### Planning a Successful UHF Operation

by William Lowell Putnam

Some guidelines from the world's foremost proponent of high-channel telecasting

M AKE A SUCCESS of a UHF station? It's very simple—if you've got enough money, if you hire the right people, if you buy the right gear, if you put on the right programs, if you pick the right market, if you pick a good transmitting site, and if you're lucky. That's all anyone

There was a time when UHF as differentiated from VHFposed very serious problems. Any allocation on Channel 13 or lower was bound to be successful, and anything 14 or higher was bound to lose. There were many who testified at great length before the Congress and the Commission on these problems. According to these experts, the problems were all technical-there were no insuperable political or economic problems. The almost comical thing was that all these experts were hired by people who never operated UHF stations. The most profound statements, swallowed whole by a gullible Commission, were made by people who knew nothing about the matter and who were parties in interestinterested in restraining competition, that is.

The market place has always determined commerce, ultimately. Granted technical developments in UHF transmitter and antenna design were left dormant while VHF was advancing. But this was solely due to lack of incentive—a fact graphically borne out by recent revelations as to when certain patents were first taken out. The All-Channel law changed many of these things, and it's possible to look at station opportunities in a broader sense-although, of course, the record indicates that a fair number of VHF stations, which didn't have all the criteria for successful operation, managed to die within the last dozen years, in addition to the larger number of UHF stations whose darkenings were more effectively publicized.

#### The Pattern for Success

In planning a UHF operation, I would say that the first consideration should be to make sure your signal will cover the market you intend to serve. If you do not have the transmitter, the antenna, and the tower height, you are never going to make it. But this first consideration is closely followed by the second, which is to have the right programs. If you've got something that people can see only on your stationand it's really worth seeingproblems of signal coverage can be partially overcome. In addition to these two major criteria, there is the matter of personnelsales personnel, management personnel, operating personnel.

Once your engineering and programming package is in order, you're ready to fight the battle of Madison Avenue in order to make ends meet, Effective and aggressive sales people are the only answer. National rep firms, unfortunately, can only read numbers. This is because their customers can only read numbers printed by ARB or NSI. And these numbers tell only a small part of the story-a good salesman can tell the rest. A rating tells you, hopefully with some degree of accuracy (a highly debatable matter), how many receivers are turned on during your program. It doesn't say how many people were attentively watching each set, and it doesn't say how many people actually saw the commercials, and it doesn't say how well they were motivated, and, of course, it doesn't say how long the motivation



High-power UHF klystron amplifier manufactured by Townsend Associates.

Kitty Broman, hostess of evening feature program, "At Home With Kitty," has been dubbed "first lady of television" in the Northeast.



#### About the Author

William L. Putnam, age 41, is President and General Manager of Springfield Television Broadcasting Corp., and has been a successful operator of UHF stations since 1953. He was the principal organizer of the Springfield firm, which received a CP in July 1952 and went on the air with WWLP on March 17, 1953—the first UHF station in Massachusetts and the second in New England. WWLP was the second UHF station in the country to use a high-power (12 kw) transmitter, and the first to receive a license.

Mr. Putnam has since guided the expansion of this corporation to include WRLP (Ch. 32) Greenfield, Mass., Brattleboro, Vt., and Keene, N. H.; WJZB (Ch. 14) Worcester, Mass.; WKEF (Ch. 22) Dayton, O.; WENS-TV (Ch. 22) Pittsburgh, Pa.; and Translator W81AA, White River Junction, Vt. He is also 50% owner of WJHF (Ch. 28) Raleigh, N. C.

Mr. Putnam has been among the foremost advocates of UHF: Chairman of the Committee for Competitive Television and of its successor, the Association for Competitive Television; Director of the Television Allocations Study Organization; and member of the Executive Board of the Committee for All-Channel Broadcasting. He is the acknowledged spokesman for UHF and has testified at every hearing involving UHF by any Senate or House Committee in the past six years, and likewise at all FCC hearings on the subject.

