11 10w Tel-Radio Comm Prop
15 1kw Blks Desiring Media 6/30/82
17 1kw Blks Desiring Media 6/30/82
28 1kw Blks Desiring Media 6/30/82
30 1kw Blks Desiring Media 7/12/82

Aromore
17 1kw Tel-Radio Comm Prop

Enid
32 1kw FM Television LTD 7/12/82
48 1kw Blks Desiring Media 6/30/82
57 1kw Blks Desiring Media 6/30/82

Antlers
59 1kw G.B. & J.C. Hill 7/01/82

Atoko
28 1kw G.B. & J.C. Hill 7/09/82

Eufaula
13 10w Edpa B'cstg. Inc 7/01/82

Krebs
36 100w OPEC 7/13/82

Madill - Tishamingo
25 1kw G.B. & J.C. Hill 7/19/82

Ponca City
15 1kw Tel-Radio Comm Prop 7/09/82
54 1kw Blks Desiring Media 7/13/82

Pryor
43 100w Retherford Publ Inc 7/14/82
49 100w Retherford Publ Inc 7/14/82
63 100w Retherford Publ Inc 7/14/82

Stillwater
26 1kw Blks Desiring Media 6/30/82
35 1kw Blks Desiring Media 7/13/82

Wagoner
15 100w Retherford Publ Inc 7/14/82
45 100w Retherford Publ Inc 7/14/82

Watonga
11 10w Edpa B'cstg. Inc 7/01/82

OREGON

Altamomt
20 1kw Blks Desiring Media 6/30/82
31 1kw Blks Desiring Media 6/30/82
41 1kw Blks Desiring Media 7/12/82
44 1kw Blks Desiring Media 7/12/82
52 1kw Blks Desiring Media 6/30/82

Klamath Falls
54 1kw Blks Desiring Media 7/12/82
25 1kw Blks Desiring Media 6/30/82
28 1kw Blks Desiring Media 7/12/82
33 1kw Blks Desiring Media 6/30/82
47 1kw Blks Desiring Media 7/12/82
49 1kw Blks Desiring Media 6/30/82

Lincoln City
19 1kw News Review Publ Co 7/12/82

Roseburg
6 10w News Review Publ Co 7/12/82

Tillamook
26 1kw News Review Publ Co

Winston
29 100w Cascade Pacific TV 7/21/82

PENNSYLVANIA

Bradford
15 1kw Blks Desiring Media 7/12/82
23 1kw Blks Desiring Media 7/01/82
46 1kw Blks Desiring Media 7/01/82

Centre Hall
41 100w Zion TV Cable Co 7/07/82

Oil City
32 100w Linda D. Clevenger 6/09/82
32 1kw Seneca B'cstg. Co 7/14/82
61 100w Linda D. Clevenger 7/12/82
20 100w Tel-Radio Comm Prop

SOUTH CAROLINA

Georgecown
53 1kw Blks Desiring Media 6/30/82

Myrtle Beach
20 1kw L F. Amburn Jr. 7/12/82
31 1kw Ness Media Co. 7/12/82
40 1kw Missionary B'cstg. 7/07/82
49 1kw Market-Graphics 7/12/82
50 1kw Market-Graphics 7/12/82
59 1kw Missionary B'cstg. 7/13/82

Surfside Beach
33 1kw Chas. & Pam Little 7/14/82

SOUTH DAKOTA

Aberdeen
39 1kw Williams B'cstg. 7/07/82
49 1kw FM Television LTD 6/30/82
40 1kw Blks Desiring Media 7/12/82
51 1kw Blks Desiring Media

Brookings
26 1kw Williams B'cstg. 7/14/82

Clark
6 10w Blks Desiring Media 7/12/82
41 1kw Hometown TV Inc 7/07/82
45 1kw Hometown TV Inc 6/09/82

Millbane
39 1kw Kaerchea Publ Inc 7/09/82
44 1kw Williams B'cstg. 7/12/82

Mitchel
4+ 10w Harlan L. Jacobsen 7/20/82

Redfield
22 1kw Hometown TV Inc 6/09/82
28 1kw Hometown TV Inc 7/07/82

Tripp
8- 10w Harlan L. Jacobsen 7/20/82

Watertown
28 1kw Williams B'cstg. 7/07/82

Webster
5 10w Kaercher Publ Inc 7/07/82
26 1kw Hometown TV Inc 6/09/82
47 1kw Hometown TV Inc 7/09/8:

TENNESSEE

Cookeville
44 1kw Tel-Radio Comm Prop 7/12/82

Crossville
49 1kw Blks Desiring Media 7/12/82
61 1kw Blks Desiring Media 7/12/82

D yersburg
2 10w Clearvision Communic 7/07/82
42 1kw Futures TV Inc 7/20/82

Humbolt
60 100w Linda D. Clevenger 7/21/82

Jackson
22 1000w Orion Brdcst. Group 7/20/82
25 1000w Orion Brdcst. Group 7/07/82
32 1000w Orion Brdcst. Group 7/12/82
48 1000w Futures TV, Inc. 7/12/82
50 1000w Local Power TV, Inc. 7/07/82

Manchester
15 1kw Blacks Des. Media
36 1kw Blacks Des. Media

Paris
49 1kw Related Companies 7/12/82

Union City
50 1kw Blacks Des. Media
54 1000w Blacks Des. Media 7/01/82

Savannah
46 1000w Jerry R. Thompson 7/19/82

TEXAS

Athens
3 10w Community Info. Center 7/14/82

Banham
6 10w Head Communications 7/07/82

Brownwood
28 100w Amer. Christ. TV Sys. 7/20/82

Bryan
23 1kw Amer. Christ. TV Syst. 7/12/82
50 1000w Drew & Drew 7/19/82

Clarksville
17 1000w Clarksville Times 7/13/82
22 1000w Clarksville Times 7/12/82
46 1000w Clarksville Times 7/12/82

Clute
4 10w The Brazosport Facts 7/07/82

Corsicana
29 1kw Navarro College 7/15/82

Del Rio
14 100w Amer. Christ. TV Sys. 7/09/82

Denison
26 1000w Tel-Radio Communic. 7/7/82
45 1kw Amer. Christ. TV Syst. 7/9/82

Eagle Pass
52 100w Amer. Christ. TV Sys. 7/9/82

Fredericksburg
55 1000w Fredericksburg Assoc. 7/20/82

Huntsville
23 1000w Tel-Radio Communic. 7/7/82
23 1000w Amer. Christ. TV Sys. 7/21/82

Jacksonville
43 1000w Resident. Entertain. 7/20/82

Johnson City
23 1kw Blanco Cablevision 7/15/82
26 1000w Blanco Cablevision 7/12/82
34 1000w Blanco Cablevision 7/12/82
45 1kw Blanco Cablevision 7/15/82
47 1kw Blanco Cablevision 7/15/82

Lufkin
16 1kw Amer. Christ. TV 7/09/82
28 1000w Drew & Drew 7/19/82
38 1000w Drew & Drew 7/19/82
39 1kw Blacks Des. Media

Mt. Pleasant
18 1000w Palmer Media, Inc. 7/7/82
38 1000w Palmer Media 7/12/82
50 1kw Palmer Media 6/9/82
54 1000w Palmer Media 7/12/82

Nacogdoches
32 1000w Kemmerly & Kemmerly 7/19/82

Palestine
17 1kw Tel-Radio Communic.
48 100w Amer. Christ. TV 7/9/82
68 1000w Resident. Entertain. 7/19/82

Miami/Pampe
21 1000w B & B Producing 7/13/82

Paris
35 1000w Drew & Drew 7/19/82
36 1000w Amer. Christ. TV 7/21/82

Pecos
22 1000w Resident. Entertain. 7/20/82

Pleasant Grove/Winsboro
18 1000w G.M. & M.G. Jones 7/20/82

Sulphur Springs
27 100w Echo Publishing 7/19/82
55 100w Echo Publishing 7/19/82
52 100w Echo Publishing 7/19/82
58 100w Echo Publishing 7/09/82

Tivoli/Rockport
36 100w Aran. Pass Progress 7/19/82

Tyler
31 100w Linda D. Clevenger 7/20/82
35 100w Linda D. Clevenger 7/20/82
63 1000w Resid. Entertain. 7/19/82

Victoria
64 100w Amer. Christ. TV 7/21/82
64 1000w Resid. Entertain. 7/20/82

UTAH

Logan
3 10w Cache Valley Publ. 6/9/82
16 1000w Blacks Des. Media 7/1/82
21 1000w Blacks Des. Media 7/14/82
24 1000w Blacks Des. Media 7/12/82
24 1000w Cache Valley Pub. 7/14/82
44 1kw Marketgraphics 7/12/82
47 1kw Cache Valley Brdcst. 7/12/82
51 1kw Cache Valley Brdcst. 7/12/82

VERMONT

Killington
39 100w Sherburne Corp. 7/9/82

Rutland
9 10w Access Rutland 7/12/82
18 1000w Blacks Des. Media 7/12/82
20 1kw Blacks Des. Media 7/01/82
30 1000w Blacks Des. Media 7/12/82
41 1kw Blacks Des. Media 7/01/82

Staunton
19 1000w E. Warren Denton 7/12/82

Winchester
17 1000w Shenandoah Val. LPTV 6/30/82

WASHINGTON

Bellingham
29 1000w Eddie Robinson 7/19/82
53 100w Span TV

Centralia
47 100w Blakeslee Min. Brd. 7/19/82

Colville
46 100w Statesman-Examiner 7/12/82

Darrington
18 1kw David Skinner 7/14/82

Fords Prairie
23 100w Skookumchuck Comm. 7/19/82

Galvin
25 100w Artesian Min. Brdcst. 7/21/82

Mt. Vernon/Burlington
19 100w Skagit Valley Publ. 7/01/82

Pullman
14 1kw Blacks Des. Media
19 1000w Blacks Des. Media 7/12/82
32 1kw Blacks Des. Media 7/13/82
39 1000w Blacks Des. Media 6/30/82
41 1000w Blacks Des. Media 6/30/82
43 1000w Blacks Des. Media 6/30/82

Richland
50 1kw Blacks Des. Media 7/13/82

Walla Walla
27 1kw Blacks Des. Media
47 1kw Blacks Des. Media 7/13/82
53 1000w Blacks Des. Media 7/12/82

WISCONSIN

Adams
64 1000w Adams STV Inc. 7/21/82

Fond du Lac
20 1kw Blacks Des. Media 7/12/82
22 1kw Blacks Des. Media 7/13/82
28 1kw Blacks Des. Media 7/13/82
48 1kw Blacks Des. Media 7/13/82
54 1000w Blacks Des. Media 6/30/82

Saint Germain
43 1000w NE Comm. Systems 7/19/82

WEST VIRGINIA

Martinsburg
50 1kw Marketgraphics 7/12/82

Moorefield
58 1000w Shenandoah Val. LPTV 6/30/82

Romney
61 1kw Shenandoah Val. LPTV 7/15/82

WYOMING

Gillette
44 1000w Eddie Robinson 7/14/82

Laramie
15 100w Russell Communicat. 7/19/82

Lander
5 10w Russell Communicat. 7/19/82

Riverton
21 100w Russell Communicat. 7/19/82

Torrington
35 100w Western Publishing 7/07/82

HERE IS AN IDEA TO CONSIDER

If you are filing applications for other people, could you think up a business name that made it sound like you were a member of a minority that would get a FCC preference? Would no one file against you then because they would think that you would be getting a minority preference and they would not have a chance? Would you be able to file in the same towns that clients paid you big bucks to file in? Would you guess that they would never know it was you filing in the same town? Would others still send you applications to file because they would not know you were filing all over the place in competition with them, using the income from filing thier applications to file competing applications? Is all fair in love and war and FCC filings? Since you would be using a name that sounds like your are a race that they know you are not Is it true that there is a sucker born every minute? Has someone already beat you to this idea?

POST PRODUCTION

Very little television production now and in the future is going to be done in the multi-camera traditional studio. Most production is now being done with a single camera and edited. This editing of several previously shot single-camera segments together is called post production. To do post production, you need an editing device. If you were equipped for editing, for example, and did a high school basketball game tape, you would be able to use two single cameras not tied together and have one wandering around taping several different angle shots from the floor from several different angles and closeups with a portable battery operated tape deck. You would do the action audio on track two of the recorder on both. Then you would go back to the studio for post production and edit' the two together, taking the best parts from the stationary camera and the best parts or shots from the roving camera. You can find this operation of editing very labor intensive and required expensive editing equipment to do a good job. This process is post production. This produces very professional results and you have hindsight control over what goes out.

TWO SCHOOLS OF LOCAL PRODUCTION THOUGHT

There are two schools of thought in low power. School one is you have to have a local quality slick look like the networks or you'll be laughed out of town.

THEY SAY IF YOU CAN'T LOOK LIKE CBS DO NOT GO INTO IT

If you belong to that school, you believe you have to invest $100,000 or more in studio and production equipment for each LPTV station and have at least five employees with college degrees in TV production or you better not go into local production at all. If you belong to this school, we suggest you not file any applications in any cities of less than 50,000 people in your coverage area and have enough money in the bank to carry you through the first year.

SCHOOL TWO ON LOCAL PRODUCTION

This group of people believe that there is very adequate equipment available for very low cost that puts out as good a picture as $50,000 cameras put out a decade or so ago. These people believe that local television is not supposed to nor is it expected to look slick like network television.

You look at all the local pictures in your local newspaper not because they were shot by a Hasselband camera by an award winning Pulitzer prize photographer. You look at them and you read the local paper because it pertains to you and your community.

DO YOU READ YOUR LOCAL PAPER

Your local newspaper probably has an occasional misspelled word or a goofed up adverb or a headline that slipped in crooked and got printed that way. You still read it even if it doesn't look like the New York Times or the Wall Street Journal.

OUR MAGAZINE AND BOOKS ARE NOT PERFECT

We put out manuals and a magazine for you and we have lots of typos and wording and many other things that need shaping up and correcting. We know about them, we regret them, but we live with them. We would like to polish it up. We often do not even have the time to proofread, but you still get the information, even if it isn't as polished as we would like. We print what maybe the world's smallest circulation magazine of this type. We do it and stay in business only because we know how to do what we do inexpensively and do not expend money and time we do not have trying to get it up to some 'standard' like some do and go broke and out of business.

Putting out an eight or twelve page newsletter is one thing, but writing, typesetting in compact type, photographing, laying out, printing, assembling, and mailing up to 60 pages with a subscriber base of under 300 is considered impossible. And on top of that, consider that we pay over $400 a month for Washington data alone, and we go through and compile, edit and reprint all of the LPTV portion for you each month.

Eventually, we believe our subscriber base will come up to where we can afford to do the job for you and deliver the 'slick' magazine you might expect, and I am sure it won't be too many years. My first newspaper I put out with a typewriter (that paper is now in its eleventh year) because I couldn't afford a typesetting machine at the start. The people interested in it read it cover to cover. It has since grown up.

LO-POWER COMMUNITY TELEVISION
PUBLISHING CO.
7432 E. DIAMOND SCOTTSDALE, AZ 85257
PHONE ORDERS 602-945-6746

COMPUTOR MAGNETIC TAPE, Data Base...
Includes full service TV stations, applications. etc. as well as LPTV and Translators. ..$300.00 Postpaid.
Updated monthly, available on one time order of monthly.

MICROFICHE FCC television data base

Full service TV stations, including applications. Filed by state, city and channel....$10.00 Includes coordinates and all necessary data.

LOW POWER AND TRANSLATORS MICROFICHE

Includes applications and licensed. Coordinates, power, Etc. Included
Filed by State, City and Channel....$10.00
Filed by State, Channel and City. $10.00
FCC Updated monthly. Each Category includes the equivalent of about 500 pages of 8 and 1/2 X11.

Microfiche readers are available at most librarys. Used machines available for $100. up.
If you would prefer paper copys off the microfiche, we can print any city or state area for $5. first page and 50¢ a page there after. Phone orders accepted. orders shipped same day

NEW!

Music Trax™ LIBRARY

- 90 different tracks
- 90 minutes of stereo music
- 3 top quality 33 1/3 LP records
- Low price **$499.00**

NO
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Call or write:

Visual Horizons
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AMERICAN TRANSLATOR DEVELOPMENT, INC.

- Low Cost Computerized Preparation of LPTV Applications
- Amendments
- Brokering of LPTV Applications and Licenses

309 Santa Monica Boulevard
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Phone (213) 393-7570

1906 13th Street
Suite 306
Boulder, Colorado 80302
Phone (303) 444-0011

Brokering:

Interested buyers and sellers, contact Jeffrey Nightbyrd at (303) 444-0011

LISTINGS:

- Investor, manager for new LPTV license. Mamoth, California area.
- 7 station LPTV/translator system; northern California. Investor wanted for expansion of profitable operation.
- Victoria, Texas area. 2 stations covering 100,000 people. Will consider offers.
- One of the strongest LPTV applicants in major U.S. markets (top 100); 54 passed cutoff. Looking for manager/partners. Real estate interests consuming too much time. Will consider various proposals.
- 3 LPTV/translator stations in Bronwood, Texas area. Could be subscription TV system.

SPN PROGRAM GRID

(EFFECTIVE 7/1/82)

EASTERN TIME	PACIFIC TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
7:00	4:00	INTERNATIONAL BYLINE					COWBOY FLICKS	INTERNATIONAL BYLINE
7:30	4:30	FINANCIAL INQUIRY	REAL ESTATE ACTION LINE	MONEYWORKS	THE SINGLETON REPORT	FINANCIAL INQUIRY		RICHARD HOGUE
8:00	5:00	BUSINESS TODAY						
8:30	5:30						JIMMY HOUSTON OUTDOORS	THE BIBLE ANSWERS
9:00	6:00	THE SHOPPING GAME	NEW ANTIQUES	THE SHOPPING GAME	BALANCED LIVING	THE SHOPPING GAME	BILL DANCE OUTDOORS	SPOTLIGHT
9:30	6:30	FRAN CARLTON					SEW-VIDEO	ZOLA LEVITT LIVE
10:00	7:00	JANET SLOANE AEROBIC DANCE/EXERCISE					TWICE A WOMAN	KENNETH COPELAND
10:30	7:30	WOMEN & THE HEALING ARTS	THE AMERICAN BABY	MEDICINE MAN	WOMEN & THE HEALING ARTS	MEDICINE MAN	FINANCIAL INQUIRY	
11:00	8:00	THE PICTURE OF HEALTH					ROY STOREY'S TRAVEL GUIDE	INSIGHT
11:30	8:30	THE BODY BUDDIES					JUST COUNTRY	INSIDE GOLF
NOON	9:00	SPN MOVIE					SPN MOVIE	THE EQUESTRIAN
12:30	9:30							BILL DANCE OUTDOORS
1:00	10:00							FISHING WITH ROLAND MARTIN
1:30	10:30	SUSAN NOON						MONEYWORKS
2:00	11:00	TWICE A WOMAN	SEW-VIDEO	CONNIE MARTINSON	THE AMERICAN BABY	NEW ANTIQUES	THE QUARTER HORSE SHOW	REAL ESTATE ACTION LINE
2:30	11:30	MURIEL STEVENS					FISHING WITH ROLAND MARTIN	THE SINGLETON REPORT
3:00	NOON	JANET SLOANE AEROBIC DANCE/EXERCISE					SPN SPECIAL	WINDOWS OF THE ORIENT
3:30	12:30	CONNIE MARTINSON	BALANCED LIVING	TWICE A WOMAN	THE GOURMET	THE SHARPER IMAGE		
4:00	1:00	ROY STOREY'S TRAVEL GUIDE	INTERNATIONAL BYLINE	TRAVELLER'S WORLD	TRAVEL TODAY	ROY STOREY'S TRAVEL GUIDE	MEDITERRANEAN ECHOES	
4:30	1:30	INSIGHT						
5:00	2:00	PAUL RYAN						PAUL RYAN
5:30	2:30	NOSTALGIA						MOVIEWEEK
6:00	3:00							
6:30	3:30	THE SHOPPING GAME						SPN MOVIE
7:00	4:00	BALANCED LIVING	INSIDE GOLF	TWICE A WOMAN				
7:30	4:30	REAL ESTATE ACTION LINE	JIMMY HOUSTON OUTDOORS	MEDICINE MAN				HELLO JERUSALEM
8:00	5:00	FINANCIAL INQUIRY	THE QUARTER HORSE SHOW	THE A...				
8:30	5:30	MONEYWORKS	NIKKI HASKELL					VISION OF ASIA/USA
9:00	6:00							
9:30	6:30							
10:00	7:00							
10:30	7:30							
11:00	8:00							
11:30	8:30							
12:00	9:00	TRAVELLER'S WORLD	PAUL RYAN	BL...		...HASKELL	JOE BURTON JAZZ	HELLO JERUSALEM
12:30	9:30	THE SHOPPING GAME	JUST COUNTRY	JA...		ROCKS 82		
1:00	10:00	ALL NIGHT AT THE MOVIES						
1:30	10:30							
2:00	11:00							
7:00	4:00							

SPN AVAILABLE TO LOW POWER AT NO COST

The SPN satellite channel is contacting low power licensees about carrying their programs free of charge (formerly available to cable systems only). The satellite Syndicated Systems Company that operates SPN is proposing allowing the low power station one minute of local along control tones as is done for cable systems adding local commercials each half hour. We assume they will be sending commercials automatically. If you are interested in staying on 24 hours programming. SPN has a wide variety of good a day, SPN runs four movies after midnight until 7:00 a.m. E.S.T.

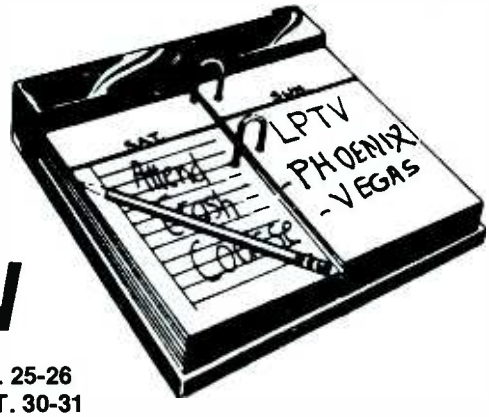
Look for many programmers to be contacting you in the future as the competitive situation heats up as many new programming services come on the new satellites in the next few months. Contact SPN (Satellite Program Network) at: 8252 South Harvard, Tulsa, Oklahoma, 74136, (918) 481-0881.

Harlan

*Local advertising availability for cable systems during network breaks (average 2 minutes per hour)

SATELLITE PROGRAM NETWORK, INC.
8252 SOUTH HARVARD TULSA, OK 74136 (918) 481-0881 TELEX 796322

LO-POWER COMMUNITY TV
BROADCASTING CRASH COURSE



HOW YOU MAKE A BUCK WITH LOW POWER TV

'How To' Crash Course

PHOENIX, SEPT. 25-26
LAS VEGAS, OCT. 30-31

Opportunities in getting a Local Power TV license

WRITE FOR INFORMATION SHEET ON THIS AND OTHER CRASH COURSES

READ WHAT LPTV PEOPLE THAT ATTENDED PREVIOUS CRASH COURSES HAVE TO SAY ABOUT THEM

SEPTEMBER 25-26 in PHOENIX
OCTOBER 30-31 in LAS VEGAS

WHO SHOULD ATTEND?

Low power applicants, would-be applicants, professionals dealing with applicants, suppliers of equipment for LPTV, program suppliers, educators, potential LPTV network executives, auxiliary businesses which can use vertical blanking intervals, teleconferencing personnel, satellite reception entrepreneurs, translator operators considering low power and local programming, cable access programmers, newspapers considering leasing cable and LPTV channels.

REGISTRATION FEE: $125 per person; includes two lunches and material packet.

CANCELLATION POLICY: Full refund of fee if written cancellation is received 14 days prior.

TAX DEDUCTION FOR EDUCATIONAL PURPOSES: Treasury regulation 1.162-5 permits deduction of educational expenses -- registration fees, travel, meals and lodging.

LOW POWER COMMUNITY TELEVISION
CRASH COURSE

FOR FURTHER INFORMATION OR PHONE REGISTRATION, CONTACT: (602) 945-6746

Note: Please use separate sheet for additional registrants.

☐ I/we wish to register for the Crash Course. **$125** is enclosed for each registration.
(Make checks payable to Lo Power Community Television)

☐ Please send me listing and prices of Video Tapes available of convention and crash course proceedings.

☐ Please add my subscription to **Lo Power Community TV Magazine. I enclose $50.**

☐ I/we wish to obtain more information or attend a crash course planned for early **'83 in Wash. D.C.**

To: Lo Power Community Television, 7432 E. Diamond, Scottsdale, AZ 85257:

Name _____ **Title** _____

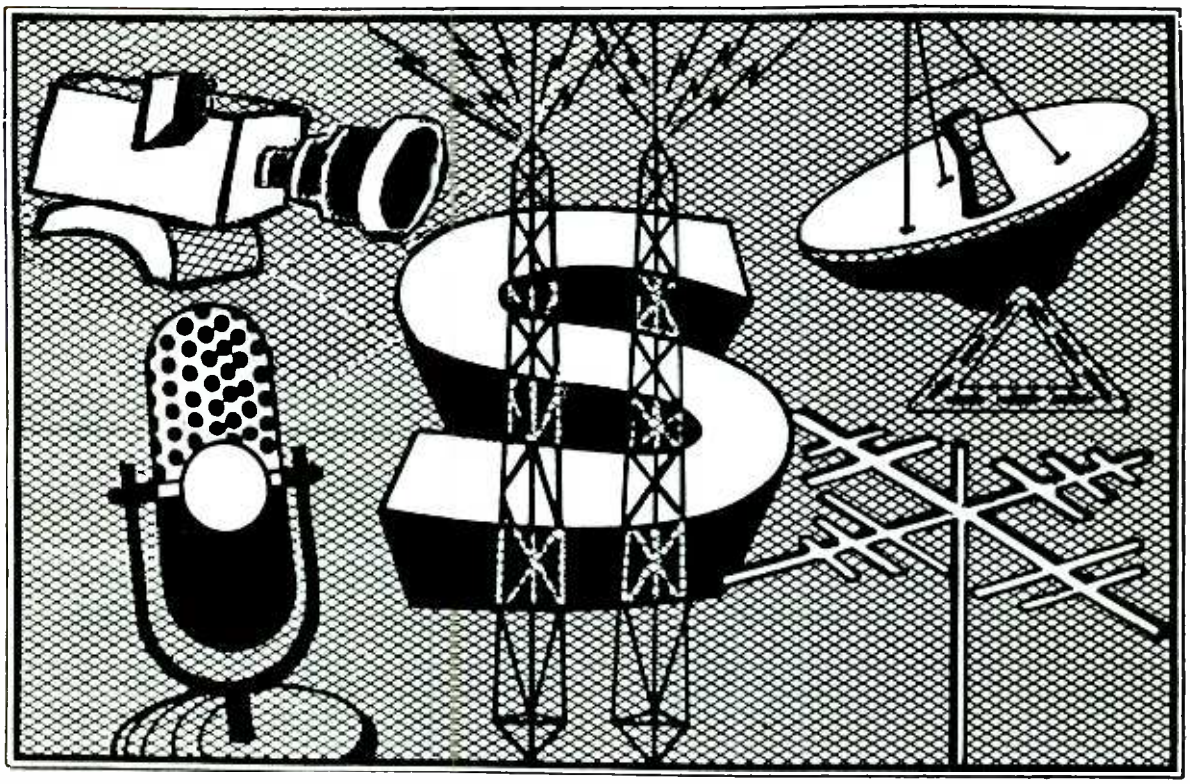
Organization _____

City/State/Zip _____ **Telephone** _____

September '82

LO-POWER COMMUNITY

TV - FM



What's Happening . . . ???

Sears recently released some figures that may explain why they are getting interested in television.

Sears' figures show that newspaper readership has dropped from a high of 94% of the population to 74% in 1981 and is expected to drop drastically even further in the next few years.

What this means is that local advertisers will no longer reach the bulk of the population economically with print ads.

The LPTV shake downs have started. One paper mill has been 'selling' investors on putting their money in LPTV applications instead of gold, penny stocks, stock market, grain futures, etc. because LPTV licenses are the coming gold rush. Either you get the license, which you can sell (supposedly after getting it on the air, but the buyer just pays you to get it on the air). If you do not get a license because someone else files or has filed on it, that someone will pay you considerably over your investment to get off the channel. The pitch is, you can't lose, investing $4,000 in an application. Either way, you can quadruple your money easy.

Some of these application 'investors' are now already asking $30,000 to get off a channel someone else applied for. We suggest in no case, ever pay anyone to get off your applied for channel through cutoff than they can document they expended for the application.

Most of these people have no intention of building a station; they are merely trafficking in applications. The only way to stop it evidently is to make it unprofitable. The word 'lottery' upsets these 'investors' terribly. Suggest they just wait for the lottery.

Another LPTV parasite has reportedly been using a pitch to the local cable system; that for a 'consideration' they won't build a station there for X period of time.

The only way to keep these never intend to build a station types from filing LPTV applications as an investment is to not make it profitable. Refuse to do business with them, and if everyone did that, they would soon quit filing applications they never intend to build.

Sure, the FCC passes rules against this, but then publicly announce that you work it out between you on mutually exclusives, which is another way to say 'pay them off' in direct contradiction to 'rules' they pass.

The paper mills pride themselves in educating the application 'investors' in how to get around the FCC rules.

Invest in LPTV licenses, the next gold rush. Send us $4,000 and we will set it up for you. Use LPTV licenses like playing cards. That's their pitch and they are getting lots of takers. The only thing is, they are getting in the way of the serious LPTV operators. Something needs to be done about it.

$5.00 sample copy
$50.00 per year

Lo-Power Community Television magazine and associated low power manual and other publications are edited and published by Harlan L Jacobsen to bring together the information required to make the concept of low power television work

The crash course in Phoenix in September is oriented toward publishers getting into low power and is sponsored in conjunction with a newspaper publishers' convention. The LPTV crash course in Las Vegas the last of October immediately precedes the translator convention, so most of the manufacturers will be in town so you should be able to visit with them on the same trip. The January 1983, Washington, D.C. crash course precedes the National Religious Broadcasters' convention and many LPTV manufacturers display there, and the exhibits are open to all.

The major LPTV transmitter manufacturers are reported to be not exhibiting at LPTV East, a John Reilly LPTV forum set October 1 and 2 in Washington, D.C. Cost of attending that one reportedly works out to $25 an hour to hear speakers including four FCC personnel tell you why your application is going to be a while before it is processed. Phone (203) 852-0500 for information.

Applicants are still hyper about amending their application before September 21. Some parties apparently are asking for a 30 day extension and the Commission may grant a 30 day extension for all. If your application met all the mileage separation criteria of the new rules, there is no need to do anything with it.

In our application listing you will see a couple of situations where one name shows up 2 and 3 times for the same channel in the same city. As we write this, there is no explanation, but they show up as filed on different dates and have all been given different file numbers by the Commission, even though they are the same channel and city. So, you figure it. We just wanted you to know our typist has not been drinking.

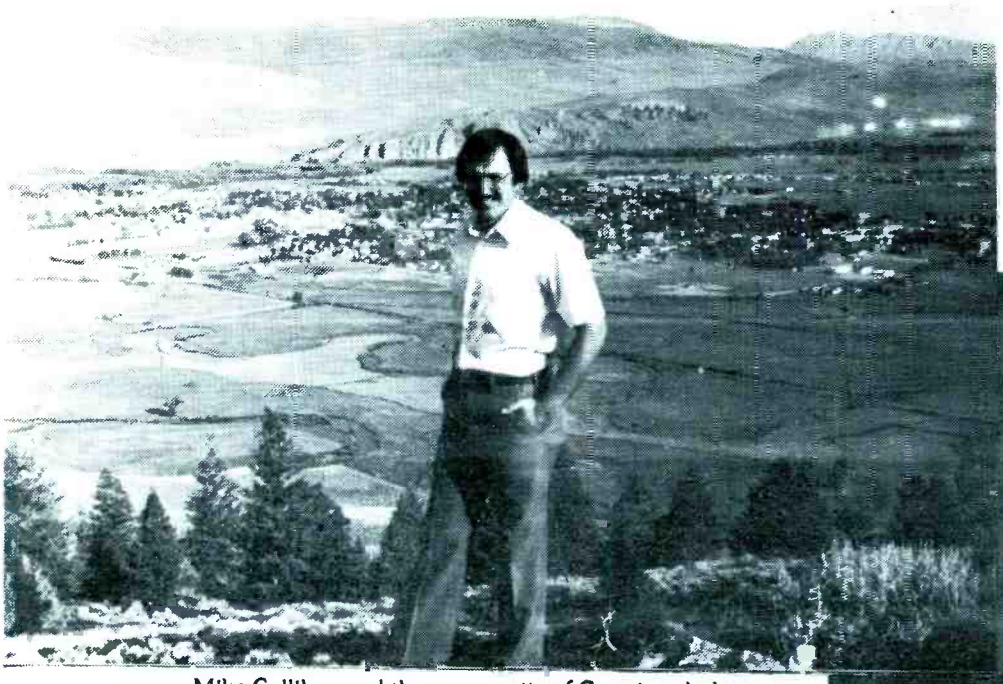
BOOKS, MANUALS AND MAPS, ETC.

Books, manuals and maps, etc., produced by us are free to members. $5 handling and postage on the bigger ones. We absorb postage and handling on the little ones. Order several together, pay only one handling charge. We also have a library of books on setting up studios, engineering, basic video, etc. that are available for loan to members; just pay postage and handling. Keep the manuals we produce permanently. The loan books, return after two weeks. Some of the manuals we produce, listed in our enclosed catalog, are not yet off the press, such as Sourcebook, studio set up and doing commercials, which have a press time of later this fall. Order them now, and we will rush you out an early copy. Most of the other manuals are ready for immediate shipment. 'How to Run' had its title changed to 'How to Set Up'.

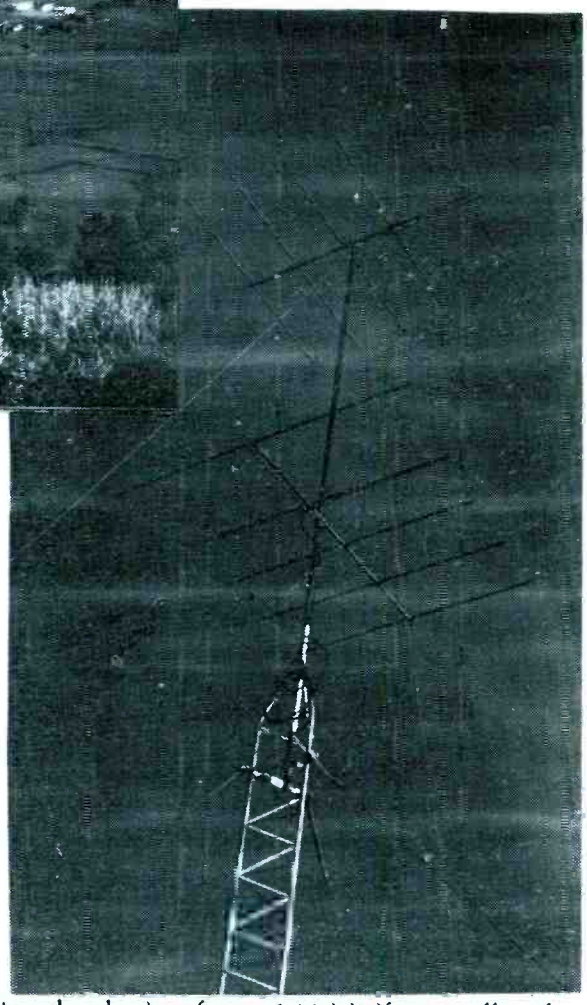
This issue is smaller than our regular issue because we have been snowed with amending applications. We will have our normal sized issue next month.

Lo-Power Community Television Magazine is published twelve times per year. Sample copies are $5, subscription $50 per year. Intended to supply needed information on Low Power Television at reasonable cost. Copyright 1982 © Lo-Power Community TV.

Postmaster, send address changes to **7432 E. Diamond, Scottsdale, AZ 85257.** Telephone, **(602) 945-6746.** Application to mail at second class rates applied for at the main post office at Scottsdale, AZ 85257. USPS 601-370 **Issue 17**



Mike Callihan and the community of Gunnison below.



Two 5 element Scala yagis transmit a heart-shaped pattern over the valley.

Gunnison, Channel 2

The mountain locked area of Gunnison, Colorado, now has STV via low power TV on Channel 2. Callihan Broadcasting Group was awarded an LPTV CP May 21, 1982, and came on the air September 9th with full time television service.

The local non-profit translator group had voluntarily moved to a different channel so Mike Callihan could file for and use Channel 2. Mr. Michael Callihan, a non-technical person, did his own application and filed it February 6 1981. Considerable Washington help from Colorado Congressman Wirth's staff, a powerful figure on sub-committees affecting telecommunications. Colorado Congressman, Ray Kogovsek, and other Colorado representatives' Washington, D.C. staffs helped 'expedite' the application through the Commission so that it was licensed in a little over 15 months.

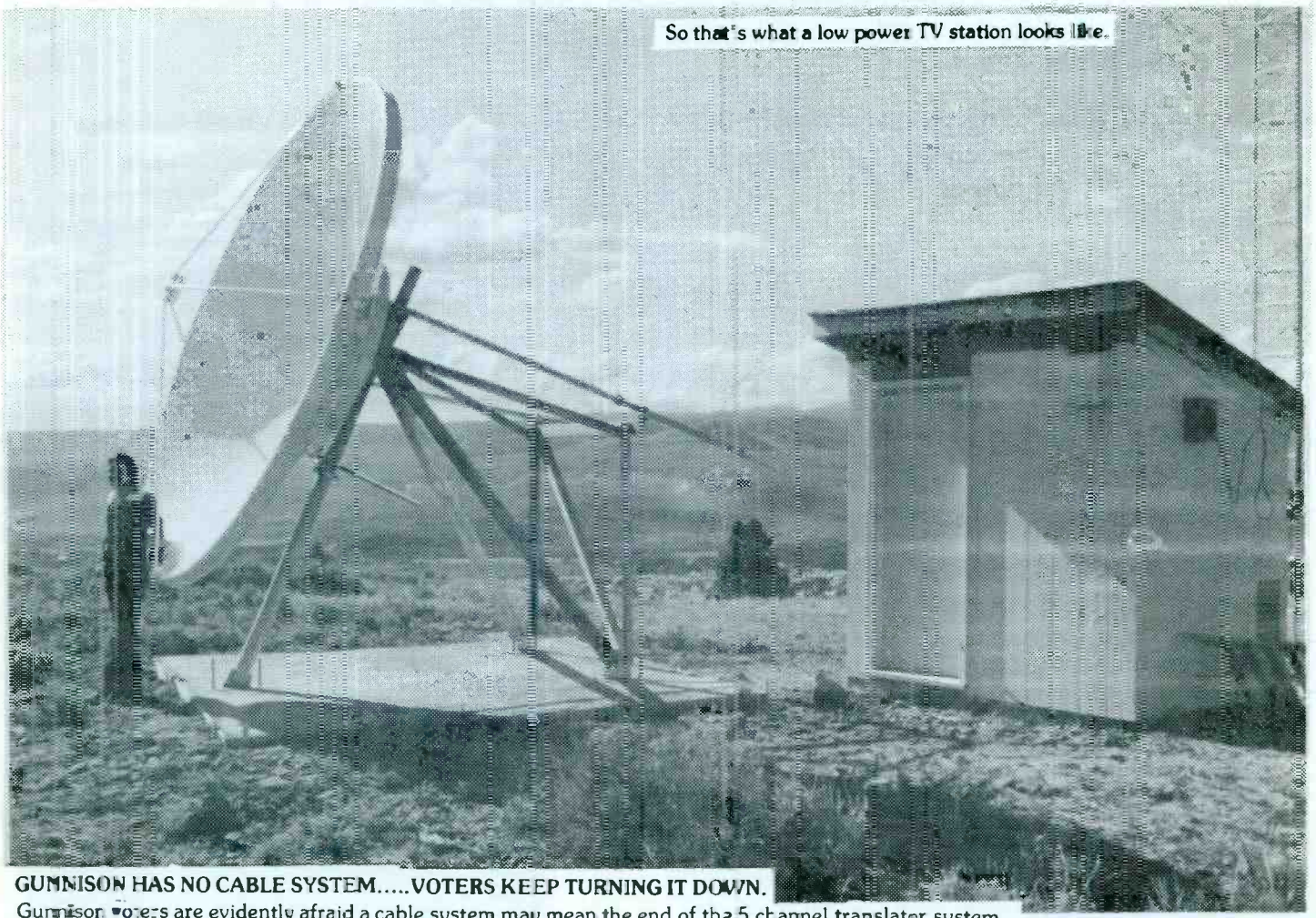
As far as we can find out, Gunnison is the first Colorado LPTV on the air, though several others have been granted CPs.

Select TV subscription movie programming is being supplied via satellite starting at 6 p.m. daily till 2 a.m. and starts at noon on weekends. SPN supplies the daytime satellite programming free of charge to the station which is rebroadcast unscrambled. A timer with back up battery does the switching. The satellite dish is a 12 foot all aluminum dish by General Instrument of Canada. The LNA and frequency agile (tuneable) receiver is by Microwave Associates, who, Mr. Callihan explains, have servicing readily available in nearby Denver. The receiver is switchable by timer or remote control. The encoder and decoder are the relatively inexpensive Mini Code from Oak Industries. The encoders and decoders are not addressable. No local origination equipment or central STL microwave link is used at present but is planned to be added later. A local college has over $100,000 worth of local production gear and also may be interested in supplying some local programming over the new low power station on Channel 2.

Using a 5 element yagi antenna which will be installed along with a decoder box for an initial half price offer of $39.95, preliminary station testing gave a 1500 microvolts level 7 miles out on the yagis at the furthest edge of the populated area they are serving during tests. 200 microvolts is considered to be well out of the snow, so the 1500 leaves plenty of extra margin. The transmitter is a solid state Television Technology transmitter. The ERP is 25 watts. The transmit antennas are two Channel 2 Scala 5 element yagis oriented at right angles delivering a directional heart shaped pattern, the bottom point of the heart being the back side of the antennas. The all solid state transmitter and receiving equipment draw little current, so they were able to use electricity from the power line originally installed underground to supply the translators on the same hill without too much voltage drop. An FM station is also located further down the ridge.

Mr. Callihan says that snow and ice have not been a problem in the past on that ridge.

A front page newspaper article by the local paper and newspaper ads started two weeks before the start up drew considerable response. Radio advertising started a few days before start up. The entire community was set to receive 3 or 4 nights of unscrambled preview of the movies supplied



So that's what a low power TV station looks like.

GUNNISON HAS NO CABLE SYSTEM.....VOTERS KEEP TURNING IT DOWN.

Gunnison voters are evidently afraid a cable system may mean the end of the 5 channel translator system that has served them so well for so many years.

by the service from Select TV and those signing up were receiving the rest of the month of September free. A $22.95 normal price is being discounted to those signing up now receiving a special $17.95 rate.

Mr. Michael Callihan can be reached at Gunnison Television, TV 2, at P.O. Box 1238, Gunnison, Colorado, 81230; area code (303) 641-3290

Why not put on two or more additional channels, using the same dish, TVRO, tower, encoder, etc. Would that make more sense then three others build stations from scratch? How about an all news channel, all classified, etc. Little additional overhead.

5 channels of tranlsators are shown on the right.

The transmitter shack for the transmitter, TVRO and encoder.

Applications Filed Since the August Issue

ALABAMA

Andalusia
22 100w Free State Brdcst. 7/28/82
33 1kw Blacks Desiring Media 8/26/82
51 100w Free State Brdcst. 8/26/82
54 1000w Blacks Des. Media 8/30/82

Evergreen
14 100w Free State Brdcst. 8/2/82
16 100w Free State Brdcst. 8/2/82

Florence
60 1kw Local Power TV, Inc.

Georgiana
14 100w Free State Brdcst. 7/28/82
17 100w Free State Brdcst. 7/28/82

Jackson
27 1000w Don Kimbrell 7/29/82

Muscle Shoals
5 10w Vikki Mitchell 2/16/82

Sanford
50 1000w Destin Comm. TV 7/28/82
62 1000w " " 8/2/82

ALASKA

Alakanuk
8 10w State of Alaska 3/12/82

Delta Junction
17 20w State of Alaska 2/19/82

Glenallen & Copper Center
13 100w State of Alaska 2/19/82

Homer & Seldovia
11 100w State of Alaska 2/19/82

Igiugig
9 10w State of Alaska 8/3/82

Kotzebue
15 10w State of Alaska

Lake Louise
11 100w State of Alaska 2/19/82

Nome
15 10w State of Alaska

Noorvik
9 10w State of Alaska 8/3/82

Perryville
4 10w State of Alaska 8/4/82

Portage Creek
7 10w State of Alaska 8/2/82

Tok Junction
7 10w Tok Community TV, Inc. 8/4/82

Tuntutuliak
9 10w State of Alaska 3/12/82

Valdez
15 10w State of Alaska

Wrangell
21 10w State of Alaska

ARIZONA

Douglas
3 100w Russwal Corporation 3/11/82

Florence/Superior
25 1000w Superior Publishing 7/28/82

Sierra Vista
35 100w Huachuca Herald, Inc. 8/2/82

Young
7 10w Aztec Video, Inc. 8/11/82

ARKANSAS

Ash Flat
12 10w HBCFGBFI 8/2/82

Blytheville
33 100w Midsouth Brdcstrs. 7/28/82

Crossett
16 1kw Blacks Desiring Media 7/28/82
20 1kw " " 7/28/82
36 1kw " " 7/28/82
38 1kw " " 7/28/82
46 1000w " " 7/29/82

Dermott
5 10w Deloy Miller 8/26/82

Fayetteville
9 10w Midsouth Broadcasters 7/28/82
9 10w Payne Broadcasting Co. 9/1/82

Helena
21 100w Midsouth Broadcasters 8/2/82

Hope
57 1kw Blacks Desiring Media 8/26/82

Hot Springs
18 1000w ABC Minority Invest. 8/2/82
32 1000w Midsouth Brdcstrs. 7/28/82
32 100w Payne Broadcasting 9/1/82

Lead Hill/Branson
15 1000w Robert M. White, II 8/2/82

Mountain Home
43 1000w Baxter Brdcst. 3/22/82

Paragould
28 100w Local Power TV, Inc. 2/19/82

Searcy
47 1kw Ind. Satellite Syst. 8/26/82

Springdale
14 1000w Edward F. Anglin 7/28/82
14 1000w Edward F. Anglin 8/12/82
16 1000w " " 7/28/82
16 1000w " " 8/12/82
19 1000w " " 7/28/82
19 1000w " " 8/5/82

Sulphur Springs
26 1000w A.M.O. Brdcstng. 8/2/82

Urbanette/Kimberling
30 1kw Larimer Publications 7/28/82

CALIFORNIA

Bagdad/Yucca Valley
19 1000w Hi-Desert Publishing 7/28/82

Blythe/Parker
28 1000w Blythe Radio, Inc. 8/30/82

Chambliss/Yucca Valley
19 1000w Hi-Desert Publ. Co. 8/30/82

Crescent City
29 1000w News-Review Pub. Co. 8/2/82

Grass Valley/Nevada City
11 10w Nevada Cy. Pub. Co. 8/2/82

Guadalupe
41 100w William V. Johnson 8/11/82
49 100w " " 8/11/82
57 100w " " 8/11/82
62 100w " " 8/11/82
66 100w " " 8/11/82

Gustine
17 1000w Radio Televisao CA 8/11/82

Healdsburg
14 1kw Larry Whitney 8/26/82
16 1000w Radio Televisao CA 8/11/82

Lancaster
20 1000w Daniel Lamaute 8/2/82

Merced
15 1000w Ronald J. Malik 3/11/82

Salinas
27 1000w Ronald J. Malik 3/11/82

San Ardo & Bradley
54 10w Monterey Super. Schools 3/12/82
(Translator req. low power facilities)

San Luis Obispo
2 10w Millard V. Oakley
17 1000w Blacks Des. Media 7/29/82
46 1kw Marketgraphics, Inc. 8/26/82

Santa Barbara
65 100w Icthus Ministries 2/18/82

Santa Maria
21 1000w Daniel Lamaute 8/2/82
23 1kw Blacks Des. Media 8/26/82
45 1kw " " 8/26/82

Santa Rosa
68 1kw Daniel Lamaute 8/26/82

San Ysidro
69 100w Reginald Fessenden 3/15/82

Ukiah
28 100w Mendocino Pub. Co. 2/19/82

Victorville
20 100w William V. Johnson 8/11/82
50 100w " " 8/11/82

Westwood
22 1000w William Holdinghausen 9/1/82

Windsor
30 1000w Community TV 8/30/82
55 1kw Community TV 8/26/82
55 1000w " 8/30/82
55 1000w " 9/1/82
69 1000w " 9/1/82

CAROLINE ISLANDS

Truk
20 1000w Al Shipley 7/28/82

COLORADO

Breckenridge
33 100w ZLTV, Inc. 8/5/82

Glenwood Springs
19 100w Dennis H. Owen 9/1/82

Greeley
8 10w Greeley Publishing Co. 7/28/82

Gunnison
13 10w Collis M. Callihan

Trinidad
12 10w Southwest Comm. TV 3/12/82
17 1000w " " 7/28/82
25 1000w " " 7/28/82
27 1000w " " 8/30/82

South Fork
54 1000w C & J Hoelscher 3/23/82

FLORIDA

Boca Raton
63 100w Saul A. Slossberg 8/4/82

Fort Pierce
23 1000w Norman S. Grudman 9/1/82

Frostproof
24 1000w Donald A. Perry 7/28/82

Live Oak
2 10w WNER Radio, Inc. 8/4/82

Marathon
3 100w Mark S. Manafo 8/2/82

Okeechobee
17 1kw H. R. Madray 8/26/82
25 1000w " 8/2/82

Perry
34 100w Kenneth B. Darby 9/1/82

Vero Beach
43 1kw Marketgraphics, Inc. 8/26/82

GEORGIA

Brunswick
20 1000w Complexicable LPTV 7/28/82
33 1kw Blacks Desiring Media 8/26/82
51 1kw " " 8/26/82
56 1000w FM Television, Ltd. 7/29/82
56 1000w " " 7/29/82
61 1000w " " 7/29/82
61 1000w " " 7/29/82

Commerce
14 1000w Donald A. Perry 7/28/82
24 1000w " " 8/30/82
26 1000w " " 7/28/82

Dublin
42 1000w Courier Herald Pub. 8/30/82

Graham
17 1000w Donald A. Perry 7/28/82
19 1000w " " 7/28/82
26 1000w " " 7/28/82

Jesup
34 100w H.R. Madray 8/2/82
48 1000w " " 8/2/82

Lula
14 1000w Community TV 8/30/82
22 1000w " " 8/30/82
24 1000w " " 8/30/82

Nicholls
17 1000w Donald A. Perry 7/28/82
19 1000w " " 7/28/82
24 1000w " " 7/28/82

Rome
25 1000w Marketgraphics 8/30/82

Sea Island
6 10w William T. Conner 8/11/82
53 100w " " 8/11/82
69 100w " " 8/11/82

Valdosta
26 1000w Complexicable LPTV 9/1/82
32 1000w " " 9/1/82

Waycross
13 10w Teletronics, Inc. 8/30/82

GUAM

Agana
20 1000w Al Shipley 7/28/82
22 1000w " " 7/28/82

HAWAII

Hilo
32 1000w Rafiudin Raphael 7/28/82
Leslie Tull Grinage

Honolulu
52 1000w Daniel Lamaute 8/2/82

Kailua Kona
24 1kw Pepsi-Cola of Alton 9/1/82
27 1kw " " 9/1/82
35 1kw " " 9/1/82
40 1kw " " 9/1/82
43 1kw " " 9/1/82
45 1000w " " 9/1/82
47 1000w " " 9/1/82
55 1000w " " 9/1/82
58 1000w " " 9/1/82
63 1000w " " 9/1/82
68 1000w " " 9/1/82

Lihue Kauai
24 1000w Atlantic & Caribbean 2/18/82
Communications Co.

Pearl City
33 1000w Pepsi-Cola of Alton 9/1/82
38 1000w " " 9/1/82
44 1000w " " 9/1/82
46 1000w " " 9/1/82
57 1000w " " 9/1/82
62 1000w " " 9/1/82

Windward Side
56 1000w Paul Yempuku 8/2/82

ILLINOIS

Centralia
21 1kw Blacks Desiring Media 8/26/82
24 1kw " " 8/26/82
42 1kw " " 8/26/82

Chenda
5 10w Cornbelt Press, Inc.

