

BROADCASTING CORPORATION

Chamber Of Commerce Bldg.

Springfield, Ohio

A GREAT INDEPENDENT

TELEPHONE 3-6488

December 31, 1954

Mr. Kermit Geary RFD #2 Walnutport, Pa.

Dear Mr. Geary:

Thanks for your letter dated December 19, 1954. Your report on our transmission is quite accurate for the periods you specify. I am surprised that you were able to read so much of our transmission. Occassionally when traveling the Pennsylvania Turnpike at sunup or sundown, I've tried to catch a bit of WAVI's short-lived skywave but never heard anything definite.

I have estimated the last few days of each month from September to December, and the first few days of each month from December to March as being the most opportune times for DXing this station; the reason being that we adjust our sigg-on and sign-off time to sunrise and sunset only once a month, and then on the first of the month.

You might be interested in some details on our plant. Our transmitter is the Collins model 300G. Our tower is guyed, series fed and about 123 electrical degrees, or about .34 wavelength. This provides us with a field at one mile of approximately 100 mv/meter. I would estimate the theoretical maximum for our skywave at you location to be about 100 microvolts. The ground conductivity in our area is 8 X 10⁻¹⁴ emu which gives us a service area (0.5 mv/meter ground wave) described by a radius of about 30 miles.

We do not expect to begin operating at our new Dayton location before March, and perhaps April. There should be no significant change in our signal at your point, or in the radius of our local service area. The call letters WAVI are fairly new for us. Until March 1954 this station's call was WWSO. We will keep the new call when we operate in Dayton.

I would suggest your considering building a large loop antenna for your DX work. There is considerable design information available, but good loops are not easy to make. To give you an idea how a loop might help you, consider when you were listening to our signal December 15th, and getting interference from WADE. A loop turned so as to pick up WAVI would give you a null on WADE which lies approximately at rightangles. A loop also discriminates against atmospheric noise which originates at right angles to your line of reception. This gives better signal-to-noise ratio. A loop of any practical size, however, will not provide as much signal as a long wire. This is often a serious disadvantage in DX work.

Thanks very much for writing. Don't hesitate to write again about reception of our signal or other DX work.

Sincerely

Vern Yeich Chief Engineer

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WAVI Broadcasting Corp.