

WYLO RADIO

FIRST ON THE DIAL AT 540

5567 North 36 Street
Milwaukee, WI 53209

March 5, 1974

universal broadcasting of milwaukee, inc.

Mr. David F. Thomas
Box 11531
Tampa, FL 33610

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

Dear Dave,

In response to your recent report, we are pleased to verify your reception of our equipment test over WYLO, on February 25, 1974. You were correct in reporting code ID's at 2:35, 2:45, and 3:28 am CDT. Also, as you noted, I was giving antenna array and pattern info at 3:15 am. Your reception was the 5th best, distance wise, in that Tampa is 1110 miles from Jackson. Other reports from Florida were from Jim Hogan- Palm Bay, Bill Lemak- Gainesville, and Steve Kennedy- Sarasota.

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.

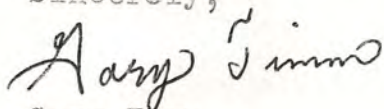
Radio 54 is a daytime only station, operating with a power of 250 watts, on 540 kHz, a Canadian clear channel, making us ineligible for any pre-sunrise authorization. The directional radiation pattern resembles a four-leaf clover. Our major lobe is on a bearing of 174° , in a southern direction. Minor lobes are oriented NE at 70° , West at 280° , and North at 352° . Nulls are NE at 33° , East at 92° (protecting CBEF, Windsor, Ontario), SW at 253° (protecting KWMT, Ft. Dodge, Iowa), and NW at 316° (protecting CBK, Regina, Saskatchewan). Tampa is 230 miles east of our major south lobe bearing, which passes 5 miles east of Crestview, FL.

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 ground wire, and 2,900' of 4" copper ground 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.

Thanx very much for monitoring the test, and sending report. The best reception so far was in NW California, where he heard only code ID's, much as you did. Best of luck in your DXing hobby.

Sincerely,



Gary Timm
WYLO Staff Engineer

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