La Salle
10 10w Vikki Mitchell 2/16/82
35 1kw Richard C. Wessell

Salem
18 1000w Pepsi-Cola of Alton 9/1/82
22 1000w " " 9/1/82
30 1000w " " 9/1/82
53 1000w " " 9/1/82
55 1000w " " 9/1/82
57 1kw " " 9/1/82

Vandalia
28 1000w Pepsi-Cola of Alton 8/30/82
41 1000w " " 8/30/82
54 1000w " " 8/30/82
57 1kw " " 9/1/82
59 1000w " " 8/30/82
63 1000w " " 8/30/82

INDIANA

Portland
11 10w Deloy Miller 8/3/82

Vincennes
51 1000w Burt Johanningsmeler 9/1/82

IOWA

Allendorf/Sibley
28 1000w Worthington Daily 7/28/82
Globe

Burlington/Fort Madison
32 100w Daily Gate City Co. 7/28/82

Denison
33 1000w Denison Newspapers 8/30/82
49 1000w " " 8/30/82
52 1000w " " 8/30/82

Dubuque
51 1000w Blacks Des. Media 7/12/82
57 1kw Tower Power Corp. IA 8/26/82

Fairfield
11 10w Benjamin B. Moore 2/18/82

Sheldon
17 1000w Worthington Daily 7/28/82
Globe

Spencer
6 10w Blacks Desiring Media 8/26/82

Spirit Lake
43 1kw Worthington Daily 8/26/82
Globe

Wever/Keokuk
5 10w Daily Gate City Co. 8/2/82

KANSAS

Cedar Vale/Winfield
45 1000w Winfield Pub. Co. 8/2/82

Hiawatha
33 100w Walls Newspapers Cons. 8/2/82

Manhattan
15 1000w Seaton Publ. Co. 3/23/82

Wakeeney
3 10w Tregovision 3/23/82

KENTUCKY

Betsy Lane
12 10w Dewey Lee Adkins 8/26/82
30 100w " " 8/26/82

Hi Hat/Neon
13 10w Holiness Church of 7/29/82
Gospel Ministry

Hopkinsville
43 1kw Kentucky New Era 7/28/82
43 1000w " " 8/2/82

London
13 10w The Sentinel-Echo 3/23/82

Zebulon
16 1000w Edward F. Anglin 7/29/82
30 1000w " " 7/29/82
30 1000w " " 8/12/82
32 1000w " " 7/29/82
32 1000w " " 8/12/82
63 1000w " " 8/12/82

LOUISIANA

Covington
43 1000w Bogalusa Daily News 9/1/82

De Ridder
16 1000w Jim Merritt 8/2/82

Leesville
54 1000w Jim Merritt 8/2/82

Many
2 10w L. Witherell & E. Taylor 3/12/82

New Iberia
13 10w Huachuca Herald, Inc. 7/29/82

Tallulah/Vicksburg
45 1000w Vicksburg Printing 8/2/82

MARYLAND

Clear Spring
47 100w Clear Spring Brdcst. 8/11/82

MARIANA ISLANDS

Saipan
20 1000w Al Shipley 7/28/82

MARSHALL ISLANDS

Kawaleigh
22 1000w Al Shipley 7/28/82

Majuro
20 1000w Al Shipley 7/28/82

MICHIGAN

Bay City
61 1000w Vistacom 8/11/82

MINNESOTA

Alexandria
34 100w Selective TV, Inc. 2/19/82

Baudette
6 10w John W. Boler 8/2/82

Detroit Lakes/Rochert
28 1000w Park Rapids Enterpr. 8/2/82

Fulda/Chandler
38 1000w Worthington Daily Globe 8/2/82

Grand Rapids
30 100w Communications Syst. 7/28/82

Marshall
39 1000w Ogden Cable Corp. 8/12/82
50 1000w Williams Brdcstng. 7/28/82

Ortonville
44 1kw Kaercher Publications 8/26/82

Park Rapids
5 10w John W. Boler 8/2/82
27 1000w Park Rapids Enter. 8/2/82

Roseau
5 10w John W. Boler 7/28/82

St. Cloud
13 10w Harlan L. Jacobsen 8/2/82

St. James
42 100w Watonwan TV Improve. 8/26/82
5 100w " " 3/23/82
(Translator req. low power facilities)

Warroad
3 10w John W. Boler 7/28/82

MISSISSIPPI

Ackerman
19 100w Ackerman Cable TV 8/5/82
35 100w " " 8/5/82
38 100w " " 8/5/82
44 100w " " 8/5/82
65 100w " " 8/5/82
67 100w " " 8/5/82

Batesville
35 100w Free State Brdcst. 7/29/82

Biloxi
43 1000w Local Power TV 3/23/82

Burgess/Oxford
6 10w Midsouth Broadcasters 8/2/82

Carthage
5 10w The Carthaginian 7/29/82

Clarksdale
31 1000w Action Communications 9/1/82

Fayette
19 1000w Tom Dixon 7/28/82

Kosciusko
22 100w Free State Brdcst. 8/26/82

Louisville
57 100w Free State Brdcst. 7/29/82

McComb
26 1000w Wyatt Emmerich 8/30/82
33 1000w " " 7/29/82
36 100w Free State Brdcst. 8/26/82
36 1000w Wyatt Emmerich 8/30/82
42 1000w " " 8/30/82
44 1kw " " 7/28/82
46 1kw " " 7/28/82
46 1000w " " 8/30/82
48 1000w " " 8/30/82
52 1kw " " 7/28/82
56 1000w " " 7/29/82
64 1000w " " 8/30/82
66 1kw " " 7/28/82
66 1000w " " 8/30/82
68 1000w " " 9/1/82
69 1000w " " 7/29/82

Monticello
49 100w Free State Brdcst. 7/29/82
65 100w " " 7/29/82

Natchez
22 1000w Commonwealth Venture 9/1/82
23 1kw Blacks Desiring Media 8/26/82
26 100w Free State Brdcst. 8/26/82
28 1000w Commonwealth Venture 9/1/82
29 1000w Blacks Des. Media 7/29/82
30 1000w Commonwealth Venture 9/1/82
34 1000w Commonwealth Venture 9/1/82
39 1000w " " 9/1/82
39 100w Free State Brdcst. 8/26/82
45 1000w Action Communications 9/1/82
45 1000w Commonwealth Venture 9/1/82
53 1000w " " 9/1/82
55 1000w " " 9/1/82
58 1000w " " 9/1/82
63 1000w " " 9/1/82
67 1000w " " 9/1/82

Oxford
47 100w Free State Brdcst. 7/28/82
51 1000w The Oxford Eagle 7/28/82
53 100w Free State Brdcst. 7/28/82

MISSOURI

Carrollton
29 1000w Kanza, Inc. 8/11/82

Caruthersville
58 1kw Related Companies 8/26/82

Houston
5 10w Robert L. Davis 8/2/82
16 1000w Robert L. Davis 8/2/82

Kirksville
5 10w Sowers Newspapers 7/27/82

Maryville
10 10w Sowers Newspapers 7/27/82

Milan
5 10w Green Hills LPTV 7/27/82

Rolla
7 10w Sowers Newspapers 7/27/82

Sleeper/Lebanon
5 10w Sowers Publications 8/2/82

Wardell/Kennett
2 10w Midsouth Broadcasters 7/28/82

West Plains
5 10w Sowers Newspapers 8/2/82

MONTANA

Bozeman
9 100w Montana State Univ. 8/2/82
21 100w Skagit Valley Pub. 7/28/82
21 1000w " " 8/11/82

Chinook
14 100w Blaine Co. Public TV 8/30/82

Kalispell
18 100w Telecrafter Corp. 2/19/82
28 100w " " 7/28/82

Libby
18 100w Telecrafter Corp. 7/28/82

Scobey
20 1kw Blacks Des. Media 8/26/82

White Sulphur Springs
57 20w Meagher Cy. TV Dist. 8/3/82

NEBRASKA

Scottsbluff
40 1000w Tracy Corp. III 9/1/82
45 1000w " " 9/1/82

NEW HAMPSHIRE

Concord
15 100w Newspapers of N. Eng. 8/4/82
28 100w " " 8/4/82
39 100w " " 8/4/82
68 100w " " 8/4/82

Lebanon
25 100w Newspapers of N. Eng. 8/4/82
47 100w " " 8/4/82

Lincoln/North Conway
24 1000w Northeast Comm. Corp. 8/2/82

NEW JERSEY

Atlantic City
34 1kw Marketgraphics, Inc. 8/26/82
47 1000w " " 7/29/82
59 1kw Missionary Brdcstrs. 8/26/82

Cape May
15 1kw Local Power TV, Inc.

NEW MEXICO

Artesia
12 10w Valley Newspapers 7/28/82
28 100w Southwest Comm. TV 7/28/82

Clovis
9 10w Southwest Comm. TV 3/12/82
14 1000w Payvision Communic. 8/2/82
18 1000w " " 7/28/82
24 1000w " " 7/28/82
47 1000w " " 7/28/82
53 1000w " " 8/2/82

Hobbs
20 1000w Southwest Comm. TV 7/28/82
40 1000w " " 7/28/82
65 1000w " " 7/28/82

Las Vegas
17 100w Carl Mark 8/2/82
17 100w " " 8/26/82

Lovington
4 10w Southwest Comm. TV 8/26/82

Santa Fe
26 1000w Payvision Communic. 7/28/82
43 1000w " " 8/2/82
47 1kw Marketgraphics, Inc. 8/26/82

Continued on back half -- colored pages.

Lo - Power Community Television

The LPTV Industry's National Information Source

LO-POWER COMMUNITY TELEVISION
PUBLISHING CO.
7432 E. DIAMOND
SCOTTSDALE, AZ 85257
PHONE ORDERS 602-945-6746

The *Gigantic* Low Power Television *Rip Off*

Over 1,000 would-be LPTV broadcasters have already been ripped off for huge amounts of money, and, believe it or not, they are now being set up for rip off stage two and three.

There are more scams in LPTV than there are ants in an ant hill. The naive are being sheared daily. Read about the multi-million dollar 'slick' LPTV rip off industry that has developed.

LPTV readers are guaranteed to save hundreds of times the cost of this manual or your money will be cheerfully refunded. (No one else in low power ever offers you your money back.)

Are you the next LPTV sucker?

Are you a babe in the woods of low power? Have you already been carved up by the wolves? Sold a bill of goods? There is nothing wrong with low power television that adequate information won't cure. This report should have been titled, 'How to Avoid the Leeches that are Sucking Low Power Entrepreneurs Dry'.

Low power television is a genuine opportunity of a lifetime. However, many LPTV pioneers in this gold rush have already been waylaid by the Indians and many more who do not read this in time will also get arrows in their backs.

Read how to avoid the shaft in, 'The Gigantic LPTV Ripoff'; Report #13; $10 postpaid
Satisfaction guaranteed.

Copy of Any FCC Application

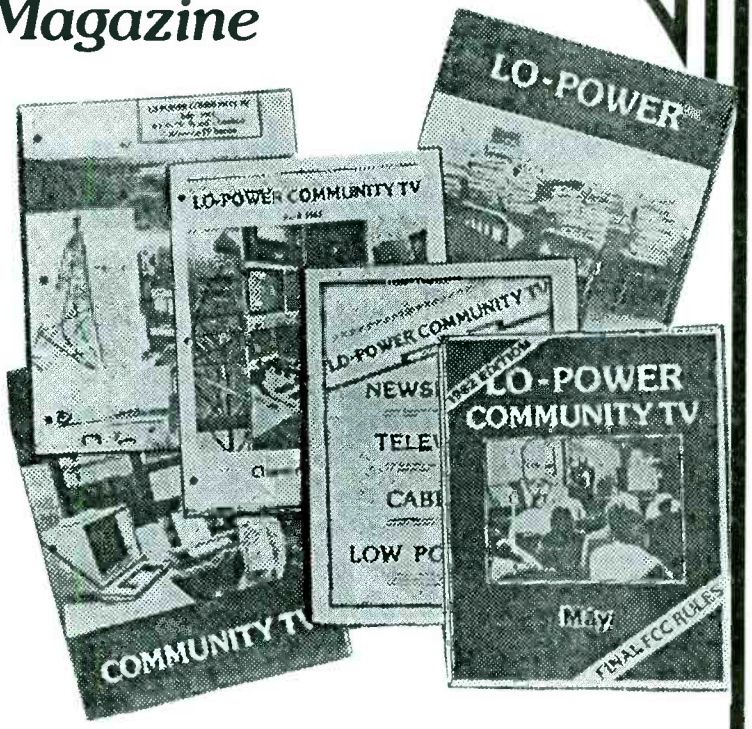
Need to know what a competitor filed for? Where their tower site is going to be? Who is the principal? How much power? What direction?

Principal's name and current mailing address; $6, postpaid
Complete application -- LPTV or translator --
Complete photocopied application rushed priority mail; $20, postpaid
Call for other Washington access or research; (602) 945-6746

Lo-Power Community TV - FM

The LPTV Industry's Only Monthly Magazine

The Only LPTV Magazine



Not a simple 8-page newsletter. This is the large, complete monthly low power publication that keeps you informed on LPTV and FM. This publication does not just tell you what is happening in Washington; it includes all FCC cut offs and FCC LPTV releases in full. All applications filed in the last 30 days as released by the FCC, as well as insights on getting your applications expedited. The only LPTV publication that keeps you up-to-date on equipment, where to buy it, and how to use it. Monthly stories and photos on new LPTV stations on the air. The only complete LPTV monthly publication.

Just to get the FCC releases out of Washington alone costs you $25 or more per month, and you have to sort through at least 100 pages of non-low power to find one page of what you want applying to low power. We reproduce **all** FCC low power releases, including all low power applications, those up for cut off dates and everything affecting low power. **Lo-Power Community Television** magazine doesn't just tell you what's happening at the FCC, you can read the entire uncut releases yourself. The applications we put in order by states and cities for easier checking.

We give you the LPTV governmental news and the technical developments affecting low power that you get nowhere else. We are not in Washington, D.C., but we carried news of the licensing of the first low power station 10 days before any Washington publication carried it.

This magazine carries advice and information and profiles other experienced people in this business, who can show you how to do it -- so you can do it, too. This is a new industry, but we are already on our second year of monthly editions and getting bigger and better each issue. Remember, this magazine gives you information on what business and technical aspects of low power you can exploit, as well as warnings of what to avoid and specific, detailed and concise information that will help you make day-to-day decisions, as well as long term LPTV strategy.

What more can we say? Frankly, we would like you to subscribe.

As a subscriber to the magazine serving low power community television, you will discover a continuing source of priceless information and new ways to capitalize on the opportunities that will present themselves in the coming months. You will be a witness to one of the major growth industries of the '80s, and you will have the best seat in the house.

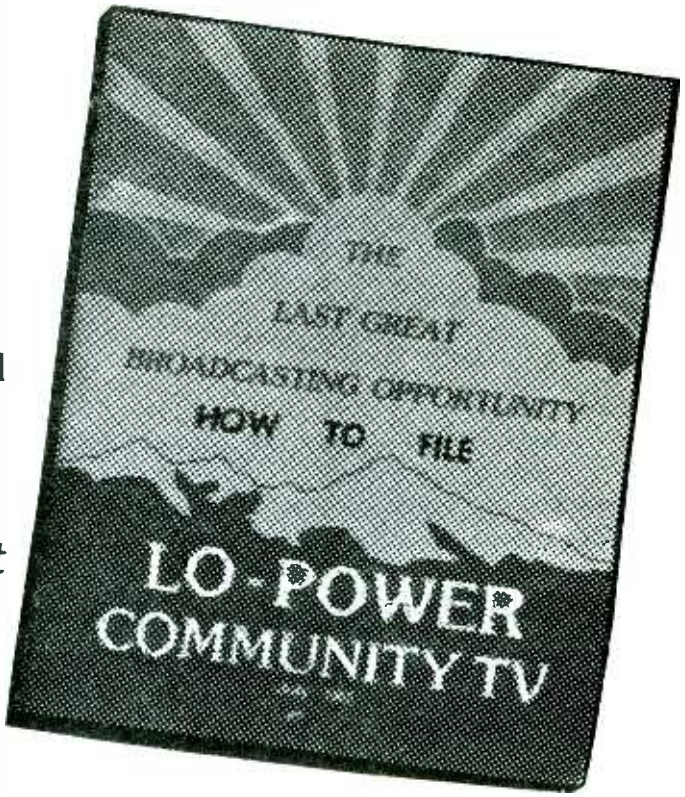
Sample copy; $5, postpaid. Yearly (12 issues) subscription; $50

How to File

* Includes new FCC application forms

The book that hundreds have used to file their own application.

Removes the mystery about the application process.



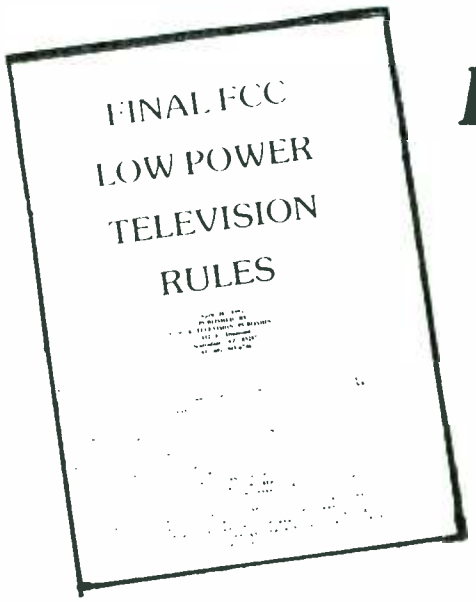
How to File; $25, postpaid. Satisfaction guaranteed.

If you are going to be involved in LPTV, you need to understand the application process. Some people have been ripped off for up to $10,000 to file a low power television application. $4,000 is a common paper mill huckster price, and worst of all, these high priced applications have been some of the poorest filing jobs you'll see at the Commission; and the people that paid these prices do not yet even know what a poor filing job was done for them.

By knowing about the process, you'll discover what is right or best for your application even if you have someone else do the detail work. Even if you know nothing about engineering you can either learn to do these entirely by yourself, or pay $100 to $500 for outside legitimate engineering help. The rest you can do yourself as well or better than most paper mills. Filing your application is about like doing your income tax. You can either do it all yourself or just have someone go over and finish it up.

Over 4,000 translators almost identical to LPTV are on the air. Most of these were filed by the applicants with little or no outside help other than possibly some from the equipment manufacturers free of charge. There are several low power construction permits already granted to people who read our earlier manual and filed their own applications.

You are afraid of something only when you are ignorant of it. There is no need to be afraid of doing your own application, because when you finish this manual, you will no longer be ignorant of low power television.



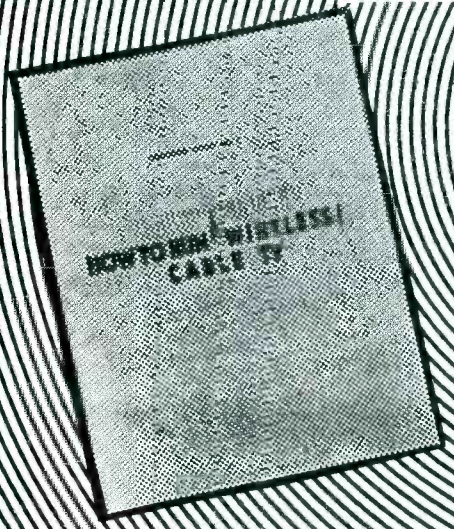
Final FCC LPTV Rules

46 pages of fine print reproduced directly from our friendly regulating agency release. Included free with the 'How to File' manual and 'Wireless Cable' manual. Also included free with any order over $25, if specifically requested. Ordered separately, Low Power Final FCC Rules; $5, postpaid.

Now You Can Run Cable TV Wireless!

ON REGULAR CHANNELS

How to Run Wireless Cable TV; Report #7; $25, postpaid

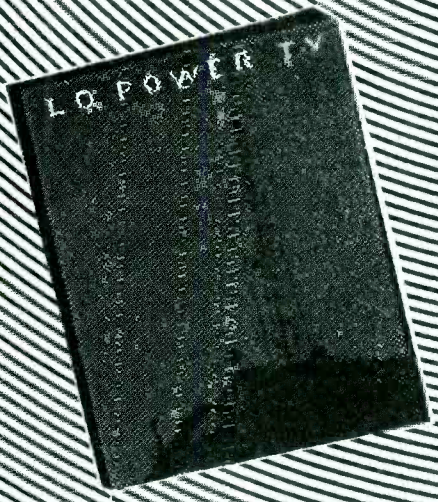


New FCC rules make it possible to bring multiple channel cable TV service even to the most rural communities. FCC type accepted equipment listed available now. A whole new concept that opens up whole new areas to cable TV type programming, including premium movie service. Use standard TV channels 2 to 69. No franchise election, fee or charges.

The how to book that can start you in a whole new profitable field with a very small investment.

What's Happening

With the LPTV Stations on the Air



Dozens of photos, facts and figures from LPTV stations on the air. Learn from others' experiences of what does and what doesn't work.

LPTV STATIONS ON THE AIR
Report #11
$12, postpaid

What You Need to Know . . .

Before Going on the Air

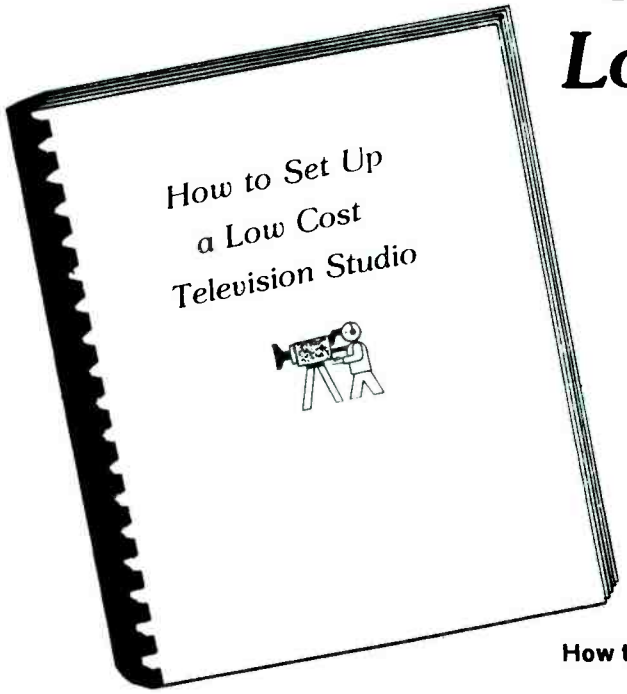
How to Set Up Low Power Television

The book you need to plan a station that is successful from the first day. How to get from studio to transmitter. How to choose the method of operation that best suits you. How to sell out your commercial time before you start. Saving money on your LPTV plant.

How to Set Up; $30, postpaid. Satisfaction guaranteed.
Free to ICTV members; pay only $5 postage and handling.

Diagrams with options on . . .

How to Set Up a Low Cost TV Studio



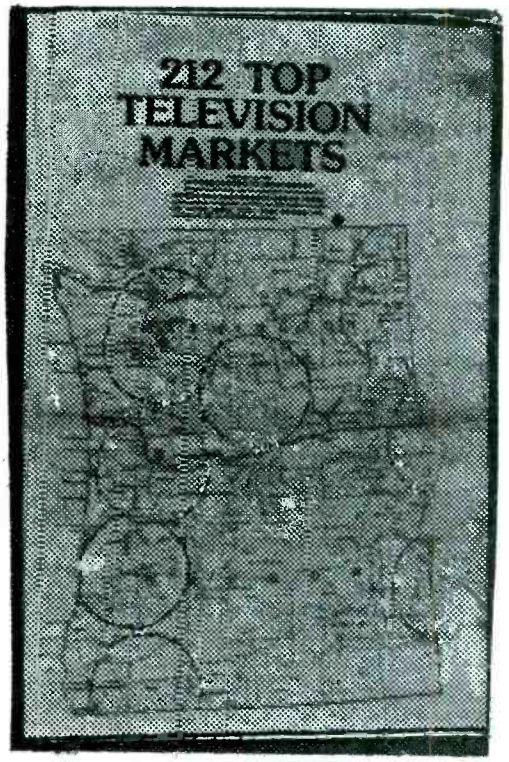
The 'how to' manual that shows you how to save tens of thousands of dollars and set up a complete studio for under $10,000 that can turn out professional quality productions. **Satisfaction guaranteed.**

How to Set Up a Low Cost Studio; $20

How to Set Up a Low Cost LPTV Studio; VHS Videotape; $100

Tiered Processing Map

Order 212 Market Map; $10, postpaid



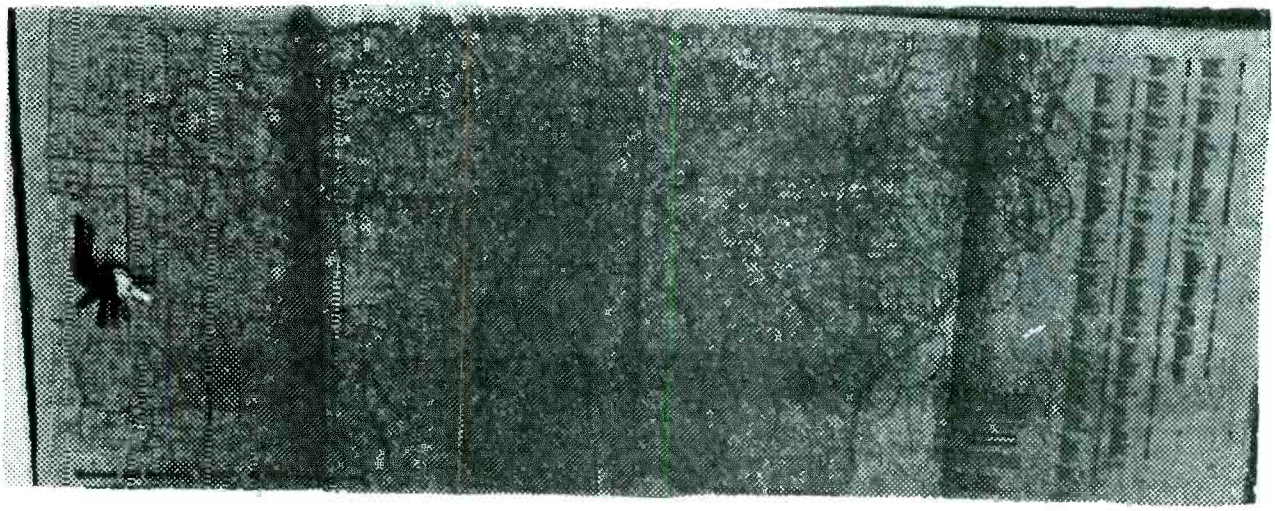
Thousands of towns and cities available now.

How do you know where you can file and when? This federal government map showing counties and major cities has been overlayed with 56 mile circles from the official center of each of the listed top markets. The top 100 are ranked and numbered so you can readily identify tiers two and three. This newspaper sized map folds out and covers the 48 states. You will be able to spot many hot areas currently available. Know what tier your present applications will be processed in. United States government produced map with counties and major cities. Contours plainly outlined.

Are you missing some great rural markets available right now?

Order 212 Market Map; $10, postpaid.

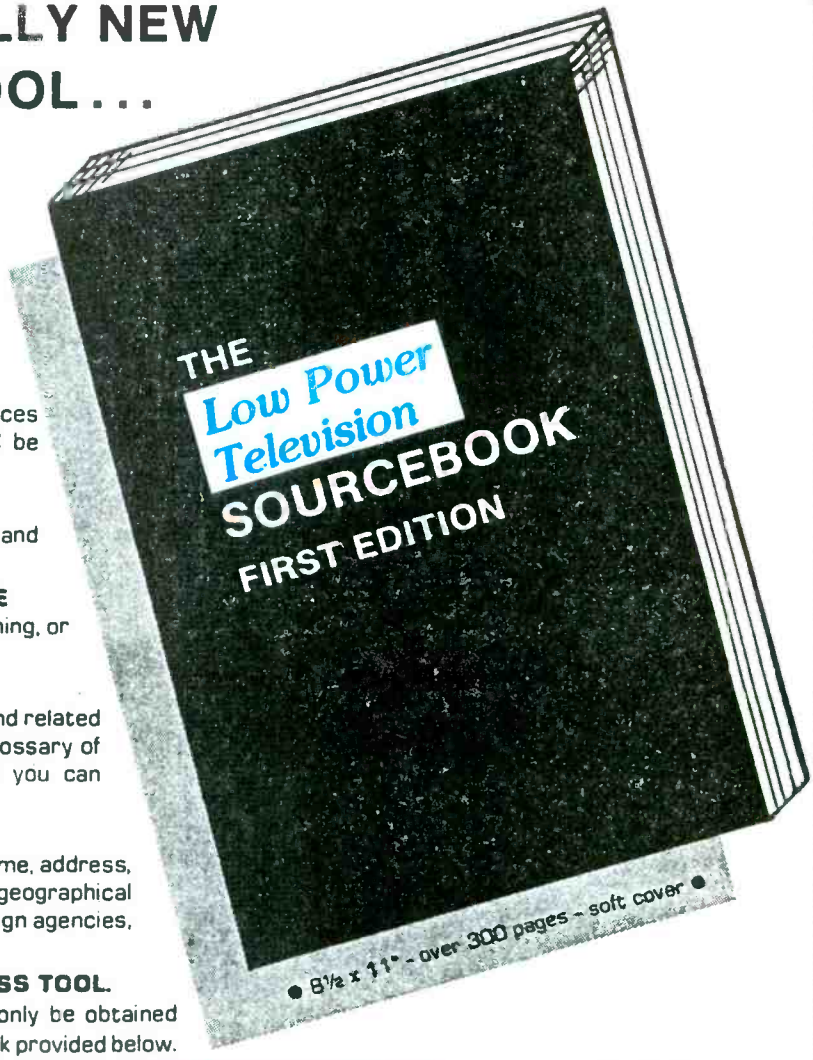
The population to be served can be inside; only the transmitter has to be outside.



16 Page Newspaper Size Map, Includes Coordinates; $10, postpaid

ANNOUNCING A TOTALLY NEW KIND OF EXECUTIVE TOOL . . .

The Low Power Television Sourcebook



IF YOU ARE IN A RESPONSIBLE POSITION
You need this reference of LPTV communications resources to stay competitive in the 1980's. Every business will be impacted.

THIS SOURCEBOOK IS FAST BECOMING THE industry "Reference Bible" for LPTV related voice, data and video communications products and services.

"VIA SATELLITE" IS A CAPTION YOU WILL SEE more and more of. You must take it seriously in your planning, or you may come up short.

THIS IS A LOW POWER INDUSTRY FACT BOOK. It is a virtual who's who in satellite electronics, cable TV, and related LPTV communication services. There is also a large glossary of LPTV and videotex terms included. With your copy you can increase your expertise.

COMPANIES ARE LISTED BY PRODUCT and service. Included is a 'Satellite Yellow Pages', listing name, address, phone and zip code. There are also special alphabetical and geographical zip code sections in the sourcebook, government and foreign agencies, plus associations are also included.

THE SOURCEBOOK IS A NECESSARY BUSINESS TOOL. It is not available yet in libraries or bookstores. It can only be obtained through this offer. Please place your order **now** on the blank provided below.

LOW POWER SOURCEBOOK
Released November, 1982; Updated Regularly
$50, postpaid

A Must For Every Reference Library

ORDER YOUR COPY OF THIS FANTASTIC NEW FIRST EDITION NOW WITH A FULL MONEYBACK GUARANTEE.

FCC Data Files on Tape and Microfiche!

LO-POWER COMMUNITY TELEVISION PUBLISHING CO.
7432 E. DIAMOND SCOTTSDALE, AZ 85257
PHONE ORDERS 602-945-6746

COMPUTOR MAGNETIC TAPE, Data Base...
Includes full service TV stations, applications. etc. as well as LPTV and Translators. ..$300.00 Postpaid.
Updated monthly, available on one time order or monthly.

MICROFICHE FCC television data base

Microfiche

Full service TV stations, including applications. Filed by state, city and channel....$10.00 Includes coordinates and all necessary data.

LOW POWER AND TRANSLATORS MICROFICHE

Includes applications and licensed. Coordinates, power, Etc. Included
Filed by State, City and Channel....$10.00
Filed by State, Channel and City. $10.00
FCC Updated monthly. Each Category Includes the equivalent of about 500 pages of 8 and 1/2 X11.

Microfiche readers are available at most librarys. Used machines available for $100. up.
If you would prefer paper copys off the microfiche, we can print any city or state area for $5. first page and 50¢ a page there after. Phone orders accepted. orders shipped same day

★ YOUR SATISFACTION GUARANTEED ★

FEDERAL COMMUNICATIONS COMMISSION

DATA BASE

CHANNEL SEARCH

We use the latest FCC data base to find the best channels you can use to file at your proposed town or tower site, along with a printout of all mileage separations and pertinent data.

Rural VHF Search and Printout; $50
Complete search to Channel 69; $100

Includes full service, translators licensed and applied for LPTV licensed and CPs as well as mutual exclusives report.

TOP 212 MARKET MILEAGE PRINTOUT

Exact mileage from your proposed tower site to nearby top markets to determine if your application will meet the requirements for processing now. If you do not have a tower site or coordinates, we have the coordinates of all cities and towns in the United States in our data base and can give you the exact mileage to your city's center from the FCC's list of major markets.

Market mileage printout; $10

MILEAGE SEPARATION CALCULATIONS

Any site in the United States; send your tower site coordinates and a list of call letters, city and station coordinates, including translators and LPTV applications, and we will computer tabulate and print out exact mileage separations.

Total charge per site; $15

★ **All computer function charges are half price to ICTV members.**

THE PROPOSED FCC COMPUTER PROGRAM ON INTERFERENCE STUDIES

Now available for immediate use on application calculations. We have obtained this government program directly from the agency. After considerable work, we now have it up and running on our computer. Field strength, protected contours, etc. Call or write for prices on calculations needed for your application. Compare our charges.

LPTV Commercials

- ★ Do your own?
- ★ Advantage of farming them out
- ★ Obtaining the 'pro' quality
- ★ Bare essentials - equipment
- ★ What you do not need
- ★ Stock slides - tapes
- ★ Pre-packaged locals - ad the name and audio
- ★ The Mavica - low cost stills
- ★ Training personnel

Producing LPTV Commercials; $20, postpaid

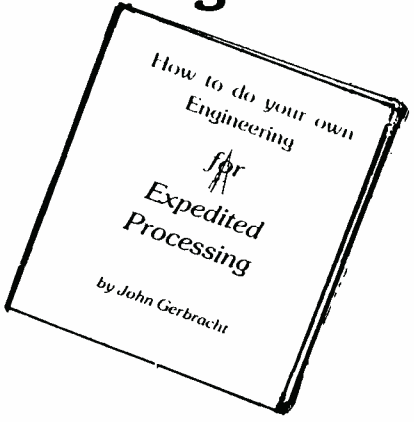
Producing Local LPTV

- ★ What local shows to do that attract audiences
- ★ What type programs to avoid that aren't worth the trouble
- ★ Advantage of doing them live
- ★ How to do them live
- ★ Producing shows with little or no post production time
- ★ What type of staff?
- ★ How many local shows a day can you produce?
- ★ Do they all have to 'make money'?
- ★ What will the locals tune in?

Producing Local LPTV They'll Watch; $25, postpaid

Doing Your Own Expedited and Close Space Engineering

- ★ A 'how to' manual written by a Phd engineer
- ★ Includes FCC 50-50 and 50-10 charts
- ★ Learn to do your own engineering contours, studies and exhibits
- ★ Includes examples

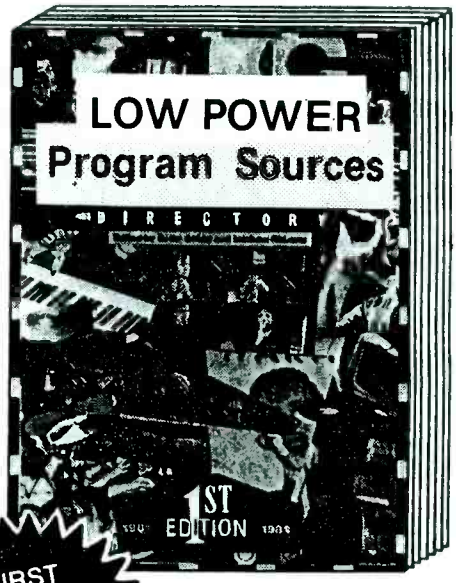


How to do Your Own Engineering Exhibits, Engineering Report #3; $20, postpaid

LPTV PROGRAM SOURCE DIRECTORY

At Last -- A directory of program sources available to low power broadcasters. An indispensable handbook that includes an STV satellite sources directory as well as ad supported programming sources. Lists several sustaining program sources free of charge. Even a section on low power FM. Essential information for anyone serious about LPTV broadcasting. Updated regularly.

LPTV Program Source Directory; $25
Available January 1983



Actual size (11"x7¾")

FIRST EDITION January 1983

LPTV Application Listings Filed in Entire U.S.

This hard copy lists state, city, channel, date filed, and applicant name for entire contiguous 48 states. Estimated 95% accurate. Hand tabulated from Commission releases; updated monthly.

LPTV Application Listings; $20

LPTV MAILING LISTS

Want to contact all LPTV applicants? Those with construction permits? You get prompt service and reasonable prices, so contact us at (602) 945-6746. We now have it all on computer labels with regularly updated data.

LPTV and Translator *Applications Data Base* Updated Monthly

Hard copy complete; includes CP, license status, etc. Printed directly from latest FCC data base. Includes coordinates, power, status, filing date, call letters, application number, applicant's name and input source if a translator. Data base updated by Commission monthly. One state only; specify which state. Accuracy same as Commission's data base.

Data Base LPTV and Translator Applications; one state only; specify which state; $15
Additional states on same order; $8 each

LO-POWER COMMUNITY TV
BROADCASTING CRASH COURSES

September 25-26, 1982; Phoenix; following and in conjunction with Newspaper Association Convention.
October 30-31, 1982; Las Vegas; preceeding translator convention and manufacturers' exhibits.
January 29-30, 1983; Washington, D.C.; preceeding National Religious Broadcasters' Convention and manufacturers' exhibits.
April 9-10, 1983; Las Vegas; preceeding NAB convention and exhibits.
June 11-12, 1983; Houston; preceeding NCTA Cable Convention and exhibits.

Crash Course
How to Make it Big in
Low Power

WHO SHOULD ATTEND?

Low power applicants, would-be applicants, professionals dealing with applicants, suppliers of equipment for LPTV, program suppliers, educators, potential LPTV network executives, auxiliary businesses which can use vertical blanking intervals, teleconferencing personnel, satellite reception entrepreneurs, translator operators considering low power and local programming, cable access programmers, newspapers considering leasing cable and owning LPTV channels.

Want to know why these crash courses are the working programs the serious LPTV broadcasters attend? Call us; we will give you names of people near you who have attended previous LPTV crash courses; they'll tell you what they got out of them. Several have traveled clear across the country to attend two, and one has even come back and attended three.

The High Powered
Low Power Television
Crash Course

- ★ Getting a license; more and faster
- ★ Planning a station and community networks for lowest investment and largest return
- ★ Engineering considerations you need to know about
- ★ Methods of operation to guarantee viewers (and income)
- ★ Where 2/3 of your income will come from that you do not even know about
- ★ Why you do not have to worry about programming sources; lists supplied
- ★ Low cost local production equipment demonstrated; sources
- ★ Electronic publishing and your part in getting ready for what's coming

Saturday -- 10 a.m. to 5 p.m.
Saturday -- 8 p.m. to 10 p.m.
Sunday -- 10 a.m. to 4 p.m.

We recommend advance reservations.
Late, or at the door, $150

REGISTRATION FEE: $125 per person; includes two lunches and material packet. ICTV members, $100.
CANCELLATION POLICY: Full refund of fee if written cancellation is received 10 days prior.

TAX DEDUCTION FOR EDUCATIONAL PURPOSES: Treasury regulation 1.162-5 permits deduction of educational expenses--registration fees, travel, meals and lodging.

YOU NEED INFORMATION ON THE MANY OPTIONS OPEN TO LPTV BROADCASTERS TO SET YOUR DIRECTION.

THIS CRASH COURSE WILL PROVIDE ANSWERS.

LOW POWER COMMUNITY TELEVISION CRASH COURSE

FOR FURTHER INFORMATION OR PHONE REGISTRATION, CONTACT: (602) 945-6746

Note: Please use separate sheet for additional registrants.
☐ **I/we wish to register for the Crash Course. $125 is enclosed for each registration.**
(Make checks payable to Lo Power Community Television)
☐ **Please send me listing and prices of Video Tapes available of convention and crash course proceedings.**
☐ **Please add my subscription to Lo Power Community TV Magazine. I enclose $50.**

To: Lo Power Community Television, 7432 E. Diamond, Scottsdale, AZ 85257:

Name _____ **Title** _____

Organization _____

City/State/Zip _____ **Telephone** _____

ICTV

Membership Information

Independent Community Television Alliance

- ☐ Local Power Hot Line -- 50 hours a week
- ☐ Subscription -- Monthly Lo-Power magazine
- ☐ Co-op Group Purchases of Equipment
- ☐ Expedited Washington Research Information
- ☐ Collective Lobbying for the Little Guy in LPTV
- ☐ Washington Follow-up on Applications
- ☐ Verbal Phone Access to Commission Data Base -- 6 Days a Week
- ☐ Use of Instructional 'How To' Videotapes (1 week free)
  Members pay only for shipping, handling, and record keeping

All Lo-Power Publishing personal copies of manuals and materials free of charge to ICTV members

INSTRUCTIONAL 'HOW TO' VIDEOTAPES AVAILABLE
(Use for one week; members pay only for shipping, handling and record keeping)

- ★ Techniques of Using One Camera
- ★ Setting up a Studio
- ★ Lighting for Television
- ★ Multiple Camera Techniques
- ★ Shooting Video 'Basics'
- ★ How to Shoot a Sports Event
- ★ How to Broadcast a Local Wedding
- ★ How to Broadcast a Church Service
- ★ Shooting Local Commericals for Cable or LPTV
- ★ Television Tape Production
- ★ LPTV Crash Course
- ★ LPTV Crash Course 'B'
- ★ Subscription TV
- ★ World's Smallest Full Service Station
- ★ The New Mavica 'Still Camera'

BOOKS AND MANUALS -- LOANED FOR
TWO WEEKS, FREE TO MEMBERS
(Members pay only for shipping, handling and record keeping)

- ★ Color TV Studio Design and Operation
- ★ Videotape Production and Communication Techniques
- ★ Designing and Maintaining a Small Television Studio
- ★ Television Production Handbook
- ★ Video User's Handbook
- ★ TV Engineering Handbook (very large and heavy book)

The LPTV Association That Works

FREE APPLICATION ASSISTANCE HOTLINE FOR MEMBERS - 6 DAYS A WEEK

☆ **WE DO A COMPLETE RURAL AREA VHF LPTV FCC APPLICATION FOR YOU!** ☆
☆ Members' Price: $250 ☆

ICTV

Below is my application for membership in ICTV. I have deducted $ _____ for which I have already paid Lo-Power Publishing for publications and enclose a check for $ _____ . the two totalling $250.00 for my one-year membership.

Independent Community Television Alliance 7432 E. Diamond, Scottsdale, AZ 85257

Membership Application

Individual(s) to contact: _____ (Name) _____ (Position)

_____ _____

Company _____

Address _____

City _____ State _____ Zip Code _____

Phone ____ ( ) _____

Order Form

Please print all information.
Please enter my order for the following :

Quantity		Amount
_____	The Gigantic LPTV Ripoff; Report #13	$10
_____	Monthly magazine; year's subscription; specify start issue	$50
_____	Monthly magazine; sample; specify	$5
_____	Monthly magazine; special back copy offer	$10 for 3
_____	How to File	$25
_____	Final FCC Rules	$5
_____	Include FCC Rules free; I have ordered $25 or more worth of publications	Free
_____	How to Run Wireless Cable TV	$25
_____	What's Happening with the LPTV Stations on the Air; Report #9	$12
_____	How to Set Up Low Power Television	$30
_____	How to Set Up a Low Cost Studio	$20
_____	Tiered Processing Map; Continental United States	$10
_____	Low Power TV Sourcebook	$50
_____	A. FCC Data Base Microfiche; Full Service Stations	$10
_____	B. FCC Data Base Microfiche; Translators and LPTV; by State, City and Channel	$10

Quantity		Amount
_____	C. FCC Data Base Microfiche; Translators and LPTV; by State, Channel and City	$10
_____	Start regular monthly service of **all 3** microfiche	$30 monthly
_____	Start regular monthly service of microfiche A, B, or C; circle which	$10 each, monthly
_____	Computer Tape, Entire FCC Data Base	$300
_____	Producing LPTV Commericals	$20
_____	Producing Local TV They'll Watch	$25
_____	Doing Your Own Expedited Engineering; Engineering Report #3	$20
_____	LPTV Program Source Directory	$25
_____	LPTV Applications Filed to Date in United States	$20
_____	LPTV and Translators Data Base; Any State; specify Additional states on same order	$15 each $8 each
_____	Mailing Lists; Special Order Only	$100 up
_____	Crash Course; Specify Date and Where	$125
_____	ICTV Membership; including subscription; all publications, Videotapes, etc. and other benefits	$250

All prices are subject to change without notice (publication dates are tentative).

For fast C.O.D. Priority Mail Phone Orders, Call

(602) 945-6746

Purchase Order No. _____

Payment Enclosed: Check___ Money Order___

Signature _____

Please enclose payment and order form in envelope and mail to

LOW POWER COMMUNITY TELEVISION

7432 E. Diamond, Scottsdale, AZ 85257

Name _____ Position _____

_____ _____

Company _____

Address _____

City _____ State _____ Zip Code _____

Phone ( ) _____

Lo-Power Community Television Publishing Co.

7432 East Diamond Scottsdale, AZ 85257

(602) 945-6746

Silver City
8 10w Southwest Community TV 3/12/82

Taos
38 100w El Crepusculo, Inc. 9/1/82

NEW YORK

Ellenville
3 10w Oleg R. Matiash 8/4/82
22 1000w " " 8/4/82
33 1000w " " 8/4/82
48 1000w " " 8/4/82

Hyde Park
33 1kw Eagle Tribune Pub. 8/26/82
33 1000w Middletown Press Pub. 8/4/82

Massena
45 1kw Blacks Des. Media 8/26/82

Olean
42 100w Ogden Cable Corp. 8/12/82
46 1kw Blacks Des. Media 8/26/82

NORTH CAROLINA

Bladenboro/Whiteville
8 10w News Reporter Comp. 7/29/82

Clinton
17 1000w L. F. Amburn, Jr. 8/11/82
24 1000w " " 7/29/82
57 1000w Destin Comm. TV 7/29/82

Elizabethton
17 1000w L. F. Amburn, Jr. 8/30/82

Fayetteville/Roslin
18 1000w L. F. Amburn, Jr. 8/2/82

Henderson
18 1000w Henderson Dispatch 8/5/82

Hope Mills
18 1kw Destin Comm. TV 8/26/82
34 1kw " " 8/26/82
69 1000w " " 7/29/82

Lenoir
56 1kw R. L. Bush, Jr. 8/26/82

Pinehurst/Sanford
38 1000w L. F. Amburn, Jr. 7/28/82

Roanoke Rapids
31 1kw Marketgraphics, Inc. 8/26/82

St. Pauls/Lumberton
34 1000w L. F. Amburn, Jr. 7/28/82

Valdese
55 1kw Burke County Brdcst. 9/1/82

Wallace/Turkey
21 1000w L. F. Amburn, Jr. 8/2/82

Weldon
17 1000w Donald A. Perry 7/28/82
20 1000w Donald A. Perry 7/28/82
31 1000w " " 7/28/82

NORTH DAKOTA

Devil's Lake
12 100w Quentin L. Breen

Dickinson
11 100w Debra M. Kamp

Elgin
20 1000w Nightwood, Inc. 8/30/82
31 1000w " " 8/30/82

Grand Forks
19 1000w FM Television, Ltd. 7/29/82
26 1000w Unecom, Inc. 7/28/82

Reeder
38 1000w Nightwood, Inc. 9/1/82
50 1000w " " 8/30/82

OHIO

Bucyrus
19 1kw Blacks Des. Media 8/26/82

Byer/Jackson
50 1000w Lewis E. Davis 8/2/82

Lexington
16 1000w Edward F. Anglin 8/2/82
23 1000w " " 8/5/82
26 1000w " " 7/28/82
32 1000w " " 7/29/82
32 1000w " " 8/5/82
64 1000w " " 8/5/82

Mansfield
14 100w Pamela D. Blow 8/5/82
17 100w " " 8/5/82
20 100w " " 8/5/82
25 100w " " 8/5/82
30 100w " " 8/5/82
41 100w " " 8/5/82
49 100w " " 8/5/82
57 100w " " 8/5/82
68 100w " " 8/5/82

Rarden/Lucasville
17 100w Barrett,Dunn & Ray 9/1/82

OKLAHOMA

Altus
11 10w Oklahoma Publishers' Electronic Communic. 3/23/82

Ardmore
47 100w The TV Group, Inc. 2/19/82

Carnegie
11 10w OPEC 9/1/82

Enid
55 1000w Ward Management Co. 8/2/82

Hobart
23 100w Oklahoma Publishers' Electronic Communic. 3/23/82

Idabel/Broken Bow
2 10w James Monroe, Inc. 3/12/82

Kenwood/Pryor
35 100w Retherford Public. 7/29/82

Moodys/Wagoner
15 100w Retherford Public. 7/29/82

Morrison/Cushing
16 100w Retherford Public. 7/29/82

Pryor
35 100w Retherford Public. 7/29/82
39 100w " " 7/29/82

Wagoner
35 100w Retherford Public. 8/26/82
53 100w " " 7/28/82
63 100w " " 8/2/82

OREGON

Baker
37 100w Gregory A. Petersen 3/12/82

Bend
33 100w Bernard Q. Petersen 3/12/82

Burns
9 100w T. Miller & K. Petersen

Eugene
36 1000w Ronald J. Malik 3/11/82

Klamath Falls
6 10w Klamath Publishing Co. 8/26/82
29 1000w " " 9/1/82

PENNSYLVANIA

Bradford
21 1kw Blacks Des. Media 8/26/82
27 1kw " " 8/26/82

Lockhaven
13 10w Lock Haven Brdcst. 8/30/82

Oil City
5 10w Olga De Anda 3/22/82

Williamsport/S. Williamsport
32 1000w Local Power TV, Inc. 2/19/82
36 1000w Marketgraphics, Inc. 9/1/82
50 1000w SPAN TV, Inc. 8/30/82
50 1000w Marketgraphics, Inc. 9/1/82

PUERTO RICO

Aguadilla
10 10w Mrs. Aracelis Ortiz 7/26/82
29 100w Eastern Sat. Services 8/26/82

Arecibo
64 100w Mr. Angel F. Ginorio 8/2/82

Dorado
42 100w Eastern Sat. Serv. 8/5/82
61 1000w " " 8/30/82
65 100w " " 8/5/82
69 100w " " 8/11/82

Fajardo
34 10w Aracelis Oritz 7/26/82

SOUTH CAROLINA

Branchville
19 1kw Community TV 8/26/82
19 1000w " " 8/30/82
21 1000w " " 8/30/82
32 1kw " " 8/26/82
32 1000w " " 8/30/82

Florence
51 1000w Florence Telecasting 2/16/82

Georgetown
27 1kw Marketgraphics 8/26/82
51 1000w " " 8/26/82
60 1000w L. F. Amburn, Jr. 7/28/82
61 1000w " " 8/11/82

Myrtle Beach
11 10w Television, Unltd. 8/5/82
34 1kw Marketgraphics 8/26/82

Surfside Beach
67 1000w C. & P. Little 8/4/82
69 1000w " " 8/4/82

SOUTH DAKOTA

Lemmon
42 1000w Nightwood, Inc. 8/2/82
60 1000w " " 8/30/82

Mitchel/Woonsocket
10 10w Harlan L. Jacobsen 3/23/82

Redfield
18 1000w Kaercher Public. 8/2/82

TENNESSEE

Camden
42 1000w Futures TV, Inc. 8/5/82

Cookeville
16 1000w Walls Newspapers Con. 8/11/82
46 1000w Local Power TV 2/19/82
58 1000w Walls Newspapers Con. 8/11/82

Crab Orchard/Harriman
13 10w Joan O'Steen Hill 7/28/82

Crossville
14 100w William T. Conner 8/11/82
39 100w " " 8/11/82
44 100w " " 8/11/82
55 1kw Blacks Des. Media 8/26/82
65 100w William T. Conner 8/11/82
67 100w " " 8/11/82

Dyersburg
52 1000w Jerry R. Thompson 9/1/82

Jackson
43 1000w SPAN TV, Inc. 8/30/82

Jamestown
2 10w William T. Conner 8/11/82
13 10w " " 8/11/82
40 100w " " 8/11/82
63 100w " " 8/11/82
66 100w " " 8/11/82

Martin
52 1kw Futures TV, Inc. 9/1/82

Shelbyville
11 10w Payne Brdcst. Co. 9/1/82

Southport/Columbia
34 100w Midsouth Brdcstrs. 7/28/82

Summertown/Columbia
6 10w LPTV of Columbia 7/28/82

Union City
25 1000w Futures TV, Inc. 8/2/82
25 1kw " " 9/1/82
33 1000w " " 7/28/82
62 1000w Related Companies 9/1/82

TEXAS

Belleville
23 1000w Radio Ten Ninety 8/2/82

Brownwood
11 10w Quentin L. Breen

Bryan
55 10w C. Ortiz & L. Tibbets 7/29/82
60 10w " " 7/29/82
65 10w " " 7/29/82

Clarksville
20 1kw Clarksville Times 8/26/82
25 1kw " " 8/26/82

Del Rio
48 100w T. Miller & K. Petersen

Eagle Pass
3 10w Carlos Ortiz 7/29/82
5 10w " " 7/29/82
7 10w " " 7/29/82
11 10w " " 7/29/82
13 10w " " 7/29/82
55 100w T. Miller & K. Petersen

Eastland
17 1000w Micromedia 9/1/82
17 1000w M & M Telecasting 8/2/82

Falfurrias
2 10w Pena TV Company 8/30/82
7 10w " " 8/30/82
9 10w " " 8/30/82
12 10w " " 8/30/82

Friona/Hereford
30 100w Southwest Comm. TV 7/28/82

Greenville
47 1kw Bill R. Wright 8/26/82

Jacksonville
2 10w Jeffrey L. Ward 3/23/82

Jasper
53 100w KTXJ Radio, Inc. 8/5/82

Kerville
5 10w Carlos Ortiz 7/29/82
7 10w " " 7/29/82
9 10w " " 7/29/82
11 10w " " 7/29/82
13 10w " " 7/29/82

Kress/Plainview
8 10w Southwest Comm. TV 7/28/82

Lufkin
57 100w Kemmerly & Kemmerly 3/23/82

Marble Falls
21 1000w Hawkins Brdcstng. 8/11/82

Mt. Pleasant
46 1kw Palmer Media, Inc. 8/26/82

Nacogdoches
47 1kw Blacks Des. Media 8/26/82

Palestine
2 10w Vista Telecommunicat. 3/12/82

Paris
25 1000w Drew & Drew 7/28/82
48 1000w " " 7/28/82

San Diego/Alice
12 10w Woodson Newspapers 7/28/82

Sulphur Springs
15 100w Echo Publishing Co. 2/19/82

Sunray/Dumas
5 10w Southwest Comm. TV 7/28/82

Tyler
13 10w George E. Gunter 3/22/82

Victoria
9 10w J.M.J. Tele-Radio 3/22/82

UTAH

Cedar City
30 1000w Spectrum Press, Inc. 8/2/82

Logan
16 1000w FM Television, Ltd. 7/29/82
18 1kw Blacks Des. Media 8/26/82
20 1kw Good News Brdcstng. 8/26/82
40 100w Spectrum Press, Inc. 8/5/82
42 1kw Marketgraphics, Inc. 8/26/82
52 100w Spectrum Press, Inc. 8/5/82

Mesquite/Gunlock
55 100w William John Miner 8/4/82

Price
35 100w KUTV, Inc.

