

WAUX radio am / fm

330 WISCONSIN AVE. • WAUKESHA, WISCONSIN • LIBERTY 2-6636
BROADWAY 2-4311

March 29, 1963

Mr. Ernest R. Cooper
438 East 21st Street
Brooklyn 26, N.Y.

Dear Mr. Cooper:

Thank you very much for your fine reception report dated February 25, 1963.

We would like to tell a little of our history and operation which may be of interest to you. Waukesha is an industrial city located in dairy country which is gradually shifting to Milwaukee suburbia. Waukesha County is claimed to be the "fastest growing county in Wisconsin" but in fact it is becoming a part of Milwaukee. WAUX began broadcasting on March 26, 1947 and operated with 250 watts carrier power (non-directional) until September 1, 1961 when we began regular programming with 10kw. We use a Collins 21M transmitter in this installation. Our audio equipment at the transmitter consists of a program controlled expander/compressor similar to the WLW automatic amplifier, with modifications. This is followed by a Symmetra-peak unit in cascade with an instantaneous action peak limiter of our own design which feeds the transmitter. This system allows us to maintain an extremely high average modulation level, flat 30 cycles to 12 kilocycles with less than 2% overall harmonic distortion studio to antenna, and without pumping or increase in noise level during absence of program. Most listeners can hear the difference. Our transmitter plant and three tower in-line radiating system is located ten miles southwest of Milwaukee. Our directional pattern is reproduced on the reverse side of this letter. We are radiating approximately 3.5 kilowatts in your direction.

We are pleased to confirm your report of our signals during the period 0309 to 0328 CST on February 25, 1963.

Very truly yours,

RADIO STATION WAUX

Adin E. Randall

Adin E. Randall
Chief Engineer

AER:tz

*
How WAUX

30°
330°

20°
340°

10°
350°

0

350°
10°

340°
20°

330°
30°

40°
320°

320°
40°

50°
310°

310°
50°

60°
300°

300°
60°

70°
290°

290°
70°

80°
280°

280°
80°

90°
0°

270°
90°

100°
260°

260°
100°

110°
250°

250°
110°

120°
240°

240°
120°

130°
230°

230°
130°

140°
220°

220°
140°

334TG POLAR CO-ORDINATE

FREDERICK POST COMPANY

50
250
500
1000
2500
5000
10000
25000

WAUX HORIZONTAL PLANE RADIATION, CALCULATED IN WATTS
WAUKESHA BROADCASTING CO.
ENGINEERING DEPARTMENT
MARCH 1962

150°
210°

160°
200°

170°
190°

180°
180°

190°
170°

200°
160°

210°
150°