



A uhf station's candid announcement that it couldn't meet vhf competition has provoked widespread doubts about uhf's future. Here's the report of a B•T editor who found out that what happened in Roanoke won't necessarily happen elsewhere.

WHAT HAPPENED IN ROANOKE?

By J. Frank Beatty

THE eyes of the television world are turned toward Roanoke, a thriving industrial city in the Blue Ridge Mountains of western Virginia.

This rather conservative but steadily growing market has developed into an electronic field laboratory where the merits of uhf vs. vhf are on trial.

To date the competition has been one-sided—so one-sided that the results have started comment all the way from Madison Ave. to Hollywood & Vine as timebuyers wonder if uhf is going to follow the pattern of FM.

In brief, WROV-TV Roanoke has decided it simply can't compete on uhf Ch. 27 with WSLs-TV's vhf Ch. 10 service [B•T, June 29, July 6].

What WROV-TV wants to do is get FCC to make an exception to the rules so the station can continue operating on Ch. 27 while it competes for a third channel available to Roanoke vhf Ch. 7.

Contrary to a widespread impression, the Roanoke case has not demonstrated that uhf is a weak or impotent service. Nothing of the sort has been shown.

On the other hand, the Blue Ridge laboratory shows that uhf can deliver a good signal over the bottom of the Roanoke bowl.

It shows, however, that a uhf signal from a 2,000-foot point can't climb 4,000-foot mountains 10 or 12 miles away.

It shows, too, that a uhf station hemmed

in by mountains faces frightening odds in trying to compete against a vhf station sitting on a favorably located peak that permits coverage of good markets out to 100 miles and more.

And it shows, finally, that people hesitate before spending extra money to tool up their homes for uhf when most of the popular network programs are on a vhf channel.

Things are rough in Roanoke for WROV-TV. Its income has been falling steadily. Expenses keep climbing. Every week the losses are getting heavier, and the stockholders are gravely concerned about their \$250,000 investment.

Problem Is Complete

No single factor is responsible for WROV-TV's troubles. Rather, the station can look to a combination of events and attitudes.

In any case, the coveted Ch. 7 is still unassigned because there are two applicants. WROV-TV asks for the right to make it a threesome, while still operating on Ch. 27.

The Roanoke case gets to the fundamentals of TV engineering and economics. Its impact already has become serious as snap judgments have been made on the basis of cursory examination of the facts.

Obviously the only way to find out what's wrong in Roanoke is to make a first-hand study of the situation.

Many questions are raised by WROV-TV's expressed desire to get out of uhf and into vhf scarcely five months after the first

test pattern was fanned out over the city.

Is there something inherently wrong with uhf—in Roanoke, that is?

Has WROV-TV given uhf a fair shake? Have dealers and distributors cooperated fully? If not, what's to be done?

Why can't WROV-TV get more network programs when there's only one other station in the city and connections are available?

Is WROV-TV the victim of a "Madison Avenue complex"?

Are TV receivers well engineered for uhf?

Is the trouble due entirely to circumstances beyond WROV-TV's control or is it the fault of ownership or management?

Would more power and/or a higher site do the trick?

These questions, and others, can be matched against the story of Roanoke television since WROV decided back in February 1951 that it wanted to add TV to its successful local radio service.

Pleased with their monthly financial statements, the half-dozen local businessmen who had started WROV in 1946 decided they wanted to be the first to apply for a TV station in Roanoke. A Ch. 7 notice was filed despite the freeze.

Later WSLs, regional Roanoke station operated by Shenandoah Life Insurance Co., applied for Ch. 10 as did Polan Industries, which had several TV projects in the works. Last summer, after the freeze, WDBJ filed on Ch. 7 beside WROV. WDBJ is owned by Times-World Corp. and is Roanoke's

oldest radio station, a 5 kw regional.

At that point there were two applicants for Ch. 7 and two for Ch. 10, but nobody had applied for uhf Ch. 27, the third commercial facility available to the city.

WROV's stockholders met one day in July, 1952 after they found WDBJ seeking the same Ch. 7 facility. They wanted to get into television as quickly as possible. After all, the FCC was encouraging use of the new TV band and the RCA Bridgeport, Conn., project was demonstrating that uhf really works.

Bridgeport-Bound

The only sure way to get into television without long and costly hearings would be via Ch. 27, the stockholders decided. That evening Frank E. Koehler, WROV general manager, was Bridgeport-bound for a first-hand look at uhf service.