St. George
33 1000w Spectrum Press, Inc. 7/28/82

St. Johnsburg
12 10w Listeners' Network TV 3/12/82

Santaquin/Provo
9 100w Spectrum Press, Inc. 7/28/82

Vernal
17 1000w Spectrum Press, Inc. 7/28/82

Winchester
52 1000w Gourley, Balfour, Rubinstein, Taylor, & Ms. May 8/5/82

Woodstock
23 1000w E. Warren Denton, Jr. 8/2/82
33 1000w " " 7/28/82

VIRGIN ISLANDS

Christiansted & Fredericksted
45 1000w Caribbean Center for Understanding Media 2/18/82

VERMONT

Brattleboro
16 1000w Eagle Publishing Co. 8/30/82

Rutland
12 10w Access Rutland, Inc. 8/26/82
12 10w " " 9/1/82

VIRGINIA

Front Royal
28 1000w E. Warren Denton, Jr. 7/28/82

Heathsville
18 1000w Donald A. Perry 7/28/82
25 1000w " " 7/28/82
31 1000w " " 8/2/82

Luray
54 1kw E. Warren Denton, Jr. 8/26/82
57 1kw " " 8/26/82

Staunton
17 1kw E. Warren Denton, Jr. 8/26/82

Strasburg
16 1000w Shenandoah Valley LPTV

Traffic
18 1kw Community Television 8/26/82
18 1000w " " 8/30/82
26 1kw " " 8/26/82
26 1000w " " 8/30/82
30 1000w " " 8/11/82

WASHINGTON

Bellingham
47 1000w SPAN TV, Inc. 8/30/82

Richland
32 1000w FM Television, Ltd. 7/29/82

Pullman
50 1kw Blacks Des. Media 8/26/82

Toledo
31 100w Ramsey Enterprises 8/5/82

Walla Walla
49 1kw Blacks Des. Media 8/26/82
58 1000w Liberty Communic. 7/28/82

WEST VIRGINIA

Martinsburg
34 1000w Ogden Cable Corp. 8/12/82
41 1kw Marketgraphics, Inc. 8/26/82

WISCONSIN

Boscobel
6 10w Rita A. Bane 3/23/82

Fond du Lac
26 1000w Marketgraphics 9/1/82

Haugen/Rice Lake
34 100w Steven C. Lutz 7/28/82

Janesville
45 1kw Madison Newspapers 7/28/82

North Fond du Lac
21 1000w Edward F. Anglin 8/2/82
21 1000w " " 8/5/82
28 1000w " " 8/2/82
28 1000w " " 8/12/82
30 1000w " " 8/5/82
30 1000w " " 8/30/82

Oshkosh
14 1000w Madison Newspapers 8/2/82

WYOMING

Laramie
46 100w Quentin L. Breen

Riverton
16 100w Star Publishing Co. 2/19/82

Rock Springs
43 100w Bernard Q. Petersen 3/12/82

PUBLIC NOTICE

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

5433

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

FM, TV TRANSLATOR AND LOW POWER APPLICATIONS ACCEPTED FOR FILING AND NOTIFICATION OF CUT-OFF DATE

Released: July 29, 1982

CUT-OFF DATE: SEPTEMBER 3, 1982

NOTICE is hereby given that the applications listed in the attached appendix are accepted for filing. They will be considered to be ready and available for processing after September 3, 1982. An application, in order to be considered with any application appearing on the attached list or with any other application on file by the close of business on September 3, 1982, which involves a conflict necessitating a hearing with any application on this list, must be substantially complete and tendered for filing at the offices of the Commission in Washington, D.C., not later than the close of business on September 3, 1982.

Petitions to deny application on this list must be on file with the Commission not later than the close of business on September 3, 1982.

Applications for new stations may not be filed against any application on the attached list which is designated by an asterisk(*).

The applications on the attached list represent applications that meet one of the exceptions to the freeze on the acceptance of new applications for TV, FM translators and low power broadcast stations. Additionally, the applications are being accepted and placed on cut-off because they are under consideration for funding by NTIA's Public Telecommunications Facilities Program.

UHF TV TRANSLATOR APPLICATIONS

BPTT-810121JW — Marble, Colorado
Pitkin County Translator Department
Req: Channel 16, 482-488 MHz, 100 watts
Primary: KRMA-TV, Denver, Colorado

BPTT-810121JZ — Victorville, California
San Bernardino Community College District
Req: Channel 20, 506-512 MHz, 100 watts
Primary: KVCR-TV, San Bernardino, California

BPTT-810121KA — Crestline, California
San Bernardino Community College District
Req: Channel 48, 674-680 MHz, 100 watts
Primary: KVCR-TV, San Bernardino, California

BPTT-810121KB — Barstow, California
San Bernardino Community College District
Req: Channel 26, 542-548 MHz, 100 watts
Primary: KVCR-TV, San Bernardino, California

BPTT-810309IO — Crawford, Colorado
Delta County
Req: Channel 55, 716-722 MHz, 100 watts
Primary: KRMA-TV, Denver, Colorado

BPTT-820510TX — Concordia, Kansas
Smoky Hills Public Television
Req: Channel 64, 770-776 MHz, 100 watts
Primary: KSMH-TV, Hays, Kansas

BPTT-820510TZ — Phillipsburg, Kansas
Smoky Hills Public Television
Req: Channel 66, 782-788 MHz, 100 watts
Primary: KSMH-TV, Hays, Kansas

BPTT-820525TY — Dover, Delaware
WDPB-TV, Delaware Public Television
Req: Channel 34, 590-596 MHz, 1 watt
Primary: WDPB-TV, Seaford, Delaware

VHF LOW POWER TV APPLICATIONS

BPTVL-820323TU — Lame Deer, Montana
Dull Knife Memorial College, Inc.
Req: Channel 4, 66-72 MHz, 10 watts

FM TRANSLATOR APPLICATIONS

BPFT-820511IF — Goodland, Kansas
Kanza Society, Inc.
Req: Channel 219, 91.7 MHz, 10 watts
Primary: KANZ-FM, Garden City, Kansas

BPFT-820521IW — The Dalles, Oregon & Goldendale, Washington
Fine Arts Radio
Req: Channel 212, 90.3 MHz, 10 watts
Primary: KFAE-FM, Richland, Washington

BPFT-820524IX — Cashmere, Dryden, Washington
Fine Arts Radio
Req: Channel 217, 91.3 MHz, 10 watts
Primary: KFAE-FM, Richland, Washington

UHF LOW POWER TV APPLICATIONS

BPTTL-820602TY — Fairfield, Texas
Navarro College
Req: Channel 41, 632-638 MHz, 1000 watts

BPTTL-820621TX — Corsicana, Texas
Navarro College
Req: Channel 29, 560-566 MHz, 1000 watts

Mileage Separation Chart --

-- Full Service Stations to LPTV Site

Many of us would like to sit down with a pencil and just figure out what channels may be available when we want to file an application in a certain area. However, about half way through, we get confused going back and forth between reading the rules and researching what channels are available and finally throw up our hands and say to hell with it.

In 1971, Television Technology of Arvada, Colorado, made up a little UHF chart that was useful for figuring what channels were available for translators at that time. That seemed to be a handy chart, so recently, we just updated it, included VHF, and made one to fit the new low power rules.

To use the VHF chart, pick a channel you want to check in the left hand column. Going across horizontally, the chart lists what other channels you need to check for and the mileage separations required.

In the VHF chart, the slant lines indicate you do not have anything to check there. (Remember, this happens because there is a space between Channels 4 and 5, 6 and 7, and 13 and 14.) For example, you decide you want to check if Channel 4 is available. You will need to check a circle 150 miles radius (if you plan to offset, or 210 miles otherwise). If there are no Channel 4 stations in that circle, next proceeding across the chart horizontally, we find we need to check a circle 90 miles in radius to see if there are any Channel 3 stations within that distance. None? Fine. You are almost home free. Next, you will need to check to see if there are any translators or LPTV stations on either of those Channels 4 or 3 nearby. That translator and LPTV mileage spacing separation required is not on this chart. We may do a chart on that in a future issue of the magazine.

On UHF, you will note you have many more channels to consider. However, in many areas, there are practically no UHF stations, so it may not be much of a checking problem in rural areas.

To determine where full service stations are, you may refer to the 'TV Factbook', if your public library or nearby broadcast station has one. TV Factbooks are about one year outdated shortly after they are delivered because of lead time. Most accurate way to check is the monthly full service station FCC data base available on one time order or automatically every month for $10 from **Lo-Power Community TV Publishing.**

150 MILES SAME CHAN.	90 MILES Lower Adj.	90 MILES Upper Adj.
2		3
3	2	4
4	3	
5		6
6	5	
7		8
8	7	9
9	8	10
10	9	11
11	10	12
12	11	13
13	12	

Mileage Separation	20 MILES ABOVE 2ND	3RD	4TH	5TH	BELOW 2ND	3RD	4TH	5TH	75 MILES Lower Adj.	Upper Adj.	60 MI BELOW 7th	60 MI ABOVE 7th	70 MI BELOW 14th	75 MI BELOW 15th	150 MI WITH OFFSET SAME CHAN.
14	16	17	18	19						15		21			14
15	17	18	19	20					14	16		22			15
16	18	19	20	21	14				15	17		23			16
17	19	20	21	22	15	14			16	18		24			17
18	20	21	22	23	16	15	14		17	19		25			18
19	21	22	23	24	17	16	15	14	18	20		26			19
20	22	23	24	25	18	17	16	15	19	21		27			20
21	23	24	25	26	19	18	17	16	20	22	14	28			21
22	24	25	26	27	20	19	18	17	21	23	15	29			22
23	25	26	27	28	21	20	19	18	22	24	16	30			23
24	26	27	28	29	22	21	20	19	23	25	17	31			24
25	27	28	29	30	23	22	21	20	24	26	18	32			25
26	28	29	30	31	24	23	22	21	25	27	19	33			26
27	29	30	31	32	25	24	23	22	26	28	20	34			27
28	30	31	32	33	26	25	24	23	27	29	21	35	14		28
29	31	32	33	34	27	26	25	24	28	30	22	36	15	14	29
30	32	33	34	35	28	27	26	25	29	31	23	37	16	15	30
31	33	34	35	36	29	28	27	26	30	32	24	38	17	16	31
32	34	35	36	37	30	29	28	27	31	33	25	39	18	17	32
33	35	36	37	38	31	30	29	28	32	34	26	40	19	18	33
34	36	37	38	39	32	31	30	29	33	35	27	41	20	19	34
35	37	38	39	40	33	32	31	30	34	36	28	42	21	20	35
36	38	39	40	41	34	33	32	31	35	37	29	43	22	21	36

Mileage Separation	20 MILES								75 MILES		60 MI.		10 MI.	75 MI.	150
	ABOVE				BELOW				lower Adj.	Upper Adj.	BELOW	ABOVE	BELOW		MILES OF FSET
	2ND	3RD	4TH	5TH	2ND	3RD	4TH	5TH			7th.	7th	14th	15th	SAME CHAN.
37	39	40	41	42	35	34	33	32	36	38	30	44	23	22	37
38	40	41	42	43	36	35	34	33	37	39	31	45	24	23	38
39	41	42	43	44	37	36	35	34	38	40	32	46	25	24	39
40	42	43	44	45	38	37	36	35	39	41	33	47	26	25	40
41	43	44	45	46	39	38	37	36	40	42	34	48	27	26	41
42	44	45	46	47	40	39	38	37	41	43	35	49	28	27	42
43	45	46	47	48	41	40	39	38	42	44	36	50	29	28	43
44	46	47	48	49	42	41	40	39	43	45	37	51	30	29	44
45	47	48	49	50	43	42	41	40	44	46	38	52	31	30	45
46	48	49	50	51	44	43	42	41	45	47	39	53	32	31	46
47	49	50	51	52	45	44	43	42	46	48	40	54	33	32	47
48	50	51	52	53	46	45	44	43	47	49	41	55	34	33	48
49	51	52	53	54	47	46	45	44	48	50	42	56	35	34	49
50	52	53	54	55	48	47	46	45	49	51	43	57	36	35	50
51	53	54	55	56	49	48	47	46	50	52	44	58	37	36	51
52	54	55	56	57	50	49	48	47	51	53	45	59	38	37	52
53	55	56	57	58	51	50	49	48	52	54	46	60	39	38	53
54	56	57	58	59	52	51	50	49	53	55	47	61	40	39	54
55	57	58	59	60	53	52	51	50	54	56	48	62	41	40	55
56	58	59	60	61	54	53	52	51	55	57	49	63	42	41	56
57	59	60	61	62	55	54	53	52	56	58	50	64	43	42	57
58	60	61	62	63	56	55	54	53	57	59	51	65	44	43	58
59	61	62	63	64	57	56	55	54	58	60	52	66	45	44	59
60	62	63	64	65	58	57	56	55	59	61	53	67	46	45	60
61	63	64	65	66	59	58	57	56	60	62	54	68	47	46	61
62	64	65	66	67	60	59	58	57	61	63	55	69	48	47	62
63	65	66	67	68	61	60	59	58	62	64	56	70	49	48	63
64	66	67	68	69	62	61	60	59	63	65	57	71	50	49	64
65	67	68	69	70	63	62	61	60	64	66	58	72	51	50	65
66	68	69	70	71	64	63	62	61	65	67	59	73	52	51	66
67	69	70	71	72	65	64	63	62	66	68	60	74	53	52	67
68	70	71	72	73	66	65	64	63	67	69	61	75	54	53	68
69	71	72	73	74	67	66	65	64	68	70	62	76	55	54	69

Translator and LPTV updated monthly on microfiche, also available for $10. They may be ordered two ways: one filed by state, city and channel; and the second way by state, channel and city.

Those that do not order both, ususally order the state, city, channel version. If you do not have a microfiche reader, you can usually use one at the local library, or maybe even your bank.

MILEAGE SEPARATIONS

Mileage separations on same channel are shown with offset. Without offset, separation required would be 210 miles, both on VHF and UHF.

Full service broadcast stations on same horizontal line must be at least the distance indicated from the proposed LPTV site. If less than this spacing, then an alternative channel should be chosen. In many cases, shorter spacing is possible, but must be demonstrated with an engineering showing. It is usually less expensive to find a different channel. VHF channels are enough less expensive than UHF, to make the extra effort and engineering cost worthwhile, when a VHF may be 'squeezed in' by the engineering showing.

REGARDING OFFSET

When your proposed station is less than 210 miles but more than 150 miles from the nearest 'co-channel' (same channel) full service station, you need to be 'offset' from the full service station. There are four offset related positions in low power. One is no offset, which means the transmitter has a relatively wide range it can move around or drift in. The next offset position is zero offset, which means you are going to maintain a very 'precise' frequency in the middle. If you go plus (10 kc) or minus (10 kc), you also are saying you are going to maintain very exact tolerances. This will add at least $300 to $1,000 to the cost of your transmitter and require more testing and maintenance than no offset.

When filing with offset, you must file a statement on how you propose to maintain the required precise tolerances. We use, 'the specified transmitter manufacturer has agreed to supply equipment that will maintain the frequency tolerances required by the Commission', which, of course, our transmitter manufacturer has agreed to do (at additional cost).

ENCODING LP

The idea of an encoding system, or scrambler if you will, is to keep people who do not pay from viewing your channel when you are operating as STV (subscription TV) or wireless cable.

The scrambler (encoder equipment) device must be type accepted by the Commission for use over the air. New systems are being developed and are being submitted to the Commission regularly, and in the not very distant future, digital scrambling systems will be developed that are economically feasible.

Digital systems will be 99.9% crack proof. Now the most sophisticated system in operation, you can buy pirate devices to decode (unscramble) the picture for $125, or so. Probably the most secure are those with really secure sound encoding. 12 states have passed laws making the sale or use of such pirate decoding devices illegal and other states will shortly follow suit. Federal court injunctions have stopped or slowed sales of pirate devices in other areas. In some big cities, however, illegal or not, the subscription broadcasters often have more pirate viewers than they have paid viewers. In rural areas, this may not be as much of a problem, but let us say, for example, you have $25,000 invested in an 'addressable' (that means you can turn off individual decoders from your office through the transmitter) system and 1000 decoders at $200 each. That's $225,000. They wind up selling a lot of pirate devices, and you can't change to a new crack proof digital system that comes out because you have too much invested. As used equipment, no one will want your high priced equipment because for little more, they will then be able to buy crack proof digital.

So, our recommendation is to go relatively inexpensive encoding and decoding equipment now if you are in a rural area and then 2 or 3 years down the road when pirate devices are appearing and the new digitals are available, you can, if the need arises, afford to move or sell to another rural area, your old inexpensive system and get most of your money back and be able to afford a crack proof system that will be out by then.

Tiering means you can turn off part of the evening (or one of the channels if you are multiple channel) from your transmitter so you can offer service with movies up until 10:30, for example, for $20, and for $5 more, they can get the R rated movies after 10:30.

People that take both (usually about 85%) would not need a tierable decoder. Those that only took the movie would.

We suggest you write to the systems that have been approved by the Commision, and then after getting all of their literature and checking with users they can tell you about, decide which you want. If you have not even made a cut off list yet, you may as well wait; more equipment will be out in the near future.

One of the problems with some decoders is that they require a high signal level to operate. These may not be compatible with low power STV if many of your subscribers will be considerably over 5 miles from your transmitter. Normally, 100 microvolts will be a barely watchable picture. Some units will require 500 microvolts, or more. All encoding systems add some picture degradation in addition. These are all things to consider when making a decision on which systems to use.

Here are those ready now. This list includes some new ones that have just been approved over the summer of 1982:

American Television and Comm. Corp.
160 Iverness Drive, West
Englewood, CO 80112
Telephone: (303) 773-3411

Blonder-Tongue Laboratories, Inc.
1 Jake Brown Road
Old Bridge, NJ 08857
Telephone: (201) 679-4000

Dynacom International, Inc.
590 Commerce Park Drive, Suite 125
Marietta, GA 30060
Telephone: (404) 428-3100

Feature Film Services, Inc.
7855B Gross Point Road
Skokie, IL 60077
Telephone: (312) 674-6154

Oak Communications, Inc.
P.O. Box 28759
Rancho Bernardo, CA 92127
Telephone (714) 485-9880

Sony Products Company
9 West 57th Street
New York, NY 10019
Telephone: (212) 371-5800

Telease, Incorporated
1875 Century Park, East #930
Los Angeles, CA 90067
Telephone: (213) 552-1055

Payview, Ltd.
3 Broad Drive
MALL GPD, Box 300
Hong Kong
Local Representation: Contact Peter Tannenwald
C/O Arent, Fox, Kintner, Plotkin and Kahn (Attornies)
1815 H Street, N.W.
Washington, D.C. 20006
Telephone: (202) 857-6000

Pay Television Corp.
390 Plandome Road
Manhasset, NY 11030
Telephone: (516) 627-7440

System Development Corp.
2500 Colorado Avenue
Santa Monica, CA 90406
Telephone: (213) 820-4111

Teleglobe, Inc.
C/O Solomon Sagall
124 West 79th Street
New York, NY 10024
Telephone: (212) 877-7957

Zenith Radio Corp.
1000 Milwaukee Avenue
Glenview, IL 60025
Telephone: (312) 391-8186

System reportedly not needing type acceptance because scramble is all in-band:
Tanner Electronics Systems Technology
16/30 Stagg Street
Van Nuys, CA 91409
Telephone: (213) 989-4535

ICTV

Membership Information

Independent Community Television Alliance

- ☐ Local Power Hot Line -- 50 hours a week
- ☐ Subscription -- Monthly Lo-Power magazine
- ☐ Co-op Group Purchases of Equipment
- ☐ Expedited Washington Research Information
- ☐ Collective Lobbying for the Little Guy in LPTV
- ☐ Washington Follow-up on Applications
- ☐ Verbal Phone Access to Commission Data Base -- 6 Days a Week
- ☐ Use of Instructional 'How To' Videotapes (1 week free)
  Members pay only for shipping, handling, and record keeping

All Lo-Power Publishing personal copies of manuals and materials free of charge to ICTV members

INSTRUCTIONAL 'HOW TO' VIDEOTAPES AVAILABLE
(Use for one week; members pay only for shipping, handling and record keeping)

- ★ Techniques of Using One Camera
- ★ Setting up a Studio
- ★ Lighting for Television
- ★ Multiple Camera Techniques
- ★ Shooting Video 'Basics'
- ★ How to Shoot a Sports Event
- ★ How to Broadcast a Local Wedding
- ★ How to Broadcast a Church Service
- ★ Shooting Local Commericals for Cable or LPTV
- ★ Television Tape Production
- ★ LPTV Crash Course
- ★ LPTV Crash Course 'B'
- ★ Subscription TV
- ★ World's Smallest Full Service Station
- ★ The New Mavica 'Still Camera'

BOOKS AND MANUALS -- LOANED FOR
TWO WEEKS, FREE TO MEMBERS
(Members pay only for shipping, handling and record keeping)

- ★ Color TV Studio Design and Operation
- ★ Videotape Production and Communication Techniques
- ★ Designing and Maintaining a Small Television Studio
- ★ Television Production Handbook
- ★ Video User's Handbook
- ★ TV Engineering Handbook (very large and heavy book)

The LPTV Association That Works

FREE APPLICATION ASSISTANCE HOTLINE FOR MEMBERS - 6 DAYS A WEEK

☆ **WE DO A COMPLETE RURAL AREA VHF LPTV FCC APPLICATION FOR YOU!** ☆
☆ Members' Price: $250 ☆

ICTV

Independent Community Television Alliance

Below is my application for membership in ICTV. I have deducted $ _____ for which I have already paid Lo-Power Publishing for publications and enclose a check for $ _____ , the two totalling $250.00 for my one-year membership.

7432 E. Diamond. Scottsdale. AZ 85257

Membership Application

Individual(s) to contact: _____ Name _____ Position

_____ _____

Company _____

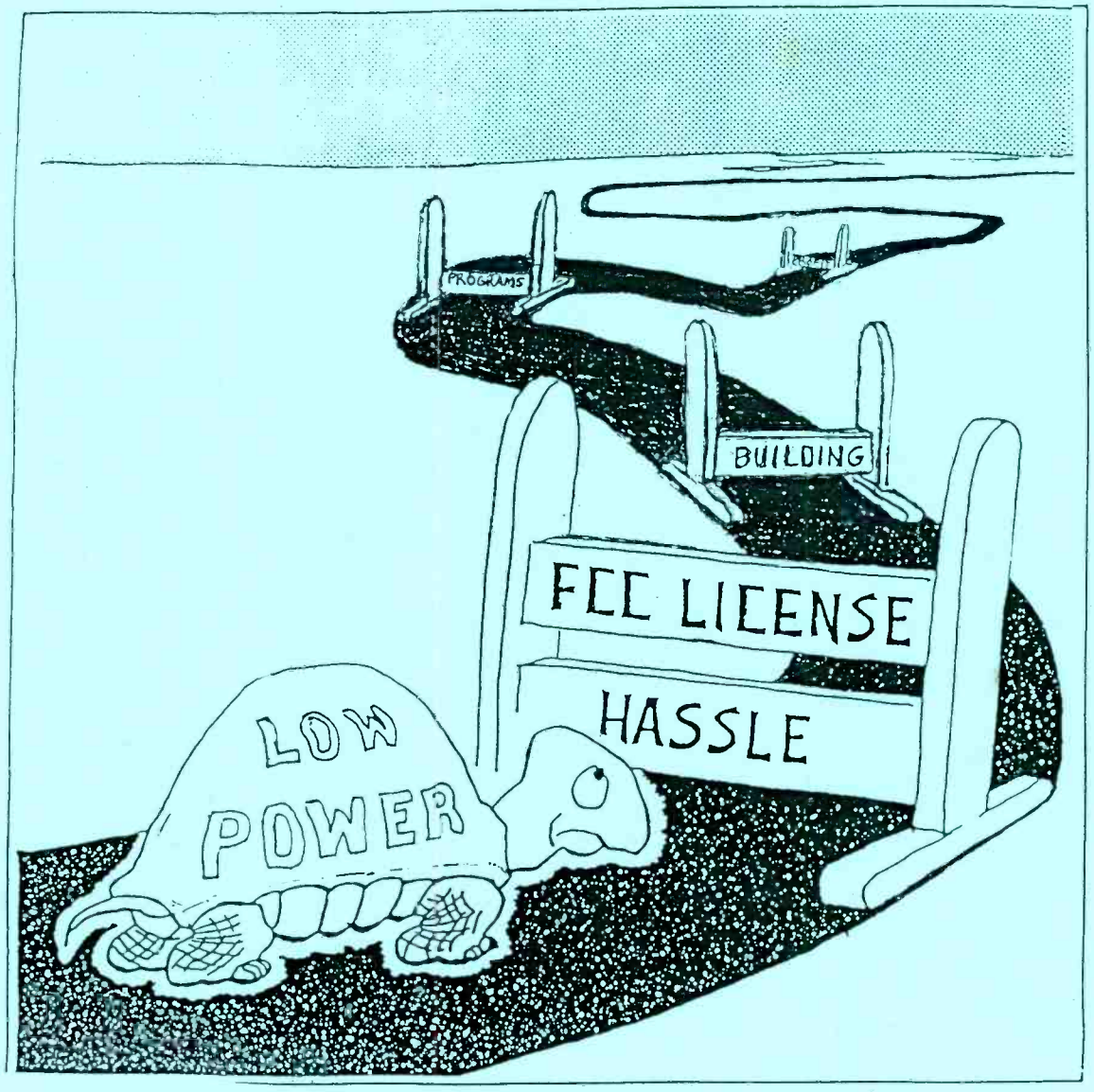
Address _____

City _____ **State** _____ **Zip Code** _____

Phone ( ) _____

LO-POWER COMMUNITY TV

October 1982



The First Hurdle is the Worst

Here We Go Again!

Luckily, we held the October magazine up waiting for the official FCC lottery rule making release because they also released a late notice.

So here we go again, rushing out our magazine at First Class rates at an expensive, out of our pocket, $250 more than second class because we think you should know as soon as possible that the Commission has come out with a short notice event again, due November 1.

This time, the Commission says, if you have a directional antenna, you have to file a composite antenna pattern, supposedly by November 1; keep in mind we didn't get this notice until October 12th.

Now, if you had your application filed by one of the paper mills that specify 'omni' because that's easy to file, then you have no problem now. It's only those precisely engineered with several directional antennas for maximum coverage that require a composite coverage pattern. The Commission needs it to enter in their computer processing system; this is necessary for them to determine who is mutually exclusive.

We are trying to keep the magazine solvent; but if the Commission keeps coming up with these short notice situations requiring first class mail, it will break us up in business. Anyway, we are leaving out some of our scheduled articles to lighten up the magazine so first class is not totally prohibitive. We had planned to include both the congressional version and the FCC rule making on the lottery for low power. The omitted one will appear next issue.

In filing applications, we are probably one of the few people that are going to the trouble of filing multiple outputs. What we have in low power is a problem of coverage with this low legal power level, so you need every 'drop' of power you can get. Applications are easy to file when you specify 'omni' antennas. A lot of the paper mills file nothing but 'omni' antennas (all directions). Then to get halfway respectable coverage, they specify an 'omni' antenna that costs around $30,000. You could often have gotten better coverage with directional antenna arrays for under $1,000. Many are finding this out, but the FCC won't allow antenna changes.

What we do that is often unique, is file for additional outputs on VHF 10 watters. Say, for example, you have an application for Centertown for 10 watts VHF. 10 miles east is Eastland; on the same application blank on the same channel, you file for a second 10 watt output to serve Eastland. South 8 miles is Southside; so you file for a third output for Southside. You use a basic transmitter that costs in the $5,000 to $6,000 range, for example, with additional 10 watt outputs at only $1,700 each. You use highly directional antennas to beam (like a flashlight) all of that 10 watts out to the additional communities. The Commission has granted many multiple outputs in the past, including FM translators with up to 8 outputs. This makes sense to conserve spectrum (channels). Instead of going down and filing and using up another channel at Eastland and another at Southside, why not just use an additional 10 watt output. The only requirement is they must not be oriented so they overlap, and you cannot exceed any direction what you would normally be able to do with 10 watts.

ABOUT MULTIPLE OUTPUTS

You should know that phasing several outputs correctly requires a lot of engineering work, not only in filing but in installing several directional outputs on the same tower, particularly in the overlap areas. The small, extra transmitter cost makes the additional 'work' well worthwhile though, to obtain the extra coverage. What we are saying, is that multiple outputs will require more work in setting up than simple omni antennas.

In the past, we have filed many applications with multiple outputs at the usual $250 total for one application even though it required considerably more work. Now we are going to have to file composite patterns, etc., so we are charging $50 additional for extra outputs.

The extra outputs can give you double and triple the coverage you would have with just one output.

In areas near Mexico, etc., where maximum power is 100 watts UHF, you can probably file for two or more 100 watt outputs to serve different communities from the same point.

Now a word about directional antennas. If nearly all your viewers are one direction, or two directions, for example, you concentrate nearly all of your puny amount of power in those directions. Instead of 40 watts (gain of 4x pointing all directions), you can get 100x gain in (1,000 watts) a highly directive 25 degree wide beam. That is directional antennas and with that much focused power, you can serve a community quite a distance away.

Now, if you just used one directional antenna oriented one direction, you do not need to file anything. However, if you split the power two or more directions, (example, see Alamogordo article, Aug. issue), then you need to file a 'composite' antenna pattern by November 1st. That will show the 'combined effect' of your directional antennas. Up until now, you filed only one pattern produced by the antenna manufacturer. What you are filing now is a combination and/or interaction of the two.

Here is an example, the way we worked one out on a graph; we haven't had time to check with the powers to see if this will be satisfactory or not, but maybe it will help explain what this is all about.

Lo-Power Community Television Magazine is published twelve times per year. Sample copies are $5, subscription $50 per year. Intended to supply needed information on Low Power Television at reasonable cost. Copyright 1982 Lo-Power Community TV. Harlan L. Jacobsen

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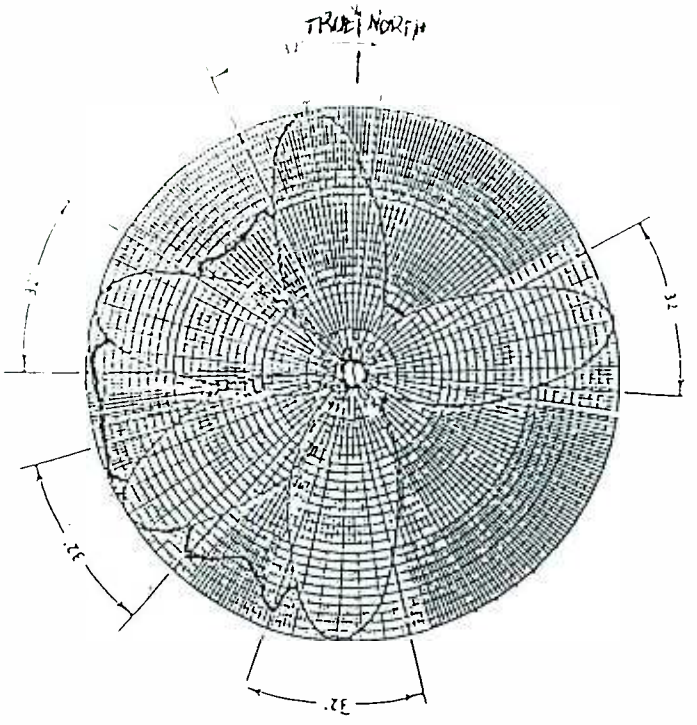
Oct



This graph was made for an existing application we filed with 5 outputs. It could also have been one output split between 5 antennas; the pattern would be the same. The reason there was no pattern N.E. or S.E. coverage was because there were close spaced potential interfering stations those directions, so what we did was squeeze in a VHF channel with a lot of power a lot of directions to serve a lot of different communities but practically no radiation the directions of the tight spaced interfering channels. This was made and written before we saw the FCC release so it is just to give you an illustration of what this is all about. Each of these 5 legs was a full 10 watts to serve 5 different distinct communities. Note the overlap of the two most westerly outputs almost exceeds the main lobe of each 10 watt leg. If overlap exceeded it, the additional output would not be allowed.

Some of the major antenna manufacturers are reported to have a computer program and plotter that can generate these for you.

There are two schools of thought when it comes to filing applications:

School One: File full power transmitter with omni antenna that doesn't go out very far. Advantages: 1. extremely easy to file; 2. easier to get past Commission and licensed since it is not going very far and probably won't have much chance of interfering with anything; 3. easier for Commission to calculate since it goes all directions nearly exactly the same. The idea being after you're licensed, then you try to file (not legal under present rules) to change your antenna pattern to get same decent coverage. The idea being that the Commission will eventually let you straighten it out for maximum coverage once you're licensed. They say, why do all that work on antenna patterns, etc., now when you may be only one of 10 applicants. If you luck out and win the lottery, then spend time doing a decent antenna pattern. The disadvantage is: 1. you have no protection in the meantime that somebody might not file down the road on the same channel after your license, and that would preclude your getting out there with coverage whereas, you could have gotten protection and licensed if you had filed originally that way; 2. under present rules, you will have to start over in the application process if you change your antenna pattern. It is likely this will be changed, we will admit, however; 3. there will be delays before you can get your coverage changed, even if they do change the rules.

School Two: File the application to obtain absolute maximum coverage reasonably possible (surprisingly, these antenna arrangements are often less expensive). File them the way you want to build them. Advantages: 1. if you are licensed, you do not have to 'redo' later and file more paperwork, hassle, etc., nor have to start over in the application process; 2. you have a maximum coverage area that is 'protected from other filings', etc. Disadvantages: 1. a lot more work for the filing party; 2. more work in installing and phasing them together and making them work properly.

The Commission's actual composite pattern appears typeset on the next to last page.

Commission - 1 Little Guy - 0

FCC 'Deregulating' Program Content?

Whether the FCC is truly deregulating and not requiring or controlling programming content in order to keep your license or not, became even more debatable recently when the Commission rightly or wrongly voted to take away the license of a one man FM station in Gloucester, Massachusetts.

Simon Geller, operator of the classical FM station for 18 years, recently saw the Commission vote 4 to 2 to give his license to a 'big operator' who was 'after it'. The license is estimated to be worth between one half and one million dollars, and the new 'winner' of the license gets it for the filing since the Commission wisely or unwisely decided to take it away, citing Simon's failure to carry 'sufficient' public interest programming, whatever that is.

Simon had only a few advertisers and, operating with no employees, played classical music 14 hours a day, 7 days a week, staying in business primarily because of donations of $12,000 a year from satisfied listeners.

Simon feels other stations carry plenty of what they say he doesn't carry and that his listeners tuned in on his station strictly for classical music. There were no 'complaints' filed against Geller's operation, and Geller has been receiving many donations to appeal. Evidently, many feel Simon Geller, the little guy, has just been run over by the Commission, and a big operator that promises 'more' than Geller can deliver and wants his license.

THE FCC IS GOING TO PROCESS IN THE ORDER RECEIVED?

We noticed a news release somewhere that the Commission was now going to handle low power applications in the order received. We thought, my God, if they are actually going to do that, why that's front page news, so we gave them the old phone call and talked to one of the wheels and asked if that were really true, if the Commission was really and truly going to process in the order received?

'Well', ---------- he replied, 'that's not new; the Commission has always processed applications in the order received', where upon I fell off of my chair. After getting back up again, I asked, 'how do you explain then, an applicant that filed 15 applications in June of 1981 and has had none granted and filed 5 in September of 1981 and has had 3 of those granted?'

That he said is probably because they were caught up in the freeze and if they didn't write and tell us they were processable under the freeze and request they be put in cutoff, they just sat there because we are not going to look up what's processable. So I says, 'you mean to tell me that we need to write you and tell you now that we have an application that is entitled to be processed in tier one and that we request it be put in cutoff?'

He said, 'that's right'. Well, I said, 'I just amended a couple dozen; do I have to write you on those too?' Answer, 'yes you do'.

So if you want your application cutoff, maybe you should write and tell them the file number, that it is entitled to processing in tier one and that you are requesting it be put on cutoff. Be sure and throw in a few lines about the 'public interest being served by getting this on cutoff'.

I then asked if it was necessary for me to send a computer printout showing the mileage to the major markets and demonstrate it is qualified for processing in tier one. He said no, that it wouldn't be necessary since they were going to check it with their computer anyway.

Now, this may all sound ridiculous to you, but you have to understand the spectrum scarcity in the U.S. is not an engineering problem, it is an attorney problem. You have to understand that getting more and better TV to the American population was solved by engineers years ago. Attornies have an oddball method of thinking and if you have ever associated with them, you become aware of that, and it is precisely that mentality that keeps spectrum scarce.

Getting better TV to the American public (or justice in the court system) is of little concern. Catching you up in not following 'the rules' is the big part of the attorney game. Understanding that the procedures at the Commission are mainly made up by the attorney mentality you have to play by their rules, logic or public interest has nothing to do with it.

When you ask questions at the Commission, you often get two different answers. It is similar to take a tax question to 5 different I.R.S. offices, you often get 5 different answers, some of which contradict the other.

Unfortunately, if the person that gives you the advice is not the same person that processes your paperwork, there may be different results than stated. The FCC is no different, and getting anything definite is difficult.

$500 TO $600 10 WATT VHF-UHF OR 450 TRANSMITTER

We have many subscribers in Mexico, South America, Australia, various islands, etc. that are not under FCC jurisdiction and have no problem with bothering with licensing. We recommend you look into a 10 watt transmitter available to you that can be obtained to broadcast on 434, etc. which will not reproduce on an ordinary TV set. So if you control the supply of downconverters, you essentially have an encoded system that no one can pick up without paying you. You can, of course, also buy it made for standard TV channels. In that case, no downconverter is needed and anyone can pick it up. To obtain more than 10 watts, you could use some readily available and relatively inexpensive linear amplifiers.

No one in the United States can buy or use these unless you have an amateur license and want to use it on the 434 band for non-commercial use.

Maybe you know of some island somewhere or some country that has no TV you can get on for peanuts. Here is an inexpensive source.

We will have more on this type of inexpensive equipment in future issues.

LPTV Applications Filed Since the September Issue

ARIZONA

Lake Havasu City
3 10w Owen Brdcst Ent 9/22/82

Prescott
29 1000w Owen Brdcstg Enter. 9/22/82

Sanders
6 10w Owen Brdcstg Enter. 9/22/82

ARKANSAS

Pine Bluff
5 10w Payne Brdcst Co. 9/22/82

Hope
57 1000w Blacks Desiring Media 9/22/82
52 1000w Blacks Desiring Media 9/22/82
35 1000w Blacks Desiring Media 9/22/82
29 1000w Blacks Desiring Media 9/22/82
27 1000w Blacks Desiring Media 9/22/82
25 1000w Blacks Desiring Media 9/22/82
33 1000w Blacks Desiring Media 9/22/82

Hot Springs
18 1000w ABC Min. Invst. Inc. 9/22/82

Searcy
41 1000w Owen Brdcst Ent. 9/22/82
44 1000w Owen Brdcst Ent. 9/22/82
63 1000w Owen Brdcst Ent. 9/22/82

CALIFORNIA

Barstow
26 100w Suzanne Schott 9/22/82

Cloverdale
27 1000w Owen Brcst Ent. 9/22/82

Crestline
48 100w Response Brdcst Co. 9/22/82
48 100w Suzanne Schott 9/22/82

Edwards
36 1000w American TV Affil. 9/22/82

Lancaster
20 1000w LLW-LPTV 9/22/82

Lancaster/Palmdale
24 1000w American TV Affil. 9/22/82

Litchfield
48 1000w Owen Brdcst Ent. 9/22/82

San Luis Obispo
2 10w Owen Brdcst Ent. 9/22/82

Santa Maria
21 1000w LLW-LPTV 9/22/82

Santa Rosa
68 1000w LLW-LPTV 9/22/82

Susanville/Herlong
63 1000w Owen Brdcst Ent. 9/22/82

Victorville
20 100w Suzanne Schott 9/22/82

COLORADO

Alamosa
12 10w Owen Brdcst Ent. 9/22/82

Placerville
61 100w San Miguel County 9/22/82

Telluride
66 20w San Miguel County 9/15/82

GEORGIA

Hazlehurst
57 1000w Stone Brdcst 9/22/82

Rome
34 1000w Blacks Desiring Media 9/22/82

HAWAII

Honolulu
26 1000w Hawaii LPTV Co. 9/22/82
52 1000w LLW-LPTV 9/22/82

Kailua
48 1000w Pepsi-Cola of Alton 9/22/82

ILLINOIS

Champaign
36 1000w American Christ. TV 9/22/82

Vandalia
57 1000w Pepsi-Cola of Alton 9/22/82

KENTUCKY

Whitley City
7 10w Wayne Marler Crusades Inc 9/22/82

LOUISIANA

Bogalusa
23 100w Bogalusa Daily News, Inc 9/22/82

MASSACHUSETTS

Hyannis
8 10w Owen Brdcst Ent 9/22/82

Nantucket
17 1000w Owen Brdcst Ent 9/22/82

MICHIGAN

Ironwood
24 1000w Owen Brdcst Ent 9/22/82

MISSISSIPPI

Natchez
50 1000w Commonwealth Venture 9/15/82

Oxford
59 100w Free State Brdcst Inc 9/22/82

MONTANA

Red Lodge
17 1000w Owen Brdcst Ent 9/22/82

NORTH CAROLINA

Rockingham
52 1000w Richmond Cnty Journ. 9/22/82
26 1000w Sidney L. Neely 9/22/82
52 1000w Owen Brdcst Ent. 9/22/82

OKLAHOMA

Altus
11 10w KWHW Radio Inc 9/14/82

Cushing
62 100w Retherford pub Inc 9/22/82
51 100w Retherford Pub Inc 9/22/82
68 100w Retherford Pub Inc 9/22/82
16 100w Retherford Pub Inc 9/22/82
30 100w Retherford Pub Inc 9/22/82

Elk City
32 1000w Joseph W. Tilton &
Ronda L. Shelton 9/22/82

PENNSYLVANIA

Lockhaven
52 1000w Blacks Desiring Media 9/22/82
7 10w Blacks Desiring Media 9/22/82

Williamsport
20 1000w Blacks Desiring Media 9/22/82
66 1000w Press-Enterprise, Inc 9/22/82
68 1000w Press-Enterprise, Inc 9/22/82
63 1000w Press-Enterprise, Inc 9/22/82
18 1000w Press-Enterprise, Inc 9/22/82
9 10w Blacks Desiring Media 9/22/82

SOUTH DAKOTA

Tripp
8 10w Harlan L. Jacobsen 9/23/82

TENNESSEE

Livingston
7 10w Edward M. Johnson 9/14/82

Merfreesboro
27 100w Payne Brdcst Co 9/22/82

TEXAS

Athens/Trinidad
3 10w Community Info Center Inc 9/22/82

Brownwood
28 1000w Owen Brdcst Ent 9/22/82

Conroe
16 1000w Jack Clarke, III 9/22/82
18 1000w Jack Clarke, III 9/22/82
34 1000? Jack Clarke, III 9/22/82

Corsicana
29 1000w Owen Brdcst Ent 9/22/82

Pampa
22 1000w Blacks Desiring Media 9/22/82
21 1000w Owen Brdcst Ent 9/22/82
24 1000w Blacks Desiring Media 9/22/82
27 1000w Blacks Desiring Media 9/22/82
30 1000w Blacks Desiring Media 9/22/82
32 1000w Blacks Desiring Media 9/22/82
40 1000w Blacks Desiring Media 9/22/82
50 1000w Blacks Desiring Media 9/22/82
52 1000w Blacks Desiring Media 9/22/82

Uvalde
5 10w Owen Brdcst Ent 9/22/82
7 10w Owen Brdcst Ent 9/22/82
13 10w Owen Brdcst Ent 9/22/82
3 10w Owen Brdcst Ent 9/22/82
9 10w Owen Brdcst Ent 9/22/82

UTAH

Aurora
51 1000w Owen Brdcst Ent 9/22/82

Logan
47 1000w Owen Brdcst Ent 9/22/82
51 1000w Owen Brdcst Ent 9/22/82

Ogden
59 100w University of Utah 9/14/82

Provo
62 100w University of Utah 9/14/82

VERMONT

Rutland
12 10w Access Rutland, Inc 9/22/82

VIRGINIA

Charlotte Amalie
6 10w Owen Brdcst Ent 9/22/82

WASHINGTON

Aberdeen & Hoquiam
2 10w Transtel Co, Inc 9/22/82

Colville
46 1000w Owen Brdcst Ent

Richland
32 1000w FM TV, Limited 9/22/82

Wenatchee
14 100w Wescoast Brdcst Co 9/22/82

WISCONSIN

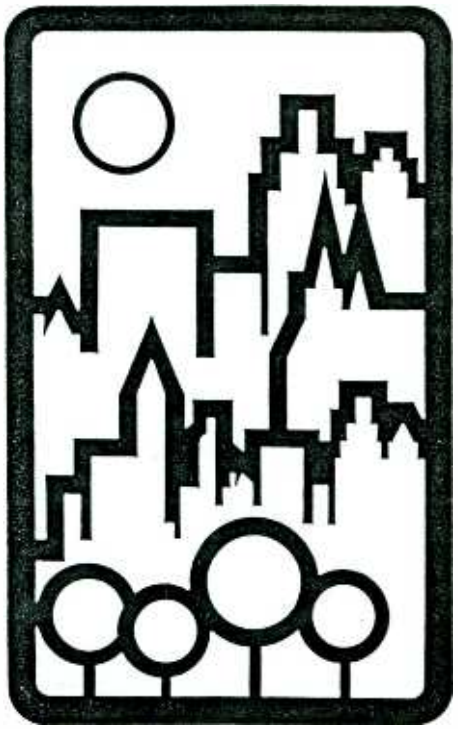
North Fond du Lac
21 1000w Edward F. Anglin 9/22/82
28 1000w Edward F. Anglin 9/22/82
30 10002 Edward F. Anglin 9/22/82

USVI

Coral Bay St. John
21 100w Virgin Islands Public TV 9/22/82

Getting on the Cable System

Every Problem Has a Solution.



Low power television has one serious problem that must be overcome by the low power operator.

COVERAGE IS THE KEY

But that coverage may be locked out of the cabled homes because the cable operator is not required by FCC rules to carry the local low power station.

The present rules require the cable operator to provide channels on his cable system for all full service television stations licensed within 35 miles of their communities and all stations whose over-the air signal are significantly viewed in the area. If the cable operator refuses to put the local LPTV station on the cable he can cut the station's 'coverage' significantly.

For the home connected to the cable, it means installing at least a rabbit ears to get the LPTV station. An antenna of some kind must be attached that they have no use for otherwise. Very few will go to this trouble of connecting or disconnecting to get some local station when they have a large variety on the cable.

To gain entry to these locked out cable homes, the LPTV operator has some problems to overcome. First, most cable operators seems anxious to include it and, so far, seem very cooperative about putting the local LPTV on the cable, but . . . and here is the sticker; they are nearly all loaded to capacity with other channels. To put you on, they have to drop something else (68% of cable systems are 12 channels or less). You may be carrying SPN, and are merrily inserting local commercials. Why should they put your channel on when they can pick up SPN direct via satellite, put it on the cable, and they insert and get paid for the local commercials. There will be great pressure from the new satellite services, hoping to get on cable systems. The cable system expands their channel capacity and they have to decide if your programming will attract more subscribers and viewers or if the satellite delivered channel will offer them more opportunity to insert and sell local commercials.

The next problem is that nearly every cable system's basic service (channels that all cable subscribers get) is full but they have room on the additional channels of service that those subscribers who pay more per month can receive through what is called tiered service.

You may wind up only in the highest priced tier that only a small percentage of cable subscribers pay for and receive. You need to be working on this matter even before you get your license.

If you file for a UHF channel, there is an advantage over VHF in that the cable viewer can, in most cases, connect a UHF roof antenna (or even the built-in set UHF antenna) to the UHF terminals on his set without bothering the VHF cable connection. When he tunes from VHF on the cable (even the tiered channels are converted and reappear on VHF), he merely switches to UHF. If you file for VHF, cable viewers will often connect both their cable and their old outdoor antenna at the same time in order to get both without connecting or disconnecting every time. The cable operator will discover that homes with the cable are radiating whatever tier of cable channels they are watching out through their antenna (even the converted premium channels when their decoder is tuned to that block), and those not on the cable can pick them up. Some channels radiated will cause interference to off the air channels and the off the air people will be mad at the cable system for interfering. One antenna hooked up this way will feed enough back up and out their antenna so that a whole apartment house may be able to watch those premium cable channels, for example, without being on the cable. Therefore, the cable operator puts your channel on the cable in self defense to keep people from connecting antennas and radiating his cable channels all over the neighborhood back out through their antennas. So there are advantages in both VHF and UHF.

The best tool you probably have is your city fathers (the mayor, council, etc.). They have a big lever over a cable system with their franchise renewal, etc.

First of all, you have to sell the city fathers that cable TV is and was conceived and sold as a 'community antenna system', that acts as one big antenna for everybody so that individual homes don't have to have a big unsightly tower and unsightly antennas on their roofs nor a big satellite dish in their back yard. The concept was that everyone would be supplied 'all' the available channels so no one on the cable would ever need an antenna again.

The cable system was passive, he didn't generate anything, he was a carrier that was in the TV signal transportation business. Now you say he wants to keep my channel off so he can go into commercial production and keep out competition that will produce not only local commercials, but local news and local shows, including city events and interests.

You explain you are offering TV to both in town and rural residents and cover everybody, not just the elite who can afford cable service but your production of local TV will be hampered if you are boycotted by the cable operator who should not have the power to decide whether the elite of the population can be excluded from watching your local channel or not.

You can make a very loud local political noise about this, and the cable system will not have everybody on his side. Remember, many people view the local cable system about like they view Ma Bell. They look on it and resent it as a monopoly and will champion anyone that offers them some competition. So that plus you will have a lot of local political leverage when you get on the air and the city fathers see that you can literally make or break their local political career by what your local TV station's news says about them, etc. So they want to be on your side. Therefore, getting something done through the city is very effective.

