

Exhibit 21 Page 1
Alabama Christian Radio, Inc.
NCE FM Interference Area to TV 6
Alexander City, Alabama

The purpose of this exhibit is to show compliance with §73.525 of the Commission's Rules. The Rules require that an applicant proposing operation on FM Channel 209, whose antenna location is less than 196 kilometers from a television Channel 6 facility, furnish a map and an engineering statement, with calculations, demonstrating compliance with the Rules with regard to interference to the reception of television channel 6. There are two affected TV 6 stations.

1. WUOA - 82 km distant
2. WUOA-DT - 82 km distant

Therefore, WUOA and WUOA-DT, must receive consideration.

First, the relative HAAT figures were generated for WUOA AND WUOA-DT using the NGDC 30 Second Database and the data from the FCC TV Database. The distances to the WUOA AND WUOA-DT contours were predicted according to the procedures specified in §73.684 of the Commission's Rules, "Prediction of Coverage," using the F(50,50) curves in Figure 9 of §73.699.

For each WUOA AND WUOA-DT television channel 6 field strength contour, the associated F(50,10) FM interference contour was obtained from Figure 1 of §73.599. The distances to the applicable NCE-FM interference contours were predicted according to the procedures specified in "Prediction of Coverage," using the F(50,10) curves in Figure 1 of §73.333 of the Rules. Radials were then computed every 5 degrees from the proposed NCE-FM site to the point at which interference stops occurring.

Exhibit 21 Page 2
Alabama Christian Radio, Inc.
NCE FM Interference to Television Channel 6
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A table of the proposed NCE-FM F(50,10) interfering contours to the WUOA AND WUOA-DT television channel 6 F(50,50) protected contours may be seen as Table 1 and 2 of this exhibit.

These calculations are based on the appropriate F(50,50), F(50,10) and FM/TV 6 protection ratio curves for an NCE-FM station operating with facilities of 21.0 kilowatts ERP at 147 meters HAAT. Free space calculations were used when computing the field strength for distances less than 1 mile.

The applicant chooses to use vertically polarized transmissions only. The maximum horizontally polarized ERP permissible at the same proposed antenna height (0.525 kilowatts at 147 meters A.A.T.), calculated without the adjustment for television receiving antenna directivity, multiplied by 40 ($0.525 \times 40 = 21.0$ kilowatts at 147 meters A.A.T.).

The total area receiving interference is 180 square kilometers within the WUOA protected contour. The total population (2010 Census) receiving interference is 889 persons.

The total area receiving interference is 179 square kilometers within the WUOA-DT protected contour. The total population (2010 Census) receiving interference is 852 persons.

Because the population receiving interference is less than 3,000 persons, the application complies with §73.525 of the Commission's Rules as pertains to interference to the reception of TV Channel 6 by NCE-FM stations.

Exhibit 21 Table 1
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NCE FM Interference to WUOA
Alexander City, Alabama

TV Contour dB	U/D Ratio dB	FM Contour dB
49.00	17.50	66.50
51.00	15.00	66.00
53.00	13.00	66.00
55.00	11.00	66.00
57.00	9.25	66.25
59.00	7.50	66.50
61.00	6.25	67.25

Exhibit 21 Table 2
Alabama Christian Radio, Inc.
NCE FM Interference to WUOA-DT
Alexander City, Alabama

TV Contour dB	U/D Ratio dB	FM Contour dB
47.00	20.25	67.25
48.00	18.50	66.50
49.00	17.50	66.50
50.00	16.00	66.00
51.00	15.00	66.00
52.00	14.00	66.00
53.00	13.00	66.00
54.00	12.00	66.00
55.00	11.00	66.00
56.00	10.25	66.25
57.00	9.25	66.25
58.00	8.50	66.50

