

WILLIAM J. SITZMAN, JR.  
INDEPENDENT BROADCAST CONSULTANTS

TECHNICAL SERVICE  
TO THE BROADCAST INDUSTRY

Box 98  
TYRONE, N.Y. 14887

October 25, 1973

Mr. Kermit Geary  
R. D. 2, Box 298  
Walnutport, Pennsylvania 18088


Dear Mr. Geary,

It is indeed my pleasure to confirm your reception of station WGHT from 6:01 AM to 6:40 AM EDT, October 11, 1973 on 1380 kHz. Your letter came as a pleasant surprise to me as well as the staff of WGHT as we are in the middle of remodelling and rewiring the WGHT studios. I used to be quite an active AM DXer about 15 years ago and since then find answering DX reports a real treat. My 1937 Philco receiver is now used mainly to monitor my various AM clients & check clocks against CHU & WWV.

It is interesting to note the type of antenna/ground system you are using. That 200' inverted "L" is actually a .25 wave (90°) at 1230 kHz or .28 wave (101°) for 1380 kHz, just a bit more efficient. That 175' well no doubt serves as an excellent ground, especially since you are located in an area of relatively low ground conductivity. Now a bit of data re WGHT:

During the pre-sunrise hours that you heard WGHT, power is cut back to 106 watts to protect CKPC, Brantford, Ontario, Canada from excessive skywave interference. Radiation toward CKPC is held to 51.7 mv/m/mile, while along the ground is at 61.8 mv/m at 1 mile. If you look at the enclosed 10% skywave propagation report, radiation toward Walnutport is 48.25 mv/m/mile at 32.5° or 120uv/m 10% of the time (before sunrise) at the receiving point. The report might appear complex but was interesting to calculate just to find out how much signal you were getting. WGHT, formerly WFSR, was purchased by Taylor Aviation, Hammondsport, N.Y. about a year ago; the pre-sunrise modification was made last February to a stalwart 1962 Gates BC-500T transmitter. It has taken a liberal amount of cleaning & brazing at the tower, re-tubing & re-wiring at both xmtr and studio to produce a clean, undistorted sound. Since the audio section of the transmitter is 100% push-pull, careful attention was made to use only precision balanced pairs of tubes from Amperex & RCA; the husky 833A modulator tubes were precision-crafted by Philips in Holland to within 1% of each other. I've enclosed a technical fact sheet about WGHT, plus some other brochures for your interest. Incidentally, you might try to pick up another client, WGMF (1500 kHz 250-Day, no pre-sunrise) of Watkins Glen, New York, but expect some interference from WTOP, Washington. In closing, it was good to hear from you- thanks again for a precision report. Write again if you have questions.

Best regards,

  
Bill Sitzman, Jr.  
Consultant to WGHT  
encl.

# TAYLOR AVIATION, INC.

TAYLOR-VAN GELDER AIRPORT

Hammondsport, New York, U.S.A.

14840



607-868-3206

HAMMONDSPORT, N. Y.



Airport  
607-868-3411

WGHT  
1380 A.M.

607-776-3326

BATH, N. Y.

## TECHNICAL DATA: WGHT

STUDIOS: 10 Pulteney Square, Bath, New York 14810, located in the historic Steuben Lodge building.

Console: Gates 'Yard', 8-channel mono

Turntables: QRK 12", Rek-O-Kut 320 arms, Shure M44 pickups

Cartridge unit: Spotmaster 5 (4 play, 1 record)

Reel-to-reel: TEAC 2000 series

Microphones: 2 E-V 635A's, 1 RCA 44BX, 1 Shure 560

XMTR: E. Washington St. Extension, .5 mile East of village limits.

Transmitter: Gates BC-500T 1380 kHz (stability  $\pm \frac{1}{2}$  hz)  
500 watts, 106 watt P-S cutback  
Audio response 30-12,000 Hz + 2 dB  
Total Harm. Dist. 30-10,000 Hz 1.5 % or less  
Final amplifier: 833A triode (Amperex)  
Modulators: 2 Class B 833A's (Philips)

Tower: 178' Rohn, Inc. series-fed uniform cross-section guyed tower  
Efficiency: 190 mv/m/1 mile/1 kw or 134.3 mv with 500 w. input.