Right now, even before you get a license, if the city council is readying a renewal or a new cable ordinance, be sure they include a line in the city franchise agreement that says the cable system must carry all local television stations.

The next lever and perhaps the best route is to carry what is not presently on the cable and create a **demand** that it be on the cable.

Let us say, for example, you carry local news, weather and sports; that you carry shows like the third grade spelling contest; you carry Junior's little league baseball games; high school events; piano recitals; an occasional local wedding; local church services, etc., etc., where they can see all their friends and neighbors on TV. Run some local contests, etc; only on your channel. Local viewers will raise hell with the cable system if Junior is on TV and it's not on cable, that they have to get an antenna to watch Junior. Local events coverage creates such a demand that you be on the cable system that the cable operator will not be able to ignore that demand without alienating his subscribers. When the Centerville High down the road 30 miles comes to your town to play basketball, broadcast it. That will give a big incentive to the Centerville cable system to also carry your channel on the Centerville cable system. Only by being on the Centerville cable system can viewers see those away from home games. If the Centerville cable system refuses to put your channel on, make some noise about putting a repeater translator in their community. The Centerville cable system would rather have an exclusive on your signal on the cable than have one more off the air channel available in their community.

So you see, the cable systems do not hold all the cards and do not have the LPTV operator by the economic throat in a life or death matter for a local LPTV station.

Surrounding towns' cable systems can double your number of viewers instantly at no cost to you. Give them something they are not getting now and they'll put you on the system, too.

HOW FAST?
MORE PROCESSING PROMISES?

Last January, Mr. Larry Harris of the FCC's Mass Media Bureau, told broadcasters the Commission was going to process approximately 50 LPTV applications per month by hand in 1982 until they got the computer on line in the fall and then 500 a month.

However, the actual total for the entire year of 1982 now looks like well under 200 (excluding Alaska), and now the computer processing won't start until spring, Harris reports, with 400 to 600 promised then. Supposedly able to wipe out the backlog, according to Harris, in less than a year from the start of computer usage. Others are saying 250 a month is more realistic.

No accurate figure seems available as to exactly how many are on file currently, varying from 6,500 to 10,000, depending on who you ask. If we took the high figure, it is probably safe to assume only about 3,500 or less are in tier one. Figuring another 3,000 coming in on tier one before they catch up, would mean 6,500 to be processed before moving to tier two. Processing 500 a month, it would still be about a year or more from next spring before tier two would open up. There will undoubtedly be 5,000 tier two filed the first day they open that up. A rate of 500 new applications a month thereafter could continue in tier two for several years, meaning at processing 500 a month, they may never get to tier three for many years.

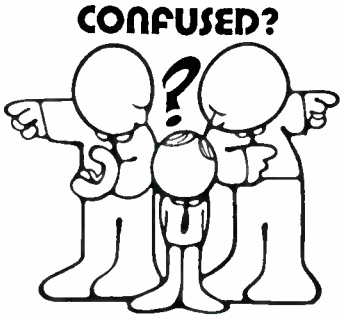
Anything filed today in tier one could still be 18 months before being processed (6 months to computer start; 12 months to get to it). Add 6 months for normal bureaucratic lethargy and you have 2 years. 'Lucky' types could be in and out in 6 months despite the Commission's statement they will be processing in the order received.

THE LATEST WORD AFFECTING LPTV

Select TV is reported to be going full time, 24 hours a day, up from 6 hours a day at present. Some on the air have been carrying SPN daytime and Select TV at night. Select is the only premium service presently actively seeking LPTV outlets. Others are interested and more are coming on the satellite that will supply LPTV premium movie service but are maintaining a low profile until there is a significant number of LPTV stations on the air.

Kodak is reported about ready to announce an electronic disc camera similar but reportedly even more sophisticated than the Sony Mavica. The Sony electronic camera is scheduled for demonstration and release at the March Photographic Convention in Las Vegas. The camera shoots 50 stills on a $2.65 reuseable magnetic disc. The camera can also be used as a full motion camera with your VCR. Similar in size to a 35 mm standard SLR camera, this new product is predicted to revolutionize local TV news and production.

LPTV and Catch 22



The big rush to amend applications came and went on September 21st with the Commission refusing to extend the time despite a formal request by Jeff Nightbyrd of ATD and others.

As of the 15th, we heard the Commission had only 300 amendments but apparently 2700 more came in at the last minute (as usual). Apparently, many that amended and changed channels, etc., did not want their competitors to know what they changed to until too late for the copy cats to copy and amend theirs the same direction. We now have a problem in that many of us want to know who moved where but the sheer volume alone would cost us in the neighborhood of $1,000 just for the copies out of Washington, let alone tabulating, typesetting and printing the changes, so we will see what interest there is.

The changes will be reflected and readily available in the November and December 1st (or January, whenever the Commission catches up) microfiche which we have available immediately on monthly release for $10, postpaid. The fiche include all translators and low powers filed and/or licensed by state and city in the U.S. We also have it in state and channel order for $10. These are the equivalent of 500 pages of hard copy and can be read on your local library's microfiche reader. We also print hard copies off any one page for $5. Additional pages at 50¢ each.

Last issue, we warned that if you changed or filed with offset, you had to explain to the Commission how you proposed to maintain the precise FCC required tolerances. We suggested using a statement that said, 'the manufacturer agrees to supply the equipment required to maintain the required tolerances'. We checked that out with the Commission and found out that wasn't good enough. Now we come to Catch 22. They said you must specify equipment that the Commission has 'type accepted' to meet the required tolerances.

It turns out that there is NO equipment even submitted (none pending) for type acceptance, let alone approved. Therefore, you apparently could not comply even though all the manufacturers agree they can make that precise equipment and get is approved, there was and is none approved.

Therefore, we wrote up the following which seems reasonable to us under the circumstances and filed this as amendments to everything that already had or was being changed to offset:

ENGINEERING EXHIBIT
MAINTAINING OFFSET

September 16, 1982

There is, at this time, no equipment type accepted to maintain the required offset tolerances. However, the basic transmitter applied for in this application is type accepted for normal tolerances and the manufacturer has given assurances that the additional precise frequency control mechanism will be submitted for type acceptance shortly.

Applicant, therefore, requests a waiver of the rules to allow processing of this application and agrees that granting of this application will be conditioned on use of transmitter equipment meeting the tolerances and will not be put in use until it is type accepted for maintaining the precise offset tolerances.

Applicant, as an alternative, until such automatic precise equipment is type accepted and available, agrees to make the necessary frequent frequency checks to maintain the required tolerances.

Respectfully submitted,

If you have zero, plus or minus offset specified in your about to be filed application or previously filed application or amended version and did not file something along this line, then you had better hurry up and amend it pronto to include some statement that will cover how you will maintain the precise offset tolerances required when specifying offset. You can, you understand, amend applications any time.

Two other things you may have missed is that an EEO statement is required now (old applications were supposed to be amended to meet the new rules), so if you proposed using less than five employees it is unnecessary to file an EEO statement, but you **must** file some type of notification that you will have less than five employees.

If you have a theater, a newspaper, or any other broadcast facilities or applications (including other LPTV) you need to file that with the Commission for each application.

If you were counting on terrain shielding (hills or mountains between) in your old application (no longer useable under the new rules), you should have or need to right away file a request for waiver of the new rules to consider your terrain shielding.

MICROFICHE SERVICE

Some of you have standing microfiche orders with us and have been wondering why you have not received a new one since August. The reason is that no one has received any anywhere because the FCC never put out a new one, and as of October 13th, we still do not have a new one since August. Inquiries bring a 'we are checking on it', but assurances that no one has received one as they have not released one.

The microfiche contain the equivalent of 500 pages of readable information of translator and LPTV applications to date direct from the FCC data base. The microfiche can be ordered filed by state and city, or by state and channel. Most order state and city, though some receive both each month. On regular delivery basis or one time order, they are $10 per copy. Also available direct from Lo-Power Publishing is a monthly updated microfiche on full service stations for $10.

A small city in rural New Mexico becomes the site of the nation's first Christian low-power TV station

Alamogordo Puts Religious LPTV on the Map

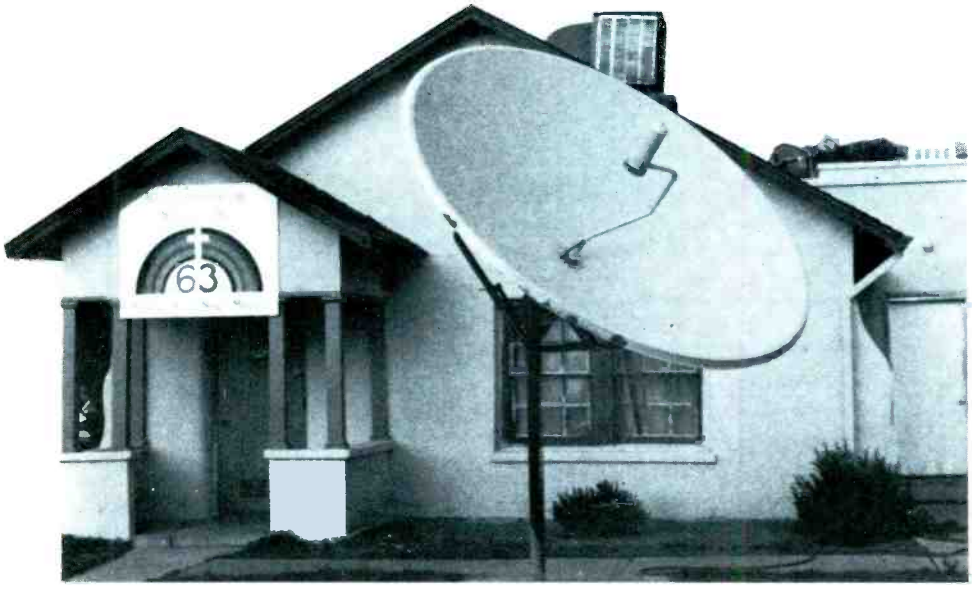
by Alex Blomerth

IN A SMALL city near the site of the first experimental explosion of an atomic bomb, a singular event of another sort took place on the evening of July 3 this year.

Alamogordo, New Mexico became the first city in the United States—perhaps the world—to have its own full-fledged religious low-power television station.

Events moved swiftly after the Federal Communications Commission issued a construction permit in February to Sara Diaz Warren. Her husband, Peter War-

Middle: Vision Broadcasting Network, Inc., bottom: the control room as large as a studio; right: Sara and Peter Warren III, respectively licensee and engineer



ren III, is vice president and director of engineering at Satellite Technology for Christ. STC, a non-profit Christian engineering firm located in El Paso, took on the job of bringing Channel 63 into reality.

Alamogordo was chosen for the LP-TV station for several reasons. Although its immediate population is only 27,000 people, the potential audience within its signal range is nearly 80,000, including Holloman Air Force Base.

Located at the foot of the Sacramento Mountains in the southern part of the state, Alamogordo is uniquely placed for low-power television. The mountains form a natural tower nearly a mile high from which the community provided the labor to build the transmitter building, erect the 80-foot tower, and rig the necessary antennas. A beautiful new Television Technology transmitter was moved into the studio-to-transmitter link.

Meanwhile, down in Alamogordo, the other end was being put in place, the studio prepared, and copious quantities of electronics tied together in an inexpensive, but efficient array. The "on air"

Low-power television stations can be an effective tool for the local church

Mr. Warren checks out the 100-watt television technology transmitter

target date was set for the evening of July 3rd. As the time drew near, the long hours began to take their toll. Pete, Sara and their son John worked side by side with the other personnel and a few hearty volunteers to complete the myriad of details. Several days lasted through the night and well into the following day.

July 3rd dawned hot and clear as the weary party arose early to make the long trek back to the mountain for final details. Dr. Byron St. Clair, president of Television Technology Corporation, and his wife flew in from Arvada, Colorado to lend physical, technical, moral and spiritual support. Alex Blomerth, president of STC, and Dr. St. Clair remained on the mountain to make final adjustments. Peter returned to the studio to complete preparations for the live programming scheduled for that evening.

It seemed an impossible task but we serve the God of the Impossible. At 8:00 pm, the station came on the air to announce to all who had ears to hear and eyes to see that "Jesus Christ is Lord!"

After the first hour of dedication and prayer, the studio tempo increased. The first program, *Alamogordo Live*, was

Christian entertainment featuring local personalities with music, interviews, testimonies, prayers, and praise. Telephone counselors ministered on the phones and the Lord blessed His people.

Programming on Channel 63 does not carry only the Christian message. FCC regulations for low-power stations permit a fluid programming arrangement that best serves rural America. As Alamogordo's local station, Channel 63 has taken quick advantage of this freedom. With Christ as the center, the programming can be designed to meet local needs and attract the unbeliever as well as the believer.

As a translator, Channel 63 picks up wholesome family programming from KCIK/El Paso, some 95 miles away. These programs are enriched with Christian programming direct from satellite via the Channel 63 earth station. About five minutes each hour is used for devotional material designed to lead the viewers into a life-changing relationship with the Lord.

Local commercials help provide community flavor. Local origination also provides the capability of communicating events as well as ministry in the Alamagordo area. For example, one program is specifically designed to highlight events at nearby Holloman Air Force Base. The business community has responded well with supportive advertising.

The Christian community has begun generally to use the station's services. As an evangelical tool, low-power stations can serve the church more effectively than ever before, by not being too large or too costly to reach the little people. Within a short period of time, local personnel can handle the day-to-day operations effectively, keeping costs down, and making the station truly local in character.

In showing how all this can be done, Channel 63/Alamogordo (New Mexico) is making for itself a niche in the annals of religious broadcasting. NRB

Mr. Blomerth is president of Satellite Technology for Christ, a non-profit Christian engineering firm in El Paso, Texas.

This article appeared in Religious Broadcasting, October 1982, and includes some additional pictures we shot while in Alamogordo.

The last issue contained an article on the Gunnison, Colorado, STV. Included in this issue is a flyer used by the new LPTV station operated by Mike Callihan. Callihan reports over 125 subscribers signed in less than a month's operation.

The Cody, Wyoming, Channel 15, is reported to be ready to begin broadcasting with local text and full video a small portion of the time from CNN. The delay in regular broadcasting beginning is developing a radio relay to the mountain.

MOVIES! MOVIES! MOVIES!

1/2 off installation plus September free.

What a Deal!

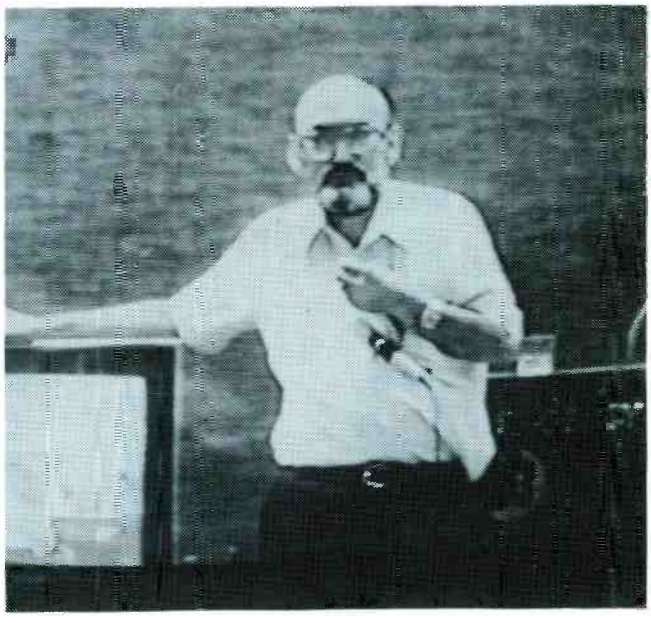
Gunnison Television is proud to be Colorado's first wireless cable TV station. So, we're making a special offer to charter subscribers. If you order now, you'll save **half** off the standard installation* and get the balance of September's movies **FREE!** That can be a savings of more that $55.00 up front on America's best movie service - selecTV. Over 55 movies per month: something each day for every member of the family: current blockbusters, film festivals, special sports events and more for just $39.95 installation charge!

Beginning October 1st your special monthly rate is only $17.95.
[$100 refundable equipment deposit still required.]

SELECTV2 AVAILABLE ONLY TV2 Gunnison Television

To Order Call
641-3290

*Offer Expires Sept. 30, 1982



Next Crash Course, Las Vegas
October 30-31, 1982
Register Now

The recent LPTV crash course in Phoenix was attended by 30 people, nearly all of whom were or are publishers. The three videotapes of the crash course are now available for loan to ICTV members, including some parts that we didn't get time to show at Phoenix. Also available for rental to non-members. Unfortunately, about one hour of the meeting didn't get recorded, but other than that, there is a lot of good information on these tapes. Speakers include 4 shown in photos here. Top left; Marshall Carpenter of **Neighborhood TV** (the group associated with Sears); Top right; Jeff Nightbyrd of **American Translator Development**; Bottom left; Harlan Jacobsen; Bottom right; Dr. Byron St. Clair of **Television Technology**. Photos were shot off a TV set from the playback of the videotapes.

The next crash course is in Las Vegas, October 30-31, preceding the Translator Convention. The under $7,000 3 camera studio equipment, including special effects, will be demonstrated in Las Vegas.

97TH CONGRESS | HOUSE OF REPRESENTATIVES | REPORT
2d Session | | No. 97-765

COMMUNICATIONS AMENDMENTS ACT OF 1982

AUGUST 19, 1982.—Ordered to be printed

Mr. DINGELL, from the committee of conference, submitted the following

CONFERENCE REPORT

[To accompany H.R. 3239]

The committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 3239) to amend the Communications Act of 1934 to authorize appropriations for the administration of such Act, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its disagreement to the amendment of the Senate to the text of the bill and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the Senate amendment insert the following:

TITLE I—COMMUNICATIONS AMENDMENTS

SHORT TITLE

SECTION 101. This title may be cited as the "Communications Amendments Act of 1982".

FINANCIAL INTERESTS OF MEMBERS AND EMPLOYEES OF FEDERAL COMMUNICATIONS COMMISSION

SEC. 102. Section 4(b) of the Communications Act of 1934 (47 U.S.C. 154(b)) is amended to read as follows:

"(b)(1) Each member of the Commission shall be a citizen of the United States.

"(2)(A) No member of the Commission or person employed by the Commission shall—

Senate amendment

The Senate lengthened the duration of Special Temporary Authority (STA) from 90 to 180 days, and allows the Commission to renew an STA for additional terms of 180 days each.

Conference substitute

The conference substitute adopts the Senate provision.

While the Conferees recognize that multiple STA renewals may be appropriate in extraordinary circumstances, it is emphasized that an applicant for STA renewal bears a heavy burden of showing, consistent with the test in Section 309(f), that a renewal should be granted.

RANDOM SELECTION SYSTEM FOR CERTAIN LICENSES AND PERMITS

House bill

The House bill contained no provision.

Senate amendment

The Senate bill amends Section 309(i) of the Communications Act of 1934, relating to the authority of the FCC to grant licenses or permits for the use of the electromagnetic spectrum through a system of random selection.

Conference substitute

The conference substitute adopts the Senate provision.

FCC discretion to use a system of random selection.—Section 309(i) of the Communications Act, as amended by this legislation, is intended to alleviate many of the delays and burdensome costs faced by both applicants and the Commission in an initial comparative licensing proceeding with mutually exclusive applicants. Use of a lottery system established pursuant to this subsection is discretionary with the Commission and such use is appropriate in the public interest within the parameters set forth below.

Relevant factors for the Commission's consideration in determining whether a lottery would serve the public interest would include: whether there is a large number of licenses available in the particular service under consideration; whether there is a large number of mutually exclusive applications for each license, for example, when a new service is initiated; whether there is a significant back-log of applications; whether employing a lottery would significantly speed up the process of getting service to the public; and whether selection of the licensee will significantly improve the level diversity of information available in the community versus the use of the traditional comparative hearing process. The Commission, in making this public interest assessment when diciding whether to utilize a lottery in a particular instance, should consider all of these factors.

With respect to the above criteria, if the traditional comparative process would provide a superior means of diversifying media ownership in particular instances, a service should not be subject to a lottery when to do so would undermine or thwart this policy goal, but all factors must be weighed. Diversification of media ownership and information are central goals of the traditional comparative licensing process, and continued promotion of these goals should not be sacrificed merely because a lottery may be more expedient. This concern takes on its greatest significance when the particular license grant involves a service over which the licensee exerts substantial content control, as opposed to strictly common carrier services where the licensee does not appreciably affect the content of the communication. For example, the Commission would have an extremely heavy burden to meet in attempting to justify use of a lottery for purposes of granting an individual license for a full-power station (e.g., the fourth full service television station in a community), the licensing of which is unrelated to the initial grants of licenses for a new service. There, the flood of new applicants for a multitude of licenses in a newly created service, with all of the administrative problems attendent thereto, have not to date confronted the Commission. On the other hand, the Commission would be perfectly justified in using, and is in fact encouraged to use, a lottery when awarding licenses for low power television stations, which involves huge backlogs which would otherwise significantly delay service to the public if the traditional comparative hearing process were relied upon.

The conference substitute provides that the Commission adopt implementing rules within 180 days of the date of enactment of this Act. The Conferees wishes to emphasize that this is an absolutely mandatory requirement. Once these rules are established, the Commission shall have the authority to modify them as necessary and the discretion, based upon an articulated assessment of the public interest factors discussed above, to apply them to particular proceedings or classes of proceedings before it. The Conferees wish to emphasize their strong expectation that the Commission will exercise carefully its discretion to use a lottery system by making a finding that the public interest would be significantly benefited by using a lottery instead of a comparative hearing to select licenses or permits with respect to those services or instances in which it determines that use of a lottery would be appropriate. Use of a lottery without identifying a substantial public interest benefit flowing therefrom would disserve the Commission's ultimate statutory goal of obtaining the best practicable information service from diverse sources.

The Conferees intend that the Commission, in making this public interest finding, should not apply the aforementioned factors mechanically or without regard to other salient considerations. For example, the Conferees note that the mere existence of a backlog of applications is not itself a sufficient reason for employing a lottery.

The Conferees also wish to emphasize as strongly as possible their firm intention and expectation that the Commission will use a lottery to expedite the processing of low power television service and translator facilities. Low power television and translator service is the ideal service for which to use a lottery, given the large number of licenses available, the large number of mutually exclusive applications for each license, the substantial backlog of applications on file with the Commission, the likeliihood that the use of a lottery is essential to expediting the process of getting low power television service to the public, and the likelihood that bringing low

power television service to the public quickly, through the use of a lottery, will result in a significant increase in the diversity of information sources available in many communities throughout the country.

The Conferees do not intend for this provision to be construed to prevent the Commission from granting licenses or permits in "blocks" of frequencies where it determines that this would serve the public interest (e.g., the proposed multi-channel multipoint distribution service).

Qualification of applicants in a random selection system.—It is the intent of the Conferees that, prior to the use of a lottery in a particular proceeding, the Commission conduct a preliminary review of each application submitted to determine that it is acceptable for filing. The Conferees expect that the Commission will use the standards for acceptability set out in *James River Broadcasting Corp.* v. *FCC*, 399 F.2d 581 (D.C. Cir. 1968), unless, by rule, it has adopted or shall adopt different standards. See, e.g., 47 C.F.R. 73.3564, 22.20. Following the lottery, the Commission shall determine that the applicant selected therein is fully qualified to become a licensee under 308(b) and 309(a). Should the applicant selected be found not to be so qualified, the Commission shall conduct another lottery, if necessary, and select another applicant. It is the intention of the Conferees that determinations under Section 308(b) and 309(a) need be made only as to the applicant who has been selected by lottery.

It is only at this latter, post-lottery stage that petitions to deny the application need be considered and that the right to a hearing may arise. This hearing may be a "paper hearing" unless the Commission determines, by rule or by decision in a particular case, that due process or other public interest considerations require some or all of the hearing to be conducted by any responsible employee or employees, including Bureau Chiefs or their delegates, to whom the Commission shall, by rule, delegate such functions. If the Commission chooses to delegate the function of presiding over these paper hearings to employees other than Administrative Law Judges (ALJ), the Commission must assure that the examiner or reviewer is truly independent in order to avoid any undue influence in the fact-finding process. Here the Conferees wish to emphasize that use of non-ALJs to govern hearings is strictly limited to post-lottery hearings. This does not imply that similar delegation would be acceptable with respect to the traditional comparative hearing process.

The Conferees wish to emphasize that the qualifications set out in Section 308(b) are not diminished in importance. By permitting the FCC to make the findings after an applicant is selected, it is intended that the Commission will be able to conduct a more thorough and in-depth inquiry than it could if it had to make a finding as to the qualifications of all applicants. Moreover, to preserve the incentives of the other applicants to raise questions concerning their competitors' qualifications, if the intitial "winner" is determined to be unqualified, the subsequent lottery must be conducted with the same applicant pool with each applicant's selection probabilities recomputed as necessary (see below).

The Conferees note that requiring the Commission to find the applicant selected by the lottery fully qualified prior to the grant of the license to that applicant protects the public from unqualified licensees, while affording the Commission the relief from the burden of having to pass on the full range of qualifications of every applicant. As with the use of non-ALJs to conduct hearings, the post-selection assessment of qualifications process is strictly limited to the lottery context and should not be utilized in the traditional comparative process.

Application of preferences in a random selection system.—It is the firm intent of the Conferees that traditional Commission objectives designed to promote the diversification of control of the media of mass communications be incorporated in the administration of a lottery system under section 309(i), as amended by this legislation. The Commission's application of its Policy Statement on Comparative Broadcast Hearings, 1 F.C.C.2d 393 (1965), has resulted in significant comparative advantages to minority-controlled applicants and to applicants with a low degree of ownership interest in mass communications media. While the degree of advantage, merit, or preference heretofore awarded to such applicants need not be precisely duplicated in the administration of a random selection system, the Conferees expect that the Commission's lottery rules will provide significant preferences to applicants (especially those who are minority-controlled), the grant to whom of the license or permit sought would increase the diversification of the media of mass communications. The Conferees intend that two distinct diversity preferences be applied where appropriate: a media ownership preference and a minority ownership preference.

The underlying policy objective of these preferences is to promote the diversification of media ownership and consequent diversification of programming content. This diversity principle is grounded in the First Amendment, as illuminated in a line of cases in large part stemming from *Associated Press* v. *United States*, where the Supreme Court stated that the First Amendment "rests on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public." 326 U.S. 1, 20 (1945). Thus, in finding that the "public interest, convenience, and necessity" would be served by granting a given mass communications media license, "the Commission simply cannot make a valid public interest determination without considering the extent to which the ownership of the media will be concentrated or diversified by the grant of one or another of the applications before it," *Citizens Communications Center* v. *FCC*, 447 F.2d 1201, 1213 n. 36 (D.C. Cir. 1971).

The nexus between diversity of media ownership and diversity of programming sources has been repeatedly recognized by both the Commission and the courts. For example, in promulgating its "concentration of control" regulations, the Commission stated that "the fundamental purpose of this facet of the multiple ownership rules is to promote diversification of program and service viewpoints as well as to prevent any undue concentration of economic power contrary to the public interest." Amendment of Sections 3.35, 3.240, and 3.636, Report and Order, 18 F.C.C. 288 (1953), aff'd, *United States* v. *Storer Broadcasting Co.*, 351 U.S. 192 (1956). In its rule-making on low power television, the Commission noted that it has received expressions of interest from minorities wishing to develop new services and that it "specifically encourages this interest, and fully intends that the inauguration of this new broadcast service be the occasion for assuring enhanced diversity of ownership and of viewpoints in television broadcasting." Low Power Television Broadcasting, Notice of Proposed Rulemaking, 82 F.C.C. 2d 47, 77 (1980). In *TV 9, Inc.* v. *FCC*, a landmark case dealing with comparative merit for minority applicants, the court stated "that it is upon ownership that public policy places primary reliance with respect to diversification of content, and that historically has proved significantly influential with respect to editorial comment and the presentation of news." 495 F.2d 929, 938 (D.C. Cir. 1973), *cert. denied*, 418 U.S. 986 (1974).

Common carrier licensees are often not engaged in the provision of information or mass media services over their facilities which they control. When common carrier licensees do exert such control, by definition they do not exclusively control the content of the information or programming which is transmitted over their facilities. Thus, Section 309(i), as amended by this bill, only requires significant preferences to be applied to licenses or construction permits for any media of mass communications. This permits the Commission to use a lottery without preferences for services such as common carrier "beepers," for which there is a large back-log of applications.

A question arises as to the administration of a lottery in services which may be neither clearly common carrier nor broadcast entities (such as multipoint distribution service), or services in which the applicant may be able to self-select either common carrier or broadcast status (such as the Commission's treatment of the direct broadcast satellite service). The Conferees intend that the Commission apply significant preferences, if it decides to use a lottery system for these services, to the extent that the licensees have the ability to provide under their direct editorial control a substantial proportion of the programming or other information services over the licensed facilities. If such services are treated by the Commission in the future strictly as common carrier services with no ability on the part of the licensee to exercise direct editorial control over a substantial proportion of the programing offered over its facilities, no preferences need be applied in using a lottery system for those services.

Characteristics of the preferences.—One important factor in diversifying the media of mass communications is the degree of applicants' ownership interest in other media of mass communications. The definition of media of mass communications relevant here includes the entities listed in section 309(i)(3)(C)(i), as amended by this Act, plus daily newspapers, which the Commission has long regarded as important in considering the diversification of the media. See, e.g., Multiple Ownership of Standard, FM and Television Broadcast Stations, Second Report and Order, 50 F.C.C.2d 1046, modified, Memorandum Report and Order, 53 F.C.C.2d 589 (1975), aff'd sub nom., *FCC* v. *Nat'l Citizens Comm. for Broadcasting*, 436 U.S. 775 (1978); Policy Statement on Comparative Broadcast Hearings, 1 F.C.C.2d 393, 394-95 (1965).

To the degree an applicant for a license or permit for the media of mass communications has controlling interest in no other, or few other, media entities, the policy of diversifying media ownership would be promoted by the grant of the license to such an applicant. Thus, the Conferees intend that in the administration of a lottery to be used for granting licenses or construction permits for any media of mass communications, the Commission award a significant media ownership preference to those applicants whose owners control no other media of mass communications. The Conferees believe that the amount of this preference must be no less than a fixed relative preference of 2:1 for each such application. Thus, each such situated applicant must be awarded a preference so that its chances of being granted the license in a lottery are at least doubled from what its chances would be if a straight random selection process without preferences were conducted. Similarly, a media ownership preference should be awarded to those applicants whose owners, when aggregated, have controlling interest (over 50%) in 1, 2, or 3 other media of mass communications. The Conferees believe that the amount of this preference must be no less than a fixed relative preference of 1.5:1 for each such application. No media ownership preference should be awarded to applicants whose owners, when aggregated, have controlling interest (over 50%) in more than 3 other media of mass communications properties.

The Conferees are concerned that the objectives of this media ownership preference scheme might be diluted where there are large numbers of applicants in a given use of a lottery. To help insure that these preferences have appreciable impact on the results of the lottery, adjustments in the preferences awarded may be required where there is a relatively large number of total applicants compared to the number of applicants deserving of the media ownership preference.

The Conferees intend that the Commission assign applicants to groups based on the number of other media of mass communications owned. A specific multiplier (preference) factor should be applied to each applicant in a given group, the factor varying inversely with the number of media of mass communications owned by the applicants in that particular group. After the appropriate preference factor is applied to each preferred applicant, the overall likelihood of selecting an applicant from one of the preferred groups should be calculated. If this probability does not meet or exceed .4, the individual applicant selection probabilities should be recomputed to bring the combined preferred group probabilities to no less than. 4 (See Administering the System of Random Selection, infra).

A second important factor in diversifying the media of mass communications is the degree of applicants' ownership interest in other media of mass communications which are in, or close to, the community being applied for. See Policy Statement on Comparative Broadcast Hearings, 1 F.C.C. 2d 393, 395 (1965). The Commission has recognized the importance of this factor in promulgating local cross-ownership rules barring the common ownership of a VHF television station and an aural (AM or FM radio) station in the same community, Multiple Ownership of Standard, FM and Television Broadcast Stations, First Report and Order, 22 F.C.C. 2d 306 (1970), modified, Memorandum Opinion and Order, 28 F.C.C. 2d 662 (1971), and barring daily newspaper—broadcast station combinations under common ownership in the same community, Multiple Ownership of Standard, FM and Television Broadcast Stations, Second Report and Order, 50, F.C.C. 2d 1046, modified, Memorandum Report and Order, 53 F.C.C. 2d 589 (1975), aff'd sub nom. *FCC* v. *Nat'l Citizens Comm. for Broadcasting*, 436 U.S. 775 (1978).

The Conferees strongly believe that the avoidance of local ownership concentration should continue to be a factor of major significance in promoting diversity in the licensing process. Where an applicant for a license or permit has controlling interest (over 50 percent) in any other medium of mass communications which would be co-located with the licensed facility sought, it would not promote diversity to give such an applicant a preferred status relative to other applicants. Thus, in the administration of a lottery system to be used for licenses or permits in the media of mass communications, no media ownership preference should be awarded to any applicant whose owners, when aggregated, have controlling interest (over 50 percent) in any medium of mass communications which is licensed to serve, franchised to serve (in th case of a cable television system), or primarily serves (in the case of a daily newspaper) the community of license for which of the grant is sought.

The Conferees expect that the Commission will make certification as to whether or not an applicant has a controlling interest in any media of mass communications in the community of license of the grant sought a prerequisite for an acceptable application for a license or permit for a medium of mass communications. Applicants who do have such ownership interests should be ineligible for a media ownership preference, notwithstanding the possibility that they might otherwise receive a preference by virtue of owning only a few media of mass communications. In sum, awards of licenses which would increase local media ownership concentration, by definition would not further the goal of diversifying media ownership, and thus the Conferees intend that such applications not be eligible for a diversity preference.

A third important factor in diversifying the media of mass communications is promoting ownership by racial and ethnic minorities—groups that traditionally have been extremely underrepresented in the ownership of telecommunications facilities and media properties. The policy of encouraging diversity of information sources is best served by not only awarding preferences based on the number of properties already owned, but also by assuring that minority and ethnic groups that have been unable to acquire any significant degree of media ownership are provided an increased opportunity to do so. It is hoped that this approach to enhancing diversity through such structural means will in turn broaden the nature and type of information and programming disseminated to the public. The Conferees find that the effects of past inequities stemming from racial and ethnic discrimination have resulted in a severe underrepresentation of minorities in the media of mass communications, as it has adversely affected their participation in other sectors of the economy as well. We note that the National Association of Broadcasters recently reported that of 8,748 commercial broadcast stations in existence in December 1981, only 164, or less than two percent, were minority owned. Similarly, only 32 of the 1,886 noncommercial stations, slightly over two percent, were minority owned.

One means of remedying the past economic disadvantage to minorities which has limited their entry into various sectors of the economy, including the media of mass communications, while promoting the primary communications policy objective of achieving a greater diversification of the media of mass communications, is to provide that a significant preference be awarded to minority-controlled applicants in FCC licensing proceedings for the media of mass communications. The narrowly-drawn preference scheme established in section 309(i), as it is amended by this legislation, is intended to achieve such a purpose. Evidence of the need for such preferential treatment has been amply demonstrated by the Commission, the Congress, and the courts. See, in this regard, Statement of Policy on Minority Ownership of Broadcast Facilities, 68 F.C.C.2d 979 (1978); FCC Minority Ownership Taskforce, Report on Minority Ownership in Broadcasting (May 17, 1978) at 3, 7-9; and *Fullilove* v. *Klutznick*, 448 U.S. 448 (1980), and reports cited therein at 467 n.55. As the court stated in *Citizens Communications Center* v. *FCC*:

> The Commission . . . may also seek in the public interest to certify as licensees those who would speak out with fresh voice, would most naturally initiate, encourage, and expand diversity of approach and viewpoint. . . . As new interest groups and hitherto silent minorities emerge in our society, they should be given some stake in and chance to broadcast on our radio and television frequencies.

447 F.2d 1201, 1213 n.36 (D.C. Cir. 1971) (citation omitted).

The Conferees intend that in the administration of a lottery to be used for granting licenses or construction permits for any media of mass communications, the Commission award a significant minority ownership preference to those applicants, a majority of whose ownership interests are held by a member or members of a minority group. The Conferees believe that the amount of this preference must be no less than a fixed relative preference of 2:1 for each such application. For purposes of becoming eligible for this minority ownership preference, individuals who are participants in a group, partnership or corporate entities and who are members of different minority or ethnic groups should be allowed to aggregate their ownership interests to achieve a majority interest in any given application.

It is clear that the current comparative hearing process has not resulted in the award of significant numbers of licenses to minority groups. Many minority applicants are simply unable to participate in comparative hearings which often take a considerable period of time and require subtantial economic resources. The Conferees believe that a lottery preference scheme will greatly speed the process of initial licensing awards, and will permit not only greater numbers of minority groups to apply for licenses, but also will result in the award of a greater proportion of available licenses to minorities than has been the case to date.

It should be noted that such groups as women, labor unions, and community organizations which were mentioned in the legislative

This is the congressional version, the law actually authorizing the lottery. The FCC rule making version will appear later.

history of the lottery statute that was originally adopted, Conference Report on H.R. 3982, Omnibus Budget Reconciliation Act of 1981—Book 2, H.R. Rep. No. 97-208, 97th Cong., 1st Sess. 897 (1981), are all significantly underrepresented in the ownership of telecommunications facilities. Such applicant groups would, of course, be eligible for both media ownership and minority ownership preferences if they meet the eligibility guidelines. The Conferees expect that such groups will also substantially benefit from this lottery preference scheme, and, consequently, the American public will benefit by having access to a wider diversity of information sources.

The operative definition of minority group is found in section 309(i)(3)(C)(ii), as amended by this bill. It is the Conferees intention that the definitions in Office of Management and Budget Statistical Policy Directive No. 15, "Race and Ethnic Standards for Federal Statistics and Administrative Reporting," be utilized for guidance with regard to any dispute as to an individual's membership in a named group.

The Conferees direct the Commission to report to the Congress annually on the effect of section 309(i)(3) and whether it serves the purposes stated. See generally Fullilove v. Klutznick, 448 U.S. 448, 510, 513 (1980). This report should include a statistical breakdown of the characteristics of applicants involved in lottery proceedings, those receiving preferences, and those actually awarded licenses.

The Conferees intend that both a media ownership preference and a minority ownership preference will be available to all eligible applicants. Thus, for example, an applicant, a majority of which is owned by minorities, and whose owners have no controlling ownership interests in the media of mass communications, would receive no less than a cumulative, 3:1 preference over an applicant without preferences. Moreover, an applicant, a majority of which is owned by minorities, but whose owners have controlling interest in four media of mass communications properties or a medium of mass communications serving the community of license of the grant sought, would still receive a minority ownership preference (though not being eligible for a media ownership preference).

With respect to both the media ownership and minority ownership preferences, the Conferees expect that the Commission shall evaluate ownership in terms of the beneficial owners of the corporation, or the partners in the case of a partnership. Similarly, trusts will be evaluated in terms of the identity of the beneficiary.

The Conferees expect that the preferences which will be awarded in the administration of a lottery will result in a real and substantial increase in the diversity of ownership in the media of mass communications and consequent diversification of media viewpoints. The Conferees note that this carefully designed preference scheme could be undermined by the rapid re-assignment or transfer of stations, construction permits, or licenses granted by a lottery. Thus, it is the firm intent of the Conferees that for any mass communications media service in which the Commission determines use of a lottery is appropriate, it should retain its present anti-trafficking rules (47 C.F.R. 73.3597 (1981)) or devise similar protections to help ensure that the very purposes sought to be achieved by the preference scheme be fulfilled. Moreover, the Commission should require that the applicant that is actually awarded the license certifies that they have not entered into any agreement, explicit or implicit, to transfer to another party after a period of time any station construction permit or license awarded. If those eligible for preferences were simply applying for licenses for the purpose of obtaining a quick profit on the sale of the station once the license is awarded, the entire lottery preference mechanism would be undermined.

Administering the system of random selection.—The Commission's administration of the random selection system will differ depending on whether the licenses are to be granted for the media of mass communications or for non-media services. The lottery procedure for the latter is extremely simple, with each applicant for a given license receiving a selection probability of 1/x, where x equals the total number of applicants.

The random selection system for mass communications media licenses, on the other hand, must take into account preferences for ownership of few or no mass communications media entities, and preferences for minority ownership, along with the total number of applicants for a given license.

The Conferees intend that the media ownership preference be computed prior to the minority ownership preference. Those applicants with no controlling ownership in mass communications media should receive a fixed relative preference of 2:1; applicants with controlling interest in one, two, or three mass communications media entities should receive a fixed relative preference of 1.5:1. Applicants with controlling interest in more than three mass communications media entities or in at least one entity serving the city of license should receive no media ownership preference. Following the award of media ownership preferences (where applicable), each applicant's selection probability should be normalized (*i.e.*, adjusted to reflect its actual probability of being selected), taking into account the total number of applicants in the lottery.

The Conferees are concerned that their objective of increasing media diversity by granting preferences in the administration of a lottery system will be diluted in instances where the number of applicants for a given license is large. It is important to ensure that the media ownership preference will have an appreciable impact on the results of the selection process. The award of preferences, therefore, is not only intended to ensure that the lottery process is conducted in a way which guarantees the consideration of certain criteria which are of primary significance in the comparative hearing process, but it is also intended to create a process which is highly outcome-oriented in terms of furthering the actual granting of licenses to those applicants who would most further diversity objectives.

Thus, the Commission must ensure that the sum of the selection probabilities of all applicants deserving of a media ownership preference be no less than .40 for any given instance in which the lottery is being used, even if after the award of the media ownership preference the aggregated selection probabilities of all such applicants awarded this preference totals less than 40 percent. The Conferees intend that this be accomplished by adjusting the normalized selection probabilities of each applicant deserving of a media ownership preference, where necessary, to ensure that the sum of the selection probabilities for all such applicants be at least .40. Following this adjustment (where applicable), the selection probability of applicants not deserving of a media ownership preference should again be normalized.

After making all the necessary adjustments for ownership preferences (where applicable), each minority controlled applicant should receive a fixed relative preference of 2:1. This minority ownership preference should be awarded in addition to any media ownership preference to which a particular applicant may be entitled. Following the award of minority ownership preferences (where applicable), each applicant's selection probability should again be normalized to arrive at the final selection probability for that particular use of the lottery.

The following step-by-step procedure, to which the Conferees and the Commission have agreed following extensive staff discussions, establishes the process for the Commission to follow in the administration of a lottery to be used for granting licenses for any media of mass communications. This detailed procedure offers the Commission guidance to correct its previous failure to implement a lottery system.

A. Divide the total number of applicants into 100 to find the individual applicant selection probabilities without adjustment for preferences.

B. Identify all applicants by ownership group according to the following table:

Group and ownership of mass communications media, and preference factor	
1—no controlling ownership interest	2.0
2—controlling interest in 1-3 entities	1.5
3—controlling interest in more than 3 entities or in at least 1 entity serving the city of license	1.0

C. Multiply the selection probabilities for each applicant from Step A by the appropriate preference factor from Step B.

D. Normalize all probabilities using the following formula: Intermediate probability for each applicant equals applicant's Step C probability divided by sum of all applicants' Step C probabilities.

E. Sum the probabilities from Step D by group. Then sum the probability totals from Groups 1 and 2. If this sum is greater than .40, skip Step F and go on to Step G. If this sum is less than .40, each applicant in Groups 1 and 2 will have its intermediate probability raised as follows:

(1) Compute the quotient of .4 divided by sum of the probability totals from Groups 1 and 2;

(2) the new intermediate probabilities are then computed as: intermediate probability for each applicant equals applicant's Step D probability times quotient from (1) above.

F. Normalize the probabilities not altered in Step E (i.e., Group 3—those with no media ownership preference) using the following formula: Intermediate probability for each Group 3 applicant equals .6 divided by number of Group 3 applicants.

G. Identify minority controlled applicants.

H. Multiply the intermediate probabilities of the minority controlled applicants by 2.0.

I. Normalize all probabilities using the following formula: Final probability of selecting any applicant equals intermediate probability of applicant divided by sum of all intermediate probabilities.

The following hypothetical situation illustrates this procedure. Assume that there are ten mutually exclusive applications for a given license for a medium of mass communications, with the following characteristics:

Applicant and minority status	*Media ownership*
1—nonminority	owns 1 other media property.
2—nonminority	owns 4 other media properties.
3—nonminority	owns 4 other media properties.
4—nonminority	owns 4 other media properties.
5—nonminority	owns 4 other media properties.
6—nonminority	owns 4 other media properties.
7—nonminority	owns 4 other media properties.
8—nonminority	owns 4 other media properties.
9—minority	owns no other media properties.
10—minority	owns 4 other media properties.

Step A: Total number of applicants equals 10. Individual applicant selection probabilities without preferences equals 10/100 equals .10

STEP B

Applicant	Number of media properties owned	Group
1	1	2
2 to 8	4	3
9	0	1
10	4	3

Step C.—Applicant and selection probability multiplied by preference factor

1	.1(1.5)=.15
2	.1(1.0)=.10
3	.1(1.0)=.10
4	.1(1.0)=.10
5	.1(1.0)=.10
6	.1(1.0)=.10
7	.1(1.0)=.10
8	.1(1.0)=.10
9	.1(2.0)=.20
10	.1(1.0)=.10
Total	1.15

Step D.—Applicant and step C probabilities divided by sum of all probabilities

1	.15/1.15=.1304
2 to 8	.10/1.15=.087
9	.20/1.15=.1739
10	.10/1.15=.087

Step E: Group 1 probabilities and Group 2 probabilities=.1739 +.1304=.3043.

Since .3043 < .40, each Group 1 and Group 2 applicant will have its intermediate probability adjusted as follows:

(1) .4 divided by the sum of the probability totals for Groups 1 and 2 equals .4 divided by 1739+.1304 equals .4 divided by .3043 equals 1.314.

(2) For Group 1: .1739(1.314) equals .2285. For Group 2: .1304(1.314) equals .1713.

Step F: Each Group 3 applicant's probability equals .6 divided by the number of Group 3 applicants equals .6 divided by 8 equals .075.

Step G: Only applicants 9 and 10 are minority controlled.

Step H.—Applicant and probability with minority ownership factor

1	.1713(1.0)=.1713
2	.075(1.0)=.075
3	.075(1.0)=.075
4	.075(1.0)=.075
5	.075(1.0)=.075
6	.075(1.0)=.075
7	.075(1.0)=.075
8	.075(1.0)=.075
9	.2285(2.0)=.457
10	.075(2.0)=.150
Total	1.3033

Step I.—Applicant and final probabilities

1	.1713/1.3033=.1314
2	.075/1.3033=.0575
3	.075/1.3033=.0575
4	.075/1.3033=.0575
5	.075/1.3033=.0575
6	.075/1.3033=.0575
7	.075/1.3033=.0575
8	.075/1.3033=.0575
9	.457/1.3033=.3506
10	.150/1.3033=.1151
Total	.9996

This congressional version has been edited and several pages of legal gobblygook omitted to save space. The part printed here contains the heart of the matter.

COMMISSION CALLS FOR SUBMISSION BY NOV. 1, 1982 OF MISSING TECHNICAL DATA FROM LOW POWER APPLICANTS PROPOSING DIRECTIONAL ANTENNA SYSTEMS

In its Report and Order in BC Docket No. 78-253 (adopted March 4, 1982), the Commission adopted new rules permitting low Power Television (LPTV) operations. Over 7,000 applications have been received since the Commission initiated this proceeding. Because of the huge number of applications filed, the Commision will conduct computerized engineering studies to determine whether the proposals involve interference with existing stations or with other co-pending proposals. Many applicants proposing directional antenna systems, however, have not submitted all the technical information necessary for the Commision to conduct these interference studies. The purpose of this public notice is to request all applicants who have not already done so to submit the missing data by november 1st of this year. Further, all future applications must contain this information.

Specifically, the Commission needs the radiation pattern for each proposed directional antenna. A directional antenna radiates a greater signal in certain directions than in other directions, usually for the purpose of increasing the population being served. Directional antennas are also used, however, to provide interference protection to other nearby stations. Without knowledge concerning the exact shape of the radiation pattern, FCC engineers cannot determine whether stations provide adequate interference protection to other stations. Applications lacking the necessary technical data regarding proposed directional operations cannot be processed and therefore will be returned to the applicants as incomplete.

The Commission is establishing a file containing the radiation patterns of common off-the-shelf directional antennas. Currently these patterns are being acquired from the various manufacturers. In this manner, it is hoped to avoid the need for each applicant proposing an off-the-shelf antenna to submit a pattern. Nonetheless, if the Commision has difficulty in obtaining this information directly from the manufacturers, then it will request such patterns from applicants, permittees, and licensees as necessary.

Because patterns will be obtained directly from manufacturers, using their model numbers, it is essential that all applicants proposing off-the-shelf antennas show the model number exactly as specified by the manufacturer so that the Commission's computer can access the corresponding radiation pattern. For example, a model QWERT-123/45 must be specified exactly as QWERT-123/45, not as QWERT-123-45. Furthermore, general antenna descriptions such as yagi and dipole are not sufficient for this purpose. The Commission requests that all applicants proposing directional antennas review their applications to make certain that the manufacturers' names and model numbers have been correctly specified.

Applicants proposing non-standard directional antenna systems must file actual radiation patterns, either in graphical or in tabular form. These non-standard antennas include both antennas that have been specifically designed for the applicant and composite antennas consisting of two or more off-the-shelf antennas. Because every composite and custom antenna generates a unique radiation pattern, specific radiation data must be filed by every applicant proposing a composite or custom directional antenna system. It is not adequate simply to submit the radiation patterns of each of the off-the-shelf antennas used in a composite antenna.

For most applicants proposing non-standards or composite antennas, it will be necessary to obtain technical assistance in determining the proper radiation pattern. This can be done either through the antenna manufacturer or the applicant's technical consultant. in any event, horizontal plane radiation patterns should be submitted in terms of the relative field strength of the horizontally polarized radiation component. If presented in a tabular format, rather than graphically, field strengths should be specifid for all minimas, maximas and at every 10 degrees. The maximum should correspond to zero degrees on the tabulation or, alternatively, in the case of symmetrical antennas, along the line of symmetry. However, the actual antenna orientation as it is proposed to be installed should be specified by stating the direction of the main radiation lobe or the line of symmetry with respect to True North.

The Commission is using this public notice as a means of informing applicants of the necessity of filing this information. Following the November 1st target date, the FCC will again review its files for applications lacking this essential data. Applicants so identified will be contacted individually and be given a short time in which to file this information. If they do not supply the information within the time period specified, their application will be returned as incomplete. It is hoped that in response to this public notice, applicants proposing directional antennas will review their applications and, if necessary, supply the missing or corrective information rather than waiting to be contacted individually. Although the Commission has established a target date of November 1st for submission of this information, it urges applicants to submit the data earlier if possible to allow entering of the material into the computer data bases as promptly as possible.

The Commission wishes to emphasize that this special call for missing information and corrective data concerning directional antenna systems is not to be confused with its June 23, 1982, announcement of a 90-day amendment period which ended on September 21,1982. That amendment period was for the purpose of permitting applicants to change their applications to conform with the new engineering standards adopted in the Report And Order of March 4, 1982. Infor-mation submitted in response to today's call regarding directional antenna data will not be accepted if it constitutes a modification or change to the proposal presently on file. Additionally, the FCC staff will be reviewing all new applications filed to assure that all required antenna information is included. If it is not, the application will be returned as incomplete.

For further information Paul Marrangoni on (202) 632-3894

ICTV

Membership Information

Independent Community Television Alliance

- ☐ Local Power Hot Line -- 50 hours a week
- ☐ Subscription -- Monthly Lo-Power magazine
- ☐ Co-op Group Purchases of Equipment
- ☐ Expedited Washington Research Information
- ☐ Collective Lobbying for the Little Guy in LPTV
- ☐ Washington Follow-up on Applications
- ☐ Verbal Phone Access to Commission Data Base -- 6 Days a Week
- ☐ Use of Instructional 'How To' Videotapes (1 week free)

Members pay only for shipping, handling, and record keeping

All Lo-Power Publishing personal copies of manuals and materials free of charge to ICTV members

INSTRUCTIONAL 'HOW TO' VIDEOTAPES AVAILABLE
(Use for one week; members pay only for shipping, handling and record keeping)

- ★ Techniques of Using One Camera
- ★ Setting up a Studio
- ★ Lighting for Television
- ★ Multiple Camera Techniques
- ★ Shooting Video 'Basics'
- ★ How to Shoot a Sports Event
- ★ How to Broadcast a Local Wedding
- ★ How to Broadcast a Church Service
- ★ Shooting Local Commericals for Cable or LPTV
- ★ Television Tape Production
- ★ LPTV Crash Course
- ★ LPTV Crash Course 'B'
- ★ Subscription TV
- ★ World's Smallest Full Service Station
- ★ The New Mavica 'Still Camera'

BOOKS AND MANUALS -- LOANED FOR TWO WEEKS, FREE TO MEMBERS
(Members pay only for shipping, handling and record keeping)

- ★ Color TV Studio Design and Operation
- ★ Videotape Production and Communication Techniques
- ★ Designing and Maintaining a Small Television Studio
- ★ Television Production Handbook
- ★ Video User's Handbook
- ★ TV Engineering Handbook (very large and heavy book)

The LPTV Association That Works

FREE APPLICATION ASSISTANCE HOTLINE FOR MEMBERS - 6 DAYS A WEEK

☆ **WE DO A COMPLETE RURAL AREA VHF LPTV FCC APPLICATION FOR YOU!** ☆

☆ Members' Price: $250 ☆

Below is my application for membership in ICTV. I have deducted $ _____ for which I have already paid Lo-Power Publishing for publications and enclose a check for $ _____ the two totalling $250.00 for my one-year membership.