#### A Word From John A. Fergie, Mgr., WKEF Dayton

Every station operator, of course, is interested in holding down overhead, but costs are more critical for the UHF operator. The fact that he must watch his operating costs more closely, however, does not mean that his station's program quality should suffer, or that he should become an inferior entity in the community. Achievement of success is made more difficult when a large V competitor is shooting news film in color and has 90 "stringers" to support an extensive news staff. The viewer, however, cannot tell how large a staff it takes to produce a program. Moreover, he is only interested in the content of the program and its quality. This is indeed a fortunate circumstance for the UHF operator, for through clever programming and distribution of manpower he can become a serious competitor.

Our Channel 22 operation in Dayton reflects much of the modern concept in UHF telecasting gained through years of experience. Our studio and transmitter facilities, for example, are located together, effecting considerable savings in the engineering payroll. On the other hand, of course, UHF operators have the advantage—for the time being, at least—of being able to use remote transmitter control. Aside from the savings incurred by being able to operate with fewer personnel, there is the decided ease of communication and coordination. Our master control and transmitter facilities are located in the same room, and the engineering personnel that maintain the transmitter logs also

switch and run audio network and live productions.

Further savings at WKEF have been realized through the use of  $1\frac{1}{2}$ " vidicon studio cameras. Left on 24 hours a day, we have obtained over 5,000 hours tube life, with none of the stickiness or graininess associated with orthicons.

Using a Townsend Associates transmitter, WKEF maintains an ERP of 500,000 watts video and 100,000 watts audio. Through the use of new high-powered klystrons, it is relatively easy to maintain rated power output, passband, and stability over long periods. This is a far cry from just a few years ago, when tetrodes and earlier vintage klystrons

were able to achieve the passband but not the rated output.

WKEF—on the air from 10 AM to approximately 1 AM—schedules programming from CBS, ABS, and NBC, as well as Sports Network. Through the use of a Xerox 914 copier and Flexoline frames and strips, changes in the program log are made almost instantaneously, and kept up to date as orders are received. Weekly avail sheets are handled in a similar manner. With this traffic control system, the traffic department is handled by one man.

Traffic also assumes the responsibility for printing all operational forms, monthly program schedules, letterheads, envelopes, etc. The traffic manager also doubles, as needed, as cameraman on early morning

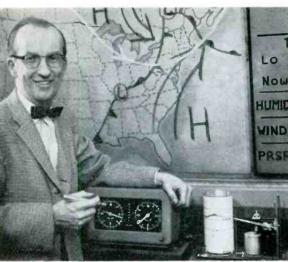
live productions.

lasted. These are things that the sales manager of Brand A really wants to know, but somehow, the time buyer of agency X never seems to care. He is under orders to make the assumption that viewers of a program automatically mean buyers of Brand A. The sales manager will often and unhappily tell you, it ain't necessarily so! And the aggressive sales manager of the struggling station has the job of telling the time buyer, it ain't necessarily so. Most buyers don't like to hear this. It forces them to exercise initiative and take responsibility -occasionally, a fatal undertaking. Anyhow, it's much easier to read numbers.

#### Local Selling is the Key

It is my opinion that in most markets where UHF stations will be coming on the air in the next few years, the major source of revenue will be from local merchants. The reasons for this are manyfold. First, VHF stations have, in large part, abdicated the field by their intensive solicitation of the national dollar. Second, V rates are generally far higher than local merchants care to pay. Even though circulation may be high enough to have a favorable CPM, based on NSI and ARB arithmetic, CPM has to be usable, and the local man doesn't care about reach—he needs results! Third, the local advertiser can find much more to assimilate in a local program; we believe in strong local programming, in addition to the usual news-sportsweather routine. Granted, it's costly, but it breeds loyalty you'll never get any other way. A word of caution, though; guard your local clients carefully. They don't care about rating, and they'll be with you forever, if you do right by them.

When we realized in 1958 that national advertisers were shying away from our UHF facility in Springfield, and its companion station in Keene, N.H., because of the greater "reach" of our newly arrived VHF competitors, we decided to institute a merchandising program that might counter the trend and save some of our income. Today, we install in-store displays, insure distribution, solicit broker support, and do everything we can to counter



John Quill, WWLP meteorologist, who at this writing has delivered more than 11,000 weather forecasts.



