

**WGGM****1410 AM**

HOFFMAN COMMUNICATIONS, INC.

10600 Jefferson Davis Highway

Richmond, Virginia 23234

804/275-6161 - - 804/748-6161

**WDYL****92.1 FM**

February 12, 1979

Mr. Kermit Geary  
RD 4, Box 321  
Walnutport, Pa. 18088

Dear Mr. Geary,

In reference to your letter of December 27, 1978, and your recording of our A.M. station, WGGM, in Chester, I'm pleased to verify without any doubt that this was our signal on December 25, 1978.

Our exact location is 37°22'58" north latitude and 77°25'32" west longitude - about ten miles south of Richmond, Virginia.

Our transmitter equipment consist of a Gates BC5P2, 5k transmitter using a 3CX2500F3 final tube plate modulated by a pair of 3CX2500's. R.F. power is series fed to a 353' vertical tower with a 163 ohm impedance. Our power input at the present time is 4427 watts, but will be increased by mid-year to 5000. The ground system consist of 120 copper radials 175' in length plus a 24' x 24' copper ground screen at the base of our tower. The ground system stays moist year round as it sits in what's almost a swamp. Modulation is limited to 100% negative and 125% positive (required by FCC) by a Gates Limiter; no compression is normally used for better dynamic range and a better natural sound.

If you are up on your electronics and like to play with calculators, you will find that our antenna current at the base is 5.21 amps of R.F.  $I^2 \times R = \text{watts}$ .  $5.21^2 \times 163 \text{ ohm} = 4424$  or 3 watts under 100% power level. R.F. within 20 or 30 feet of the tower is so intense it will light a 40 watt fluorescent tube to full brilliance when held up in your hand, a very interesting effect.

Thanks for writing and good listening.



Michael Melnyk, Jr.

Chief Engineer