Overlap with WUOA

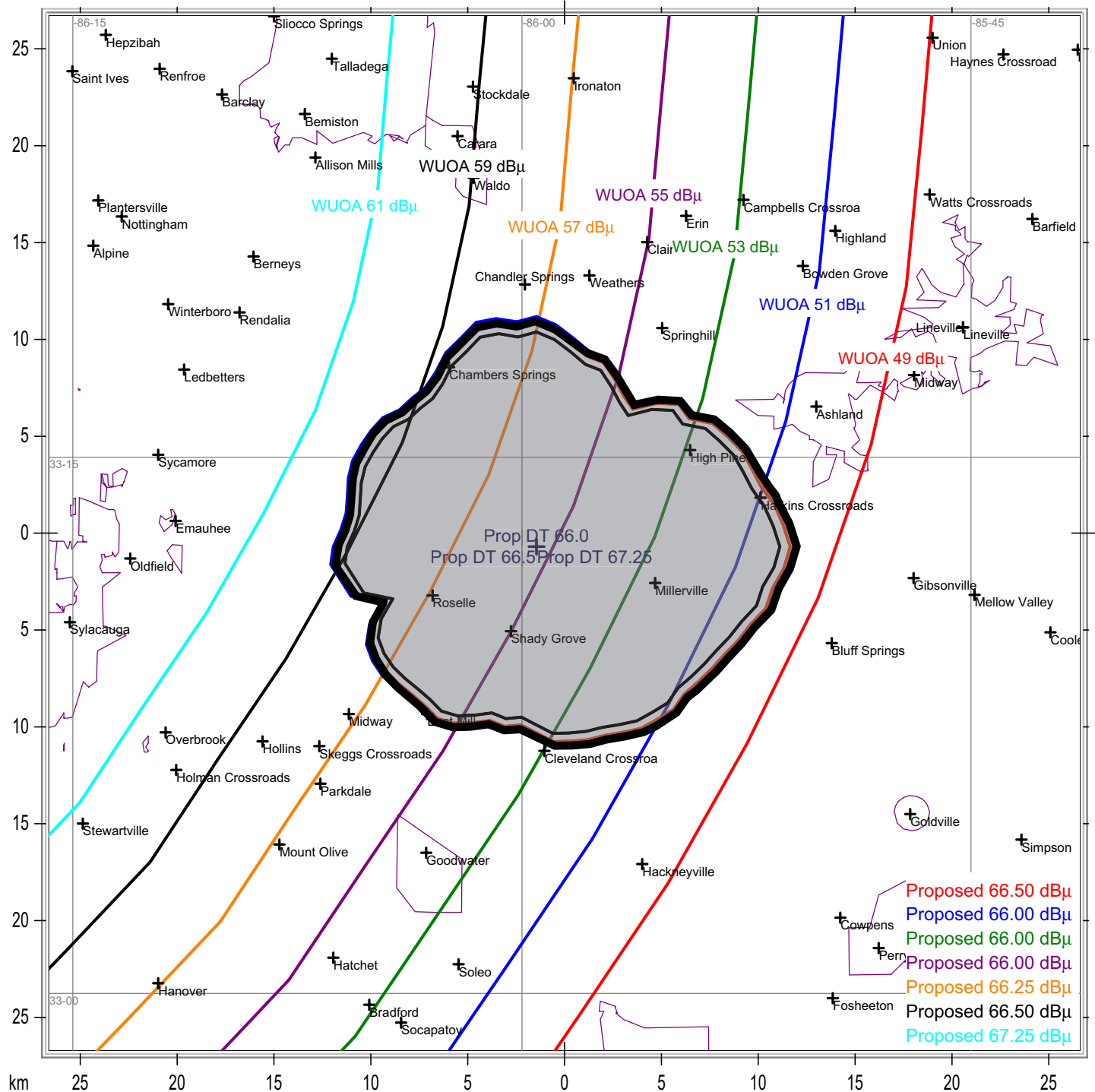


Exhibit 21 Figure 1
Alabama Christian Radio, Inc.
Interference Area to WUOA
Alexander City, Alabama

State Borders City Borders Lat/Lon Grid