Tom Collon (i.) is host of "western Mass, Highlights."

the exaggerated claims and statistics offered by competition. We now find that our merchandising not only accounts for dozens of orders received through the normal channels of national sales, but, interestingly enough, also for a number of sales made directly to local contacts, who, like other local accounts, care not a whit for statistics and ratings. All they need to see is results. Strong local effort, sustained over a period of time, does bring results, and loyalty. Only a few national advertisers are capable of the discrimination required to exhibit this kind of loyalty, or respond to it; local people are often incapable of anything else.

#### **Programming Concepts**

To oversee your programming you need a manager who is smart enough to know that you have a substantial audience for hockey, and so he somehow finds a means of getting hockey on the air. rather than baseball. These are points that the Commission emphasizes, because they want to know if you've made a real analvsis of community needs. Unfortunately, "community needs" to the Commission generally means how many clergymen or educators have you talked tonot how many baseball fans. Clergymen and educators are pretty poor viewers and add very little to the statistics that time buyers go for, and they add practically nothing to the statistics that bookkeepers go for. Furthermore, dealings with them always seem to be on a one-way basis. It's usually a case of what have you done for them lately.

In regard to local programming, it is important to be consistent. The temptation to thrash wildly about comes often when bills are high and income is low. There are countless people who will say this or that program should be changed. Often they are right, but more often they are wrong.

It is very important to consider very carefully the gaps in the fare already available to your town, and then to fill these gaps. Do not lose confidence because of the first low ratings; if you felt you were right when you set up a program, ride it all the way, have confidence. This expression, I find, is one I have used so often that my employees often accuse me of knowing no other. But, we have had confidence in our program concepts and personalities to the extent that they are now among the antiques of the industry. At our Springfield station, WWLP, our woman's hour has been hosted by the same lady for over 2600 weekday hours. Our evening local feature program has run with the same local sponsor for the same number of quarter hour visits and with the same host. Our professional weathercaster has delivered some 11,000 weather forecasts, and while he may have flubbed a few, this is a record that no TV station in the world can match. There is no evening feature host like ours anywhere; our Kitty is the first lady of television in the Northeast. Each of these people has suffered through low ratings, many times, but they have survived all competition, and they carry large and loyal followings, and sponsors.

#### Good Engineering is Vital

From 1955 to 1963, major equipment manufacturers didn't care a bit about developing transmitters and antennas for UHF television. Their effort went into VHF, where the dollars wereand, of course, into studio equipment, which anyone could buy. We were blessed with competent engineers from the outset, and therefore were able to overcome this difficulty by doing our own development work. The abdication of the major equipment manufacturers has given us a place in the sun, and we now feel we know a great deal more about UHF transmitters than anyone. We learned most of it the hard way trial and error.

Naturally, you have to have adequate tower height, but this does not mean sheer altitude; it means "apparent height" over the market. If you're going to be 30 miles away from the town you want to serve, you'll need absolute altitude in order to have an apparent height above the town. But if you're right in close, you can get the same apparent height with a much smaller tower. Thus, the new station operator must determine where he really has to have a signal, and then really make sure he puts it there. That means adequate transmitter power.

We don't recommend exceptionally high gain in antennas, since we have learned that this often leads to dead spaces in what turns out to be the most

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#### Successful UHF

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important residential area of all -the place your local clients live! (There's nothing more debilitating to the station economy than having a local sponsor find out he can't see his own commercial!) As for your transmitter, don't make the mistake of trying to get on the air with too minimal a power plant. You may be dead before you find out what went wrong. If you're not prepared to play in the same ball park with your VHF competitors, then don't play the game.

There are a lot of variable factors in determining the final

#### Studio Equipment

Extensive studio facilities using vast lighting boards and numerous came as are not necessary, if you make proper use of what you do have and get real mileage out of your video tape. Two film chains are highly desirable (one manufacturer provides a multiplexer which allows either film or slide projector to be used with either film camera—a real saving when it comes to color). Special effects gene ators are also very good inventments, as they increase flexibility without adding to the operating budget. This is the real key to equipment buying. Buy all of your gear, with a view to living with it from day to day, and when laying out your station, think of your studios similarly.

