

WYLO RADIO

FIRST ON THE DIAL AT 540

5667 North 36 Street
Milwaukee, WI 53209

March 8, 1974

universal broadcasting of milwaukee, inc.

Mr. Bill Nittler
603 West 1st
McCook, NE 69001

p.o. box 3096
milwaukee, wisconsin 53218
area code 414-353-5300

Dear Bill,

In response to your recent report, we are pleased to verify your reception of our equipment test over WYLO Radio, February 25, 1974, from 2:34 - 2:37, at 2:48, and from 2:56 - 3:00 am, CDT. "Ruby, Don't Take Your Love to Town" wasn't mine; must have been WDAK. Yours was the 16th best reception, McCook being 675 miles from Jackson. The farthest report was from NW California. Yours was the only Nebraska report.

WYLO is 0.8 mile NE of Jackson, Wisconsin, a town of 691, located 23 air miles NW of Milwaukee, our exact site being $43^{\circ}20'00''$ North Lat., and $88^{\circ}09'13''$ West Long. Waylow began broadcast operations on May 1, 1964.

The Big Country Sound is a daytime only station, operating on 540 kHz, with a power of 250 watts. Being on a Canadian clear channel, we are ineligible for any pre-sunrise authorization. The directional radiation pattern resembles a four-leaf clover. Our major lobe is on a bearing of 174° , in a southern direction. Minor lobes are oriented NE at 70° , West at 280° , and North at 352° . Nulls are NE at 33° , SW at 253° (protecting KWMT, Ft. Dodge, Iowa), East at 92° (protecting CBEF, Windsor, Ontario), and NW at 316° (protecting CBK, Regina, Saskatchewan). You hit it right on the head in your report. You are only 17 miles NW of the bearing of our SW null, which runs through Minden, NE, from Jackson.

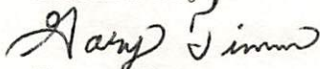
The WYLO antenna system consists of three series-fed, uniform-triangular-cross-section, guyed towers, in an in-line array, on a bearing 354° . The end towers are each spaced a distance of 90° (456 feet) from the center tower, with the base of each tower at an elevation of 842' above mean sea level. The radiating portion of each tower is 320' (63°), with top loading using horizontal cables, interconnecting the top 80,3' of each of the three guy wires, just above the insulator, thus simulating a height of 74'. With each tower built on a 4' high, concrete base, the top of the tower is at 1166' above mean sea level.

The antenna ground system utilizes 237,000' of #10 copper wire, and 2,900' of 4# copper grounding strap. Some 240 ground rods, spaced at 1.5' intervals, radiate out from the base of each tower, to alternate lengths of 200' and 470'. All towers are interconnected by the copper bonding strap, which then continues on into the transmitter building. The transmitter and studios are housed in a building just south of the antenna array. We use a Gates BC250GY transmitter, with most other equipment made by Collins, including phasor cabinet, audio board, and cart machines.

Thank much for the report, Bill. I was wondering how we would do down that null. Only other report along that SW null was from Bill Cowles, Tucson, AZ. He had me in for 15 minutes, with a weak signal.

73 & Best of luck in your DXing hobby.

Sincerely,



Gary Timm
WYLO Staff Engineer

-serving the milwaukee area - the nation's 17th market