ICTV

Independent Community Television Alliance 7432 E. Diamond. Scottsdale. AZ 85257

Membership Application

Individual(s) to contact: _____ Name _____ Position

_____ _____

Company _____

Address _____

City _____ State _____ Zip Code _____

Phone _____ ( ) _____

The High Powered
Low Power Television
Crash Course

October 30-31, 1982; Las Vegas; preceeding translator convention and manufacturers' exhibits.

- ★ Getting a license; more and faster
- ★ Planning a station and community networks for lowest investment and largest return
- ★ Engineering considerations you need to know about
- ★ Methods of operation to guarantee viewers (and income)
- ★ Where 2/3 of your income will come from that you do not even know about
- ★ Why you do not have to worry about programming sources; lists supplied
- ★ Low cost local production equipment demonstrated; sources
- ★ Electronic publishing and your part in getting ready for what's coming

Saturday -- 10 a.m. to 5 p.m.
Saturday -- 8 p.m. to 10 p.m.
Sunday -- 10 a.m. to 4 p.m.

We recommend advance reservations.
Late, or at the door, $150

REGISTRATION FEE: $125 per person; includes two lunches and material packet. ICTV members, $100.
CANCELLATION POLICY: Full refund of fee if written cancellation is received 10 days prior.

TAX DEDUCTION FOR EDUCATIONAL PURPOSES: Treasury regulation 1.162-5 permits deduction of educational expenses--registration fees, travel, meals and lodging.

YOU NEED INFORMATION ON THE MANY OPTIONS OPEN TO LPTV BROADCASTERS TO SET YOUR DIRECTION.

THIS CRASH COURSE WILL PROVIDE ANSWERS.

L O W P O W E R C O M M U N I T Y T E L E V I S I O N
C R A S H C O U R S E

FOR FURTHER INFORMATION OR PHONE REGISTRATION, CONTACT: (602) 945-6746

Note: Please use separate sheet for additional registrants.
☐ I/we wish to register for the Crash Course. $125 is enclosed for each registration.
(Make checks payable to Lo Power Community Television)
☐ Please send me listing and prices of Video Tapes available of convention and crash course proceedings.
☐ Please add my subscription to **Lo Power Community TV Magazine.** I enclose $50.

To: Lo Power Community Television, 7432 E. Diamond, Scottsdale, AZ 85257:

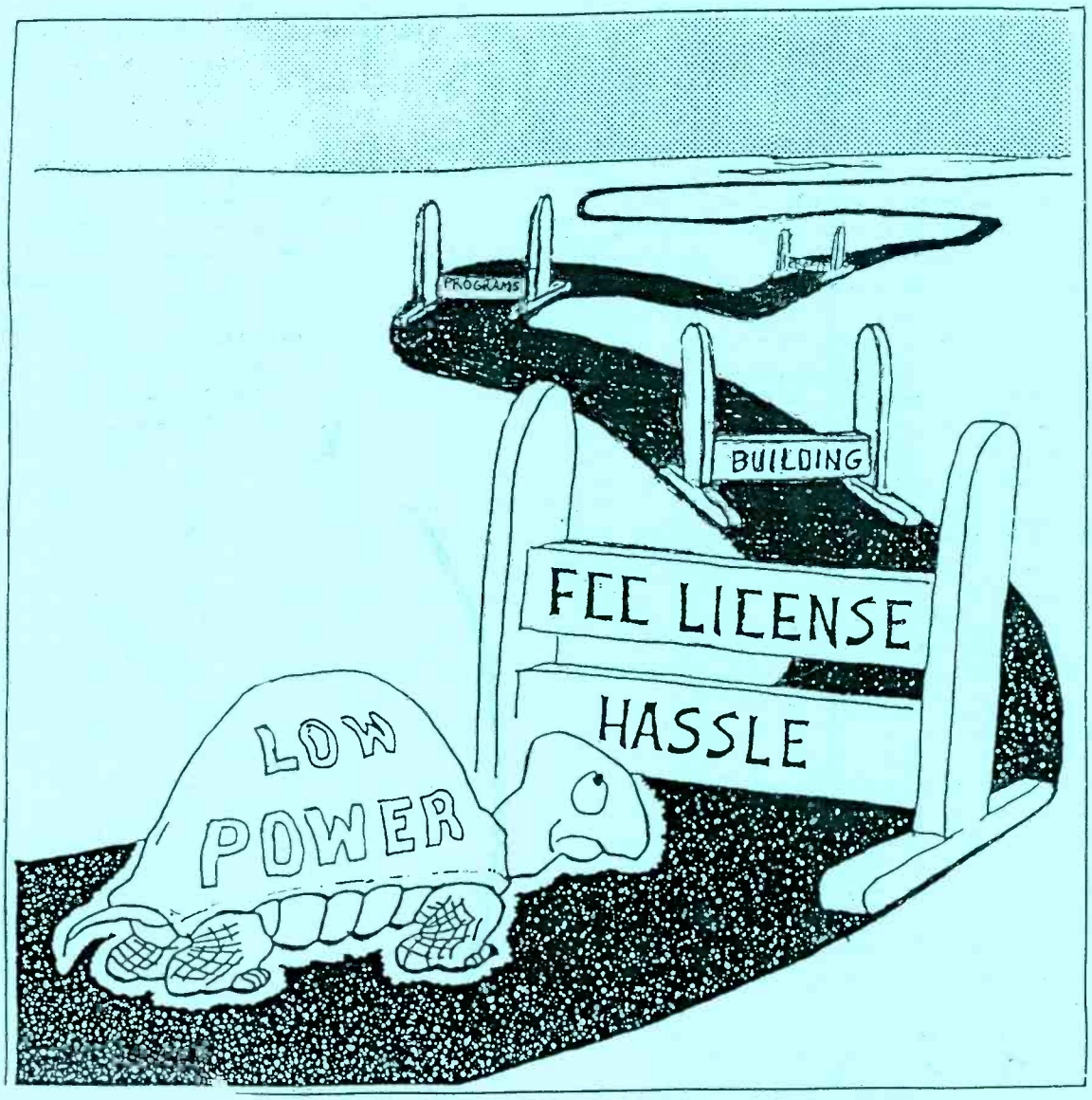
Name _____ **Title** _____

Organization _____

City/State/Zip _____ **Telephone** _____

LO-POWER COMMUNITY TV

October 1982



The First Hurdle is the Worst

Here We Go Again!

Luckily, we held the October magazine up waiting for the official FCC lottery rule making release because they also released a late notice.

So here we go again, rushing out our magazine at First Class rates at an expensive, out of our pocket, $250 more than second class because we think you should know as soon as possible that the Commission has come out with a short notice event again, due November 1.

This time, the Commission says, if you have a directional antenna, you have to file a composite antenna pattern, supposedly by November 1; keep in mind we didn't get this notice until October 12th.

Now, if you had your application filed by one of the paper mills that specify 'omni' because that's easy to file, then you have no problem now. It's only those precisely engineered with several directional antennas for maximum coverage that require a composite coverage pattern. The Commission needs it to enter in their computer processing system; this is necessary for them to determine who is mutually exclusive.

We are trying to keep the magazine solvent; but if the Commission keeps coming up with these short notice situations requiring first class mail, it will break us up in business. Anyway, we are leaving out some of our scheduled articles to lighten up the magazine so first class is not totally prohibitive. We had planned to include both the congressional version and the FCC rule making on the lottery for low power. The omitted one will appear next issue.

In filing applications, we are probably one of the few people that are going to the trouble of filing multiple outputs. What we have in low power is a problem of coverage with this low legal power level, so you need every 'drop' of power you can get. Applications are easy to file when you specify 'omni' antennas. A lot of the paper mills file nothing but 'omni' antennas (all directions). Then to get halfway respectable coverage, they specify an 'omni' antenna that costs around $30,000. You could often have gotten better coverage with directional antenna arrays for under $1,000. Many are finding this out, but the FCC won't allow antenna changes.

What we do that is often unique, is file for additional outputs on VHF 10 watters. Say, for example, you have an application for Centertown for 10 watts VHF. 10 miles east is Eastland; on the same application blank on the same channel, you file for a second 10 watt output to serve Eastland. South 8 miles is Southside; so you file for a third output for Southside. You use a basic transmitter that costs in the $5,000 to $6,000 range, for example, with additional 10 watt outputs at only $1,700 each. You use highly directional antennas to beam (like a flashlight) all of that 10 watts out to the additional communities. The Commission has granted many multiple outputs in the past, including FM translators with up to 8 outputs. This makes sense to conserve spectrum (channels). Instead of going down and filing and using up another channel at Eastland and another at Southside, why not just use an additional 10 watt output. The only requirement is they must not be oriented so they overlap, and you cannot exceed any direction what you would normally be able to do with 10 watts.

ABOUT MULTIPLE OUTPUTS

You should know that phasing several outputs correctly requires a lot of engineering work, not only in filing but in installing several directional outputs on the same tower, particularly in the overlap areas. The small, extra transmitter cost makes the additional 'work' well worthwhile though, to obtain the extra coverage. What we are saying, is that multiple outputs will require more work in setting up than simple omni antennas.

In the past, we have filed many applications with multiple outputs at the usual $250 total for one application even though it required considerably more work. Now we are going to have to file composite patterns, etc., so we are charging $50 additional for extra outputs.

The extra outputs can give you double and triple the coverage you would have with just one output.

In areas near Mexico, etc., where maximum power is 100 watts UHF, you can probably file for two or more 100 watt outputs to serve different communities from the same point.

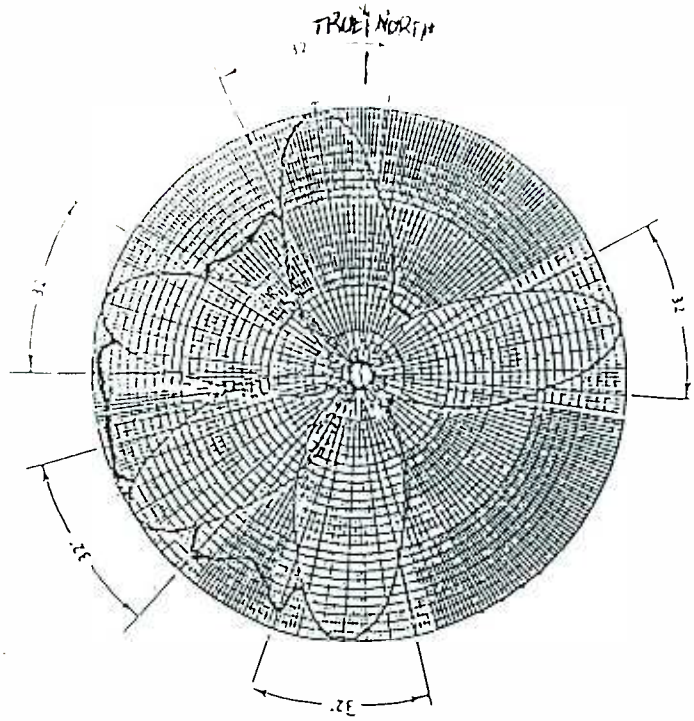
Now a word about directional antennas. If nearly all your viewers are one direction, or two directions, for example, you concentrate nearly all of your puny amount of power in those directions. Instead of 40 watts (gain of 4x pointing all directions), you can get 100x gain in (1,000 watts) a highly directive 25 degree wide beam. That is directional antennas and with that much focused power, you can serve a community quite a distance away.

Now, if you just used one directional antenna oriented one direction, you do not need to file anything. However, if you split the power two or more directions, (example, see Alamogordo article, Aug. issue), then you need to file a 'composite' antenna pattern by November 1st. That will show the 'combined effect' of your directional antennas. Up until now, you filed only one pattern produced by the antenna manufacturer. What you are filing now is a combination and/or interaction of the two.

Here is an example, the way we worked one out on a graph; we haven't had time to check with the powers to see if this will be satisfactory or not, but maybe it will help explain what this is all about.

Lo-Power Community Television Magazine is published twelve times per year. Sample copies are $5, subscription $50 per year. Intended to supply needed information on Low Power Television at reasonable cost.

Postmaster, send address changes to **7432 E. Diamond, Scottsdale, AZ 85257.** Telephone, **(602) 945-6746.** Mailed at second class rates at the main post office at Scottsdale, AZ 85257. USPO # 0279-4152 July 1982, Issue 15



This graph was made for an existing application we filed with 5 outputs. It could also have been one output split between 5 antennas; the pattern would be the same. The reason there was no pattern N.E. or S.E. coverage was because there were close spaced potential interfering stations those directions, so what we did was squeeze in a VHF channel with a lot of power a lot of directions to serve a lot of different communities but practically no radiation the directions of the tight spaced interfering channels. This was made and written before we saw the FCC release so it is just to give you an illustration of what this is all about. Each of these 5 legs was a full 10 watts to serve 5 different distinct communities. Note the overlap of the two most westerly outputs almost exceeds the main lobe of each 10 watt leg. If overlap exceeded it, the additional output would not be allowed.

Some of the major antenna manufacturers are reported to have a computer program and plotter that can generate these for you.

There are two schools of thought when it comes to filing applications:

School One: File full power transmitter with omni antenna that doesn't go out very far. Advantages: 1. extremely easy to file; 2. easier to get past Commission and licensed since it is not going very far and probably won't have much chance of interfering with anything; 3. easier for Commission to calculate since it goes all directions nearly exactly the same. The idea being after you're licensed, then you try to file (not legal under present rules) to change your antenna pattern to get same decent coverage. The idea being that the Commission will eventually let you straighten it out for maximum coverage once you're licensed. They say, why do all that work on antenna patterns, etc., now when you may be only one of 10 applicants. If you luck out and win the lottery, then spend time doing a decent antenna pattern. The disadvantage is: 1. you have no protection in the meantime that somebody might not file down the road on the same channel after your license, and that would preclude your getting out there with coverage whereas, you could have gotten protection and licensed if you had filed originally that way; 2. under present rules, you will have to start over in the application process if you change your antenna pattern. It is likely this will be changed, we will admit, however; 3. there will be delays before you can get your coverage changed, even if they do change the rules.

School Two: File the application to obtain absolute maximum coverage reasonably possible (surprisingly, these antenna arrangements are often less expensive). File them the way you want to build them. Advantages: 1. if you are licensed, you do not have to 'redo' later and file more paperwork, hassle, etc., nor have to start over in the application process; 2. you have a maximum coverage area that is 'protected from other filings', etc. Disadvantages: 1. a lot more work for the filing party; 2. more work in installing and phasing them together and making them work properly.

The Commission's actual composite pattern appears typeset on the next to last page.

Commission - 1
Little Guy - 0

FCC 'Deregulating' Program Content?

Whether the FCC is truly deregulating and not requiring or controlling programming content in order to keep your license or not, became even more debatable recently when the Commission rightly or wrongly voted to take away the license of a one man FM station in Gloucester, Massachusetts.

Simon Geller, operator of the classical FM station for 18 years, recently saw the Commission vote 4 to 2 to give his license to a 'big operator' who was 'after it'. The license is estimated to be worth between one half and one million dollars, and the new 'winner' of the license gets it for the filing since the Commission wisely or unwisely decided to take it away, citing Simon's failure to carry 'sufficient' public interest programming, whatever that is.

Simon had only a few advertisers and, operating with no employees, played classical music 14 hours a day, 7 days a week, staying in business primarily because of donations of $12,000 a year from satisfied listeners.

Simon feels other stations carry plenty of what they say he doesn't carry and that his listeners tuned in on his station strictly for classical music. There were no 'complaints' filed against Geller's operation, and Geller has been receiving many donations to appeal. Evidently, many feel Simon Geller, the little guy, has just been run over by the Commission, and a big operator that promises 'more' than Geller can deliver and wants his license.

THE FCC IS GOING TO PROCESS IN THE ORDER RECEIVED?

We noticed a news release somewhere that the Commission was now going to handle low power applications in the order received. We thought, my God, if they are actually going to do that, why that's front page news, so we gave them the old phone call and talked to one of the wheels and asked if that were really true, if the Commission was really and truly going to process in the order received?

'Well', ---------- he replied, 'that's not new; the Commission has always processed applications in the order received', where upon I fell off of my chair. After getting back up again, I asked, 'how do you explain then, an applicant that filed 15 applications in June of 1981 and has had none granted and filed 5 in September of 1981 and has had 3 of those granted?'

That he said is probably because they were caught up in the freeze and if they didn't write and tell us they were processable under the freeze and request they be put in cutoff, they just sat there because we are not going to look up what's processable. So I says, 'you mean to tell me that we need to write you and tell you now that we have an application that is entitled to be processed in tier one and that we request it be put in cutoff?'

He said, 'that's right'. Well, I said, 'I just amended a couple dozen; do I have to write you on those too?' Answer, 'yes you do'.

So if you want your application cutoff, maybe you should write and tell them the file number, that it is entitled to processing in tier one and that you are requesting it be put on cutoff. Be sure and throw in a few lines about the 'public interest being served by getting this on cutoff'.

I then asked if it was necessary for me to send a computer printout showing the mileage to the major markets and demonstrate it is qualified for processing in tier one. He said no, that it wouldn't be necessary since they were going to check it with their computer anyway.

Now, this may all sound ridiculous to you, but you have to understand the spectrum scarcity in the U.S. is not an engineering problem, it is an attorney problem. You have to understand that getting more and better TV to the American population was solved by engineers years ago. Attornies have an oddball method of thinking and if you have ever associated with them, you become aware of that, and it is precisely that mentality that keeps spectrum scarce.

Getting better TV to the American public (or justice in the court system) is of little concern. Catching you up in not following 'the rules' is the big part of the attorney game. Understanding that the procedures at the Commission are mainly made up by the attorney mentality you have to play by their rules, logic or public interest has nothing to do with it.

When you ask questions at the Commission, you often get two different answers. It is similar to take a tax question to 5 different I.R.S. offices, you often get 5 different answers, some of which contradict the other.

Unfortunately, if the person that gives you the advice is not the same person that processes your paperwork, there may be different results than stated. The FCC is no different, and getting anything definite is difficult.

$500 TO $600 10 WATT VHF-UHF OR 450 TRANSMITTER

We have many subscribers in Mexico, South America, Australia, various islands, etc. that are not under FCC jurisdiction and have no problem with bothering with licensing. We recommend you look into a 10 watt transmitter available to you that can be obtained to broadcast on 434, etc. which will not reproduce on an ordinary TV set. So if you control the supply of downconverters, you essentially have an encoded system that no one can pick up without paying you. You can, of course, also buy it made for standard TV channels. In that case, no downconverter is needed and anyone can pick it up. To obtain more than 10 watts, you could use some readily available and relatively inexpensive linear amplifiers.

No one in the United States can buy or use these unless you have an amateur license and want to use it on the 434 band for non-commercial use.

Maybe you know of some island somewhere or some country that has no TV you can get on for peanuts. Here is an inexpensive source.

We will have more on this type of inexpensive equipment in future issues.

LPTV Applications Filed Since the September Issue

ARIZONA

Lake Havasu City
3 10w Owen Brdcst Ent 9/22/82

Prescott
29 1000w Owen Brdcstg Enter. 9/22/82

Sanders
6 10w Owen Brdcstg Enter. 9/22/82

ARKANSAS

Pine Bluff
5 10w Payne Brdcst Co. 9/22/82

Hope
57 1000w Blacks Desiring Media 9/22/82
52 1000w Blacks Desiring Media 9/22/82
35 1000w Blacks Desiring Media 9/22/82
29 1000w Blacks Desiring Media 9/22/82
27 1000w Blacks Desiring Media 9/22/82
25 1000w Blacks Desiring Media 9/22/82
33 1000w Blacks Desiring Media 9/22/82

Hot Springs
18 1000w ABC Min. Invst. Inc. 9/22/82

Searcy
41 1000w Owen Brdcst Ent. 9/22/82
44 1000w Owen Brdcst Ent. 9/22/82
63 1000w Owen Brdcst Ent. 9/22/82

CALIFORNIA

Barstow
26 100w Suzanne Schott 9/22/82

Cloverdale
27 1000w Owen Brcst Ent. 9/22/82

Crestline
48 100w Response Brdcst Co. 9/22/82
48 100w Suzanne Schott 9/22/82

Edwards
36 1000w American TV Affil. 9/22/82

Lancaster
20 1000w LLW-LPTV 9/22/82

Lancaster/Palmdale
24 1000w American TV Affil. 9/22/82

Litchfield
48 1000w Owen Brdcst Ent. 9/22/82

San Luis Obispo
2 10w Owen Brdcst Ent. 9/22/82

Santa Maria
21 1000w LLW-LPTV 9/22/82

Santa Rosa
68 1000w LLW-LPTV 9/22/82

Susanville/Herlong
63 1000w Owen Brdcst Ent. 9/22/82

Victorville
20 100w Suzanne Schott 9/22/82

COLORADO

Alamosa
12 10w Owen Brdcst Ent. 9/22/82

Placerville
61 100w San Miguel County 9/22/82

Telluride
66 20w San Miguel County 9/15/82

GEORGIA

Hazlehurst
57 1000w Stone Brdcst 9/22/82

Rome
34 1000w Blacks Desiring Media 9/22/82

HAWAII

Honolulu
26 1000w Hawaii LPTV Co. 9/22/82
52 1000w LLW-LPTV 9/22/82

Kailua
48 1000w Pepsi-Cola of Alton 9/22/82

ILLINOIS

Champaign
36 1000w American Christ. TV 9/22/82

Vandalia
57 1000w Pepsi-Cola of Alton 9/22/82

KENTUCKY

Whitley City
7 10w Wayne Marler Crusades Inc 9/22/82

LOUISIANA

Bogalusa
23 100w Bogalusa Daily News Inc 9/22/82

MASSACHUSETTS

Hyannis
8 10w Owen Brdcst Ent 9/22/82

Nantucket
17 1000w Owen Brdcst Ent 9/22/82

MICHIGAN

Ironwood
24 1000w Owen Brdcst Ent 9/22/82

MISSISSIPPI

Natchez
50 1000w Commonwealth Venture 9/15/82

Oxford
59 100w Free State Brdcst Inc 9/22/82

MONTANA

Red Lodge
17 1000w Owen Brdcst Ent 9/22/82

NORTH CAROLINA

Rockingham
52 1000w Richmond Cnty Journ. 9/22/82
26 1000w Sidney L. Neely 9/22/82
52 1000w Owen Brdcst Ent. 9/22/82

OKLAHOMA

Altus
11 10w KWHW Radio Inc 9/14/82

Cushing
62 100w Retherford pub Inc 9/22/82
51 100w Retherford Pub Inc 9/22/82
68 100w Retherford Pub Inc 9/22/82
16 100w Retherford Pub Inc 9/22/82
30 100w Retherford Pub Inc 9/22/82

Elk City
32 1000w Joseph W. Tilton & Ronda L. Shelton 9/22/82

PENNSYLVANIA

Lockhaven
52 1000w Blacks Desiring Media 9/22/82
7 10w Blacks Desiring Media 9/22/82

Williamsport
20 1000w Blacks Desiring Media 9/22/82
66 1000w Press-Enterprise, Inc 9/22/82
68 1000w Press-Enterprise, Inc 9/22/82
63 1000w Press-Enterprise, Inc 9/22/82
18 1000w Press-Enterprise, Inc 9/22/82
9 10w Blacks Desiring Media 9/22/82

SOUTH DAKOTA

Tripp
8 10w Harlan L. Jacobsen 9/23/82

TENNESSEE

Livingston
7 10w Edward M. Johnson 9/14/82

Merfreesboro
27 100w Payne Brdcst Co 9/22/82

TEXAS

Athens/Trinidad
3 10w Community Info Center Inc 9/22/82

Brownwood
28 1000w Owen Brdcst Ent 9/22/82

Conroe
16 1000w Jack Clarke, III 9/22/82
18 1000w Jack Clarke, III 9/22/82
34 10002 Jack Clarke, III 9/22/82

Corsicana
29 1000w Owen Brdcst Ent 9/22/82

Pampa
22 1000w Blacks Desiring Media 9/22/82
21 1000w Owen Brdcst Ent 9/22/82
24 1000w Blacks Desiring Media 9/22/82
27 1000w Blacks Desiring Media 9/22/82
30 1000w Blacks Desiring Media 9/22/82
32 1000w Blacks Desiring Media 9/22/82
40 1000w Blacks Desiring Media 9/22/82
50 1000w Blacks Desiring Media 9/22/82
52 1000w Blacks Desiring Media 9/22/82

Uvalde
5 10w Owen Brdcst Ent 9/22/82
7 10w Owen Brdcst Ent 9/22/82
13 10w Owen Brdcst Ent 9/22/82
3 10w Owen Brdcst Ent 9/22/82
9 10w Owen Brdcst Ent 9/22/82

UTAH

Aurora
51 1000w Owen Brdcst Ent 9/22/82

Logan
47 1000w Owen Brdcst Ent 9/22/82
51 1000w Owen Brdcst Ent 9/22/82

Ogden
50 100w University of Utah 9/14/82

Provo
62 100w University of Utah 9/14/82

VERMONT

Rutland
12 10w Access Rutland, Inc 9/22/82

VIRGINIA

Charlotte Amalie
6 10w Owen Brdcst Ent 9/22/82

WASHINGTON

Aberdeen & Hoquiam
2 10w Transtel Co, Inc 9/22/82

Colville
46 1000w Owen Brdcst Ent

Richland
32 1000w FM TV, Limited 9/22/82

Wenatchee
14 100w Wescoast Brdcst Co 9/22/82

WISCONSIN

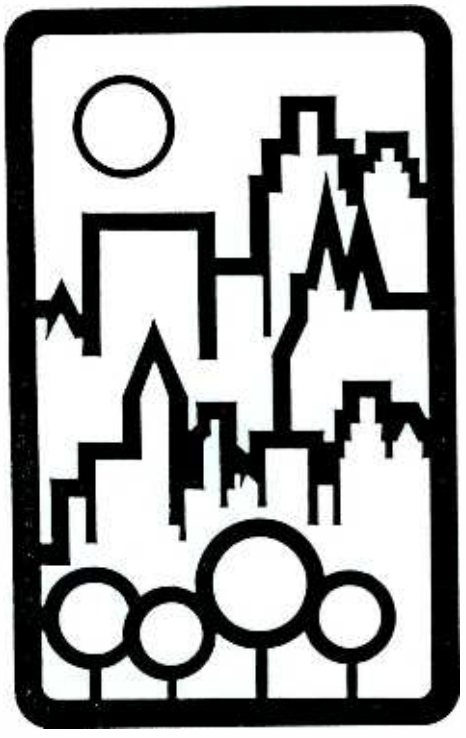
North Fond du Lac
21 1000w Edward F. Anglin 9/22/82
28 1000w Edward F. Anglin 9/22/82
30 10002 Edward F. Anglin 9/22/82

USVI

Coral Bay St. John
21 100w Virgin Islands Public TV 9/22/82

Getting on the Cable System

Every Problem Has a Solution.



Low power television has one serious problem that must be overcome by the low power operator.

COVERAGE IS THE KEY

But that coverage may be locked out of the cabled homes because the cable operator is not required by FCC rules to carry the local low power station.

The present rules require the cable operator to provide channels on his cable system for all full service television stations licensed within 35 miles of their communities and all stations whose over-the air signal are significantly viewed in the area. If the cable operator refuses to put the local LPTV station on the cable he can cut the station's 'coverage' significantly.

For the home connected to the cable, it means installing at least a rabbit ears to get the LPTV station. An antenna of some kind must be attached that they have no use for otherwise. Very few will go to this trouble of connecting or disconnecting to get some local station when they have a large variety on the cable.

To gain entry to these locked out cable homes, the LPTV operator has some problems to overcome. First, most cable operators seems anxious to include it and, so far, seem very cooperative about putting the local LPTV on the cable, but . . . and here is the sticker; they are nearly all loaded to capacity with other channels. To put you on, they have to drop something else (68% of cable systems are 12 channels or less). You may be carrying SPN, and are merrily inserting local commercials. Why should they put your channel on when they can pick up SPN direct via satellite, put it on the cable, and they insert and get paid for the local commercials. There will be great pressure from the new satellite services, hoping to get on cable systems. The cable system expands their channel capacity and they have to decide if your programming will attract more subscribers and viewers or if the satellite delivered channel will offer them more opportunity to insert and sell local commercials.

The next problem is that nearly every cable system's basic service (channels that all cable subscribers get) is full but they have room on the additional channels of service that those subscribers who pay more per month can receive through what is called tiered service.

You may wind up only in the highest priced tier that only a small percentage of cable subscribers pay for and receive. You need to be working on this matter even before you get your license.

If you file for a UHF channel, there is an advantage over VHF in that the cable viewer can, in most cases, connect a UHF roof antenna (or even the built-in set UHF antenna) to the UHF terminals on his set without bothering the VHF cable connection. When he tunes from VHF on the cable (even the tiered channels are converted and reappear on VHF), he merely switches to UHF. If you file for VHF, cable viewers will often connect both their cable and their old outdoor antenna at the same time in order to get both without connecting or disconnecting every time. The cable operator will discover that homes with the cable are radiating whatever tier of cable channels they are watching out through their antenna (even the converted premium channels when their decoder is tuned to that block), and those not on the cable can pick them up. Some channels radiated will cause interference to off the air channels and the off the air people will be mad at the cable system for interfering. One antenna hooked up this way will feed enough back up and out their antenna so that a whole apartment house may be able to watch those premium cable channels, for example, without being on the cable. Therefore, the cable operator puts your channel on the cable in self defense to keep people from connecting antennas and radiating his cable channels all over the neighborhood back out through their antennas. So there are advantages in both VHF and UHF.

The best tool you probably have is your city fathers (the mayor, council, etc.). They have a big lever over a cable system with their franchise renewal, etc.

First of all, you have to sell the city fathers that cable TV is and was conceived and sold as a 'community antenna system', that acts as one big antenna for everybody so that individual homes don't have to have a big unsightly tower and unsightly antennas on their roofs nor a big satellite dish in their back yard. The concept was that everyone would be supplied 'all' the available channels so no one on the cable would ever need an antenna again.

The cable system was passive, he didn't generate anything, he was a carrier that was in the TV signal transportation business. Now you say he wants to keep my channel off so he can go into commercial production and keep out competition that will produce not only local commercials, but local news and local shows, including city events and interests.

You explain you are offering TV to both in town and rural residents and cover everybody, not just the elite who can afford cable service but your production of local TV will be hampered if you are boycotted by the cable operator who should not have the power to decide whether the elite of the population can be excluded from watching your local channel or not.

You can make a very loud local political noise about this, and the cable system will not have everybody on his side. Remember, many people view the local cable system about like they view Ma Bell. They look on it and resent it as a monopoly and will champion anyone that offers them some competition. So that plus you will have a lot of local political leverage when you get on the air and the city fathers see that you can literally make or break their local political career by what your local TV station's news says about them, etc. So they want to be on your side. Therefore, getting something done through the city is very effective.

Right now, even before you get a license, if the city council is readying a renewal or a new cable ordinance, be sure they include a line in the city franchise agreement that says the cable system must carry all local television stations.

The next lever and perhaps the best route is to carry what is not presently on the cable and create a **demand** that it be on the cable.

Let us say, for example, you carry local news, weather and sports; that you carry shows like the third grade spelling contest; you carry Junior's little league baseball games; high school events; piano recitals; an occasional local wedding; local church services, etc., etc., where they can see all their friends and neighbors on TV. Run some local contests, etc; only on your channel. Local viewers will raise hell with the cable system if Junior is on TV and it's not on cable, that they have to get an antenna to watch Junior. Local events coverage creates such a demand that you be on the cable system that the cable operator will not be able to ignore that demand without alienating his subscribers. When the Centerville High down the road 30 miles comes to your town to play basketball, broadcast it. That will give a big incentive to the Centerville cable system to also carry your channel on the Centerville cable system. Only by being on the Centerville cable system can viewers see those away from home games. If the Centerville cable system refuses to put your channel on, make some noise about putting a repeater translator in their community. The Centerville cable system would rather have an exclusive on your signal on the cable than have one more off the air channel available in their community.

So you see, the cable systems do not hold all the cards and do not have the LPTV operator by the economic throat in a life or death matter for a local LPTV station.

Surrounding towns' cable systems can double your number of viewers instantly at no cost to you. Give them something they are not getting now and they'll put you on the system, too.

HOW FAST?
MORE PROCESSING PROMISES?

Last January, Mr. Larry Harris of the FCC's Mass Media Bureau, told broadcasters the Commission was going to process approximately 50 LPTV applications per month by hand in 1982 until they got the computer on line in the fall and then 500 a month.

However, the actual total for the entire year of 1982 now looks like well under 200 (excluding Alaska), and now the computer processing won't start until spring, Harris reports, with 400 to 600 promised then. Supposedly able to wipe out the backlog, according to Harris, in less than a year from the start of computer usage. Others are saying 250 a month is more realistic.

No accurate figure seems available as to exactly how many are on file currently, varying from 6,500 to 10,000, depending on who you ask. If we took the high figure, it is probably safe to assume only about 3,500 or less are in tier one. Figuring another 3,000 coming in on tier one before they catch up, would mean 6,500 to be processed before moving to tier two. Processing 500 a month, it would still be about a year or more from next spring before tier two would open up. There will undoubtedly be 5,000 tier two filed the first day they open that up. A rate of 500 new applications a month thereafter could continue in tier two for several years, meaning at processing 500 a month, they may never get to tier three for many years.

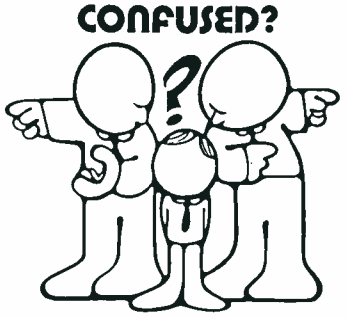
Anything filed today in tier one could still be 18 months before being processed (6 months to computer start; 12 months to get to it). Add 6 months for normal bureaucratic lethargy and you have 2 years. 'Lucky' types could be in and out in 6 months despite the Commission's statement they will be processing in the order received.

THE LATEST WORD AFFECTING LPTV

Select TV is reported to be going full time, 24 hours a day, up from 6 hours a day at present. Some on the air have been carrying SPN daytime and Select TV at night. Select is the only premium service presently actively seeking LPTV outlets. Others are interested and more are coming on the satellite that will supply LPTV premium movie service but are maintaining a low profile until there is a significant number of LPTV stations on the air.

Kodak is reported about ready to announce an electronic disc camera similar but reportedly even more sophisticated than the Sony Mavica. The Sony electronic camera is scheduled for demonstration and release at the March Photographic Convention in Las Vegas. The camera shoots 50 stills on a $2.65 reuseable magnetic disc. The camera can also be used as a full motion camera with your VCR. Similar in size to a 35 mm standard SLR camera, this new product is predicted to revolutionize local TV news and production.

LPTV and Catch 22



The big rush to amend applications came and went on September 21st with the Commission refusing to extend the time despite a formal request by Jeff Nightbyrd of ATD and others.

As of the 15th, we heard the Commission had only 300 amendments but apparently 2700 more came in at the last minute (as usual). Apparently, many that amended and changed channels, etc., did not want their competitors to know what they changed to until too late for the copy cats to copy and amend theirs the same direction. We now have a problem in that many of us want to know who moved where but the sheer volume alone would cost us in the neighborhood of $1,000 just for the copies out of Washington, let alone tabulating, typesetting and printing the changes, so we will see what interest there is.

The changes will be reflected and readily available in the November and December 1st (or January, whenever the Commission catches up) microfiche which we have available immediately on monthly release for $10, postpaid. The fiche include all translators and low powers filed and/or licensed by state and city in the U.S. We also have it in state and channel order for $10. These are the equivalent of 500 pages of hard copy and can be read on your local library's microfiche reader. We also print hard copies off any one page for $5. Additional pages at 50¢ each.

Last issue, we warned that if you changed or filed with offset, you had to explain to the Commission how you proposed to maintain the precise FCC required tolerances. We suggested using a statement that said, 'the manufacturer agrees to supply the equipment required to maintain the required tolerances'. We checked that out with the Commission and found out that wasn't good enough. Now we come to Catch 22. They said you must specify equipment that the Commission has 'type accepted' to meet the required tolerances.

It turns out that there is NO equipment even submitted (none pending) for type acceptance, let alone approved. Therefore, you apparently could not comply even though all the manufacturers agree they can make that precise equipment and get is approved, there was and is none approved.

Therefore, we wrote up the fcllowing which seems reasonable to us under the circumstances and filed this as amendments to everything that already had or was being changed to offset:

ENGINEERING EXHIBIT
MAINTAINING OFFSET
September 16, 1982

There is, at this time, no equipment type accepted to maintain the required offset tolerances. However, the basic transmitter applied for in this application is type accepted for normal tolerances and the manufacturer has given assurances that the additional precise frequency control mechanism will be submitted for type acceptance shortly.

Applicant, therefore, requests a waiver of the rules to allow processing of this application and agrees that granting of this application will be conditioned on use of transmitter equipment meeting the tolerances and will not be put in use until it is type accepted for maintaining the precise offset tolerances.

Applicant, as an alternative, until such automatic precise equipment is type accepted and available, agrees to make the necessary frequent frequency checks to maintain the required tolerances.

Respectfully submitted,

If you have zero, plus or minus offset specified in your about to be filed application or previously filed application or amended version and did not file something along this line, then you had better hurry up and amend it pronto to include some statement that will cover how you will maintain the precise offset tolerances required when specifying offset. You can, you understand, amend applications any time.

Two other things you may have missed is that an EEO statement is required now (old applications were supposed to be amended to meet the new rules), so if you proposed using less than five employees it is unnecessary to file an EEO statement, but you must file some type of notification that you will have less than five employees.

If you have a theater, a newspaper, or any other broadcast facilities or applications (including other LPTV) you need to file that with the Commission for each application.

If you were counting on terrain shielding (hills or mountains between) in your old application (no longer useable under the new rules), you should have or need to right away file a request for waiver of the new rules to consider your terrain shielding.

MICROFICHE SERVICE

Some of you have standing microfiche orders with us and have been wondering why you have not received a new one since August. The reason is that no one has received any anywhere because the FCC never put out a new one, and as of October 13th, we still do not have a new one since August. Inquiries bring a 'we are checking on it', but assurances that no one has received one as they have not released one.

The microfiche contain the equivalent of 500 pages of readable information of translator and LPTV applications to date direct from the FCC data base. The microfiche can be ordered filed by state and city, or by state and channel. Most order state and city, though some receive both each month. On regular delivery basis or one time order, they are $10 per copy. Also available direct from Lo-Power Publishing is a monthly updated microfiche on full service stations for $10.

A small city in rural New Mexico becomes the site of the nation's first Christian low-power TV station

Alamogordo Puts Religious LPTV on the Map

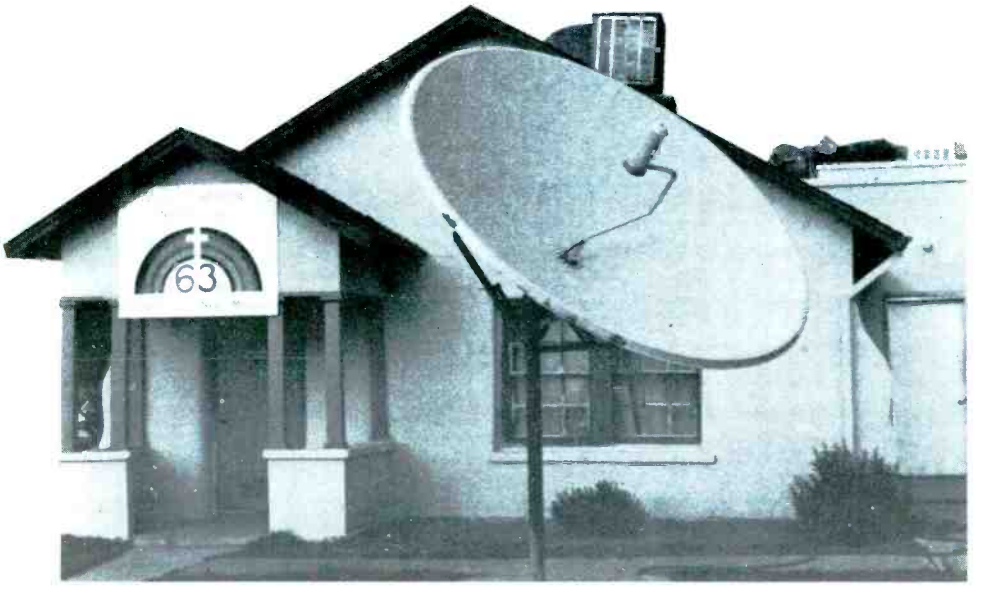
by Alex Blomerth

IN A SMALL city near the site of the first experimental explosion of an atomic bomb, a singular event of another sort took place on the evening of July 3 this year.

Alamogordo, New Mexico became the first city in the United States—perhaps the world—to have its own full-fledged religious low-power television station.

Events moved swiftly after the Federal Communications Commission issued a construction permit in February to Sara Diaz Warren. Her husband, Peter War-

Middle: Vision Broadcasting Network, Inc., bottom: the control room as large as a studio; right: Sara and Peter Warren III, respectively licensee and engineer



Low-power television stations can be an effective tool for the local church

ren III, is vice president and director of engineering at Satellite Technology for Christ. STC, a non-profit Christian engineering firm located in El Paso, took on the job of bringing Channel 63 into reality.

Alamogordo was chosen for the LP-TV station for several reasons. Although its immediate population is only 27,000 people, the potential audience within its signal range is nearly 80,000, including Holloman Air Force Base.

Located at the foot of the Sacramento Mountains in the southern part of the state, Alamogordo is uniquely placed for low-power television. The mountains form a natural tower nearly a mile high from which the community provided the labor to build the transmitter building, erect the 80-foot tower, and rig the necessary antennas. A beautiful new Television Technology transmitter was moved into the studio-to-transmitter link.

Meanwhile, down in Alamogordo, the other end was being put in place, the studio prepared, and copious quantities of electronics tied together in an inexpensive, but efficient array. The "on air"

Mr. Warren checks out the 100-watt television technology transmitter

target date was set for the evening of July 3rd. As the time drew near, the long hours began to take their toll. Pete, Sara and their son John worked side by side with the other personnel and a few hearty volunteers to complete the myriad of details. Several days lasted through the night and well into the following day.

July 3rd dawned hot and clear as the weary party arose early to make the long trek back to the mountain for final details. Dr. Byron St. Clair, president of Television Technology Corporation, and his wife flew in from Arvada, Colorado to lend physical, technical, moral and spiritual support. Alex Blomerth, president of STC, and Dr. St. Clair remained on the mountain to make final adjustments. Peter returned to the studio to complete preparations for the live programming scheduled for that evening.

It seemed an impossible task but we serve the God of the Impossible. At 8:00 pm, the station came on the air to announce to all who had ears to hear and eyes to see that "Jesus Christ is Lord!"

After the first hour of dedication and prayer, the studio tempo increased. The first program, *Alamogordo Live*, was

Christian entertainment featuring local personalities with music, interviews, testimonies, prayers, and praise. Telephone counselors ministered on the phones and the Lord blessed His people.

Programming on Channel 63 does not carry only the Christian message. FCC regulations for low-power stations permit a fluid programming arrangement that best serves rural America. As Alamogordo's local station, Channel 63 has taken quick advantage of this freedom. With Christ as the center, the programming can be designed to meet local needs and attract the unbeliever as well as the believer.

As a translator, Channel 63 picks up wholesome family programming from KCIK/El Paso, some 95 miles away. These programs are enriched with Christian programming direct from satellite via the Channel 63 earth station. About five minutes each hour is used for devotional material designed to lead the viewers into a life-changing relationship with the Lord.

Local commercials help provide community flavor. Local origination also provides the capability of communicating events as well as ministry in the Alamagordo area. For example, one program is specifically designed to highlight events at nearby Holloman Air Force Base. The business community has responded well with supportive advertising.

The Christian community has begun generally to use the station's services. As an evangelical tool, low-power stations can serve the church more effectively than ever before, by not being too large or too costly to reach the little people. Within a short period of time, local personnel can handle the day-to-day operations effectively, keeping costs down, and making the station truly local in character.

In showing how all this can be done, Channel 63/Alamogordo (New Mexico) is making for itself a niche in the annals of religious broadcasting. NRB

Mr. Blomerth is president of Satellite Technology for Christ, a non-profit Christian engineering firm in El Paso, Texas.

This article appeared in Religious Broadcasting, October 1982, and includes some additional pictures we shot while in Alamogordo.

The last issue contained an article on the Gunnison, Colorado, STV. Included in this issue is a flyer used by the new LPTV station operated by Mike Callihan. Callihan reports over 125 subscribers signed in less than a month's operation.

The Cody, Wyoming, Channel 15, is reported to be ready to begin broadcasting with local text and full video a small portion of the time from CNN. The delay in regular broadcasting beginning is developing a radio relay to the mountain.

MOVIES! MOVIES! MOVIES!

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Beginning October 1st your special monthly rate is only $17.95.
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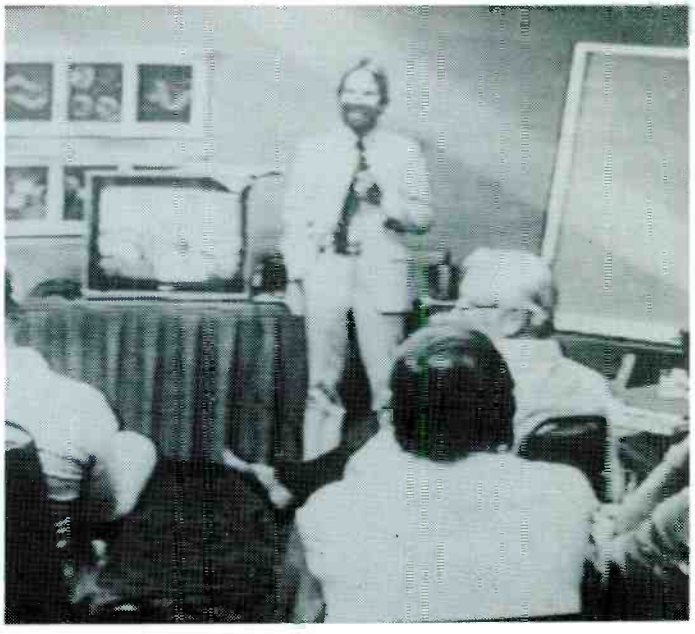
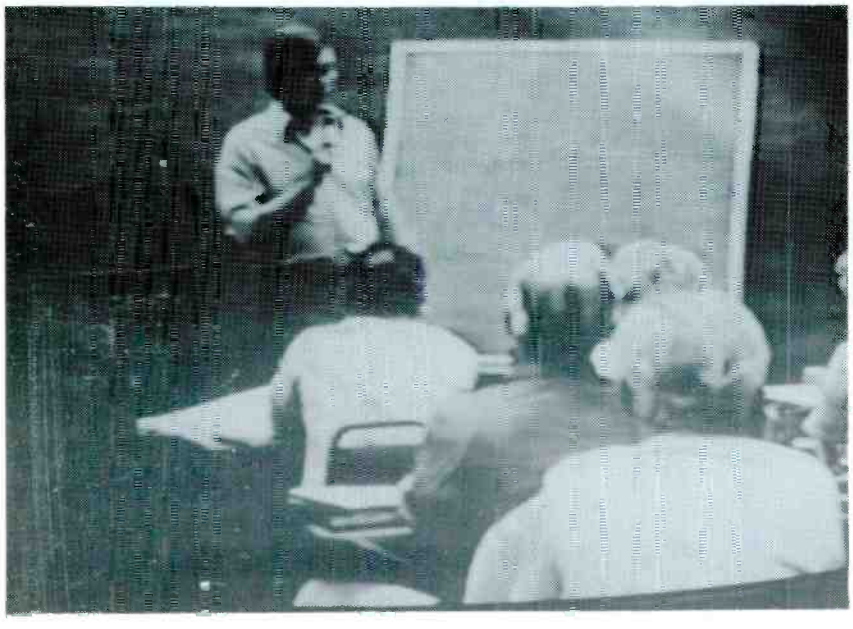
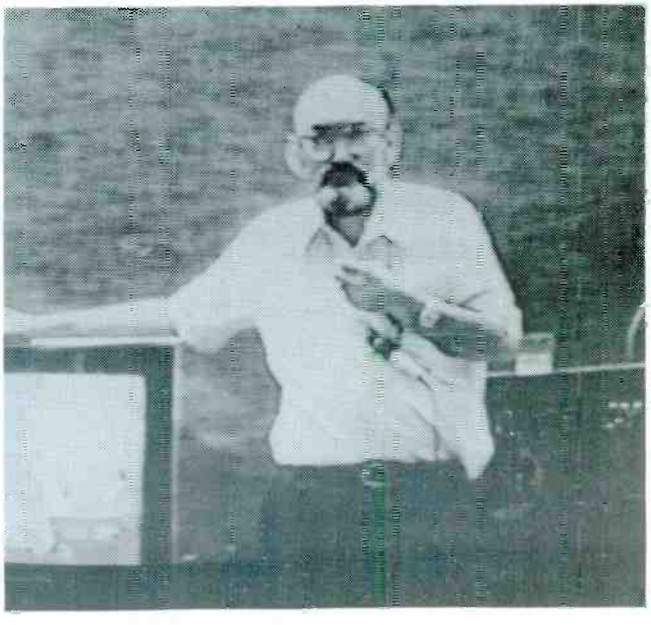
*Offer Expires Sept. 30, 1982







Next Crash Course, Las Vegas
October 30-31, 1982
Register Now

The recent LPTV crash course in Phoenix was attended by 30 people, nearly all of whom were or are publishers. The three videotapes of the crash course are now available for loan to ICTV members, including some parts that we didn't get time to show at Phoenix. Also available for rental to non-members. Unfortunately, about one hour of the meeting didn't get recorded, but other than that, there is a lot of good information on these tapes. Speakers include 4 shown in photos here. Top left; Marshall Carpenter of **Neighborhood TV** (the group associated with Sears); Top right; Jeff Nightbyrd of **American Translator Development**; Bottom left; Harlan Jacobsen; Bottom right; Dr. Byron St. Clair of **Television Technology**. Photos were shot off a TV set from the playback of the videotapes.

The next crash course is in Las Vegas, October 30-31, preceding the Translator Convention. The under $7,000 3 camera studio equipment, including special effects, will be demonstrated in Las Vegas.

97TH CONGRESS | HOUSE OF REPRESENTATIVES | REPORT
2d Session | No. 97-765

COMMUNICATIONS AMENDMENTS ACT OF 1982

AUGUST 19, 1982.—Ordered to be printed

Mr. DINGELL, from the committee of conference, submitted the following

CONFERENCE REPORT

[To accompany H.R. 3239]

The committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 3239) to amend the Communications Act of 1934 to authorize appropriations for the administration of such Act, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its disagreement to the amendment of the Senate to the text of the bill and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the Senate amendment insert the following:

TITLE I—COMMUNICATIONS AMENDMENTS

SHORT TITLE

SECTION 101. This title may be cited as the "Communications Amendments Act of 1982".

FINANCIAL INTERESTS OF MEMBERS AND EMPLOYEES OF FEDERAL COMMUNICATIONS COMMISSION

SEC. 102. Section 4(b) of the Communications Act of 1934 (47 U.S.C. 154(b)) is amended to read as follows:

"(b)(1) Each member of the Commission shall be a citizen of the United States.

"(2)(A) No member of the Commission or person employed by the Commission shall—

Senate amendment

The Senate lengthened the duration of Special Temporary Authority (STA) from 90 to 180 days, and allows the Commission to renew an STA for additional terms of 180 days each.

Conference substitute

The conference substitute adopts the Senate provision.

While the Conferees recognize that multiple STA renewals may be appropriate in extraordinary circumstances, it is emphasized that an applicant for STA renewal bears a heavy burden of showing, consistent with the test in Section 309(f), that a renewal should be granted.

