

APPLICATION FOR STATION LICENSE
RADIO TRAINING NETWORK, INC.
WLFS (FM) RADIO STATION
CH 220C3 - 91.9 MHZ - 23.5 KW (DA)
PORT WENTWORTH, GEORGIA
February 2009

TECHNICAL STATEMENT

This Technical Statement was prepared on behalf of Radio Training Network, Inc. (“RTN”), licensee of radio station WLFS, Channel 220A, Port Wentworth, Georgia. RTN has an outstanding permit to relocate WLFS and upgrade to Channel 220C3 (BPED-20060526AAO). RTN herein submits a license application to cover the outstanding permit. A calculation of the transmitter power output of the WLFS transmitter is attached as Exhibit A. It is noted that the horizontal power gain of the WLFS antenna is slightly higher than that of the vertical gain. Therefore, the antenna is elliptically polarized.

There are six operating conditions/restrictions on the WLFS permit. The first four conditions relate to the use of a directional antenna system for the station. Attached as Exhibit B is an antenna proof of performance from Shively Labs (“Shively”), the manufacturer of the WLFS antenna system, demonstrating the compliance of the antenna system with the requirements and limits contained in the permit. The measured pattern (composite of horizontal and vertical) is within 85% of the envelope pattern submitted with the construction permit application. Further, attached as Exhibit C is a statement from an engineer that the antenna was assembled and installed in accordance with Shively’s specifications. Finally, attached as Exhibit

D is a verification from a Land Surveyor that the antenna is oriented as specified by Shively.¹ Further, as detailed in Exhibit B (relative field pattern of the measured antenna system), the power of WLFS at 290° is below the required limits; the relative field at 290° is 0.225, a power level of 1.190 kilowatts (horizontal), and a relative field of 0.225 or 1.164 kilowatts (vertical) (maximum allowed power at 290° is 1.50 kilowatts). At an azimuth of 300°, the relative field is 0.230, or a power of 1.243 kilowatts (horizontal), and a relative field of 0.210 or 1.014 kilowatts (vertical) (maximum allowed power at 300° is 1.5 kilowatts). At an azimuth of 310°, the relative field is 0.220, or a power of 1.137 kilowatts (horizontal), and a relative field of 0.220 or 1.113 kilowatts (vertical) (maximum allowed power at 310° is 1.5 kilowatts). Finally, at an azimuth of 315°, the relative field is 0.219, or a power of 1.127 kilowatts (horizontal), and a relative field of 0.230 or 1.217 kilowatts (vertical) (maximum allowed power at 315° is 1.8 kilowatts). All power values at the various noted azimuths are below the levels listed in the WLFS permit.

The fifth condition states that the WLFS application for permit was granted pursuant to §73.215 of the rules. RTN acknowledges this condition. The sixth and final condition states that RTN will reduce the power of WLFS, or cease operation as needed, to insure that persons with access to the tower will not be exposed to radio frequency radiation levels in excess of the Commission's guidelines. RTN will comply with this requirement.

Based on the foregoing, it is believed that WLFS is operating in compliance with the Commission's rules and that all conditions have been met. It is further requested that the Commission authorize full power operation for WLFS.

1) 125° true orientation.