Ball-Po	irk Cost F Minor League	gures First Class				
Transmitter	&					
Antenna	\$150,000	\$300.000				
Tower	10,000	100,000				
Building	40,000	150,000				
VTR & Studio						
Equipment	100,000	400,000				
Miscellaneo	200,000					

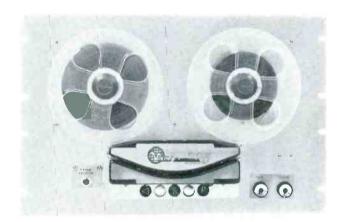
#### Annual Net Before Taxes for a Well-Known UHF Station

1952			\$ (35,775.15)
1953.			(154,628.43)
			(101,882.20)
1955			16,305.99
1956			133,444.40
1957			10,337.60*
1958			128,845 05
1959			169,588.58
1960			113,972.36
1961			122,770 38
1962			183,534.91
1963			272.914.86
1964			383,541.20
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figure			

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background masic

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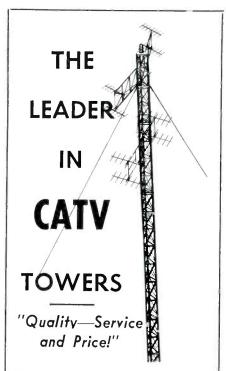
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ERP, but ERP is not the final answer. The real answer is in mv/m at the viewer's antenna. Never forget this. If you have to deal with terrain problems and public apathy, you need the apparent height and you've got to go easy on antenna gain. Don't try to straddle markets; don't try to be too many thing to too many people. Pick your own targets and be sure to hit them squarely.

Equipment other than transmission gear is equally important. You can do a very creditable job with minimum camera and studio facilities, but you have to work what you have pretty hard, and you must have engineers capable of keeping what you have in shape to meet the demands placed upon it. You cannot run a decent station these days without video tape. And if I were building a new facility right now, I would certainly look hard at color origination equipment, even if I had minimum capital funds. The future of any station-U or Vlies in staying with the industry, and hopefully a bit ahead of it. At WWLP, for example, a Zoomar lens carries serial number 001, which means more than that we got it long before James Bond became famous.

#### Management and Money

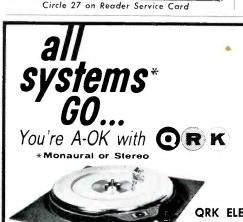
Your top management has to be of a nature that will acquire the rest of the troops to work long hours for low pay. As I am composing this, the secretary snickers-because she's not sure she's getting paid this weekbut, then again, neither am I. When we have ditches to dig or tower lights to change, I often do these jobs myself-partly because I need the exercise, partly because I can't afford to hire

anyone else. The net effect, however, in terms of corporate morale, is that people on the payroll know there is no job I wouldn't or couldn't do myself (except, of course, to take this down in shorthand).

Jokes aside, let's take a longer look at the money business. It's very easy to delude the FCC as to how much money you have, because Commission people don't really know what it means to meet a payroll-none of them ever have! And they set up rather arbitrary guidelines as to how much you ought to have for this and that-like enough money to meet the first year's operating expenses (based on the utterly ridiculous assumption that during that one year you'll have absolutely no operating income).

Well, anyone can get a few letters from banks and insurance companies and from miscellaneous capitalists indicating that funds are available. The rub comes when the capitalists go broke and the bankers don't like your balance sheet. Any banker will lend you money if you can prove you don't need it, but have you ever tried getting money from a banker when you're in real trouble? Therefore, availability of money when you really need it is a subject worth serious consideration. It means you must pick your stockholders very carefully, and you must go into the enterprise prepared to lose for some period. There's no future in worrying along the lines of the Commission's specific requirements, because they're ridiculous. But if you intend to stay in business, you better have the dough.

Any TV station, no matter what frequency it operates on, will have a painful growth period. Where you have lack of receiver tunability, the painful period will be longer. At our Springfield station, we lost an aggregate of over \$300,000 in operating costs before turning the corner. What happened at our other stations is such a painful subject I don't even discuss it. We don't think that anyone planning to operate a respectable station in a respectable market for the next couple of years should plan on anything much different. You can, of course, run a "sleazy" operation at lower cost—but we're not in a position to give much advice on how it is done.



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