

TECHNICAL SUMMARY

RADIO STATION WAYE BIRMINGHAM, ALABAMA 1220 KHZ, 1 KW, D

1. WAYE is licensed for operation at Birmingham, AL, at a frequency of 1220 kHz with a nominal non-directional power of 1 kW during daytime hours (with 0.075 kW secondary nighttime power).*

2. The instant application is to relocate WAYE to the existing transmitter site of WJLD, Fairfield, AL, 1400 kHz, and duplex on its existing non-directional antenna system with no physical changes to the antenna tower structure.†

3. As demonstrated herein, the proposed WAYE daytime facility meets the 5-mV/m contour coverage requirements of its city of license of Birmingham. Specifically, the proposed predicted 5 mV/m groundwave contour encompasses 60% of the land area of Birmingham, which exceeds the FCC's 50% coverage requirement.

4. The proposed facility qualifies for consideration under the FCC's 2-mile processing policy. Therefore, the daytime allocation study was limited to second- and third-adjacent cases only. Under these criteria, the facility complies with the allocation requirements of 47 C.F.R. Sections 73.37, 73.182 and 73.187.

5. The WAYE ground system will consist of 120 evenly-spaced, buried, copper wire radials 70.1 m in length, plus a 7.3 m by 7.3 m ground screen.‡ A series-fed base-insulated transmitting antenna is to be employed, with a height of 57.9 m (electrical length of 84.8° at 1220 kHz). The antenna efficiency was calculated to be 302.45 mV/m at 1 km for 1 kW power based on FCC's Figure 8 antenna efficiency calculation tool.

6. There are no other AM broadcast stations within close enough proximity to the WJLD tower site to trigger possible AM antenna disturbance consideration under Section 1.30000 of the FCC Rules.

7. The proposed facility is compliant with Section 73.1030(c) of the FCC Rules concerning the protection of the closest FCC Monitoring Station at Powder Springs, GA, which is located 205 km away.

* See FCC File No. BL-3791.

† See FCC File No. BL-13286.

‡ Electrical length of 102.7° at 1220 kHz.