

ENGINEERING REPORT  
STA OPERATION BY WADO  
NEW YORK, NEW YORK  
1280 kHz 50 kW – D 7.2 kW – N DA-2 U

This memorandum explains the situation with regard to changes that are soon to be made at the WADO transmitter site and how they are expected to temporarily impact the station's operation. Tower 2 of the array, which is active for operation with both the daytime and nighttime directional antenna patterns, is going to be replaced. The new tower will have electrical characteristics identical to those of the present tower, insofar as its function in the directional antenna system is concerned. No FCC construction permit is required for the tower replacement work. No other changes that could impact the directional antenna pattern shapes are going to be made.

Work to erect the new tower will be completed in planned, orderly stages to minimize the disruption of the station's operating schedule. For a period of time, it will be necessary for WADO to operate nondirectionally with 25 percent of the power authorized for directional antenna operation as is specified for "operation during modification of facilities" in 47 CFR 73.1615. Nondirectional operation may be with either tower 1 or tower 4, in consideration of the movement of personnel and materials on the site during construction. Directional operation after the new tower is placed into operation will be with the antenna monitor parameters that are found through an adjustment process to be correct for the authorized patterns – and they may differ from the presently licensed operating parameters as the antenna monitor sampling system may have different sensitivity to current in the new tower 2.

Work to replace the tower is expected to commence on or about Monday, July 21, 2014. It will be necessary for WADO to operate with Special Temporary Authorization [an "STA"] from the FCC using a nondirectional antenna, with 12.5 kW in the daytime and with 1,800 watts at night during construction, and with antenna monitor parameters at variance from their licensed values once the directional antenna patterns have been restored to substantial adjustment following the tower replacement work. This office will assist WADO with completing the engineering portion of an FCC Form 302 application for direct measurement of power specifying new operating parameters, if it is found to be necessary to adjust to other than the presently licensed antenna monitor ratios and phases and conduct a partial proof of performance on the directional antenna system.



Ronald D. Rackley, P.E.

July 2, 2014