The new medium looked good, and WROV went into action. An RCA 1 kw uhf transmitter was ordered, "and please hurry." Next was the question of finding a site. The choice narrowed down to Mill Mountain, a colossal 750-foot hump stuck right in the south end of the city, and 4,000-foot Fort Lewis mountain, about a dozen miles to the southwest.

Since uhf has strong line-of-sight traits and high-power transmitters were a year or more away, it was decided to use the Mill Mountain site. There the antenna could look right down into the living rooms of nearly every home in Roanoke.

With the main policy decisions out of the way, WROV continued its studio experi-

ments with an RCA TV camera it had owned nearly a year, still its only camera.

It also twiddled its corporate thumbs for weeks and more weeks while awaiting delivery of the transmitter. Eventually it had to abandon all hope of being Roanoke's first television station because WSLs had meantime been granted a Ch. 10 permit. Polan Industries had switched its Ch. 10 application to Ch. 7 after WROV's selection of uhf Ch. 27, leaving the way open for WSLs.

The delay in getting a transmitter was a cruel blow to WROV-TV. Last Dec. 11 WSLs-TV took the air on Ch. 10 from Poor Mountain, a lofty peak 4,000 above sea level and 3,000 feet above Roanoke itself. This peak is 13 miles from the city.

At that time Roanoke had a thousand or more TV sets, fed from \$150-\$200 stacked yagis and assorted dipoles that could catch WFMY-TV Greensboro, N. C., 100 miles away and frequently WSAZ-TV Huntington, W. Va., or WTVR (TV) Richmond.

Even before WSLs-TV was transmitting, local appliance stores were conducting campaigns to sell vhf sets. Local merchants were joined by fiery promoters whose gorgeous claims and easy credit helped stimulate the demand for sets—all this during the pre-Christmas season when TV sets move at their fastest, and on into the winter.

Eventually WROV's transmitter arrived. After a fortnight of testing, the station started program service March 3.

By that time WSLs was claiming over 40,000 sets in its service area—relatively few of them able to receive a uhf signal.

AGENCY VIEW OF UHF

CHARLES WILDS, chief timebuyer at N. W. Ayer & Son, New York, told B•T last week:

"With the bugs being taken out of uhf more and more every day and as more uhf stations get on the air, I'm sure that uhf will be as satisfactory as vhf.

"The most important thing uhf has to do is educate the audience on uhf—make the program appealing, perhaps emphasize local events so that people will either convert their sets or buy a uhf one."

WROV-TV had started promoting conversion during the winter and had conducted dealer-distributor educational campaigns.

That was the situation last March. A heavy share of TV sets, nearly all vhf-only, had been bought on time. To catch WROV-TV's picture meant \$30 to \$50 for an antenna or lead-in, plus \$5 to \$50 for a strip or converter ranging from one channel to the whole uhf band.

An educational campaign aimed at dealers and distributors was showing signs of results. Installation crews were learning the hard way that uhf presents special problems. Sometimes they threw up their hands and said they guessed there wasn't a uhf signal anywhere on the roof.

Bow Ties and Yagis

Even so, bow ties and yagis started sprouting from Roanoke rooftops. At the same time, dealers began meeting some sales resistance. Having sunk \$200 to \$400 or so in a TV set, customers raised this point—why spend all the dough tooling up for uhf when all the NBC-TV and CBS-TV programs are on WSLs-TV?

WROV-TV had ABC-TV service, picking it up from a 35-mile AT&T microwave link. This added up to only a few hours a week. WSLs-TV, on the other hand, started off the day with NBC's Garroway and was possibly 80-90% network right through to the 11 p.m. news. Nearly three-fourths of the network programs on WSLs-TV are NBC, the rest CBS.

The WROV-TV program service starts at 5:30 p.m. with a religious series, moving along with local personalities to 6:30 when it has a western film. Local news and assorted local programs and film shows are carried to signoff, usually around 11 p.m. Like WSLs-TV, it is limited to one rather small studio though WSLs-TV has two cameras plus a third in the Appalachian Power Co.'s auditorium.

At first the local merchants and services were buying plenty of WROV-TV time, enough to justify its backers' hopes that life with television would be quite merry after the first few months. The conversions weren't fast enough to suit them, however, and they started comparing WROV-TV's programs and coverage with those of WSLs-TV.