RANDOM SELECTION SYSTEM FOR CERTAIN LICENSES AND PERMITS

House bill

The House bill contained no provision.

Senate amendment

The Senate bill amends Section 309(i) of the Communications Act of 1934, relating to the authority of the FCC to grant licenses or permits for the use of the electromagnetic spectrum through a system of random selection.

Conference substitute

The conference substitute adopts the Senate provision.

FCC discretion to use a system of random selection.—Section 309(i) of the Communications Act, as amended by this legislation, is intended to alleviate many of the delays and burdensome costs faced by both applicants and the Commission in an initial comparative licensing proceeding with mutually exclusive applicants. Use of a lottery system established pursuant to this subsection is discretionary with the Commission and such use is appropriate in the public interest within the parameters set forth below.

Relevant factors for the Commission's consideration in determining whether a lottery would serve the public interest would include: whether there is a large number of licenses available in the particular service under consideration; whether there is a large number of mutually exclusive applications for each license, for example, when a new service is initiated; whether there is a significant back-log of applications; whether employing a lottery would significantly speed up the process of getting service to the public; and whether selection of the licensee will significantly improve the level diversity of information available in the community versus the use of the traditional comparative hearing process. The Commission, in making this public interest assessment when diciding whether to utilize a lottery in a particular instance, should consider all of these factors.

With respect to the above criteria, if the traditional comparative process would provide a superior means of diversifying media ownership in particular instances, a service should not be subject to a lottery when to do so would undermine or thwart this policy goal, but all factors must be weighed. Diversification of media ownership and information are central goals of the traditional comparative licensing process, and continued promotion of these goals should not be sacrificed merely because a lottery may be more expedient. This concern takes on its greatest significance when the particular license grant involves a service over which the licensee exerts substantial content control, as opposed to strictly common carrier services where the licensee does not appreciably affect the content of the communication. For example, the Commission would have an extremely heavy burden to meet in attempting to justify use of a lottery for purposes of granting an individual license for a full-power station (e.g., the fourth full service television station in a community), the licensing of which is unrelated to the initial grants of licenses for a new service. There, the flood of new applicants for a multitude of licenses in a newly created service, with all of the administrative problems attendent thereto, have not to date confronted the Commission. On the other hand, the Commission would be perfectly justified in using, and is in fact encouraged to use, a lottery when awarding licenses for low power television stations, which involves huge backlogs which would otherwise significantly delay service to the public if the traditional comparative hearing process were relied upon.

The conference substitute provides that the Commission adopt implementing rules within 180 days of the date of enactment of this Act. The Conferees wishes to emphasize that this is an absolutely mandatory requirement. Once these rules are established, the Commission shall have the authority to modify them as necessary and the discretion, based upon an articulated assessment of the public interest factors discussed above, to apply them to particular proceedings or classes of proceedings before it. The Conferees wish to emphasize their strong expectation that the Commission will exercise carefully its discretion to use a lottery system by making a finding that the public interest would be significantly benefited by using a lottery instead of a comparative hearing to select licenses or permits with respect to those services or instances in which it determines that use of a lottery would be appropriate. Use of a lottery without identifying a substantial public interest benefit flowing therefrom would disserve the Commission's ultimate statutory goal of obtaining the best practicable information service from diverse sources.

The Conferees intend that the Commission, in making this public interest finding, should not apply the aforementioned factors mechanically or without regard to other salient considerations. For example, the Conferees note that the mere existence of a backlog of applications is not itself a sufficient reason for employing a lottery.

The Conferees also wish to emphasize as strongly as possible their firm intention and expectation that the Commission will use a lottery to expedite the processing of low power television service and translator facilities. Low power television and translator service is the ideal service for which to use a lottery, given the large number of licenses available, the large number of mutually exclusive applications for each license, the substantial backlog of applications on file with the Commission, the likeliihood that the use of a lottery is essential to expediting the process of getting low power television service to the public, and the likelihood that bringing low

power television service to the public quickly, through the use of a lottery, will result in a significant increase in the diversity of information sources available in many communities throughout the country.

The Conferees do not intend for this provision to be construed to prevent the Commission from granting licenses or permits in "blocks" of frequencies where it determines that this would serve the public interest (e.g., the proposed multi-channel multipoint distribution service).

Qualification of applicants in a random selection system.—It is the intent of the Conferees that, prior to the use of a lottery in a particular proceeding, the Commission conduct a preliminary review of each application submitted to determine that it is acceptable for filing. The Conferees expect that the Commission will use the standards for acceptability set out in *James River Broadcasting Corp.* v. *FCC*, 399 F.2d 581 (D.C. Cir. 1968), unless, by rule, it has adopted or shall adopt different standards. See, e.g., 47 C.F.R. 73.3564, 22.20. Following the lottery, the Commission shall determine that the applicant selected therein is fully qualified to become a licensee under 308(b) and 309(a). Should the applicant selected be found not to be so qualified, the Commission shall conduct another lottery, if necessary, and select another applicant. It is the intention of the Conferees that determinations under Section 308(b) and 309(a) need be made only as to the applicant who has been selected by lottery.

It is only at this latter, post-lottery stage that petitions to deny the application need be considered and that the right to a hearing may arise. This hearing may be a "paper hearing" unless the Commission determines, by rule or by decision in a particular case, that due process or other public interest considerations require some or all of the hearing to be conducted by any responsible employee or employees, including Bureau Chiefs or their delegates, to whom the Commission shall, by rule, delegate such functions. If the Commission chooses to delegate the function of presiding over these paper hearings to employees other than Administrative Law Judges (ALJ), the Commission must assure that the examiner or reviewer is truly independent in order to avoid any undue influence in the fact-finding process. Here the Conferees wish to emphasize that use of non-ALJs to govern hearings is strictly limited to post-lottery hearings. This does not imply that similar delegation would be acceptable with respect to the traditional comparative hearing process.

The Conferees wish to emphasize that the qualifications set out in Section 308(b) are not diminished in importance. By permitting the FCC to make the findings after an applicant is selected, it is intended that the Commission will be able to conduct a more thorough and in-depth inquiry than it could if it had to make a finding as to the qualifications of all applicants. Moreover, to preserve the incentives of the other applicants to raise questions concerning their competitors' qualifications, if the intitial "winner" is determined to be unqualified, the subsequent lottery must be conducted with the same applicant pool with each applicant's selection probabilities recomputed as necessary (see below).

The Conferees note that requiring the Commission to find the applicant selected by the lottery fully qualified prior to the grant of the license to that applicant protects the public from unqualified licensees, while affording the Commission the relief from the burden of having to pass on the full range of qualifications of every applicant. As with the use of non-ALJs to conduct hearings, the post-selection assessment of qualifications process is strictly limited to the lottery context and should not be utilized in the traditional comparative process.

Application of preferences in a random selection system.—It is the firm intent of the Conferees that traditional Commission objectives designed to promote the diversification of control of the media of mass communications be incorporated in the administration of a lottery system under section 309(i), as amended by this legislation. The Commission's application of its Policy Statement on Comparative Broadcast Hearings, 1 F.C.C.2d 393 (1965), has resulted in significant comparative advantages to minority-controlled applicants and to applicants with a low degree of ownership interest in mass communications media. While the degree of advantage, merit, or preference heretofore awarded to such applicants need not be precisely duplicated in the administration of a random selection system, the Conferees expect that the Commission's lottery rules will provide significant preferences to applicants (especially those who are minority-controlled), the grant to whom of the license or permit sought would increase the diversification of the media of mass communications. The Conferees intend that two distinct diversity preferences be applied where appropriate: a media ownership preference and a minority ownership preference.

The underlying policy objective of these preferences is to promote the diversification of media ownership and consequent diversification of programming content. This diversity principle is grounded in the First Amendment, as illuminated in a line of cases in large part stemming from *Associated Press* v. *United States*, where the Supreme Court stated that the First Amendment "rests on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public." 326 U.S. 1, 20 (1945). Thus, in finding that the "public interest, convenience, and necessity" would be served by granting a given mass communications media license, "the Commission simply cannot make a valid public interest determination without considering the extent to which the ownership of the media will be concentrated or diversified by the grant of one or another of the applications before it." *Citizens Communications Center* v. *FCC*, 447 F.2d 1201, 1213 n. 36 (D.C. Cir. 1971).

The nexus between diversity of media ownership and diversity of programming sources has been repeatedly recognized by both the Commission and the courts. For example, in promulgating its "concentration of control" regulations, the Commission stated that "the fundamental purpose of this facet of the multiple ownership rules is to promote diversification of program and service viewpoints as well as to prevent any undue concentration of economic power contrary to the public interest." Amendment of Sections 3.35, 3.240, and 3.636, Report and Order, 18 F.C.C. 288 (1953), aff'd, *United States* v. *Storer Broadcasting Co.*, 351 U.S. 192 (1956). In its rule-making on low power television, the Commission noted that it has received expressions of interest from minorities wishing to develop new services and that it "specifically encourages this interest, and fully intends that the inauguration of this new broadcast service be the occasion for assuring enhanced diversity of ownership and of viewpoints in television broadcasting." Low Power Television Broadcasting, Notice of Proposed Rulemaking, 82 F.C.C. 2d 47, 77 (1980). In *TV 9, Inc.* v. *FCC*, a landmark case dealing with comparative merit for minority applicants, the court stated "that it is upon ownership that public policy places primary reliance with respect to diversification of content, and that historically has proved significantly influential with respect to editorial comment and the presentation of news." 495 F.2d 929, 938 (D.C. Cir. 1973), *cert. denied*, 418 U.S. 986 (1974).

Common carrier licensees are often not engaged in the provision of information or mass media services over their facilities which they control. When common carrier licensees do exert such control, by definition they do not exclusively control the content of the information or programming which is transmitted over their facilities. Thus, Section 309(i), as amended by this bill, only requires significant preferences to be applied to licenses or construction permits for any media of mass communications. This permits the Commission to use a lottery without preferences for services such as common carrier "beepers," for which there is a large back-log of applications.

A question arises as to the administration of a lottery in services which may be neither clearly common carrier nor broadcast entities (such as multipoint distribution service), or services in which the applicant may be able to self-select either common carrier or broadcast status (such as the Commission's treatment of the direct broadcast satellite service). The Conferees intend that the Commission apply significant preferences, if it decides to use a lottery system for these services, to the extent that the licensees have the ability to provide under their direct editorial control a substantial proportion of the programming or other information services over the licensed facilities. If such services are treated by the Commission in the future strictly as common carrier services with no ability on the part of the licensee to exercise direct editorial control over a substantial proportion of the programing offered over its facilities, no preferences need be applied in using a lottery system for those services.

Characteristics of the preferences.—One important factor in diversifying the media of mass communications is the degree of applicants' ownership interest in other media of mass communications. The definition of media of mass communications relevant here includes the entities listed in section 309(i)(3)(C)(i), as amended by this Act, plus daily newspapers, which the Commission has long regarded as important in considering the diversification of the media. See, e.g., Multiple Ownership of Standard, FM and Television Broadcast Stations, Second Report and Order, 50 F.C.C.2d 1046, modified, Memorandum Report and Order, 53 F.C.C.2d 589 (1975), aff'd sub nom., *FCC* v. *Nat'l Citizens Comm. for Broadcasting*, 436 U.S. 775 (1978); Policy Statement on Comparative Broadcast Hearings, 1 F.C.C.2d 393, 394-95 (1965).

To the degree an applicant for a license or permit for the media of mass communications has controlling interest in no other, or few other, media entities, the policy of diversifying media ownership would be promoted by the grant of the license to such an applicant. Thus, the Conferees intend that in the administration of a lottery to be used for granting licenses or construction permits for any media of mass communications, the Commission award a significant media ownership preference to those applicants whose owners control no other media of mass communications. The Conferees believe that the amount of this preference must be no less than a fixed relative preference of 2:1 for each such application. Thus, each such situated applicant must be awarded a preference so that its chances of being granted the license in a lottery are at least doubled from what its chances would be if a straight random selection process without preferences were conducted. Similarly, a media ownership preference should be awarded to those applicants whose owners, when aggregated, have controlling interest (over 50%) in 1, 2, or 3 other media of mass communications. The Conferees believe that the amount of this preference must be no less than a fixed relative preference of 1.5:1 for each such application. No media ownership preference should be awarded to applicants whose owners, when aggregated, have controlling interest (over 50%) in more than 3 other media of mass communications properties.

The Conferees are concerned that the objectives of this media ownership preference scheme might be diluted where there are large numbers of applicants in a given use of a lottery. To help insure that these preferences have appreciable impact on the results of the lottery, adjustments in the preferences awarded may be required where there is a relatively large number of total applicants compared to the number of applicants deserving of the media ownership preference.

The Conferees intend that the Commission assign applicants to groups based on the number of other media of mass communications owned. A specific multiplier (preference) factor should be applied to each applicant in a given group, the factor varying inversely with the number of media of mass communications owned by the applicants in that particular group. After the appropriate preference factor is applied to each preferred applicant, the overall likelihood of selecting an applicant from one of the preferred groups should be calculated. If this probability does not meet or exceed .4, the individual applicant selection probabilities should be recomputed to bring the combined preferred group probabilities to no less than .4 (See Administering the System of Random Selection, infra).

A second important factor in diversifying the media of mass communications is the degree of applicants' ownership interest in other media of mass communications which are in, or close to, the community being applied for. See Policy Statement on Comparative Broadcast Hearings, 1 F.C.C. 2d 393, 395 (1965). The Commission has recognized the importance of this factor in promulgating local cross-ownership rules barring the common ownership of a VHF television station and an aural (AM or FM radio) station in the same community, Multiple Ownership of Standard, FM and Television Broadcast Stations, First Report and Order, 22 F.C.C. 2d 306 (1970), modified, Memorandum Opinion and Order, 28 F.C.C. 2d 662 (1971), and barring daily newspaper—broadcast station combinations under common ownership in the same community, Multiple Ownership of Standard, FM and Television Broadcast Stations, Second Report and Order, 50, F.C.C. 2d 1046, modified, Memorandum Report and Order, 53 F.C.C. 2d 589 (1975), aff'd sub nom. *FCC v. Nat'l Citizens Comm. for Broadcasting*, 436 U.S. 775 (1978).

The Conferees strongly believe that the avoidance of local ownership concentration should continue to be a factor of major significance in promoting diversity in the licensing process. Where an applicant for a license or permit has controlling interest (over 50 percent) in any other medium of mass communications which would be co-located with the licensed facility sought, it would not promote diversity to give such an applicant a preferred status relative to other applicants. Thus, in the administration of a lottery system to be used for licenses or permits in the media of mass communications, no media ownership preference should be awarded to any applicant whose owners, when aggregated, have controlling interest (over 50 percent) in any medium of mass communications which is licensed to serve, franchised to serve (in th case of a cable television system), or primarily serves (in the case of a daily newspaper) the community of license for which of the grant is sought.

The Conferees expect that the Commission will make certification as to whether or not an applicant has a controlling interest in any media of mass communications in the community of license of the grant sought a prerequisite for an acceptable application for a license or permit for a medium of mass communications. Applicants who do have such ownership interests should be ineligible for a media ownership preference, notwithstanding the possibility that they might otherwise receive a preference by virtue of owning only a few media of mass communications. In sum, awards of licenses which would increase local media ownership concentration, by definition would not further the goal of diversifying media ownership, and thus the Conferees intend that such applications not be eligible for a diversity preference.

A third important factor in diversifying the media of mass communications is promoting ownership by racial and ethnic minorities—groups that traditionally have been extremely underrepresented in the ownership of telecommunications facilities and media properties. The policy of encouraging diversity of information sources is best served by not only awarding preferences based on the number of properties already owned, but also by assuring that minority and ethnic groups that have been unable to acquire any significant degree of media ownership are provided an increased opportunity to do so. It is hoped that this approach to enhancing diversity through such structural means will in turn broaden the nature and type of information and programming disseminated to the public. The Conferees find that the effects of past inequities stemming from racial and ethnic discrimination have resulted in a severe underrepresentation of minorities in the media of mass communications, as it has adversely affected their participation in other sectors of the economy as well. We note that the National Association of Broadcasters recently reported that of 8,748 commercial broadcast stations in existence in December 1981, only 164, or less than two percent, were minority owned. Similarly, only 32 of the 1,886 noncommercial stations, slightly over two percent, were minority owned.

One means of remedying the past economic disadvantage to minorities which has limited their entry into various sectors of the economy, including the media of mass communications, while promoting the primary communications policy objective of achieving a greater diversification of the media of mass communications, is to provide that a significant preference be awarded to minority-controlled applicants in FCC licensing proceedings for the media of mass communications. The narrowly-drawn preference scheme established in section 309(i), as it is amended by this legislation, is intended to achieve such a purpose. Evidence of the need for such preferential treatment has been amply demonstrated by the Commission, the Congress, and the courts. See, in this regard, Statement of Policy on Minority Ownership of Broadcast Facilities, 68 F.C.C.2d 979 (1978); FCC Minority Ownership Taskforce, Report on Minority Ownership in Broadcasting (May 17, 1978) at 3, 7-9; and *Fullilove v. Klutznick*, 448 U.S. 448 (1980), and reports cited therein at 467 n.55. As the court stated in *Citizens Communications Center v. FCC*:

> The Commission . . . may also seek in the public interest to certify as licensees those who would speak out with fresh voice, would most naturally initiate, encourage, and expand diversity of approach and viewpoint. . . . As new interest groups and hitherto silent minorities emerge in our society, they should be given some stake in and chance to broadcast on our radio and television frequencies.

447 F.2d 1201, 1213 n.36 (D.C. Cir. 1971) (citation omitted).

The Conferees intend that in the administration of a lottery to be used for granting licenses or construction permits for any media of mass communications, the Commission award a significant minority ownership preference to those applicants, a majority of whose ownership interests are held by a member or members of a minority group. The Conferees believe that the amount of this preference must be no less than a fixed relative preference of 2:1 for each such application. For purposes of becoming eligible for this minority ownership preference, individuals who are participants in a group, partnership or corporate entities and who are members of different minority or ethnic groups should be allowed to aggregate their ownership interests to achieve a majority interest in any given application.

It is clear that the current comparative hearing process has not resulted in the award of significant numbers of licenses to minority groups. Many minority applicants are simply unable to participate in comparative hearings which often take a considerable period of time and require subtantial economic resources. The Conferees believe that a lottery preference scheme will greatly speed the process of initial licensing awards, and will permit not only greater numbers of minority groups to apply for licenses, but also will result in the award of a greater proportion of available licenses to minorities than has been the case to date.

It should be noted that such groups as women, labor unions, and community organizations which were mentioned in the legislative

This is the congressional version, the law actually authorizing the lottery. The FCC rule making version will appear later.

history of the lottery statute that was originally adopted, Conference Report on H.R. 3982, Omnibus Budget Reconciliation Act of 1981—Book 2, H.R. Rep. No. 97-208, 97th Cong., 1st Sess. 897 (1981), are all significantly underrepresented in the ownership of telecommunications facilities. Such applicant groups would, of course, be eligible for both media ownership and minority ownership preferences if they meet the eligibility guidelines. The Conferees expect that such groups will also substantially benefit from this lottery preference scheme, and, consequently, the American public will benefit by having access to a wider diversity of information sources.

The operative definition of minority group is found in section 309(i)(3)(C)(ii), as amended by this bill. It is the Conferees intention that the definitions in Office of Management and Budget Statistical Policy Directive No. 15, "Race and Ethnic Standards for Federal Statistics and Administrative Reporting," be utilized for guidance with regard to any dispute as to an individual's membership in a named group.

The Conferees direct the Commission to report to the Congress annually on the effect of section 309(i)(3) and whether it serves the purposes stated. See generally Fullilove v. Klutznick, 448 U.S. 448, 510, 513 (1980). This report should include a statistical breakdown of the characteristics of applicants involved in lottery proceedings, those receiving preferences, and those actually awarded licenses.

The Conferees intend that both a media ownership preference and a minority ownership preference will be available to all eligible applicants. Thus, for example, an applicant, a majority of which is owned by minorities, and whose owners have no controlling ownership interests in the media of mass communications, would receive no less than a cumulative, 3:1 preference over an applicant without preferences. Moreover, an applicant, a majority of which is owned by minorities, but whose owners have controlling interest in four media of mass communications properties or a medium of mass communications serving the community of license of the grant sought, would still receive a minority ownership preference (though not being eligible for a media ownership preference).

With respect to both the media ownership and minority ownership preferences, the Conferees expect that the Commission shall evaluate ownership in terms of the beneficial owners of the corporation, or the partners in the case of a partnership. Similarly, trusts will be evaluated in terms of the identity of the beneficiary.

The Conferees expect that the preferences which will be awarded in the administration of a lottery will result in a real and substantial increase in the diversity of ownership in the media of mass communications and consequent diversification of media viewpoints. The Conferees note that this carefully designed preference scheme could be undermined by the rapid re-assignment or transfer of stations, construction permits, or licenses granted by a lottery. Thus, it is the firm intent of the Conferees that for any mass communications media service in which the Commission determines use of a lottery is appropriate, it should retain its present anti-trafficking rules (47 C.F.R. 73.3597 (1981)) or devise similar protections to help ensure that the very purposes sought to be achieved by the preference scheme be fulfilled. Moreover, the Commission should require that the applicant that is actually awarded the license certifies that they have not entered into any agreement, explicit or implicit, to transfer to another party after a period of time any station construction permit or license awarded. If those eligible for preferences were simply applying for licenses for the purpose of obtaining a quick profit on the sale of the station once the license is awarded, the entire lottery preference mechanism would be undermined.

Administering the system of random selection.—The Commission's administration of the random selection system will differ depending on whether the licenses are to be granted for the media of mass communications or for non-media services. The lottery procedure for the latter is extremely simple, with each applicant for a given license receiving a selection probability of 1/x, where x equals the total number of applicants.

The random selection system for mass communications media licenses, on the other hand, must take into account preferences for ownership of few or no mass communications media entities, and preferences for minority ownership, along with the total number of applicants for a given license.

The Conferees intend that the media ownership preference be computed prior to the minority ownership preference. Those applicants with no controlling ownership in mass communications media should receive a fixed relative preference of 2:1; applicants with controlling interest in one, two, or three mass communications media entities should receive a fixed relative preference of 1.5:1. Applicants with controlling interest in more than three mass communications media entities or in at least one entity serving the city of license should receive no media ownership preference. Following the award of media ownership preferences (where applicable), each applicant's selection probability should be normalized (*i.e.*, adjusted to reflect its actual probability of being selected), taking into account the total number of applicants in the lottery.

The Conferees are concerned that their objective of increasing media diversity by granting preferences in the administration of a lottery system will be diluted in instances where the number of applicants for a given license is large. It is important to ensure that the media ownership preference will have an appreciable impact on the results of the selection process. The award of preferences, therefore, is not only intended to ensure that the lottery process is conducted in a way which guarantees the consideration of certain criteria which are of primary significance in the comparative hearing process, but it is also intended to create a process which is highly outcome-oriented in terms of furthering the actual granting of licenses to those applicants who would most further diversity objectives.

Thus, the Commission must ensure that the sum of the selection probabilities of all applicants deserving of a media ownership preference be no less than .40 for any given instance in which the lottery is being used, even if after the award of the media ownership preference the aggregated selection probabilities of all such applicants awarded this preference totals less than 40 percent. The Conferees intend that this be accomplished by adjusting the normalized selection probabilities of each applicant deserving of a media ownership preference, where necessary, to ensure that the sum of the selection probabilities for all such applicants be at least .40. Following this adjustment (where applicable), the selection probability of applicants not deserving of a media ownership preference should again be normalized.

After making all the necessary adjustments for ownership preferences (where applicable), each minority controlled applicant should receive a fixed relative preference of 2:1. This minority ownership preference should be awarded in addition to any media ownership preference to which a particular applicant may be entitled. Following the award of minority ownership preferences (where applicable), each applicant's selection probability should again be normalized to arrive at the final selection probability for that particular use of the lottery.

The following step-by-step procedure, to which the Conferees and the Commission have agreed following extensive staff discussions, establishes the process for the Commission to follow in the administration of a lottery to be used for granting licenses for any media of mass communications. This detailed procedure offers the Commission guidance to correct its previous failure to implement a lottery system.

A. Divide the total number of applicants into 100 to find the individual applicant selection probabilities without adjustment for preferences.

B. Identify all applicants by ownership group according to the following table:

Group and ownership of mass communications media, and preference factor

1—no controlling ownership interest	2.0
2—controlling interest in 1-3 entities	1.5
3—controlling interest in more than 3 entities or in at least 1 entity serving the city of license	1.0

C. Multiply the selection probabilities for each applicant from Step A by the appropriate preference factor from Step B.

D. Normalize all probabilities using the following formula: Intermediate probability for each applicant equals applicant's Step C probability divided by sum of all applicants' Step C probabilities.

E. Sum the probabilities from Step D by group. Then sum the probability totals from Groups 1 and 2. If this sum is greater than .40, skip Step F and go on to Step G. If this sum is less than .40, each applicant in Groups 1 and 2 will have its intermediate probability raised as follows:

(1) Compute the quotient of .4 divided by sum of the probability totals from Groups 1 and 2;

(2) the new intermediate probabilities are then computed as: intermediate probability for each applicant equals applicant's Step D probability times quotient from (1) above.

F. Normalize the probabilities not altered in Step E (i.e., Group 3—those with no media ownership preference) using the following formula: Intermediate probability for each Group 3 applicant equals .6 divided by number of Group 3 applicants.

G. Identify minority controlled applicants.

H. Multiply the intermediate probabilities of the minority controlled applicants by 2.0.

I. Normalize all probabilities using the following formula: Final probability of selecting any applicant equals intermediate probability of applicant divided by sum of all intermediate probabilities.

The following hypothetical situation illustrates this procedure. Assume that there are ten mutually exclusive applications for a given license for a medium of mass communications, with the following characteristics:

Applicant and minority status	*Media ownership*
1—nonminority	owns 1 other media property.
2—nonminority	owns 4 other media properties.
3—nonminority	owns 4 other media properties.
4—nonminority	owns 4 other media properties.
5—nonminority	owns 4 other media properties.
6—nonminority	owns 4 other media properties.
7—nonminority	owns 4 other media properties.
8—nonminority	owns 4 other media properties.
9—minority	owns no other media properties.
10—minority	owns 4 other media properties.

Step A: Total number of applicants equals 10. Individual applicant selection probabilities without preferences equals 10/100 equals .10

STEP B

Applicant	Number of media properties owned	Group
1	1	2
2 to 8	4	3
9	0	1
10	4	3

Step C.—Applicant and selection probability multiplied by preference factor

1	.1(1.5)=.15
2	.1(1.0)=.10
3	.1(1.0)=.10
4	.1(1.0)=.10
5	.1(1.0)=.10
6	.1(1.0)=.10
7	.1(1.0)=.10
8	.1(1.0)=.10
9	.1(2.0)=.20
10	.1(1.0)=.10
Total	1.15

Step D.—Applicant and step C probabilities divided by sum of all probabilities

1	.15/1.15=.1304
2 to 8	.10/1.15=.087
9	.20/1.15=.1739
10	.10/1.15=.087

Step E: Group 1 probabilities and Group 2 probabilities=.1739 +.1304=.3043.

Since .3043 < .40, each Group 1 and Group 2 applicant will have its intermediate probability adjusted as follows:

(1) .4 divided by the sum of the probability totals for Groups 1 and 2 equals .4 divided by 1739+.1304 equals .4 divided by .3043 equals 1.314.

(2) For Group 1: .1739(1.314) equals .2285. For Group 2: .1304(1.314) equals .1713.

Step F: Each Group 3 applicant's probability equals .6 divided by the number of Group 3 applicants equals .6 divided by 8 equals .075

Step G: Only applicants 9 and 10 are minority controlled.

Step H.—Applicant and probability with minority ownership factor

1	.1713(1.0)=.1713
2	.075(1.0)=.075
3	.075(1.0)=.075
4	.075(1.0)=.075
5	.075(1.0)=.075
6	.075(1.0)=.075
7	.075(1.0)=.075
8	.075(1.0)=.075
9	.2285(2.0)=.457
10	.075(2.0)=.150
Total	1.3033

Step I.—Applicant and final probabilities

1	.1713/1.3033=.1314
2	.075/1.3033=.0575
3	.075/1.3033=.0575
4	.075/1.3033=.0575
5	.075/1.3033=.0575
6	.075/1.3033=.0575
7	.075/1.3033=.0575
8	.075/1.3033=.0575
9	.457/1.3033=.3506
10	.150/1.3033=.1151
Total	.9996

This congressional version has been edited and several pages of legal gobblygook omitted to save space. The part printed here contains the heart of the matter.

FCC PUBLIC NOTICE

COMMISSION CALLS FOR SUBMISSION BY NOV. 1, 1982 OF MISSING TECHNICAL DATA FROM LOW POWER APPLICANTS PROPOSING DIRECTIONAL ANTENNA SYSTEMS

In its Report and Order in BC Docket No. 78-253 (adopted March 4, 1982), the Commission adopted new rules permitting low Power Television (LPTV) operations. Over 7,000 applications have been received since the Commission initiated this proceeding. Because of the huge number of applications filed, the Commision will conduct computerized engineering studies to determine whether the proposals involve interference with existing stations or with other co-pending proposals. Many applicants proposing directional antenna systems, however, have not submitted all the technical information necessary for the Commision to conduct these interference studies. The purpose of this public notice is to request all applicants who have not already done so to submit the missing data by november 1st of this year. Further, all future applications must contain this information.

Specifically, the Commission needs the radiation pattern for each proposed directional antenna. A directional antenna radiates a greater signal in certain directions than in other directions, usually for the purpose of increasing the population being served. Directional antennas are also used, however, to provide interference protection to other nearby stations. Without knowledge concerning the exact shape of the radiation pattern, FCC engineers cannot determine whether stations provide adequate interference protection to other stations. Applications lacking the necessary technical data regarding proposed directional operations cannot be processed and therefore will be returned to the applicants as incomplete.

The Commission is establishing a file containing the radiation patterns of common off-the-shelf directional antennas. Currently these patterns are being acquired from the various manufacturers. In this manner, it is hoped to avoid the need for each applicant proposing an off-the-shelf antenna to submit a pattern. Nonetheless, if the Commision has difficulty in obtaining this information directly from the manufacturers, then it will request such patterns from applicants, permittees, and licensees as necessary.

Because patterns will be obtained directly from manufacturers, using their model numbers, it is essential that all applicants proposing off-the-shelf antennas show the model number exactly as specified by the manufacturer so that the Commission's computer can access the corresponding radiation pattern. For example, a model QWERT-123/45 must be specified exactly as QWERT-123/45, not as QWERT-123-45. Furthermore, general antenna descriptions such as yagi and dipole are not sufficient for this purpose. The Commission requests that all applicants proposing directional antennas review their applications to make certain that the manufacturers' names and model numbers have been correctly specified.

Applicants proposing non-standard directional antenna systems must file actual radiation patterns, either in graphical or in tabular form. These non-standard antennas include both antennas that have been specifically designed for the applicant and composite antennas consisting of two or more off-the-shelf antennas. Because every composite and custom antenna generates a unique radiation pattern, specific radiation data must be filed by every applicant proposing a composite or custom directional antenna system. It is not adequate simply to submit the radiation patterns of each of the off-the-shelf antennas used in a composite antenna.

For most applicants proposing non-standards or composite antennas, it will be necessary to obtain technical assistance in determining the proper radiation pattern. This can be done either through the antenna manufacturer or the applicant's technical consultant. in any event, horizontal plane radiation patterns should be submitted in terms of the relative field strength of the horizontally polarized radiation component. If presented in a tabular format, rather than graphically, field strengths should be specifid for all minimas, maximas and at every 10 degrees. The maximum should correspond to zero degrees on the tabulation or, alternatively, in the case of symmetrical antennas, along the line of symmetry. However, the actual antenna orientation as it is proposed to be installed should be specified by stating the direction of the main radiation lobe or the line of symmetry with respect to True North.

The Commission is using this public notice as a means of informing applicants of the necessity of filing this information. Following the November 1st target date, the FCC will again review its files for applications lacking this essential data. Applicants so identified will be contacted individually and be given a short time in which to file this information. If they do not supply the information within the time period specified, their application will be returned as incomplete. It is hoped that in response to this public notice, applicants proposing directional antennas will review their applications and, if necessary, supply the missing or corrective information rather than waiting to be contacted individually. Although the Commission has established a target date of November 1st for submission of this information, it urges applicants to submit the data earlier if possible to allow entering of the material into the computer data bases as promptly as possible.

The Commission wishes to emphasize that this special call for missing information and corrective data concerning directional antenna systems is not to be confused with its June 23, 1982, announcement of a 90-day amendment period which ended on September 21,1982. That amendment period was for the purpose of permitting applicants to change their applications to conform with the new engineering standards adopted in the Report And Order of March 4, 1982. Infor-mation submitted in response to today's call regarding directional antenna data will not be accepted if it constitutes a modification or change to the proposal presently on file. Additionally, the FCC staff will be reviewing all new applications filed to assure that all required antenna information is included. If it is not, the application will be returned as incomplete.

For further information Paul Marrangoni on (202) 632-3894

ICTV

Membership Information

Independent Community Television Alliance

- ☐ Local Power Hot Line -- 50 hours a week
- ☐ Subscription -- Monthly Lo-Power magazine
- ☐ Co-op Group Purchases of Equipment
- ☐ Expedited Washington Research Information
- ☐ Collective Lobbying for the Little Guy in LPTV
- ☐ Washington Follow-up on Applications
- ☐ Verbal Phone Access to Commission Data Base -- 6 Days a Week
- ☐ Use of Instructional 'How To' Videotapes (1 week free)
  Members pay only for shipping, handling, and record keeping

All Lo-Power Publishing personal copies of manuals and materials free of charge to ICTV members

INSTRUCTIONAL 'HOW TO' VIDEOTAPES AVAILABLE
(Use for one week; members pay only for shipping, handling and record keeping)

- ★ Techniques of Using One Camera
- ★ Setting up a Studio
- ★ Lighting for Television
- ★ Multiple Camera Techniques
- ★ Shooting Video 'Basics'
- ★ How to Shoot a Sports Event
- ★ How to Broadcast a Local Wedding
- ★ How to Broadcast a Church Service
- ★ Shooting Local Commericals for Cable or LPTV
- ★ Television Tape Production
- ★ LPTV Crash Course
- ★ LPTV Crash Course 'B'
- ★ Subscription TV
- ★ World's Smallest Full Service Station
- ★ The New Mavica 'Still Camera'

BOOKS AND MANUALS -- LOANED FOR
TWO WEEKS, FREE TO MEMBERS
(Members pay only for shipping, handling and record keeping)

- ★ Color TV Studio Design and Operation
- ★ Videotape Production and Communication Techniques
- ★ Designing and Maintaining a Small Television Studio
- ★ Television Production Handbook
- ★ Video User's Handbook
- ★ TV Engineering Handbook (very large and heavy book)

The LPTV Association That Works

FREE APPLICATION ASSISTANCE HOTLINE FOR MEMBERS - 6 DAYS A WEEK

☆ **WE DO A COMPLETE RURAL AREA VHF LPTV FCC APPLICATION FOR YOU!** ☆
☆ Members' Price: $250 ☆

ICTV

Independent Community Television Alliance 7432 E. Diamond. Scottsdale. AZ 85257

Below is my application for membership in ICTV. I have deducted $ _____ for which I have already paid Lo-Power Publishing for publications and enclose a check for $ _____ , the two totalling $250.00 for my one-year membership.

Membership Application

Individual(s) to contact: _____ Name _____ Position

_____ _____

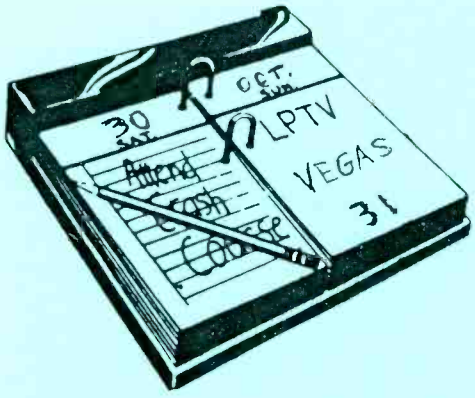
Company _____

Address _____

City _____ State _____ Zip Code _____

Phone _____ ( ) _____

The High Powered
Low Power Television
Crash Course



October 30-31, 1982; Las Vegas; preceeding translator convention and manufacturers' exhibits.

- ★ Getting a license; more and faster
- ★ Planning a station and community networks for lowest investment and largest return
- ★ Engineering considerations you need to know about
- ★ Methods of operation to guarantee viewers (and income)
- ★ Where 2/3 of your income will come from that you do not even know about
- ★ Why you do not have to worry about programming sources; lists supplied
- ★ Low cost local production equipment demonstrated; sources
- ★ Electronic publishing and your part in getting ready for what's coming

Saturday -- 10 a.m. to 5 p.m.
Saturday -- 8 p.m. to 10 p.m.
Sunday -- 10 a.m. to 4 p.m.

We recommend advance reservations.
Late, or at the door, $150

REGISTRATION FEE: $125 per person; includes two lunches and material packet. ICTV members, $100.
CANCELLATION POLICY: Full refund of fee if written cancellation is received 10 days prior.

TAX DEDUCTION FOR EDUCATIONAL PURPOSES: Treasury regulation 1.162-5 permits deduction of educational expenses--registration fees, travel, meals and lodging.

YOU NEED INFORMATION ON THE MANY OPTIONS OPEN TO LPTV BROADCASTERS TO SET YOUR DIRECTION.

THIS CRASH COURSE WILL PROVIDE ANSWERS.

L O W P O W E R C O M M U N I T Y T E L E V I S I O N
C R A S H C O U R S E

FOR FURTHER INFORMATION OR PHONE REGISTRATION, CONTACT: (602) 945-6746

Note: Please use separate sheet for additional registrants.
☐ I/we wish to register for the Crash Course. $125 is enclosed for each registration.
(Make checks payable to Lo Power Community Television)
☐ Please send me listing and prices of Video Tapes available of convention and crash course proceedings.
☐ Please add my subscription to **Lo Power Community TV Magazine. I enclose $50.**

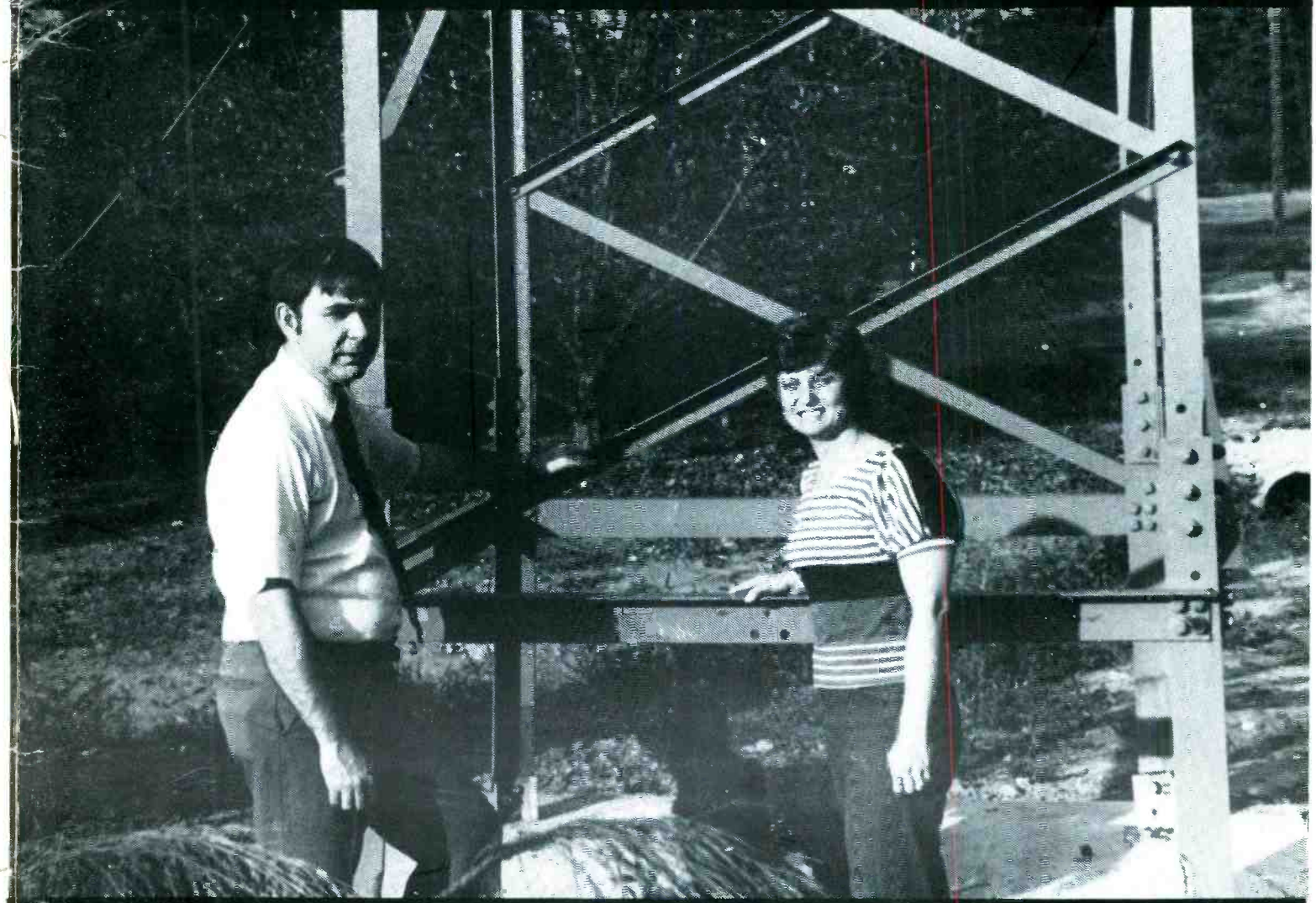
To: Lo Power Community Television, 7432 E. Diamond, Scottsdale, AZ 85257:

Name _____ **Title** _____

Organization _____

City/State/Zip _____ **Telephone** _____

LO-POWER



COMMUNITY TV

DECEMBER

The Only LPTV Magazine

We recently received a call from a third party and they had been talking to the paper mill factory (I use that name, they didn't) and that as a gesture of 'good will' they would see to it that Mutual exclusive applications on my personal applications I was upset about were withdrawn, just tell them which they were. Needless to say, I let that offer sit.

We want them off everybody's application, not just mine.

So mine will sit in mutual exclusive's just like everybody elses until we can band together and get the 'extortions' people out of LPTV.

If you are an ICTV member and we have some applications stacked up for you, you should know we have gotten temporarily behind. Our normal turn around time (after we have the right maps) is 2 to 3 weeks. However, with the recent wholesale MXing we have been concentrating our time and effort primarily in that direction in solving that before filing more, and now believe we have a 'workable' solution in 'copyrighting' your application. $20 additional to copyright one, $10 each on more than one.

To top everything else, our computer went down during the time we had the how to file course here and has gone down now 3 more times for a total of 10 days in the shop which really set us back on applications. Hopefully they now have it back on line to stay, and we should be back to normal turn around January 1.

If you are an ICTV member and we are doing your application, to expedite your application send along 7½ or 15½ minute geological survey maps, usually available at a local blueprint office, stationary store etc. ask around. We have to wait two weeks or more when we order them from the government. Having an antenna site with coordinates, altitude, tower height etc. saves you $60, and also speeds it up. If we work at locating a tower site and have absolutely no luck, we charge you for phone calls, but no charge for our time and work expended. We only charge you when we succeed in locating a good site, which is most of the time.

We are primarily interested in helping you learn to do most of your own application, and in your keeping application costs down so the little guy can participate, get licensed and on the air.

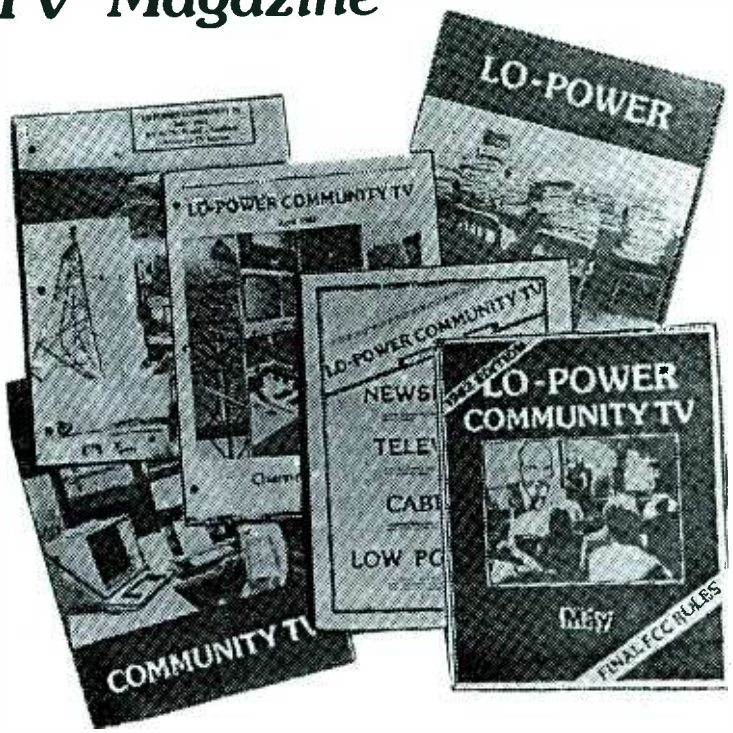
In our article in this issue on identifying your station, the total line you add to the bottom of your application should include the word 'tape'. It was omitted from that article. It should read, Character Generator, Camera and Tape.

We have included in this issue the 50-50 charts, and the 50-10 charts, this time with an article on how to use them. Photocopy the slider page and you won't-have-to-cut-up-your-magazine.

These charts will allow you to predict almost exactly how far your station will cover and also how far it will interfere. It will for example, help you determine how high a tower you will need to get the coverage you want. We suggest you will find it very valuable to learn to use them.

ICTV

The LPTV Association That Works



Not a simple 8-page newsletter. This is the large, complete monthly low power publication that keeps you informed on LPTV and FM. This publication does not just tell you what is happening in Washington; it includes all FCC cut offs and FCC LPTV releases in full. All applications filed in the last 30 days as released by the FCC, as well as insights on getting your applications expedited. The only LPTV publication that keeps you up-to-date on equipment. where to buy it, and how to use it. Monthly stories and photos on new LPTV stations on the air. The only complete LPTV monthly publication.

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

Postmaster, send address changes to **7432 E. Diamond, Scottsdale, Arizona, 85257. Telephone (602) 945-6746.** Mailed at second class rates at the main post office in Scottsdale, Arizona, 85251. USPO #601370.

December 1982 -- Issue #20

TIMES-VIRGINIAN

A LIVELY WEEKLY NEWSPAPER AT HISTORIC APPOMATTOX COURT HOUSE, VIRGINIA

Volume 91 Number 44 — Times Virginian, November 4, 1982 — One Section 14 Pages

Local television station unique

What does Concord, Va. have in common with New York City, Los Angeles, Washington, D.C., and other major population centers of the United States?

Concord has its own television station.

And Concord's station is unique in the state of Virginia and all along the Eastern Seabord: it is the first "low power" television station on the east coast.

Paul and Shirley Passink, who own UHF Channel 33 in Concord, filed in March of 1981 for a license to operate a low-power television station in their home area, Concord.

"The Federal Communications Commission ruling which made low power, or 'community television' stations legal, had been in force since 1980," Paul points out. "But the FCC was so swamped with applications that we didn't get our finished until early 1981, and it was almost a year after that before it had been processed."

The purpose of the ruling which made low-power television legal, according to Paul, was to allow a mechanism for "filling in the gaps where it's not economically feasible to install cable television. We're not trying to take the place of the Campbell County cable company or the Appomattox County cable company. We just want to provide a service in those areas where the cable companies cannot."

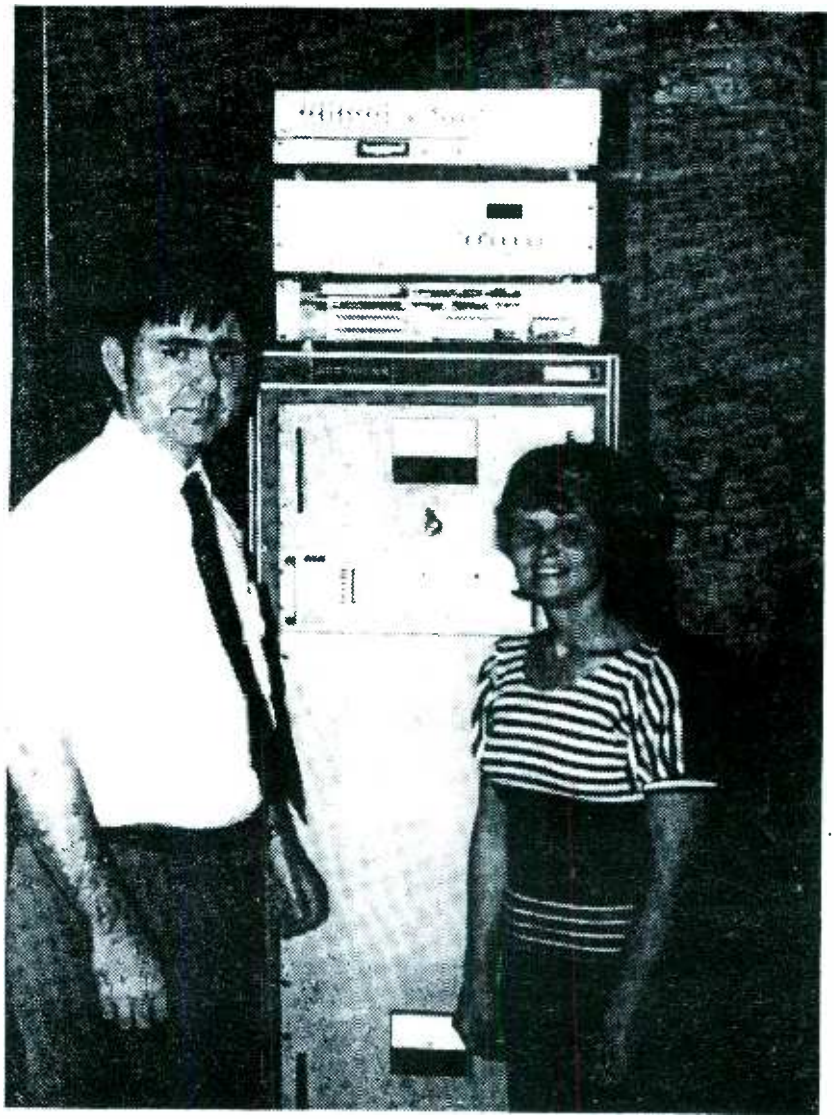
Channel 33, which has a broadcast radius of approximately 20 miles, features Satellite Programming Network (SPN) material from 9 a.m. until 8 p.m. Monday through Friday.

At night, after 8 p.m. the station is a subscription movie channel, with a wide variety of first-run major motion pictures, on until 4 a.m.

The subscription movie company, "SelecTV" comes on at 2 p.m. weekends and runs until 4 a.m. In approximately two weeks, the weekend morning programming will feature old western movies, according to Paul.

While anyone can receive the SPN programming during the day, those wishing to receive the movie channel must buy a special antenna made specifically for Channel 33's signal, and a "signal decoder" which will unscramble the signal as it enters the television set.

Those interested in receiving the service may contact Shirley Passink, station manager, at 993-3300.



PAUL AND SHIRLEY PASSINK with part of their new television station's broadcast equipment. The station, located in Concord, is the first low-power station on the Eastern Seaboard. (Photo by Bill Sherrod)

MOM & POP TV

What may well be the first 'mom and pop' Low Power Television station is now on the air at Concord Va. broadcasting 20 hours a day and will be on 24 hours a day starting January 1983.

Operated by Paul and Shirley Passink, and their daughter Trina, the small family station has no employees. Currently carrying SPN programming day time hours, changes were planned December 10 when SPN had scheduled a change to a different satellite requiring re-aiming the disk or getting a new satellite receiver set up.

The 100 foot self supporting tower (see cover) sits in the back yard of their home and provides coverage at about 8 miles in the hilly area, but puts a grade B 20 miles away over the Lynchburg and Appotomax areas.

Concord Virginia is a town of about 1,000 people if you include the rural homes and has no cable systems.

The 100 watt Acrodyne transmitter feeds thru Andrew cable into a Scala omni Paraslot antenna mounted a top of the back yard antenna.

A Dynacom fully addressable encoding system is used presently but is being replaced with a different manufacturers equipment. Select TV provides the movie service currently being supplied for $17.00 monthly. A $35.00 hook-up charge is made but no deposit is required of subscribers.

'It's no piece of cake' Paul says, and if everything worked as well as his transmitter system it would be a lot easier. Paul found it difficult to find the information needed to get equipment together to make the station work. The self supporting tower was purchased as a used 140 FM tower and had to be cut down to 100 feet to comply with the original application. Paul did his own application. The Passinks are enthusiastic about their Channel 33, Acrodyne Transmitter, Scala antenna and the help they have gotten from those firms in getting the stations together.

