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TECHNICAL STATEMENT FOR WLJH, GLENS FALLS, NY

This document was prepared in support of a change in the antenna of WLJH, Glens Falls, NY.

I, Thomas R. Ray, III, have been employed as a Broadcast Engineer for 44 years. I have extensive experience with both AM and FM transmission systems. I hold FCC General Radio Telephone License PG-017214, and am certified by the Society of Broadcast Engineers as a Certified Professional Broadcast Engineer, Certification number 50798, in addition to holding an Extra Class Amateur License W2TRR. My works are a matter of record before the Commission. I personally supervised the installation of the replacement antenna for WLJH.

WLJH operates with a directional antenna. Per 73.1690[c](2), it is permissible to replace a directional FM antenna providing the licensed composite directional pattern at any azimuth is not exceeded in any direction, there is no change in Effective Radiated Power, and compliance with the principal coverage requirements are maintained. In fact, the measured pattern of the replacement antenna is virtually identical to the antenna replaced. Additionally, the replacement antenna was mounted at the exact same elevation on the tower, so there was no change in Height Above Ground or Height Above Average Terrain.

Because the replacement antenna is slightly more efficient than the antenna that was replaced, a slight reduction in Transmitter Output Power was required to achieve the licensed Effective Radiated Power, which did not change.

The reason for the replacement was that the antenna that was on the tower, even though enclosed in a full radome, was exhibiting VSWR conditions during icing events which would take the station off the air as the VSWR was severe enough to cause the transmitter to completely shut down rather than just back its power down. The antenna manufacturer was consulted and could not help the situation. Rather than have the station off the air during severe weather at a location that is not accessible during winter months, Sound of Life decided it was best to replace the antenna with another manufacturer's antenna.

The replacement antenna, an American Amplifier Technologies V-DP-D-1 was assembled and mounted to the tower exactly as described in the installation drawings and documents provided by American Amplifier Technologies.

The station is presently operating at 50% of licensed Effective Radiated Power per 73.1690[c](2) awaiting full power operation under Program Test Authority.

The antenna Proof of Performance, installation drawings, and Surveyor's Statement are attached. The antenna was pointed with the surveyors on site who worked with the tower crew to ensure the antenna was pointed correctly.

It is believed that the replacement meets all of the FCC's technical requirements.

Thomas R. Ray, III
President
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