Ground system: 120 radials #10 awg copper wire 178' long, spaced every 3' with 48'x48' ground screen buried at tower base. Lighting: 300mm beacon, 2 obs. lights at 89'

Antenna resistance: 51.5 ohms

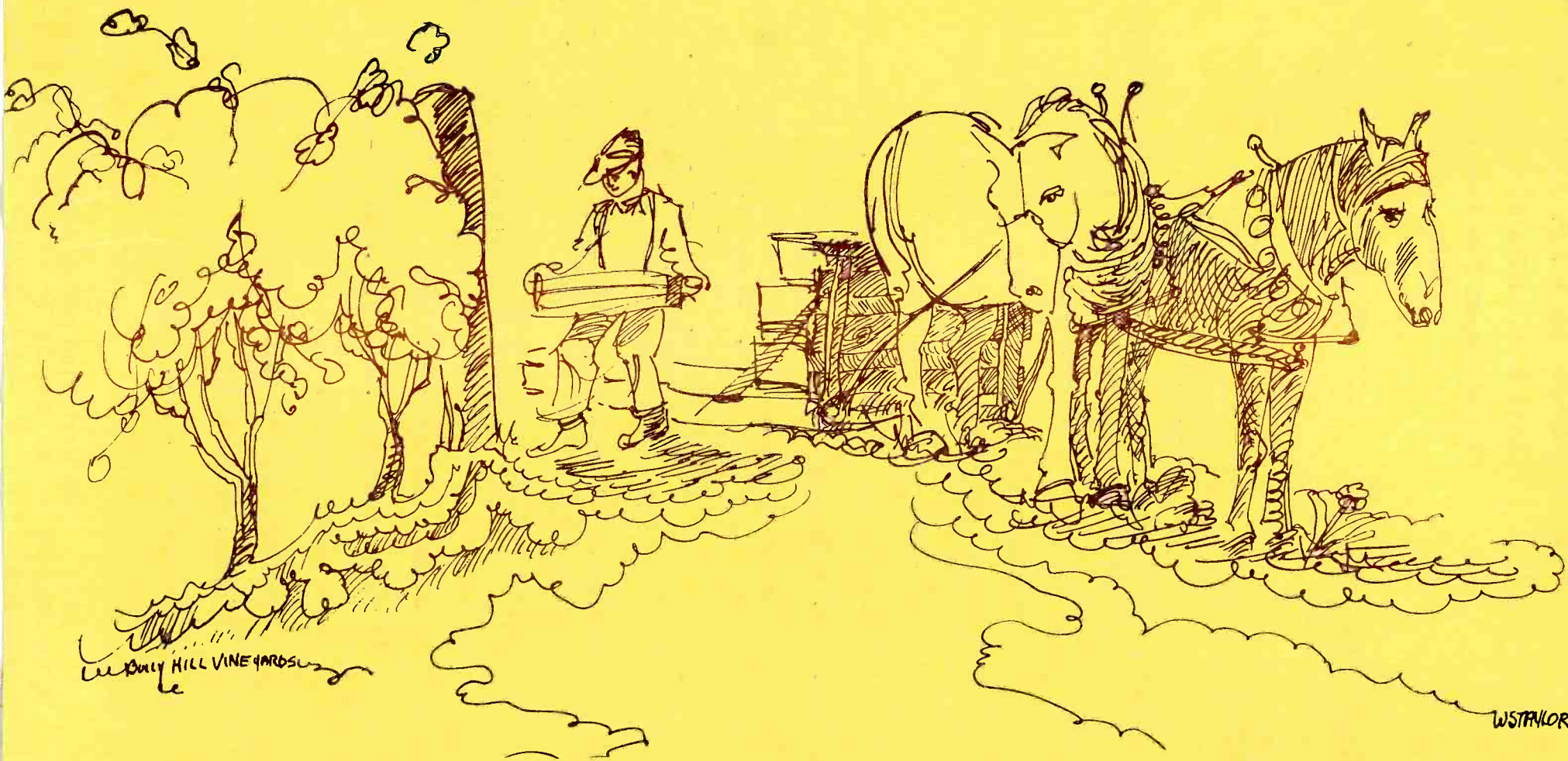
Antenna Current: 3.12A Day, 1.435A Pre-sunrise

Modulation monitor: Gates M-5693

Frequency monitor: Gates M-4990

Limiter: Gates SA-39B

Remote control: Gates RDC-10AC



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