Then began real sponsor trouble. Local contract cancellations started to come in—polite, as a rule, but quite firm. New York timebuyers were courteously indifferent.

The networks, too, were disinterested, aside from ABC-TV. The AM part of the

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WLSL setup had an NBC affiliation. Since WLSL-TV carried many more NBC-TV programs than CBS-TV, why couldn't WROV-TV get the unused CBS-TV programs? "You answer it," WROV-TV officials say when the question is posed, adding, "We've tried and tried."

Near-70% Saturation

Since March WROV-TV has watched the number of uhf installations increase steadily if not spectacularly. By May there were signs of nearly 50% uhf saturation in Roanoke TV homes and the figure has been described as approaching 70% or even more.

But that's in Roanoke proper, with a population of 91,000 (28,000 families) in 1950. The Roanoke metropolitan area (Roanoke County) has nearly 140,000 people, or 38,000 families.

According to WROV-TV, it can slap a good signal into most of the populous parts of Roanoke County, with an estimated 19,000 homes having uhf equipment.

The station frankly says it is practically blind beyond 12 or 15 miles because Roanoke is nearly surrounded by mountain ranges that overtop its own 1,750-foot Mill Mountain. The signal sneaks out through some valleys, but unfortunately many of the valleys have their openings turned away from Mill Mountain. Thus WROV-TV says it can't do a good job in Rocky Mount, Bedford or Troutville, for example.

Can't Get Over

WROV-TV plants a 2,000 microvolt signal on Catawba Mountain 12 miles away, but simply can't get over it to reach the other side. The signal averages 2,000 microvolts in an 8-mile radius, according to James W. Robertson, chief engineer. Though WROV-TV's 21-slot antenna puts out a signal of 18 kw, the FCC rates it at 9.77 kw because of a 1 degree electrical tilt and 0.3 degree mechanical tilt.

Now take a look at the coverage story of WLSL-TV, with a 2 kw RCA transmitter driving a high-gain antenna radiating a rated 26.2 kw. WLSL-TV's antenna reaches 4,007 feet above sea level compared to 2,000.7 for WROV-TV. The WLSL mail map shows regular response from such cities as Bristol (125 miles), Richmond (140 miles), Lynchburg (45 miles), Bluefield (70 miles), Henderson, N. C. (120 miles), Danville (60 miles), Beckley (80 miles), Winston-Salem (90 miles) and many other North Carolina cities.

The WLSL-TV set count of 87,000 is said to include Bluefield, Lynchburg (which has its own WLVA-TV), Martinsville, Danville, Radford and Bedford. Its total market adds up to 396,000 families or 1½ million people, according to WLSL-TV.

WLSL-TV Rates Up

Believing it really has 100,000 sets and anticipating a total of 300,000 sets in its area in the not too distant future, WLSL-TV is in the process of revising its rate card upward. It plans a big Radio-TV Center.

A vicious circle is thus apparent—vicious from the WROV-TV standpoint and a matter of sincere concern to its friendly competitor, WLSL-TV, which wants to see Roanoke become a saturated, satisfied and competitive television market.

The vicious circle starts at the perimeter mountains whose forested slopes refuse to

let Ch. 27 impulses pass on to the other side. That limits WROV-TV's potential audience roughly to the 38,000 families in the metropolitan area or county. The circle moves on as WROV-TV faces dealer resistance to the more severe installation problems and customer resistance to paying more for uhf receiving sets plus \$30-\$50 antennas. Lacking wide coverage, WROV-TV now has only two national accounts and 10 local accounts, at least one being a stockholder.

Circle Continues

The circle continues as advertisers sponsoring network shows fail to show interest in WROV-TV when they see the WLSL-TV market data. Since WROV-TV has only a few ABC-TV network shows in its log, it can't interest New York timebuyers

in buying adjacencies because there aren't any—or at least, only a few.