Daughter Trina, age eleven flips the Transmitter on when it's air time.

About 10,000 people live in the coverage area of which part is covered by cable systems. This is the first low power station on the eastern seaboard and Lo-Power magazine will carry many more pictures and more information in the next issue. Paul reports at press time that with SPN's satellite switch, they will be broadcasting only at night from December 10 until January, when Select TV goes to programming around the clock. You may contact the Mom and Pop station at 804-993-3300, or write Channel 33, Rt. 2, Box 37, Concord, Va 24538.

OWN NETWORK

The Osmonds are reported to be backing a 'major' Low-Power TV network, to be called the JPD Television network. (After its president James Patrick Devaney.)

This network will supposedly carry 3 hours (apparently weekly) of LPTV programming of which one hour will be the Osmonds. We will do a piece on this source of LPTV programming source in a future issue.

Columbia pictures also announced this month, they will start a new STV network including pay per view.

Penthouse and Select TV are in a 50/50 venture to bring an adult oriented service to pay subscribers-and will offer it to low power stations as well as other subscription services. The service will be available April 3, 1983.

You can start your own LPTV network. What you need is at least one half hour of programming weekly. Sign up a hundred or ten or 2 LPTV stations, cable systems, full sice vice stations, SMATVs or whatever to pick up off the satellite and carry it.

Your cost of operation, (minus programs cost) will be $300 (or even less) a week for satelite time (day time hours) or just mail around tapes initially if that's cheaper until you get enough signed up.

There may be some TV show produced and shown in your city now for example that may be of interest nationally. Get the rights to that program after it's shown locally (free or darn near) and you are ready to put together your network. Sell 4 commercials in your half hour and allow space for the local stations to put in two. Get an average of $5 per station it appears on for your National spots. That equals with four spots, $20 per half hour per station. With 15 stations you break even and with one hundred you'd have $2,000 income and only $300 transmitting expense. 1000 LPTV stations carrying it and you are in tall cotton. Expand from there.

See, becoming an LPTV Network is no big deal (or big money.) There are going to be hundreds of these National LPTV networks with some really ingenious programming. All of this programming will be 'free' to your stations, or some will actually 'pay' you to carry it.

LPTV creates a whole new opportunity for 'little guy' national programming as well as 'little guy' local programming. This will cause a literal explosion of new talent and creative TV program ideas that have never had a chance of making it before. Once we get a couple thousand LPTV stations on, the programming sources of this type will spring up like grass, a lot of it with some darn good stuff and you can cherry pick.

. . . In the summer of 1981, Congress authorized the FCC to choose winners by lottery, after having figured in a preference for minorities and small owners. The FCC dillied and dallied and finally refused altogether, in large part some critics suspect, because it did not want to favor little guys at the expense of the large corporations . . .'

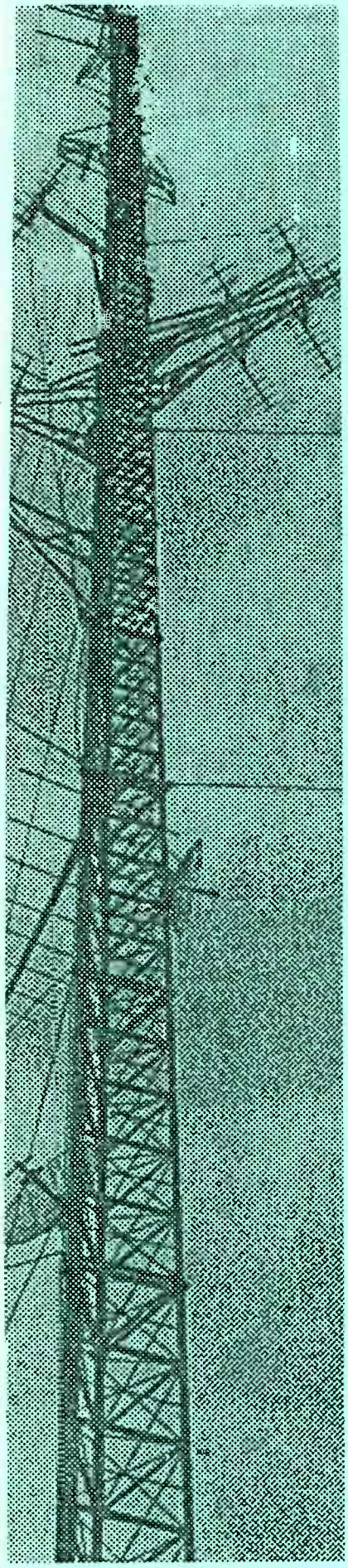
A quote from **Low Power TV: Broadcasting in a Minor Key -- Channels magazine; November/December 1982.**

NEW TRICKS

Please note that all of the 'bulk filings' in this months new applications filed section were all filed by the same paper mill, we find from checking thru these applications. This is the tip of the iceburg since they have a new market and a new sales pitch. Now, not the early people interested in getting a license and running LPTV stations. They are now selling 'investing' in applications with several promised pay offs for the 'application investment,' none of which includes operating a low power station.

> Latest trick--you'll notice in this issue's list of new apps, the same paper mill filing identical applications for the same channel with two or more different names. How many names can you file to improve your odds? We didn't expect them to start that until January, '83.

We had planned to include a sample of filing a 'motion to dismiss' in this issue (so you can file one on each of your MX'd), but we'll probably include it in the next issue since the magazine size and weight on getting this out by first class postage here is probably too severe already. We keep moving forward our story and photos on low cost studio equipment keying cameras etc. for the same reason.



The Commission has some internal shifting with some of the LPTV-translator people changing jobs ..... Operations of interest to our readers are being moved from the third floor to the seventh floor at the Commission.....

If you thought it was hard to find the head of the worm (to clarify something) ... and/or get a call returned etc. before, it is almost impossible at the moment. Nobody seems to know even who is doing what..... (Guess that's normal)....

We held up the November issue waiting for the promised November cut-off list... Finally gave up on that issue and then being late.....had to mail first class again at considerable unbudgeted extra expense..... So for the December issue, We were planning to mail our December issue November 20 so you would have it by the first or there abouts.....but still no cut off list.... We held up the December publication waiting for the cut off list, here it is the 8th of December, there still isn't one.....and then.....we find out there isn't going to be one.....the promised cut-off list is not going to appear until later.....So now we are late in December, have to mail first class and still do not have a cut-off list included for you..... More first class mail expense, all for nothing.....we printed on heavy stock and everything....which means nothing to you but several hundred dollars in extra first class postage.

THIS NO CUT -OFF NEWS means there can be no grants in the first quarter of 83, because you have to have them thru cut-off first and that means since there has been no Low Power cut-off list for over 7 months, we have been had by the Commission again. THE FCC LOW POWER STALL ROLLS ON..... Write or call your Congressmen and Senator and let them know what goes on, or doesn't go on re: LPTV at the Commission.

JOHN BOLERS second LPTV station, this one in larger Grand Rapids, Minnesota, is on & tied to the Bemidji station with two way microwave. Boler is the LPTV pioneer who put the first station on a little over a year ago and is presently setting up a regional network of LPTV stations in the northern Minnesota area..... Another first for this television pioneer.

After checking with many LPTV grant owners, after 6 months,.....many still have no concrete plans or start up target date....as to when they will be on or what they are going to do with it.....

Biggest news at the Western Cable Tv show was MCI wanting to arrange to use cable lines to tie in their long distance phone network directly to cabled homes... JVC showed the new 71b. VCR with the new mini cassette that will have a 20 minute capacity..... GE supposedly stole the show with equipment that allows two channels to be carried in the space of one. In development and evidently a long way from production, this present shaky development could expand the channel capacity on a cable system so they could carry LPTV stations presently loaded to capacity, all .....without a major rebuild of the cable system plant.....

Has anyone heard of any translators now adding commercials and local programs? They only have to send a letter to the commission to switch to some local origination. Tell us if you know of any..... Thanks.....

The *Gigantic* Low Power Television *Rip Off*

Note: **'The Gigantic LPTV Ripoff'; Report #13; $10 postpaid**

We have reason to believe the paper mills are trying to get a copy of **The Great LPTV Ripoff**, so right now we are not sending out any. In a nutshell--we aren't mailing any for the present (drive 'em crazy), but to keep up, I'd suggest you subscribe to our magazine.

Reader's Digest Type Condensation
Ripoff Summary--Paper Mills

1. Charge double or triple the rate of competent people and file the most incompetent.

2. File the poorest applications--many of which won't work--towers would collapse with antenna specified; no permission to use tower, etc.

3. Specify and lock you into a $35,000 antenna, for example, and specify a $72,000 transmitter and then list total cost of the station at $56,000.

4. Offer to 'straighten out' your application for $1,000 additional.

5. File on top of you with someone else's name (wife's maiden name, bookkeepers, etc.)

6. File the simplest 'omni' antenna arrangements and that wastes a lot of coverage and result in poor or inadequate coverage where you do need it because that is simple to file and requires little work or engineering. You are locked into this by the FCC.

7. Sell people in filing 'copy' investment applications on top of yours and other applications. 'We are all perfectly legal', is what they'll tell you, and all is fair in love and LPTV.

8. Make you a 'deal' to get others off your application for $5,000 each. They'll trade in withdrawal credits and debits and keep $1,000 on each.

9. File your application with a lot of superfluous fluff, all worthless and needless (now done with a computer). Have large ad budgets and sales staff; little engineering staff.

10. When you ask why they charge so much, the old line is fed you--'you get what you pay for'. What they don't tell you about that old saw is--'except in dating services and low power applications'.

11. If you ever do get a license, they have a new scam waiting for you in 'consulting service' to 'buy' equipment for you and get you on the air. It will be another name--they refer you to.

12. There's more but you will get the drift by now. They cannot be disciplined by any professional group such as engineers or attorney's self-policing groups. Hucksters and con groups have no ethics watchdogs.

13. Big donators and participants in LPTV associations who won't 'bother them' about their ethics and tactics because they are a member in 'good standing' (paid up). Large wine and dine budget for 'buddies' in a position who could put crimp in their style.

14. Manufacturers group leadership has their equipment specified in nearly all applications, locking applicants into high-priced equipment. Manufacturers wouldn't dare 'irritate' paper mill, who has good thing going for them. They cover their behind from all directions. Reported FCC staff person also in hind pocket.

15. Word of mouth of people in the know has slowed new applications to a trickle at the paper mills. New tactic is to sell 'investors' in investing in and trading in applications. There may be no money in low power, but they assure you there is money in getting into applications. Invest in 'copy' applications and trading withdrawals for 'licenses'.

16. Tell newcomers only their firm is smart enough to get an application filed right now in tier three (big cities). Charge $4,000 to file a big city application and request 'a waiver of the freeze rules'. Application just sits there and FCC does not return it. Applicant won't know he has been had with a 'junk' application for three years, or more. Paper mill gets his money now. Plucks another goose.

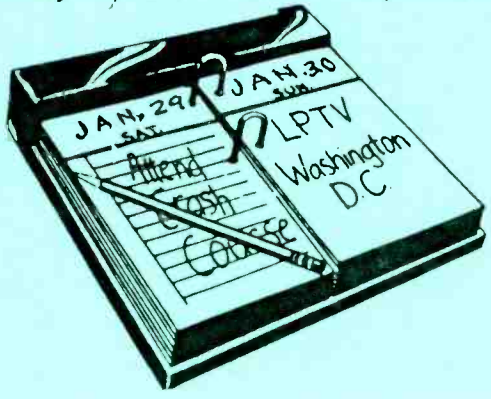
17. Not only selling copy applications but selling multiple people (and themselves) on filing on the very same channel. Expect up to 20 or more filed on the same channel by the paper mill with different names, on any larger, valuable market.

If you can't beat them-should you join them?

If the present 'rip-off' is allowed to continue of 'copying' your application and filing multiple copies with different names to improve lottery odds, we are setting up the following price schedule for 'copying' other engineering, tower site, map, etc., and filing applications for you:

ORIGINAL COPYCAT APPLICATION-In your name--$100.
Second filing in your mothers name--$50.
Sisters name on third filing--$45.
Uncles name on fourth filing--$40.
Your bookkeeper on fifth filing--$35.
Brother-in-law on sixth filing--$30.
Special combination brother-in-law and bookkeeper, if same person--$25.

Call for special rates on street bums names.
*If they win, lease the channel with option to buy.



Cable and low-power tv risks
SEMINAR HIGHLIGHTS

By Andrew Radolf

American Newspaper Publishers Association seminars on cable and low-power television filled all the available seats in Chicago's Marriott O'Hare Hotel as publishers were eager to learn the opportunities for newspapers in these new media.

The cable seminar on November 3, which was co-sponsored by the Newspaper Advertising Bureau, drew about 75 publishers from around the country, representing primarily small to medium-size dailies. The low-power tv seminar from November 4 to 5 had a turnout of equal size and make-up.

If any one conclusion can be said to have come out of the seminars, it is that cable looks like a more promising venture for newspapers than low-power television. Yet even those publishers involved in cable say profits from their channels are still a long way off.

The seminar did not assess how other communication technologies such as telephone-delivered videotex, direct broadcast satellites, and mutliple distribution systems will affect cable and LPTV development. Yet, the point was made that the possible commercial development of these technologies makes any foray into cable and LPTV a risky venture.

Promotion and protection

The consensus at the seminars was that newspapers were entering cable to position themselves for the future when two-way services became available, to protect their local advertising markets, and to promote their printed product.

"Videotex is where the real money will be," commented a general manager for a newspaper cable company who was attending the seminar. He said his company did not expect to make money with its cable channels but was developing them in order "to get into the game."

About 10 publishers attending the seminar raised their hands to show they were currently operating or planning to operate a cable channel. About half of the 75 indicated they are presently negotiating with their local cable operators for channel space.

"I think you'll find more papers are putting money into improving their newspaper products," said Grant Gray, publisher of *Monroe* (Mich.) *Evening News*, who was an attendee. "They're putting their money in what we do best—print."

"How do you put a dollar value on the promotional aspect and the protectionist aspect?" asked David Reed, director of the *Lexington* (Ky.) *Herald Leader*'s cable service, Telepress. "We're protecting ourselves with our classified (on cable)."

Reed, who was a featured speaker, said Telepress "probably won't make money next year," but may turn a profit "in the future."

Reed said the Herald Leader carries "daily ads" as part of an "image campaign" to promote Telepress. The increased viewership resulting from the campaign in turn "helped bring readers into our newspaper."

Text can't compete with broadcast

"The people I work for don't believe character generated news is going to be very profitable in a market which has a lot of broadcast time available. We have five commercial channels in Jacksonville," said David Gold, production manager of Coastline Communications, a subsidiary of Florida Publishing Co. which publishes *Jacksonville Journal* and *Florida Times-Union*.

Gold said Coastline's character generated news channel is "good promotion for our newspapers."

Coastline has begun producing 30-second commercials for advertisers at $100 each. The ads appear for $20 to $50 per spot on the local availabilities of satellite-delivered channels such as USA, ESPN, and CNN.

"We are making money on the satellite channels," Gold said. "We do occasionally run a commercial on our character generated channel, but we have not found much interest (by advertisers) when they can have video on the satellite channels."

Six channels planned

Only one publisher expanding into cable, Donald Soldwedel president of Western Newspapers which publishes *Yuma* (Ariz.) *Sun*, reported his cable ventures were "close" to turning a profit but not until some time in 1983.

Soldwedel operates three cable text channels—classified ads, news and local retail ads, and a mix of Dow Jones, AP, and Reuters news—plus a fourth channel to bring in Ted Turner's WTBS. The WTBS channel features videotaped ads on the local spots which Sun Cable will also produce for local advertisers. The other three channels feature text ads.

Soldwedel plans to add two more channels in Yuma for a total of six. Other plans call for adding two channels in Prescott and two in Kingman. Western Newspaprs publishes *Prescott Courier* and *Kingman Daily Miner*.

The Yuma cable channels this year will lose about $10,000 on $90,000 to $100,000 in revenues. "That's peanuts to lose, and at the same time we're making our newspapers a better buy," Soldwedel said. With projected gross revenues of $150,000 to $180,000 next year, Soldwedel predicted, "We will make a profit in 1983."

Soldwedel noted that the cable system's penetration in Yuma increased from 50% to 80% after it began featuring the Yuma Sun's news and advertising. The Yuma Sun's household penetration is around 90%.

Tele-publishers

A continuing theme of the cable seminar was that newspapers probably have more to offer cable operators than the other way around.

Newspapers' credibility in their communities and their expertise in selling local advertising to targeted audiences were cited several times as a chief attraction to cable operators.

The seminar speakers also noted that more and more cable operators want to enter joint ventures with newspapers in order to gain acceptance for the concept they are tele-publishers with First Amendment rights rather than common carriers subject to regulation.

The National Cable Television Association has asked the

American Newspaper Publishers Association to "to join them in the fight to be tele-publishers," said Charles Kinsolving, NAB's vicepresident for marketing and new technology.

Tele-Communications, Inc., the largest cable company with over 2 million subscribers, wants "joint ventures with newspapers only because of the tele-publishing angle," Kinsolving said.

"Leases are falling in disfavor. Cable wants to avoid the common carrier label," added Phil Green, a consultant with Communications Studies and Planning in Cambridge, Mass.

Green noted that "a lot of local avails are going unsold" on cable network channels like CNN and ESPN. "There's a big opportunity to buy those things up and start selling them."

Green said newspapers have "the most leverage" in negotiating with cable operators when the systems are under construction or the franchise is up for renewal.

Retrenchment likely

Stephen Effros, executive director of Community Antenna Television Association, which represents cable operators in small markets, said the "extortionist" demands by cities for systems with 100 or more channels has made cable operators desperate for any kind of programming to fill them.

"Does the public want text channels? We don't know and we don't care," Effros said. "With 100-plus channels, we don't know what to put on them."

Effros advised the publishers to "take a very realistic look at cable and your own industry before you decide this is the greatest thing since sliced bread. There's no evidence today the public wants something other than broadcast, movies, sports, and dirty movies."

Effros said cable industry was going to undergo a retrenchment as most companies backed away from pledges to build elaborate systems "that won't make money. Most promises you read about are on paper, not in the streets," he said, "and are not likely to get into the streets the way they are on paper."

Returning to newspapers

Jayne Zenaty, manager of media research for Leo Burnett USA in Chicago, told the seminar that cable "is never going to take over as the dominant advertising medium. It will be there as a supplement."

She said that as broadcast television loses its upscale audience to non-commercial pay cable, media planners will turn to newspapers, magazines, and radio rather than commercial cable channels to reach them again.

"Newspapers, magazines, and radio will benefit at the expense of the networks," Zenaty said. "The upscale audience diverted by pay cable I can find easily in the newspaper."

Doug Watts, staff counsel for ANPA, reminded the publishers that entering cable requires "a fundamental psychological change from the business you are in today."

Beware of city hall politics

Watts noted that a cable franchise holder is "a creature of city hall to no small extent. You may find he gets a little nervous at franchise renewal time about your city hall coverage."

Watts said negotiating with a cable operator involves reaching agreement on both editorial control and "bottom line control. Giving up business control requires some measure of quid pro quo from the operator."

Watts also said it is possible for a newspaper to bargain away some its editorial control of what appears on the channel. He said if that is done, the newspaper should also negotiate for the operator to assume a proportional degree of the liability for what's on the channel.

At the ANPA seminar on low-power television, publishers learned the drawbacks to this new medium may well outweigh its attractions.

LPTV transmitters are limited to 10 watts of power for VHF stations and 1,000 watts for UHF. The stations have a broadcast radius of about 15 to 20 miles.

The sense of the meeting was that LPTV will follow broadcast tv models in its development and that the potential for text services is limited to filling "the gaps" between video programming.

The speakers agreed that news on LPTV would have to be done live in the manner of regular broadcast stations in order to attract an audience.

As for local advertising, the prevailing view was that LPTV will compete more against radio than newspapers and that most ads will be in a video format.

LPTV was described as a much more expensive medium than cable to get into. Estimates for constructing a station ranged fromg $300,000 to $600,000, with operating expenses for the first year, assuming a phasing in of service, estimated as high as $1.4 million.

Newspapers will have to be very careful and assess their market before venturing into cable tv," said Pam Reilly, an ANPA staff counsel, "or they stand to lose their shirts. There's a lot of unknowns out there."

Media guerrillas

In developing programming for LPTV, publishers were advised to become "media guerrillas" and come up with innovative, and often off-beat ways, to compete against broadcast stations.

Suggestions on how to go about this included airing programs at five minutes before the hour to grab an audience before network shows come on, and to offer syndicated shows counter-targeted to regular broadcast fare.

Non-broadcast video productions and video documentaries were other sources of programming recommended for LPTV.

"Start with portable video equipment that goes to where the community is," recommended Parry Teasdale, chairman of the Television Center in Washington D.C. "You have the sources of news. Be innovative and you will get an audience."

George Back, president of All American Television, a syndication firm, said "the potential for syndication among you of newspaper content is vast."

Back also told the publishers that syndicators "have the programmiing for LPTV" and not to be concerned about the cost. "They'll find a way for you to pay them," he said, including deals where LPTV stations barter commercial time for programs.

X-rated movies and STV

Subscription television, an over-the-air pay service, may provide a lucrative source of revenues for local LPTV stations by showing a mix of movies and sporting events, the publishers learned, but STV's main attraction is its late night offering of R- and X-rated movies.

"X-rated movies are one of the most desirable features" of STV, said John Calvetti, senior vicepresident and general manager of SelectTV. "To not offer it tends to limit the marketability of the service."

(Continued)

Calvetti said by providing an STV service, publishers would be "entering the arena of the Hollywood business. That's what you're on the verge of getting into with pay tv."

Several publishers attending the seminar commented that they would choose not to offer an STV service if it needed the X-rated fare to be profitable rather than jeopardize their newspapers' standing in the community.

The three major broadcast networks—ABC, CBS, and NBC—also are showing little interest in making their programs available to LPTV except in "four or five unusual circumstances," the publishers were told.

Melvin Goldberg, vicepresident of marketing, planning, technologies, and research for ABC, told the seminar his network "has not considered" offering its programs to LPTV stations.

Several entrepreneurs are working on creating LPTV networks. These will be modelled after the major networks and offer such programming as old movies, sports, and re-runs. In exchange for airing the programs, LPTV stations would get back local advertising availabilities.

Cable penetration a key factor

"The single greatest issue" concerning the success of a low-power television station is the cable penetration in its market. There are no "must carry" rules requiring cable operators to put an LPTV station on one of their channels, and cable operators want "to get the antennas off the roofs."

If a local cable operator is unwilling or unable for lack of channel space to put an LPTV channel on his system, then LPTV will be unable to reach cable homes unless the owner puts up a "costly" new antenna with a switch for receiving LPTV signals "off air."

"The cable operator may carry you just to get that antenna off the roof," said David Butterfield, president of Butterfield Communications. "There's also less pressure on him for local origination. It's nonsense that cable operators care about local programming. They just do it to get franchising."

Butterfield said the "cons" of carrying a low-power station on cable "outweigh the pros" for the operator. "It (LPTV) displaces a more attractive service. It's competition for local ad sales. It may cannibalize STV (subscription television) or pay-cable revenues. It may set a precedent for other systems (the operator owns)."

Butterfield said publishers "can bring to bear political pressure to get your signal carried."

FCC lottery

Publishers also learned at the seminar that the Federal Communications Commission has stacked the odds against them in its lottery system for awarding LPTV construction permits.

The FCC has adopted a "diversity principle" in its lottery process which favors minority applicants and applicants who have no other media properties.

Non-media applicants will be favored in the lottery 1.5 to 1 over companies with one to three media properties including newspapers, provided those media are not in the same market as the proposed LPTV station.

Non-media applicants will have a 2 to 1 advantage over companies with four or more media properties and a 2 to 1 advantage over "co-located" newspapers.

The ANPA is preparing a court challenge to the FCC's LPTV lottery on "legal and policy grounds," but that is unlikely to succeed in overturning the Congressionally mandated system.

The FCC has also devised a three tier system for processing LPTV applications. Tier one covers applications in locations more than 55 miles from the top 212 markets and will be processed first. Tier 2 includes applications for transmitters located more than 55 miles from the top 100 markets. Tier three includes the top 100 markets.

The FCC is expected to take until late 1983 or early 1984 to finish awarding construction permits for tier one. The commission probably won't get to tier three until 1986 or 1987.

Construction permits are only the beginning. Applicants will have to meet a host of other criteria including engineering specifications and moral fitness to operate an LPTV station before the FCC will grant a license.

Equal time and fairness doctrines also apply to local origination programming on LPTV and most statutes regarding obscenity, lotteries, and payola also apply.

There are no cross-ownership rules for LPTV, however. No restrictions on the number of stations a company can own. No restrictions on the number of stations in a market.

Rolla ready to roll

Thomas Sowers, associate publisher of *Rolla* (Mo.) *Daily News*, said his newspaper received three construction permits for LPTV stations "well ahead" the FCC's final rules.

The first station, in Rolla, is scheduled to go on the air January 1. The other two are located in Marysville and Kirksville, Missouri, and will go into operation after the bugs are worked out of the Rolla station.

Sowers said his company decided to get into LPTV because of its greater reach in the local market. "LPTV can service a trade area," he commented.

The cable company in Rolla, which is limited by its franchise to the corporate city limits, has about 3,000 subscribers. His LPTV station will cover a radius of 10 to 15 miles and reach about 15,000 homes.

Three different cable franchises operate within the trade area.

"The key" to LPTV coverage, Sowers said, is "where you place your tower" and "the kind of antenna you have."

Powerful antenna needed

Although his VHF low-power signal is limited to 10 watts, the antenna has a "17 gain", he said, explaining the antenna acts "like an amplifier" and boosts the signal by a factor of 17.

Sowers noted that it will cost him about $400,000 to $500,000 to "get the station going." To acquire a radio station in a market his size would cost about twice that amount, he said.

He plans to offer "as much local origination as we can" on the LPTV station, with most of that being video programming "and supplementary text." Satellite and LPTV networks and syndicated shows will also be tapped as sources for programming, he said.

Sowers said he is "working on an arrangement" with several cable companies to have them carry his LPTV stations.

"At first there was some misunderstanding," he said. "Now it seems like they are willing to cooperate."

Sowers stressed the need to find "legitimate" consultants, lawyers, and engineers when seeking to obtain an LPTV construction permit.

Making Local Origination Pay

LPTV Reruns

When we get right down to programming your LPTV station, we are going to be telling you over and over again to air absolutely as much local programming as possible, and most of what you air the first time, do it live. We said airing as much as possible, we didn't say producing as much as possible. What that means it that the cost of good useable (broadcastable) camera equipment is coming down so rapidly (the RCA CCO11's we bought last year wholesale for $1,200 are now available retail at around $800, for example) that lots of people in your community are going to be able to put together some pretty good local material. Use it. A poorly shot local program with local people in it in quantity will outdraw the most expensive syndicated program you could pay for.

NOBODY MAKES A SHOW PAY FOR ITSELF WITH ONE RUN
Not ABC, NBC, CBS, or any Independent Producer

Run it once live and let the tape machine record it back at the station. Tell the audience when it will be repeated like during the day on the weekend. All the people that were at the event will watch it during that rerun (plus others that missed it) and schedule it again several times later in various forms and disguises. Let us take, for example, the high school football game. You televise it live on Tuesday night. You run excerpts and highlights from it on all of Wednesday's news shows. You schedule a rerun of it in full length for Saturday afternoon at 4 p.m. and another on Sunday at 10:30 p.m. and then you save it and at the end of the football season, you make up a program by showing the best parts of the season's games by having several tapes cued up at different spots, and then run the second VCR machine up to a predetermined place on the counter while the first one is running.

Tape this program of these highlights of the '83 football season on a third machine as you put it out over the air and tell them when 'Highlights of the '83 Smallville High Football Season' will be shown again. Show highlights of the '83 football season at least three times. Also use all of those football games tapes along with tapes of everything else you have taped at the high school this year to put together highlights of the '83 year at Smallville High and make yourself another two hour tape for the end of the year showings (easy to sell to local advertisers). Show the seniors in action over the year (or years) and show stills and action pictures of each of them. Draw some of that from these football broadcasts. Advertisers will want their commercials in this program because lots of people at home are going to be taping this video high school annual and be playing it over and over again.

So, plan on running good programs full length at least three times, plus on the news, and with highlights from a series of these being run as a program later, and running this highlights program at least three times, just as the networks do.

So, you need to have and will have footage on hand from nearly all of the year's shows and nearly all of the townspeople that are often in the news. Then when you have news items about any of them, you can go back and draw on them.

With a new 1/2 inch recorder we have now (Panasonic 8950), you can lock it on one frame and have a perfect still. Hold it on that one and dupe that still over to another recorder running full motion and you can have on a very small amount of tape dozens of still pictures of any one individual or event and keep that as 'library' of footage for news items. For example, let us say you have one six hour tape you have set aside as library footage of school faculty or city government, or church clergy, etc., etc. Say the school faculty tape has little action shots of the coach taken from all of the football, basketball tapes, etc. You have the same you have duped over from all the faculty on other events. Now let us say if you have a news item about Coach Jones receiving an award, you dig out your faculty tape and while doing the news about the event of Jones' award, you run some of these stills or action full motion shots of the coach. At the end of the year when he quits to take a job elsewhere, you can put little glimpses again in your news program and put together a half hour program on the coach--sort of a 'fairwell coach' program. So you see with a little imagination, you can put together local 'specials' from a collection of excerpts from local programs you have run in the past. Example--say a local kid leaves school or whatever, or is killed in a car accident. You can go back through all of your local tapes where this kid has appeared (football example again) and put together a 30 minute tape on this kid. Fill in with friends, school faculty, etc., talking or telling about him. You can do this on adults too in your community as you build a library of footage of local events and people, but you need to keep track of and index what tapes and who is on each tape. We will show you how to do that one day on a small computer so you can punch in the name John Jones and it will tell you what tapes and where he appears in each. This is the kind of system you will need to draw on for local news so that when you have news about some individual in your community, you don't have to make a rush trip out and shoot something for the news--you draw on your 'library' footage.

When you go out and shoot a commercial, shoot scenes from all over the place. Get the whole story of the business as stock library tape. Then when you have a news item about this business or need to do another commercial, you can put together a new commercial from your library footage. Have one whole tape set aside for that business. All of his stock footage, commercials, new items you run on them, etc., all go on that tape labeled 'Jones' Hardware'. When you have a news item about an explosion at the feed mill, you show footage from the feed mill you shot six months ago while you were over there doing a commercial. Later, when you get time to get 'after' shots of the explosion, you will have before and after the explosion shots, etc.

So plan on everything you shoot being used over and over again. If it's local, they never get tired of it.

50/50 -- 50/10 Charts Use Guide

by Chris Cleland

The FCC 50/50 and 50/10 charts are used to determine signal coverage and interference. The 50/50 charts refer to potential signal reception--they contain contours indicating ranges for potential receiver stations that will receive a signal of at least 50% of a given signal strength at least 50% of the time.

The 50/10 charts contain contours that indicate ranges of potential receiver stations that will receive a signal of at least 50% of a given signal strength at least 10% of the time.

The main difference here is that the 50/50 charts show ranges for reception while the 50/10 charts show ranges for interference. The interference range will be greater because a signal too weak for adequate reception can still cause interference. For instance, a station's reception range may be only 15 miles while its range of interference may be as much as 40-50 miles.

It's relatively easy to use the charts. First, you must have several pieces of information: the channel being broadcast; actual ERP; and transmitting antenna height.

Now, before we get into actual calculations, let's familiarize ourselves with the charts. First of all, there are really six different charts: each channel band (low VHF, high VHF, and UHF) has its own 50/50 and 50/10 chart, so make sure you're using the right chart for the channel being considered. From there though, everything is pretty much the same.

Let's look at the first chart--the 50/50 chart for channels 2-6. The bottom edge is graduated logarithmically and corresponds to transmitter height in feet. The left vertical edge is uniformly graduated and corresponds to field strength above one microvolt/meter in decibels. The curved contours crossing the chart correspond to the range in miles, given along the right edge of the chart.

At this point, we're almost ready for calculations. Actually, we are ready, but only if your transmitter is always 1kw ERP. All the charts are based upon this value. To use the charts for other ERP's, we must introduce one more item--the sliding scale. Before we do this, though, and really confuse everything, let's do a quick calculation to get familiar with the process.

Assume that we have a Channel 5 transmitter. Its ERP is 1,000 watts (so we can use the chart without the sliding scale). Also, let's assume our tower to be 200 feet tall. We're now ready to proceed.

First, we either look at the FCC rules, or just **know** that Channel 5 corresponds to a field strength of 47 dBu. (In case you don't just **know**: Channel 2-6 = 47 dBu; Channel 7-13 = 56 dBu; and Channel 14-83 = 64 dBu.) Now, look along the left edge and find where 47 dBu lies. Next, look along the bottom edge and find the 200 foot column. Now, trace up from 200 and over from 47 dBu to where they intersect. Note that this point lies between the 10 mile and 20 mile contours. So, using dividers, a ruler, or careful estimation, we can conclude that our range is (approximately) 18 miles. Understand? To check your grasp of all of this, note that if our tower height was 240 feet, the range would have been almost exactly 20 miles. A tower of 1,400 feet would have given us 40 miles range.

Now, to consider transmitters of other ERP's, we basically need to slide the field strength scale up or down. This is where the sliding scale comes in. Take a look at it now. Using a sharp blade or scissors, cut out the scale, making sure to cut the left and right edges as straight as possible. Along the left edge, there is a scale labeled 'power radiated'. This is where you'll index your ERP. The next scale you'll want to consider is the one labeled 'F in dB ABOVE 1uv/m'. This corresponds exactly to the left edge of the charts. Note that 1kw of radiated power corresponds to a field strength of 40. If you place the slider on the chart and line up the 1kw mark with 40 on the field strength chart scale, you have the slider in the 'zero' position. (Note that the slider and chart field strength scales are aligned.)

Now, to do calculations for a particular ERP, just line up the number on the radiated power scale with the **40** field strength row on the chart by sliding the scale up or down. Then, with these two marks aligned, slide the scale to the right until the right edge of the scale is lined up with the proper transmitter height. Now find the appropriate field strength (47, 56 or 64) on the **slider's** field strength scale. Trace this over to the right edge of the scale (where we'll have a field strength/tower height intersection, just as before), and you'll have your point to evaluate between two range contours.

A sample calculation:

100 watts ERP

150 foot transmitting antenna.

Channel 10 output

Reception range should be about 7 miles. If you got a different range, check and make sure: 1. you are using the right chart (we're channel 10, now), 2. figure using a field strength of 56 dBu.

So, the whole process, in short:

1. Line up your ERP on the power radiated slider scale with the 40 dBu line on the chart.
2. Slide the right edge of the slider over to the corresponding transmitter height column.
3. Look on the **slider's** field strength column for the correct field strength for the channel you're considering.
4. Find the intersection point of the field strength row and the height column.
5. Interpolate between the two adjacent contour lines to get range.

Make sure:

1. you're on the right chart--50/50 for reception, 50/10 for interference, right channel, etc.

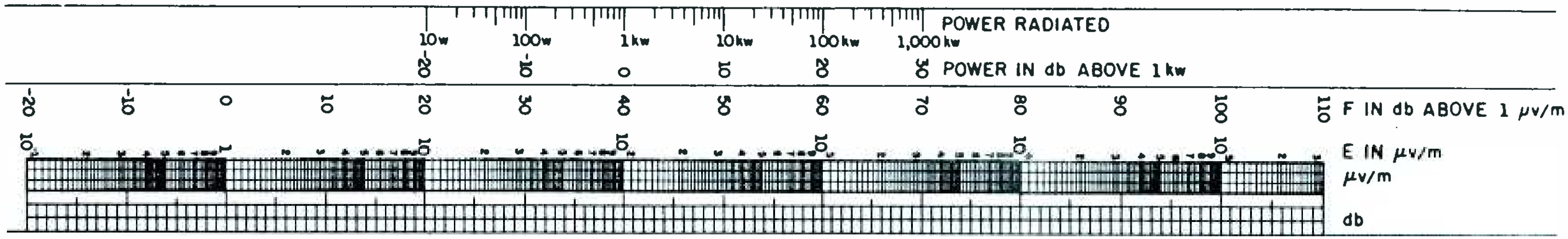
2. Use the right field strength for your channel.

3. Use the slider for other than 1kw ERP.

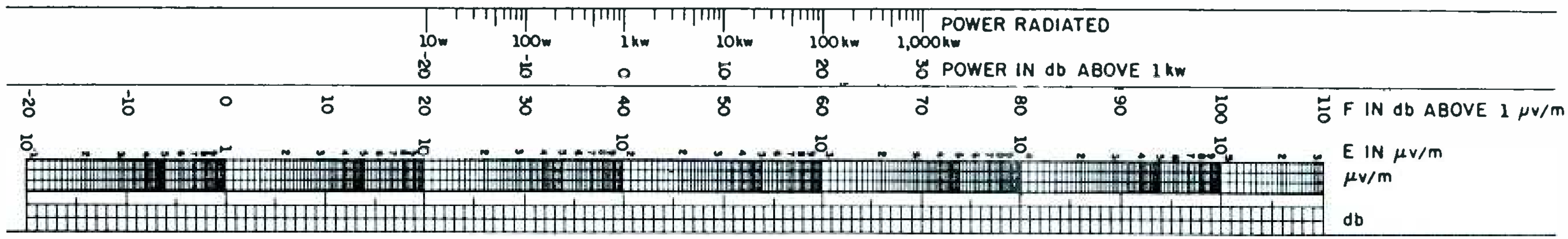
If you have any problems, check the above and start all over. Go through the sample calculations and make sure that you're doing things right.

One final note--these charts also work backwards, i.e., you can find field strength at a given mile range. Just place the scale lined up properly (your ERP versus chart's 40 dBu) along the correct height column. Find your mileage, interpolating if necessary between adjacent contours. From this point, read directly to the left to the slider's field strength scale.

Example: Channel 10, 100 watts, 1,000 foot tower. We want to know what the field strength is at the 10 mile radius. Using the above procedure, you should get a field strength of 65 dBu above 1 v/m.



Sliding scale for use with Figures 9 & 10.



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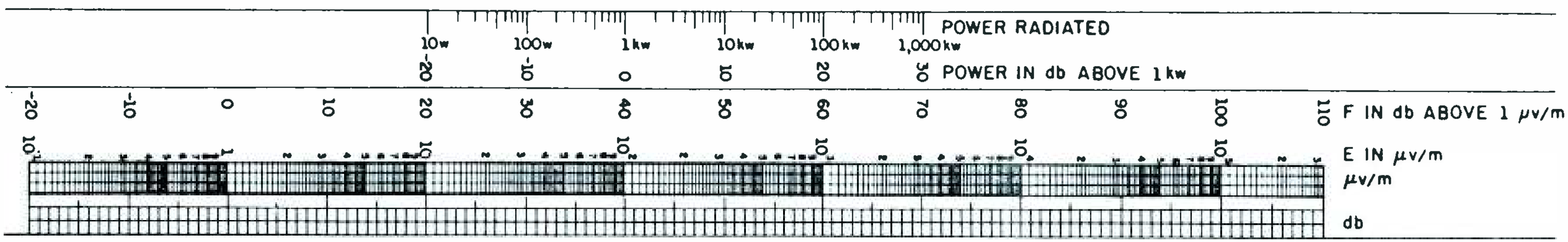

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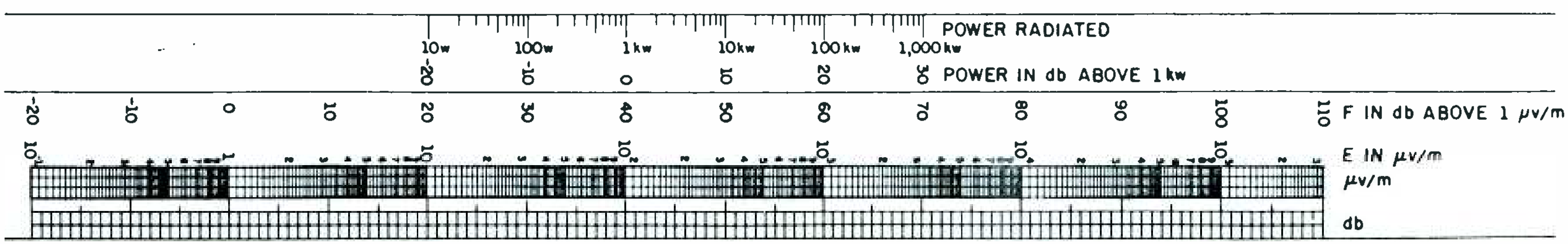
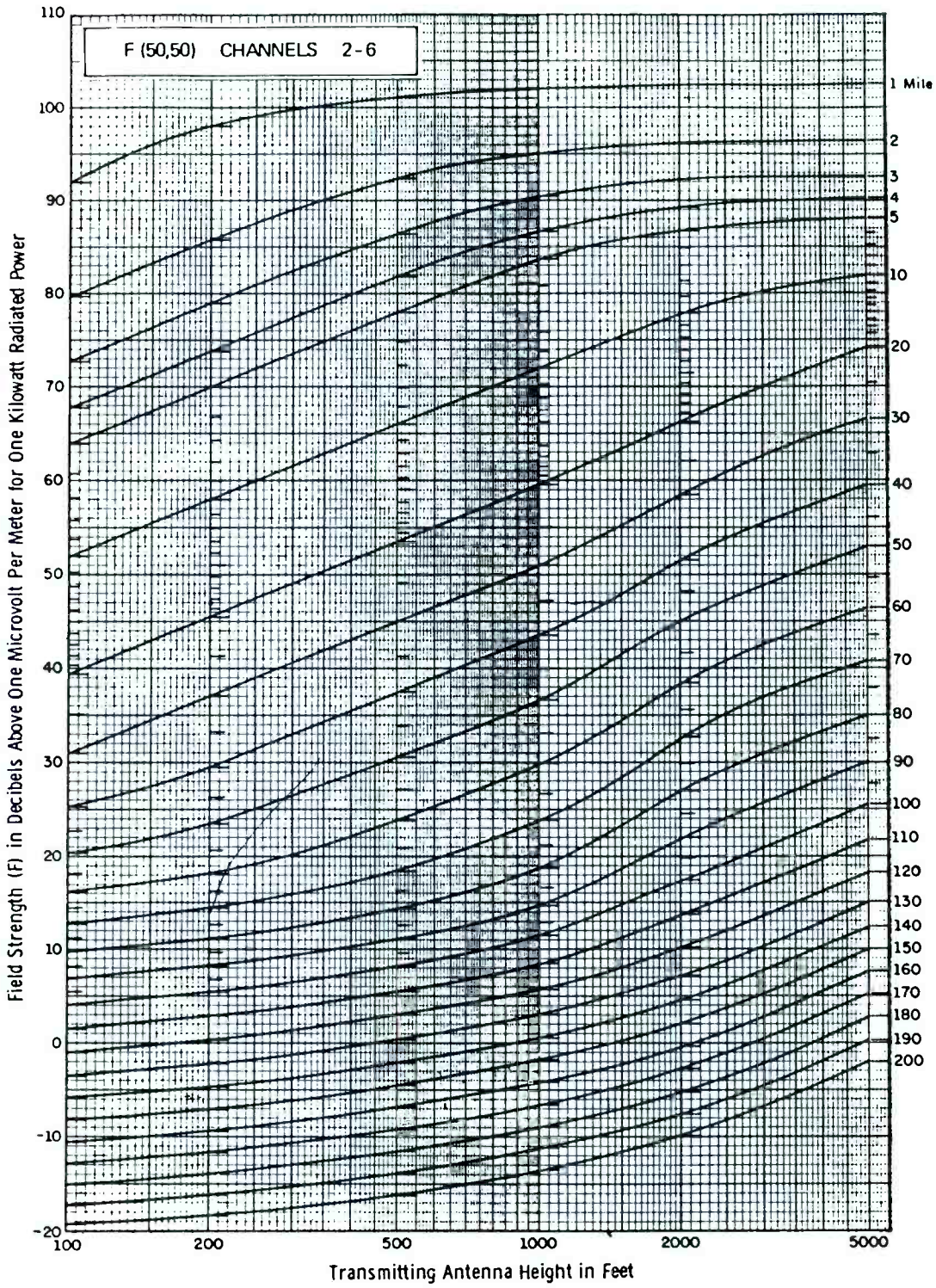


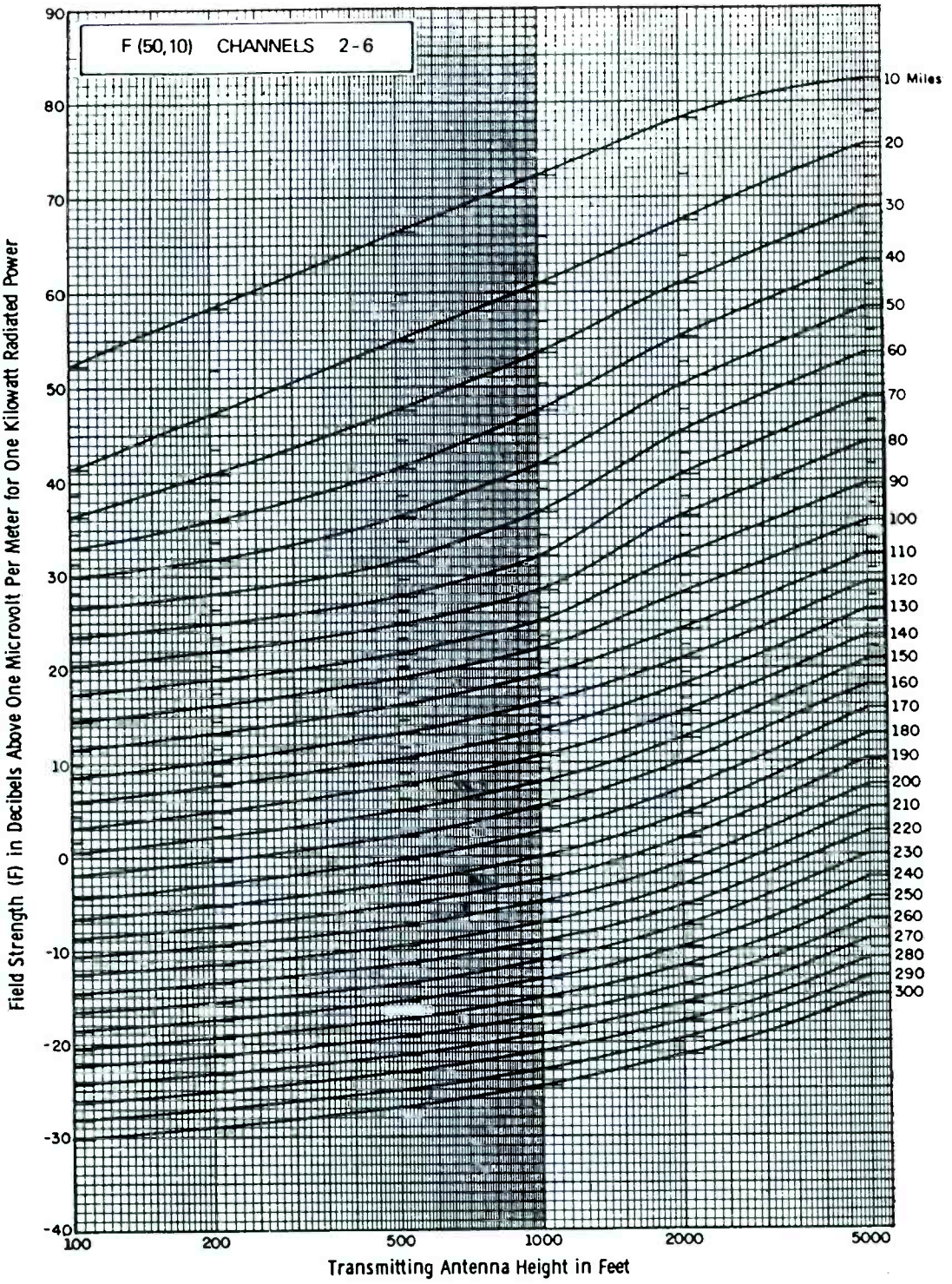
Sliding scale for use with Fiqures 9 & 10.



