

TECHNICAL EXHIBIT
APPLICATION FOR STATION LICENSE

WRXX (FM)
FCC FACILITY ID: 26625

W. RUSSELL WITHERS, JR
CENTRALIA, ILLINOIS

FM CH. 237A 5.5 KW 100 M HAAT

MAY 2003

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TECHNICAL NARRATIVE

The technical exhibit, of which this narrative is part, was prepared on behalf of W. Russell, Jr., in support of an application for station license concerning FM Broadcast Station WRXX (FM), Centralia, Illinois. The FCC facility identification number is 26625.

W. Russell Withers, Jr., holds an outstanding construction permit, BMP-20030428ACV, that permit expires on May 12, 2003. This instant application seeks a license to cover the outstanding construction permit. The station is currently operating under automatic program test authorization. The station is fully constructed and operational.

This application conforms with all applicable rules and regulations of the Federal Communications Commission.

Transmitter Power Output Calculations (TPO).

The relative gain of the nondirectional antenna as provided by the manufacturer (Electronic Research, Inc.) is 2.133 for both horizontal and vertical polarizations. The antenna model number is ERI LPX-4E, a 4-bay circular polarized non-directional antenna with full wave length spacing between the elements (bays). The antenna input power is 2.58 kilowatts. The station employs 328 feet (99.6 meters) of Andrew HJ7-50A 1-5/8 inch air dielectric transmission line. The efficiency of the line with connectors is 60.56 percent (2.18 dB loss). Therefore, the transmitter power output (TPO) for this combination of gains and losses is 4.26 kilowatts to

achieve an effective radiated power of 5.5-kilowatts.

Special Operating Conditions or Restrictions:

There are two special conditions or restrictions placed on the construction permit.

Condition 1: Other site users

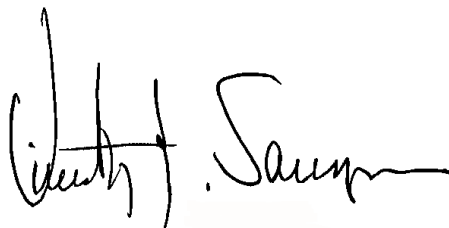
The permittee/licensee will coordinate with other users of the site and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of the FCC guidelines.

Condition 2: 73.215 Contour Protection Grant

Applicant acknowledges that this is a 47 C.F.R. §73.215 contour protection grant as requested by the applicant/licensee.

Inquiries concerning the technical portion of this application should be directed to the office of the undersigned.

May 10, 2003

A handwritten signature in black ink, appearing to read "Timothy Z. Sawyer". The signature is fluid and cursive, with the first name "Timothy" and last name "Sawyer" clearly distinguishable.

Digitized Signature - Original ON FILE - Timothy Z. Sawyer

Timothy Z. Sawyer

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