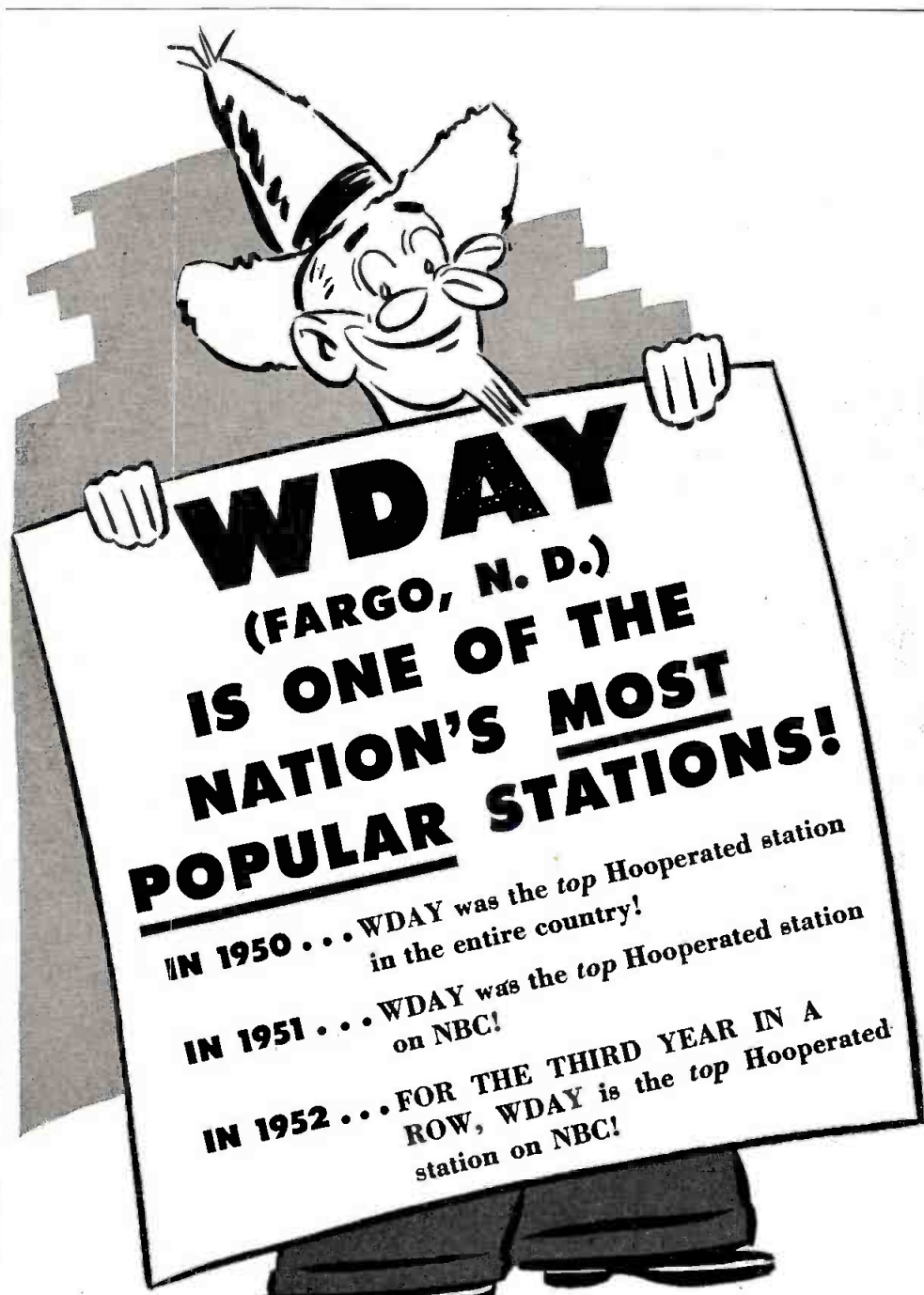
Now take a look at the WROV-TV financial picture.

Financial Picture

In its first three months of operation, WROV-TV took in \$15,569 (March \$6,829, April \$4,771, May \$3,969). Its expenses totaled \$27,045 (March \$9,068, April \$8,730, May \$9,247).

Just for the sake of argument, project the three-month figures to an annual basis. WROV-TV, then, would show income of \$62,276, expenses of \$108,180 and loss of \$45,896—assuming the last nine months of the year were like the first three.

That's enough to scare the financial wits out of the businessmen who have put up



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the funds to start this electronic operation.

And just for the sake of another argument, take those projected figures and compare them to the estimated income, expenses and construction cost in the early application.

This application carried the following item: Estimated operating cost for first year, \$165,504. This is far above the \$108,180 figure derived from a projection of WROV-TV's first three months.

Then the application carried a second figure: Estimated revenue for first year, \$160,000. The 12-month projection of the first three months' income falls roughly \$100,000 short of this figure.