TELEVISION CHANNELS 2-6

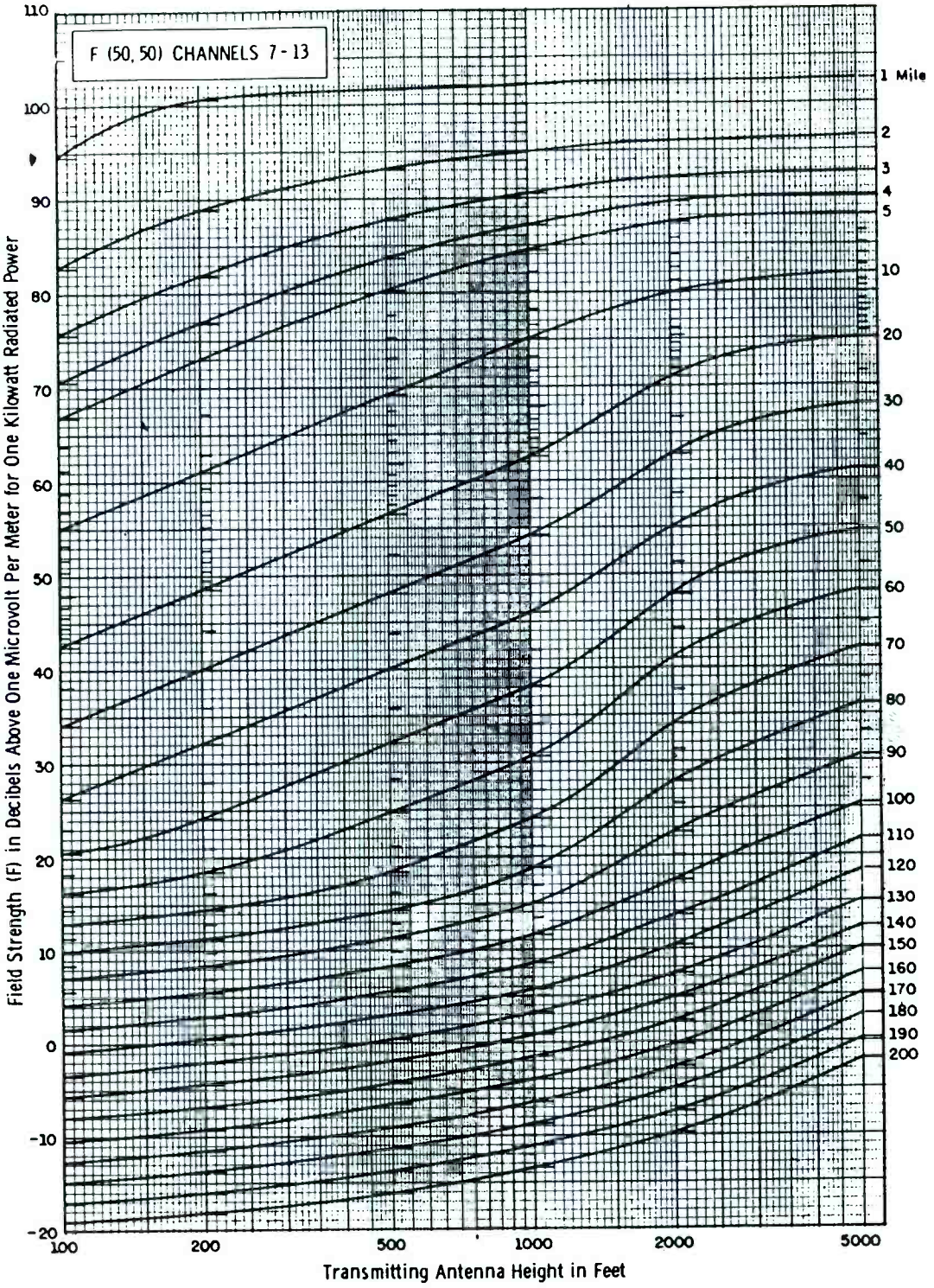
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

FCC §73.699 FIGURE 9



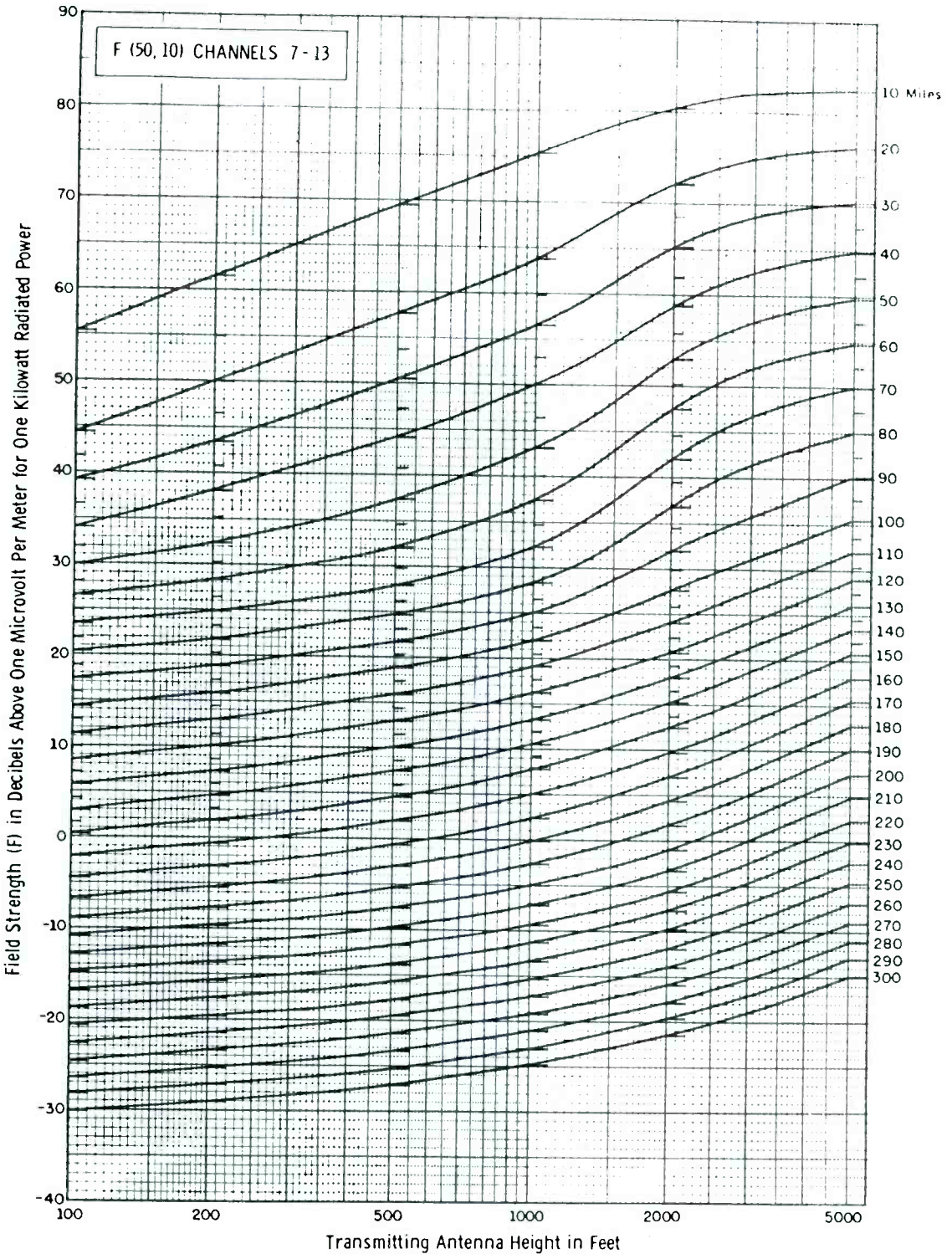
TELEVISION CHANNELS 2-6
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

FCC §73.699 FIGURE 9a



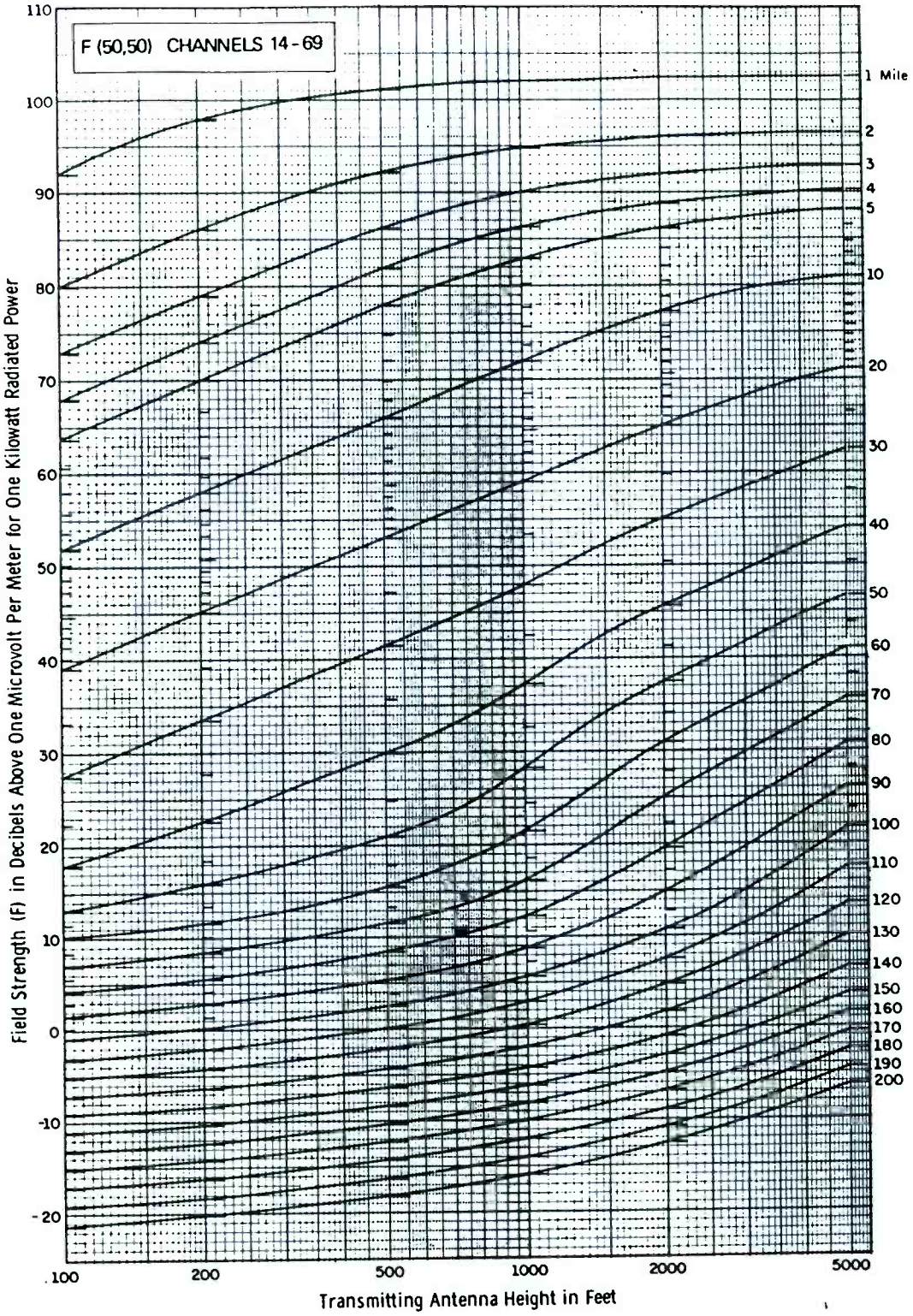
TELEVISION CHANNELS 7 - 13
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

FCC §73.699 FIGURE 10



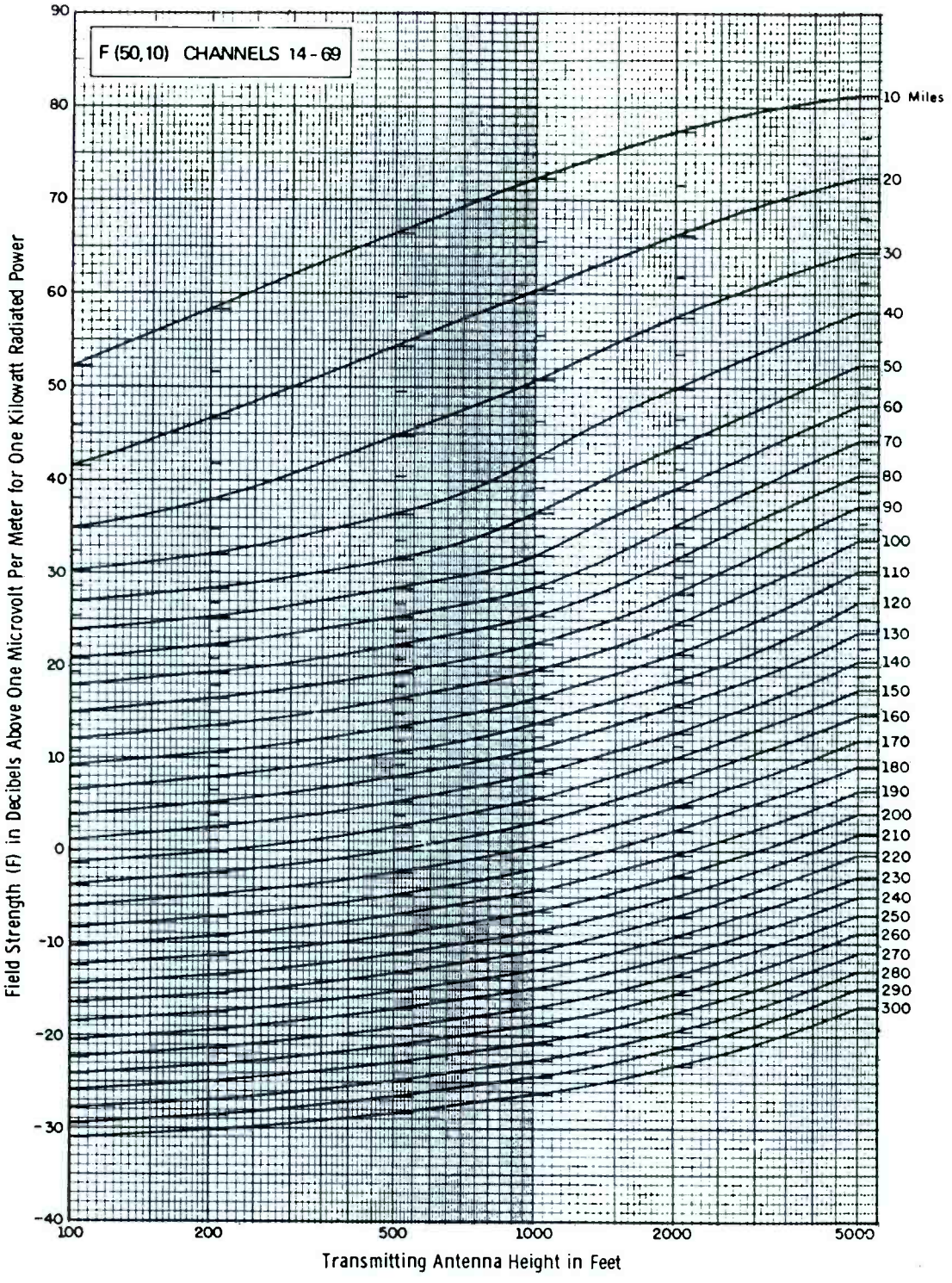
TELEVISION CHANNELS 7 - 13
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

FCC §73.699 FIGURE 10a



TELEVISION CHANNELS 14-69
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 50 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

FCC §73.699 FIGURE 10b



TELEVISION CHANNELS 14 - 69
ESTIMATED FIELD STRENGTH EXCEEDED AT 50 PERCENT
OF THE POTENTIAL RECEIVER LOCATIONS FOR AT LEAST 10 PERCENT
OF THE TIME AT A RECEIVING ANTENNA HEIGHT OF 30 FEET

FCC §73.699 FIGURE 10c

FCC May Have Deliberately Structured Rules so LPTV Will Bog Down and Self Destruct

Evidence is mounting that this Commission set out to expedite big total national coverage TV DBS stations and to 'forget' or grant little or no priority to local television through LPTV despite the Communication Act requiring emphasis on local broadcasting. When political pressure for local television through LPTV became active, this made it necessary for the Commission to take some action, or at least, appear to. They have, as a result, knowingly (or carelessly) now set up a set of rules so that LPTV wouldn't go anywhere for years, if ever.

The Commission, for example, to stall political pressure, keeps making 'promises' such as the 50 a month promised in 1982. (The 600) turned out to be 110 all year. Now they are promising up to 500 or 600 a month in the Spring of 1983, but have set up the rules so that mutual exclusives copy 'strike' applications are now happening and are allowed to be filed on **every** application which will mean absolutely **no** applications grantable in 1983 (except those paying off the paper mills). The Commission will say it isn't our fault they have all these mutual exlcusives, denying responsibility for failing to pass rules that would allow it to work.

Recent checks with the FCC staff on the 'missing' promised November cutoff list, for example, indicate they are using the excuse they cannot find 'hardly any' that are not mutually exclusive with somebody, and as a result, the cutoff list will be small. That's ridiculous, when I check and find I have 25 small town personal applications myself that are not yet mutually exclusive with anyone and could readily be put on cutoff lists.

The knowledgeable FCC staff members, the staff heavyweights want nothing to do or be associated with low power in any way because it has been screwed up from the start. The 'lightweight' staff members presently associated with low power seem to show little or no concern, or care not, that low power gets bogged down further the way the rules are set up and show little interest in rule changes that would allow LPTV to work.

Private computer contractors have reportedly indicated they could 'process' present LPTV applications for the Commission in a very short time at a cost of $20 to $50 each. The Commission still insists on doing it with 'staff' and having control of the 'dragging out' process, at a much higher cost in time and money.

Lobbying for low power has been totally lacking or completely ineffective and until some group with political clout such as NAB (National Association of Broadcasters) take some interest in LPTV, the Commission will continue to do nothing to clean up the low power act. NAB, who filed opposing comments to LPTV originally, is now reported to be changing their tune as major member broadcasters are clamoring to get into LPTV licenses. Unless NAB takes some lobbying action, however, expect no workable changes or help from the present 'we never really wanted to fool with low power in the first place' Commission.

The Commission knows full well, the way it is set up, LPTV processing will completely bog down but will claim it isn't their fault. All the while knowing that a few simple rule changes could correct the problem.

The Present LPTV Problem as We See It

That some of the paper mills, who's regular business has fallen off because of the 'word' getting out on their combination of over pricing and inadequate applications, are now selling 'investors' in, not investing in building a low power station, but in 'investing' in applications. In filing copy applications and then settling for a withdrawal fee or getting a withdrawal 'credit' with them that you can then trade several of these with someone else for a CP; that they are telling 'investor' prospects they are gearing up to file 10,000 applications in 1983, evidently, most of which will be of the 'copy others' application type; that the paper mills have evidently copied and filed on top of 100% of all applications available at the Commission since the new rules (minus those they filed themselves previously) and that anyone having legitimate firms file for them (other than these paper mills) would have, and be delayed by, mutual exclusives; that many of these 'strike' applications (definition of strike application is those filed to delay, impede or to be paid off) are filed under the paper mills' bookkeeper-brother-in-law's name, etc. The 10,000 in 1983 evidently means they are gearing up to file multiple applications on all those going into cutoff. (Only those they filed will have any chance at all of being granted promptly.) Everyone else will be delayed one year, minimum. Apparently, no one else has gotten wise to what is going on, so, evidently, being the only voice in the wilderness, we have been blowing the whistle loud and long. Less than 1/3 of the applicants in low power presently read this magazine, so you hereby have permission to help by photocopying any of the paper mill items here to send to and alert others to this internal cancer that is now running amuck and will kill our industry. Con men always convince everyone they are such nice guys they wouldn't do anything bad. Only after it's too late do their victims realize what has happened.

Several LPTV manufacturers have been hanging on by a thread through one FCC promise and delay after another, year after year and with nothing but Alaska licensed in the next year, could have a disastrous effect on them, too. Nearly all of the rest of the serious, 'build a local station' little guys will also get disgusted and they, too, will drop out and leave it to the 'game players' con and extortion artists and licensing will be picked up by big broadcasters.

Apparently, the industry would not wise up to this until several months from now when the mutual exclusives show up at the Commission on the next cutoff. This is nearly three months before that will be apparent at the Commission, so do not say we did not give you advance warning. Remember--a lot of people didn't want to hear they had been 'had' on the paper mills' applications either; many do not know yet, nor want to believe it, they were such 'nice' guys.

Frankly, I and a lot of Little Guys are Pissed

We spend a tremendous amount of our time, effort and money locating sites, getting agreements to use it, engineering a precise antenna pattern and channel selection, etc., to make some small town area station feasible and work successfully. We put our heart and soul into bringing more and better TV to these little communities that are very marginally profitable, if ever, and maybe we have hundreds or even thousands of our hard earned, scarce dollars tied up in this application in filing it the way we did. Then some paper mill simply copies it (in long hand, and files it that way, no less), does not have permission to file on or use the site and can't even be bothered to copy down our antenna data but simply refers to it (for antenna data, see application #BPTVL111111, etc.) and files this $5 investment in photo-copying on top of our application. This delays us for over a year even if we win it in a lottery. The current rate asked by the filing paper mill in this case for withdrawal is $5,000 per 'copied' application. This is nothing different than extortion, plain and simple, and the FCC set us up.

Should we be mad at the con artists that have the audacity to sell people (and file for themselves using their bookkeeper, wife's maiden name, etc.) filing this type of application, or at the FCC for setting up and/or allowing this travesty?

Actually both. I am also mad at myself because I have watched the FCC since 1954 and **knew** this type of hanky panky was being done and would be done again, and, as you know, since my first issue, have written articles that the FCC regulating method has always been bad and still stinks. My experience from getting badly burned by FCC actions in the 50's, and observing their actions since what they say they are doing and what they are actually going to do are never anywhere near the same (about as trustworthy as the communists). That FCC actions are always excruciatingly slow and it is always 'just around the corner' that they are going to expedite and get something done. Masters of the stall and inaction. Actually, in LPTV, we don't have that kind of time. With DBS, etc., coming on, cable getting more entrenched, etc. Local television, LPTV's crucial time is now--not down the road. To delay it is to kill it and they know exactly what they are doing. Despite the Communications Act requiring local TV preference, the present Commission wants to expedite and promote big politically powerful national TV stations that come over the entire U.S. (DBS) and hamper the development of local TV as long as possible and give the channels for LPTV stations away to land mobile. This process has already been started! UHF channels for LPTV is a secondary service, and now they have made land mobile use of UHF secondary or same category as LPTV.

It's about time somebody besides editor of an ultra-small low power TV magazine gets mad and lets the Commission know, enough is enough. The FCC is an arm of Congress--contact your Senator and Congressman.

Solutions

We have spent hundreds of dollars of ICTV membership income on phone calls and mailings on this problem. We have talked to manufacturers, applicants, six Washington attornies, three non-Washington attornies, contacted the associations and everybody we could think of, including several people that have regular contact with the Commission staff

Sorting through all the reactions, I conclude the following from knowledgeable people:

1. The associations are not going to do anything against 'a member' who wines and dines and picks up the tab for agency members at conventions, etc. Forget that.

2. The manufacturers' association who's equipment is being 'specified' and 'locked in' on hundreds of applications isn't going to do anything.

3. The FCC staff are not going to do anything. **That's normal.** 'Old Buddy' ex parte contacts are made at the Commission all the time.

4. The courts aren't going to do anything unless **somebody** takes it there and spends enough money to make it stick.

5. With the big associations and Commission in their hip pocket, the LPTV/translator remaining applicants are not likely to be sophisticated enough to get together to get anything done.

6. That the sleeping NAB hasn't been interested enough to step in. But with past full service nonsense from these particular paper mill promoters, may now be wakeable.

Possible Solutions

1. Somebody wake up NAB.

2. Extorted and about to be extorted and delayed applicants get together to hire an attorney to: **A.** try to get some action from the full Commission; **B.** go to court in Washington if the Commission still refuses to act.

3. 50 or more burned applicants chip in to have some communications or knowledgeable attorney draw up an unfair competition, extortion, racketeering action, and then 50 people file it in 50 different cases in 50 different states. You only have to win one.

4. All request the Commission condition all licenses granted to these strike applicants and those filed by the paper mills hereafter be conditioned on the outcome of these cases. If they are proven racketeering, that **all** of their grants and applications be thrown out. Character proven in court too defective to be granted licenses or file applications.

5. Everyone file petitions to dismiss against all strike applications and pressure your Congressman and Senator for FCC action.

6. All of the above.

Disappointment after Disappointment

Do you remember when low power television was a dream come true, rather than the nightmare it is today? When you and others like you--genuinely interested in the well-being of the community in which you live--thought you were being given a chance to bring the first (or at least the first relevant) television to your home town? How you read and studied about translator technology and walked potential antenna sites so that you could write an original and accurate FCC application showing not only your hard-earned understanding of what TV could mean for your town, but also just how it could be successfully introduced there?

My colleagues and I remember. But as the months go by and the list of broken promises lengthens, the enthusiasm and idealism of the early days yields increasingly to cynicism and bitterness. The early days seem long ago.

It didn't have to be this way. At any one of a dozen or more critical points, a fair-minded and responsible decision by the FCC could have saved the soul of LPTV and allowed the new service to truly and quickly benefit millions of 'television needy' Americans. Instead, at each and every crossroad, the agency--either through monumental ineptitude or worse--has chosen a path which warped the entire original LPTV concept. By these same choices it has repeatedly wounded the hundreds of 'original' LPTV applicants by penalizing them for their candor, sincerity, small size, diligence and trust.

Consider just some of these FCC 'decisions':

1. Use of 'interim processing' which induced hundreds of 'little guys' to file LPTV applications with the FCC identifying for all to see America's greatest areas of potential television growth and need, and setting forth the engineering necessary to actually bring TV into those areas.

2. Delay of a year and more in doing anything to vest the rights of, or otherwise deal with, this first wave of generally reputable applications, during which time the 'big guys' and 'paper mills' had time to discover LPTV and devise ways to buy into what they perceived as the new service's financial rewards.

3. Use of the 'cutoff' procedure, lifted intact from the FCC's full power licensing rules, but entirely inappropriate to the startup of an entirely new broadcast service for which several large blocks of time had already been provided for the submission of unlimited applications by **anyone** interested in participating.

4. Imposition of a so-called 'freeze' on new applications which actually invited a second wave of applications by 'big guys' and forced these applications to be made directly on top of existing ones, even though dozens of open frequencies were available from an engineering standpoint.

5. The host of anti-'little guy' decisions embodied in the LPTV Final Rules allowing unlimited applications by a single applicant, multiple frequency applications in the same municipality, media applications, etc.; rejecting any preference for local ownership or local programming; rejecting 'must carry' provisions for local cable; together with repeated resort by the Commission to reliance on the so-called 'marketplace' decision mechanism (read: big bucks) in direct contravention of the Federal Communications Act.

6. No action at any point to curb the rapidly growing abuses by the paper mills, and finally a new 'tiered freeze' directing these activities into the nation's rural areas where television is most needed, and where it now seems further and further away.

Throughout all this lunacy, most original applicants have hung tough, hoping that in the end an Administrative Law Judge would select them over their cynical, copycat, non-local competition despite the complete lack of criteria within the LPTV rules to do so. But wait! In order to 'speed up' the process, the FCC has proposed a lottery which will remove the human element entirely. And if your competitor was crass enough to file applications for his brother, his uncle and his gardener, well then, this new 'random selection' looks like just the ticket!

Forget, too, about the lottery speeding anything up. If you do win somehow, they're going to put you on **another** cutoff list so that the disappointed applicants (that is, the wealthy ones with staying power) can get another shot at you. The lawyers file a 'Petition to Deny' which probably results in the very hearing the lottery was supposed to avoid in the first place. Some speed-up!

Finally, we now learn (**Broadcasting**, November 22, 1982) that the Commission is moving towards agreeing with our friends in their 'Private Radio Bureau' that we should 'share' (i.e., give up) **every** UHF-TV frequency with the belt beepers and glorified CB radios of business and government types too lazy to use the phone.

As an administrative law attorney and original LPTV applicant, I have seen enough! My legal training taught me where possible to negotiate, accommodate and not litigate, but this is too much. As the little English judge on my desk reminds me, the time has come to 'sue the bastards'. The judge's ancestors invented a common law rule known as 'prior in time is prior in right', and it applies even to LPTV applications. While an agency like the FCC may modify this doctrine by regulation adopted for good cause and in the public interest, it may not repeatedly eradicate the rights and legitimate expectations of the LPTV 'originals' by a series of arbitrary steps doing nothing to advance the public good. (Could you picture FCC lawyers trying to explain to the judge how what they have done to the first LPTV applicants has advanced the public welfare or furthered the goals of the Communications Act?!)

With the last issue of this magazine, you received a publisher's letter concerning possible legal action against the paper mills. Such action should be undertaken in all 50 states by applicants--original or otherwise--who have been hurt the most by the misconduct of these unscrupulous outfits. In the meantime, it is vital that the FCC be brought to account in federal court for its behavior.

A government agency is a tough opponent, but not an impossible one. Only a vigorous 'class action'-type suit pooling as plaintiffs those LPTV applicants who have been most seriously injured--financially and otherwise--by the FCC's outrageous conduct can succeed. This means the 'original' applicants first induced to apply by the FCC.

Each such plaintiff will need to scrape together at least some significant amount of money for the effort (top Washington communications attornies are a must), but a failure to act promptly and decisively probably means an end to any realistic chance of ever being an LPTV licensee, so the choice at least is clear.

One thing is certain: if someone doesn't do something soon, not only will the hopes of most of the original LPTV applicants be crushed, but the entire low power television dream may be extinguished forever.

Gugliemo Marconi

(Editor's note: Gugliemo Marconi is the pseudonym of a lawyer and LPTV applicant living in a rural-resort community in the Northeast.)

— NOTICE — FRUSTRATED APPLICANTS

- Did you file an LPTV application with the FCC on or before February 17, 1981?
- Was that application placed on a "cut-off" list by the FCC on or after February 9, 1982?
- As a result of "cut-off" exposure, were you "MX-ed" or otherwise blocked from further FCC processing by the actions of a third party (competing application, petition to deny, etc.), such that you have not been granted a construction permit and don't know when and if you may ever get one?

If you answered "yes" to ALL of the above, you should know that a group of LPTV applicants like you has formed to consider a class action lawsuit to compel immediate approval by the FCC of all otherwise valid "original" low power applications, **whether or not MX-ed.** Interested parties should call (202) 785-3355 before December 31, 1982.

FOUR-WAY STV AND AD STATION

Channel magazine reports the KST5 TV Channel 48 (full service) in San Jose runs STV Japanese language TV from 7 to 9 on subscription for $19.95 a month; Chinese from 9 to 11 at the same price; and X-rated from 11 on for $4.95 additional. X-rated alone is $11.95 a month and the station runs as a standard ad supported station daytime. Each scrambling system is different.

ICTV Members *and Interested Parties*

FOUR DIFFERENT PROPOSED COURT ACTIONS

1. Those who have been ripped off are all filing a class action suit against the paper mills to recover money paid, plus triple damages, contact ICTV--we will refer you to active parties.

2. Washington, D.C. Commission and/or Washington, D.C. court action--hiring an attorney jointly to stop 'strike' applications such as are now being filed. Contact this office if you want to help.

3. Local court actions in 50 states--hiring one attorney to draw up tight racketeering case to be filed in 50 local jurisdictions. All file motions with FCC to condition the grant of any applications filed by parties in lawsuit. If they lose law suit, all grants be denied to them; proven unfit characters to be licensed.

4. Class action law suit against Commission for ignoring the rights of early applicants and grant of early applications. See article elsewhere and ad for phone number to contact.

Frankly, someone else needs to help pick up the ball and run with it. We have already spent a considerable amount of time and money getting this far. We have limited resources. What can you do to help?

PUBLIC NOTICE

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

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

November 17, 1982

INTERIM POLICY REGARDING
AGREEMENTS TO WITHDRAW MUTUALLY EXCLUSIVE
BROADCAST APPLICATIONS

Section 116(a) of the Communications Amendments Act of 1982 (Public Law No. 97-259, effective September 13, 1982) amended Section 311(c)(3) of the Communications Act of 1934, as amended. 47 U.S.C. § 311(c)(3). This section pertains to Commission approval of agreements to withdraw one or more of a group of competing broadcast applications:

> "The Commission shall approve the agreement only if it determines that (A) the agreement is consistent with the public interest, convenience, or necessity; and (B) no party to the agreement filed its application for the purpose of reaching or carrying out such agreement."

While we conclude that our present rules and policies do not directly conflict with the recent amendment, it is the intent of the Commission in the near future to initiate a rulemaking proceeding to determine whether (and what) modification of our present rules and policies is necessary best to carry out the intent of Congress in amending the statute.

Until such rulemaking is completed, the Broadcast Bureau will continue to apply its present regulations, Section 73.3525 of our Rules, 47 C.F.R. § 73.3525, in particular, in evaluating such agreements. This interim policy, effective from the enactment of amended Section 311(c)(3) of the Communications Act, until the Commission's promulgation of new rules or policies regarding settlement agreements, is intended to preserve the status quo and avoid confusion in this area.

More Program Options

Interview with a representative at NTA booth of Telecrafter Corporation based at Billings, Montana.

In addition to being a low power applicant, a receptor of instruction programs ourselves, we have built and completed the construction on three low power television stations, complete construction on our first seven, making an additional four to the current three by December 15 of this year, so we have as much experience in this construction as almost anyone in the business, and our application procedures go back to as far as November of 1980. What we've done is to come up with a programming idea that we think represents not only an opportunity to buy a legitimate service, but also to the consumer, a valuable advertising medium for local merchants, but also that unique and somewhat rare opportunity to get your station into a cash flow position on an ongoing basis to sustain the operation. Because, ultimately if you're not making money, unless you have a very deep-pocketed parent behind you, you are not going to stay in business very long, and we know future growth of the industry depends on that very thing--a quality operation that can sustain itself at a profit to you. So, we've come up with a committee of information; basically what it is is a software and hardware package that exploits the text aspects, the text publishing aspects of the local television outlet. We've found that there is a strong opportunity to support full video in many of the smaller markets that are now being issued construction permits in low power. We not only believe, but we have experiences to prove that text and particular text in conjunction with the one local newspaper operator is a legitimate, viable opportunity to do business--to do business in low power television.

Q. Do you want to show us what's happening on your screen now? **A.** Alright, this is our first channel. This is the news channel. This section of the screen is not only the headline which identifies the channel but also the software package includes 7-8 pages that are dedicated for breaking news or bulletins that are of interest to the community, such as the weather, time; information that we found from the research that's been done shows a tremendous desire for weather information at the local level.

In this section, we are facing the U.P.I. wire. The U.P.I. cable wire delivered by satellite along with that local news that's generated by the newspaper. We program it in 15 minute cycles so that the first 15 minutes of a half hour, the consumer sees national/international news provided by U.P.I.. The second 15 minutes, we see local news with local flavor, local information of importance done by the people who have always done their news, probably the most trusted outlet in any community, and that's the local newspaper.

This is our advertising segment. We sell advertisements on a 15 minute plot. We will sell an advertiser up to four 15 second displays every four hours, up to 22 hours a day. During four 30-minute periods of the day, we run CNN headline services. We have found on the markets where we have it--three at this point--it's a tremendously attractive service and adds substantially to the valve of the service in the consumer's eyes. The first network channel is a news channel, community information, as I said. It's on in three markets at the time and will be on four other markets, our construction permits, by the end of December.

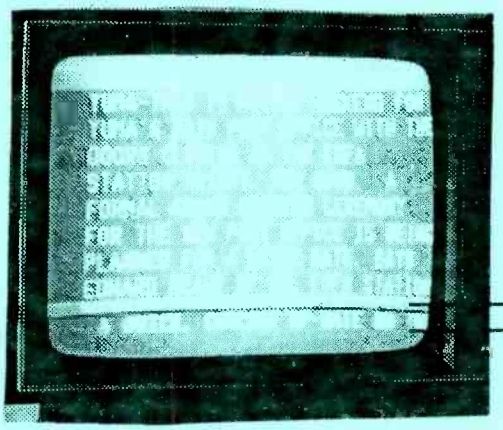


photo above from our article the Yuma newspapers 'Text' channels on the Yuma cable system

Q. Do you merchandise any full video at all? **A.** Just the satellite received and transmitted cable news headline service. We're not in the full video business.

Q. Is this the character generator you are using? **A.** That is the hardware that generates the committee information network. It is a character generator that's located at the transmitter along with our newspaper office.

Q. Do you have local newspaper input? **A.** Right! Right! And this gear here is at the newspaper office. It's a video display combination. Actually, it's an electronic composer for a newspaper front end system, so it's a very natural combination. The information is then transmitted by character generator and/or transmitted back to the transmitter and the character.

Q. What's in it for the newspaper? **A.** Well, it gives them the opportunity to the n'th degree to vary problem that they have these days. What the newspaper industries are experiencing at this time is escalating costs, apparently static subscription level, and if you believe the research that's being done, readership as a whole of the newspaper is declining somewhat. So the newspaper is forced with a rather difficult sales job of going to its advertiser and saying, 'I can deliver you less in terms of gross readership, and I'm going to have to charge you more'. So now instead of getting news and advertising into only the homes that subscribe to the local newspaper by way of community information that work in low power television, it gets into each and every home that has a television set.

Q. You are talking now about the newspaper owning the license. **A.** No, we own the license and we own the equipment; the newspaper is the operational ---------- of the joint venture.

Q. O.K., how do we get in touch with you if we want more information? **A.** Well, they can call us in Billings. (406) 245-8200. They can either talk with myself, George Bullocks, or they can talk with the president of the company, Clint Oberun .

LO-POWER COMMUNITY TV
BROADCASTING CRASH COURSES

January 29-30, 1983; Washington, D.C.; preceeding National Religious Broadcasters' Convention and manufacturers' exhibits.
April 9-10, 1983; Las Vegas; preceeding NAB convention and exhibits.
June 11-12, 1983; Houston; preceeding NCTA Cable Convention and exhibits.

Crash Course

How to Make it Big in

Low Power

- ★ Getting a license; more and faster
- ★ Planning a station and community networks for lowest investment and largest return
- ★ Engineering considerations you need to know about
- ★ Methods of operation to guarantee viewers (and income)
- ★ Where 2/3 of your income will come from that you do not even know about
- ★ Why you do not have to worry about programming sources; lists supplied
- ★ Low cost local production equipment demonstrated; sources
- ★ Electronic publishing and your part in getting ready for what's coming

REGISTRATION FEE: $125 per person; includes two lunches and material packet. ICTV members, $100.

LOW POWER TELEVISION COURSE

FOR FURTHER INFORMATION (602) 945-6746

Note: Please use separate sheet for additional registrants.
☐ **I/we wish to register for the Crash Course. $125**
(Make checks payable to Lo Power Community Television)
☐ **Please send me listing and prices of Video Tapes**
☐ **Please add my subscription to Lo Power Community TV**

To: Lo Power Community Television, 7432 E. Diamond, Scottsdale, AZ 85257:

Name _____ **Title** _____

Organization _____

City/State/Zip _____ **Telephone** _____

Applications Filed Since the November 1982 Issue

ALABAMA

Grove Hill
36 1kw Forward Broadcast Communications 10/25/82

ALASKA

Atkasuk
4 10w State of Alaska 9/20/82

Homer
6 100w Kachemak Video 11/9/82
9 100w " " 11/9/82

Klawock
7 10w State of Alaska 11/9/82

ARIZONA

Prescott
13 10w Owen Broadcasting 10/25/82
31 100w Focus Translators 10/22/82

ARKANSAS

Harrison
36 1kw Ozark Television 10/27/82
47 1kw " " 10/27/82

CALIFORNIA

Atwater
28 100w Control Design Service 10/20/82

Barstow
32 100w Focus Translators 10/22/82

Castle Gardens
26 1kw Community TV 10/25/82
39 1kw " " 10/25/82
42 1kw " " 10/25/82
44 1kw " " 10/25/82
47 1kw " " 10/25/82

San Clemente
32 1kw David Graziano 11/15/82
32 1kw Nikita Maggos 11/15/82
41 1kw David Graziano 11/15/82
41 1kw Nikita Maggos 11/15/82
44 1kw David Graziano 11/15/82
44 1kw Nikita Maggos 11/15/82

San Luis Obispo, Morro Bay, Grover City, and Santa Margarita
40 1kw K.B.L.A., Inc. 9/21/82

Serrano
22 1kw Community TV 10/22/82
25 1kw " " 11/9/82
44 1kw " " 10/22/82
48 1kw " " 11/9/82
52 1kw " " 10/22/82

Windsor
35 1kw Thelma W. Anglin 10/25/82
38 1kw " " 10/25/82

COLORADO

Gateview/Lake Fork
39 1kw Owen Broadcasting 10/25/82

Lake City
48 1kw Owen Broadcasting 11/15/82

Sargents
51 1kw Owen Broadcasting 11/15/82

Vail
33 1kw Owen Broadcasting 10/25/82

DELAWARE

Oak Grove
19 1kw Community TV 10/25/82
28 1kw " " 10/25/82
32 1kw " " 10/25/82
38 1kw " " 11/18/82
55 1kw " " --------

FLORIDA

Avon Park
36 1kw Atlantic Sand-blasting 11/2/82

Frostproof
16 1kw David Graziano 11/15/82
16 1kw Nikita Maggos 11/15/82
20 1kw David Graziano 11/15/82
20 1kw Nikita Maggos 11/15/82
30 1kw David Graziano 11/15/82
30 1kw Nikita Maggos 11/15/82
41 1kw " " 11/15/82
55 1kw " " 11/15/82

Lecanto
30 1kw Cowboy Junction Broadcasting 11/10/82
43 1kw " " 11/8/82

Marathon
41 100w Raymond Winbush 10/25/82

Melbourne
27 1kw Sun Dial Brdcstng. 11/9/82

Vero Beach
20 1kw Vero Broadcasting 10/22/82
28 1kw " " 10/22/82
47 1kw Owen Broadcasting 11/15/82
63 1kw Vero Broadcasting 10/22/82

GEORGIA

Apple Valley
16 1kw Thelma W. Anglin 11/8/82
18 1kw " " 11/8/82
20 1kw Community TV 10/22/82
44 1kw " " 10/22/82
69 1kw " " 10/22/82

Elberton
19 1kw James Brown 11/18/82
25 1kw " " 11/18/82
27 1kw " " 11/1/82
32 1kw " " 11/1/82
56 1kw " " 11/1/82
59 1kw " " 11/1/82

Halls Spur
14 1kw Community TV 10/25/82
28 1kw " " 11/9/82
36 1kw Thelma W. Anglin 10/25/82
38 1kw " " 10/25/82

Hazlehurst
57 1kw Owen Broadcasting 11/15/82

Waycross
13 10w Owen Broadcasting 11/9/82

HAWAII

Honolulu
5 10w David Graziano 11/15/82
5 10w Nikita Maggos 11/15/82
6 10w David Graziano 11/15/82
6 10w Nikita Maggos 11/15/82
67 1kw David Graziano 11/15/82
67 1kw Nikita Maggos 11/15/82

Kailua
45 1kw David Graziano 11/15/82
47 1kw " " 11/15/82
55 1kw " " 11/15/82
58 1kw " " 11/15/82
63 1kw " " 11/15/82
68 1kw " " 11/15/82

Kailua Kona
24 1kw David Graziano 11/1/82
27 1kw " " 11/1/82
35 1kw " " 11/1/82
40 1kw " " 11/15/82
43 1kw " " 11/15/82
48 1kw " " 11/15/82

Lihue
32 1kw Good News Bcg. 11/9/82

Pearl City
33 1kw David Graziano 11/15/82
38 1kw " " 11/15/82
44 1kw " " 11/15/82

IDAHO

Elk Bend
7 10w Owen Broadcasting 11/15/82

Pocatello
67 100w Peyton Bcg., Inc. 11/9/82

Weiser
16 1kw Tri-County Comm. 11/1/82

ILLINOIS

Greenwich
15 1kw Community TV 11/18/82
23 1kw " " 11/9/82
28 1kw " " 11/18/82
39 1kw " " 11/9/82
48 1kw " " 11/9/82

Herscher
38 1kw David Graziano 11/15/82
38 1kw Nikita Maggos 11/15/82
46 1kw David Graziano 11/15/82

Mazon
17 1kw David Graziano 11/15/82
17 1kw Nikita Maggos 11/15/82
26 1kw David Graziano 11/15/82
26 1kw Nikita Maggos 11/15/82
30 1kw David Graziano 11/15/82
30 1kw Nikita Maggos 11/15/82

Salem
53 1kw David Graziano 11/15/82
55 1kw " " 11/15/82
57 1kw " " 11/15/82

Vandalia
28 1kw Focus Translators 10/25/82

IOWA

Lenox Park
14 1kw Community TV 11/18/82
16 1kw " " 11/18/82
38 1kw " " 11/18/82
44 1kw " " 11/18/82

Ottumwa
58 1kw Owen Broadcasting 11/15/82

KANSAS

Junction City
26 1kw Focus Translators 10/25/82

KENTUCKY

Pineville
31 1kw Carroll Knicely 10/27/82

MASSACHUSETTS

Cape Cod
22 1kw Jennifer Frost & Lilias Morrison 11/8/82
25 1kw Barbara A. Nadley 11/1/82
61 1kw " " 11/1/82
65 1kw Jennifer Frost & Lilias Morrison 11/8/82

MICHIGAN

Hancock
14 100w James Farmer 11/5/82

MINNESOTA

Coleraine
24 100w Creative Brdcst. Communications 10/25/82

Grand Rapids
24 100w Freda A. Brown 10/25/82

Marshall
36 1kw KMHL Bcg. Co. 11/9/82

MISSOURI

Chillicothe
22 1kw Focus Translators 11/9/82

West Plains
28 1kw Ozark Television 10/27/82
34 1kw " " 10/27/82

MONTANA

Livingston
15 100w Artis Mebane, Jr. 11/5/82

NEBRASKA

Scottsbluff
40 1kw Owen Broadcasting 11/9/82
45 1kw " " 11/9/82

NEW HAMPSHIRE

Durham
66 1kw Mtn. Wave Media 11/18/82

Keene
25 1kw Mtn. Wave Media 11/18/82

Laconia
23 1kw Local Power TV 11/8/82

Lebanon
22 1kw Mtn. Wave Media 11/18/82

Manchester
44 1kw Mtn. Wave Media 11/18/82

NEW JERSEY

Wildwood
19 1kw Cape May County Television, Inc. 10/28/82
27 1kw " " 10/28/82

NEW MEXICO

Clovis
16 1kw Owen Broadcasting 11/15/82

Gallup
17 1kw Owen Broadcasting 11/9/82

Hillsboro
2 10w Owen Broadcasting 10/25/82
13 10w " " 11/15/82

Raton
12 10w Owen Broadcasting 11/15/82

Taos
28 1kw Owen Broadcasting 10/25/82
38 1kw " " 11/15/82

NEW YORK

Newburgh
29 1kw Jennifer Frost & Lilias Morrison 11/8/82
31 1kw " " 11/8/82
35 1kw " " 11/8/82
38 1kw " " 11/8/82
60 1kw " " 11/8/82

New Paltz
13 10w Oleg R. Matiash 11/8/82

South Fallsburg
13 10w Oleg R. Matiash 11/3/82
18 1kw " " 11/3/82

NORTH CAROLINA

Clinton
19 1kw Thelma W. Anglin 11/9/82

Morganton
23 1kw James Brown 11/18/82
58 1kw " " 11/1/82
67 1kw " " 11/1/82

Pine Hurst
44 1kw Thelma W. Anglin 10/25/82

Southern Pines
3 10w Owen Broadcasting 11/15/82
7 10w " " 11/15/82
10 10w " " 11/15/82
12 10w " " 10/25/82

NORTH DAKOTA

Carrington
10 10w Owen Broadcasting 11/15/82
13 10w " " 11/15/82

Elgin
20 1kw Owen Broadcasting 11/9/82
31 1kw " " 11/9/82

Jamestown
2 10w Owen Broadcasting 10/25/82
32 1kw " " 11/15/82

Milton
30 1kw Owen Broadcasting 11/15/82

Reeder
38 1kw Owen Broadcasting 11/9/82
50 1kw " " 11/9/82

OHIO

Mansfield
39 1kw Local Power TV 11/8/82
59 1kw " " 11/8/82

OKLAHOMA

Clinton
29 1kw Focus Translators 11/8/82

Elk City
27 1kw Owen Broadcasting 11/9/82

Erick
58 1kw Owen Broadcasting 11/9/82

OREGON

Baker
20 1kw Owen Broadcasting 10/25/82

La Grande
33 1kw Owen Broadcasting 11/15/82

Winston
29 1kw Owen Broadcasting 11/15/82

PENNSYLVANIA

Lock Haven
13 10w Owen Broadcasting 11/9/82

Williamsport
20 1kw Owen Broadcasting 11/9/82
50 1kw " " 11/9/82
53 100w Focus Translators 10/22/82

PUERTO RICO

Maricao
34 1kw Luis Jimenez 11/1/82
66 1kw " " 11/1/82

SOUTH CAROLINA

Georgetown
35 1kw Thelma W. Anglin 10/25/82
64 1kw " " 10/25/82

SOUTH DAKOTA

Aberdeen
5 10w Sodak Communicat. 10/26/82

TEXAS

Bryan
7 10w Owen Broadcasting 11/15/82
9 10w " " 11/15/82
11 10w " " 11/15/82
13 10w " " 11/15/82
50 1kw " " 11/15/82
55 1kw " " 11/9/82
65 1kw " " 11/9/82

Falfurrias
9 10w Owen Broadcasting 11/9/82
12 10w " " 11/9/82

Nacogdoches
11 10w Owen Broadcasting 11/15/82
12 10w " " 11/15/82
13 10w " " 11/15/82
32 1kw " " 11/15/82

Paris
48 1kw " " 11/15/82

UTAH

Logan
27 1kw Cache Valley Pub. 11/8/82

VERMONT

Rutland
12 10w Vermont Radio 11/9/82
47 1kw Access Rutland 11/3/82
52 1kw " " 11/3/82

WASHINGTON

Aberdeen
31 100w Focus Translators 10/22/82

Moses Lake
36 1kw Owen Broadcasting 10/25/82

WISCONSIN

Adams
64 1kw Owen Broadcasting 11/15/82

WYOMING

Jackson
66 1kw Owen Broadcasting 11/15/82

Rawlins
15 1kw Bernard Lafayette 11/5/82

Rural West Riverton
44 100w Riverton Fremont TV Club 11/9/82

The edited letter to the right was written about 6 months ago and appeared in the Dec. issue of **Coop's Satellite Digest**, a leading publication on the home TVRO market. $50 per year. Write CSD, Box 100858, Ft. Lauderdale, Florida 33310.

As of press time (last minute) other parts of issue written previously,) we are now going ahead with hiring a prestigious highly recommended law firm in Washington to proceed with action at the Commission on these strike applications. We have decided to take this action despite the fact that I had an opportunity to get them off of my personal applications, see 'offer of gesture of good will elsewhere.'

We have received a few phone calls, a letter or two of encouragement and one contribution of $20.00 so far. We could use a lot more $ help.

It also looks like we may personally, on my own applications, file a law suit in Arizona District Federal court over copyright infringement. You might do the same. (You can copy ours. I am sure you will get a 'gesture of good will offer too.) The new copyright laws protect an 'original work' even without copyright notice, if it has not been abandoned which of course these have not. We are still also working on the special unfair competition, racketering (extortion) etc. laws in Arizona as another possability of local action.

The Washington action now underway by the law firms have already made the Commission aware they have been retained to take some action affecting everyones strike applications.

As far as our local law suits in Federal court or anyone elses filing on a class action etc. has some advantages once one is filed.

Once a suit is filed you can then get into discovery. Example, supena records of which applications have been returned by the Commission and clients not notified. Which clients are not paying their bill and why, etc., etc. You can then open up a whole can of worms and develop enough material, I am sure, to collapse their whole house of cards.

You will see why I have had an offer of 'a gesture of good will' to withdraw those filed on top of mine, withdrawals of their filings from my personal applications that have been MXed. In our research into past MX's in other services besides low power, when a law suit was threatened with these paper mills, they have always withdrawn. Evidently they can not afford to let anyone get to the 'discovery' stage of a law suit.

If you make each strike application 'cost them' with a law suit instead of 'paying them $5,000' to withdraw, it would soon get unprofitable to file strike applications. They apparently file them to 'extort' money from you. When we all 'refuse to pay' and cost them money defending lawsuits instead, not only them but everyone will soon stop filing strike applications, because they do not pay. Now is the time to take a stand. Our joint effort slogan perhaps should be 'Help make filing LPTV strike applications unprofitable.'

Embarrassed

Needless to say, we were embarrassed to read in **CSD** that one of our customers had not been receiving his magazines. The gal that handled his correspondence failed to follow through and take care of the complaint. We have mailed to him, first class mail, the last two issues, and are starting his subscription from that point. We are also enclosing copies of our last two issues for your own information. As you may realize, it is difficult to publish a magazine with fewer than 250 subscribers and few or no advertisements.

I am very concerned with the recent explosion in firms offering to put people into the Television broadcasting (low power TV) business. Some of these advertisements sell $4,000 license application packages, painting the $4,000 investment as a token towards the grant of licenses worth millions. I have inspected many of these applications, and they appear to have been mimeographed! I am preparing for publication in our own magazine an article titled 'The Low Power TV Ripoff'. People need to be warned.

Harlan L. Jacobsen
Lo-Power Television
7432 E, Diamond
Scottsdale, Az. 85257

An earlier issue of CSD carried a letter from a subscriber who wanted assistance in running down a missing subscription to Harlan's Low Power TV Magazine. He got it. **Harlan is dead right; because of the tragic, bungling way the FCC has handled low power TV license applications, and the absurd procedures established by the FCC for processing those applications, the whole low power TV thing has turned into a giant boon doggle. We are not surprised to see opportunists jumping in with $4,000 get-rich licensing schemes. The truth is that only those preparing such licenses are apt to get rich. We had great hope for the marriage of low cost TVROs and low cost, low-power television broadcasting.** But no more. **The FCC has screwed this one up so badly it will take an act of Congress to set it right again. Our suggestion is that they return each and every of the 7,000 or so plus applications now on file, adopt some hard rules for LPTV, and having done that, create a new,** simplified, **automatic go / no-go license processing procedure. There comes a time when the best thing you can do with a really dirty mess is to walk away from it and start all over.** The FCC bankrupted this one. **It is time they admitted their mistake and started with a clean slate. As for Harlan's magazine effort, we like it. Harlan is enthusiastic, he writes with an honest pen, and he is trying. Anyone seriously interested in ever getting into LPTV should support his publication because at the moment he is the only guy out there trying to find a sensible solution to the FCC created mess.**

ICTV

Membership Information

Independent Community Television Alliance

- ☐ Local Power Hot Line -- 50 hours a week
- ☐ Subscription -- Monthly Lo-Power magazine
- ☐ Co-op Group Purchases of Equipment
- ☐ Expedited Washington Research Information
- ☐ Collective Lobbying for the Little Guy in LPTV
- ☐ Washington Follow-up on Applications
- ☐ Verbal Phone Access to Commission Data Base -- 6 Days a Week
- ☐ Use of Instructional 'How To' Videotapes (1 week free)
  Members pay only for shipping, handling, and record keeping

All Lo-Power Publishing personal copies of manuals and materials free of charge to ICTV members

INSTRUCTIONAL 'HOW TO' VIDEOTAPES AVAILABLE
(Use for one week; members pay only for shipping, handling and record keeping)

- ★ Techniques of Using One Camera
- ★ Setting up a Studio
- ★ Lighting for Television
- ★ Multiple Camera Techniques
- ★ Shooting Video 'Basics'
- ★ How to Shoot a Sports Event
- ★ How to Broadcast a Local Wedding
- ★ How to Broadcast a Church Service
- ★ Shooting Local Commericals for Cable or LPTV
- ★ Television Tape Production
- ★ LPTV Crash Course
- ★ LPTV Crash Course 'B'
- ★ Subscription TV
- ★ World's Smallest Full Service Station
- ★ The New Mavica 'Still Camera'

BOOKS AND MANUALS -- LOANED FOR
TWO WEEKS, FREE TO MEMBERS
(Members pay only for shipping, handling and record keeping)

- ★ Color TV Studio Design and Operation
- ★ Videotape Production and Communication Techniques
- ★ Designing and Maintaining a Small Television Studio
- ★ Television Production Handbook
- ★ Video User's Handbook
- ★ TV Engineering Handbook (very large and heavy book)

The LPTV Association That Works

FREE APPLICATION ASSISTANCE HOTLINE FOR MEMBERS - 6 DAYS A WEEK

☆ **WE DO A COMPLETE RURAL AREA VHF LPTV FCC APPLICATION FOR YOU!** ☆
☆ Members' Price: $250 ☆

ICTV

Below is my application for membership in ICTV. I have deducted $ _____ for which I have already paid Lo-Power Publishing for publications and enclose a check for $ _____ , the two totalling $250.00 for my one-year membership.

Independent Community Television Alliance 7432 E. DIAMOND, SCOTTSDALE, AZ 85257

Membership Application

Individual(s) to contact: _____ Name _____ Position

_____ _____

Company _____

Address _____

City _____ State _____ Zip Code _____

Phone ____ ( ) _____