Enough to pucker any stockholder's brow, especially when it is observed that the third month produced barely five-eighths the revenue taken in the first.

The Loss Trend

But what really alarms WROV-TV is the loss trend. March, the first month, was pretty good—\$2,238 in the red. That wasn't bad for a new electronic enterprise. April, however, brought bad news in the form of a \$3,959 deficit.

And then came May, with a frightening \$5,277 loss. That's red ink at the rate of \$63,224 a year, if the figure is multiplied by 12.

Now, WROV-TV admits, June was worse than May and July is more of the same.

In its June 23 petition to FCC, WROV-TV, asking that FCC rules be waived so it could continue operating on Ch. 27 while applying for Ch. 7, said: ". . . if the Commission will not waive the provisions

of its temporary processing procedure it (WROV-TV) will relinquish its permit for Ch. 27 in order that this application (Ch. 7) may be received and processed."

WROV-TV's Troubles

Citing WROV-TV's troubles in an accompanying letter, Leo F. Henebry, station president, said the station believed half the sets in the immediate Roanoke area could tune Ch. 27. Since that time an independent survey has around seven out of every 10 sets can get the WROV-TV picture.

Taking the most recent highest TV saturation figure for Roanoke, one out of every two homes, WROV-TV would appear to be reaching at least 13,300 homes in the immediate area.

Like the other WROV-AM-TV stockholders, Mr. Henebry is a businessman full of enthusiasm for the market and eager to provide it with a profitable television service.

"My jewelry store in Roanoke has not been off radio a single day in a quarter-century," he told B*T, recalling he put time signals on WDBJ free when it took the air in 1924. "All of us are Roanoke businessmen. We are really interested in the stations.

"We had accumulated about \$100,000 from radio though we lost heavily when we started in 1946 as the original \$75,000 ran up to \$130,000.

"We aren't men who throw money away. Right now we have forgotten profits. We're fighting for existence. We have more than \$250,000 invested. The networks aren't

sympathetic and people who strained to buy TV sets are thinking twice before spending \$50 more to get uhf."

There's the WROV-TV problem. It shows that a uhf station in the rugged Roanoke terrain can't compete with a vhf station with better coverage and network programs. After all, when WROV-TV was picking a site it didn't dare take a chance on putting a costly uhf installation atop a mountain 10 or more miles away when 10 kw uhf amplifiers were over a year away. It feared Roanoke coverage might be inadequate, choosing the safer Mill Mountain instead.

WROV-TV showed business courage when it came out into the open with the facts of uhf service in Roanoke. It knew what Madison Avenue would say. It knew what Roanoke people would say. It knew the legend would be spread that "WROV-TV has given up the ghost" whereas it merely was asking for the right to apply for Ch. 7 frequency it had originally sought.

Would high power solve the Roanoke uhf problem? Engineers aren't giving a definite answer. Even with 100 kw, the signal still would get bumped around and be blind to many areas. People would still have to buy expensive gadgets. There would still be the problem of competing with the WSLs-TV vhf signal and two-network service.

Worst of all, Ch. 7 will be opened one of these months.

A Steady Market

Roanoke is a steady, dynamic market, third in the state and has high buying power. The town has adopted television as a medium—not spectacularly because it leans toward the conservative side. People do a lot of viewing. The *Times* and *World-News* (WDBJ and applicant for Ch. 7) print complete logs of both local TV stations plus Richmond, Lynchburg, Huntington and Greensboro TV stations.

The WSLs-TV basic rate is \$300 an hour. WROV-TV has a national rate of \$200 and local rate of \$140.

Obviously, in Roanoke the program's the thing. WROV-TV originally envisioned 11 or 12 daily hours of top local programming, a policy that had been responsible for its success as a local outlet in a market that had two regionals and has recently added a radio daytimer (WRIS). Such an array would require vast sums of money. Live TV and and remotes are costly.

What would you do if you were sitting on Ch. 27 in Roanoke, competing with Ch. 10 and facing additional Ch. 7 service?

WIOU Brand Ratings

MANUFACTURERS of food products have a better idea how their individual brands are selling in Kokomo, Ind., thanks to that city's WIOU. John Carl Jeffrey, vice president and general manager of the station, reports the outlet has distributed lists of products ranking in different categories according to local sales. Frank Gregory & Assoc. compiled the survey, interviewing managers of 75 grocery outlets in the community. Ratings were based on "comparative" sales.

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