

**ENGINEERING REPORT**

**MINOR CHANGE APPLICATION**

For

**WWRZ(FM) – Fort Meade, FL**

**Channel 252C2 – 98.3 MHz**

**License No. BLH-19990330KA**

**April, 2004**

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(Exhibit Numbering is in response to FCC Online Form 301, Section III-B)

# DISCUSSION OF REPORT

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This firm was retained to prepare the required engineering report in support of a minor change application for WWRZ(FM) License No. BLH-19990330KA. WWRZ(FM) is currently licensed with 26.0 kW (H)&(V) ERP at 209 meters HAAT on Channel 252C2. WWRZ(FM) currently serves Fort Meade, FL. This application seeks to relocate to an alternate tower location with 11.5 kW (H)&(V) ERP at 311 meters HAAT. A non-directional antenna will be employed. WWRZ(FM) will continue to serve Fort Meade, FL.

The WWRZ(FM) proposed site will continue to meet all the spacing requirements of 47 C.F.R. §73.207 toward other stations in the allocation with the exception of two domestic facilities. A tabulation of the existing and required spacing toward each of the other relevant stations is found in **Exhibit 24.1**. A Class C to CØ downgrade for WXTB(FM), Clearwater, FL is requested to accommodate this allocation. WXTB(FM) is currently operating as a Class C facility with Class CØ equivalent parameters of 100 kW at 410 meters HAAT. WWRZ(FM) would be fully spaced to a WXTB(FM) Class CØ operation. WWRZ(FM) will be short-spaced to WNUE-FM Titusville, FL. Contour protections towards WNUE-FM as required by §73.215 have been included in **Exhibit 28.1**. Inspection of the WNUE-FM license indicates the facility is currently operating under §73.215. Per §73.215(b)(2)(iii), protection has only been afforded the present WNUE-FM operating parameters and not maximum class facilities.

The proposed service contours have been calculated in accordance with the Rules, and the data obtained has been tabulated and plotted in this report. The plotted contours are found as **Exhibit 22.1** of this report. This exhibit shows the FCC 3.16 mV/m contour which serve the community of license, and the overall service provided by the 1.0 mV/m contour of the facility. The tabulation of the distances to the respective contours shown in this discussion is based on the use of the standard eight cardinal bearings, which were also used for the computation of the HAAT. However, the plotted contours shown in **Exhibit 22.1** and the contour used as the basis of the population figures are based on the use of a full 360 terrain radials.

The proposed antenna will be mounted on an existing structure bearing FCC Antenna Structure Registration No. 1029810. A copy of the existing Antenna Structure Registration has been included as **Exhibit 21.2**. The proposed construction will not increase the overall tower height, therefore the FAA need not be notified.

The remainder of the information in this report and exhibit numbering is responsive to the Rules of the Commission, and provides the data for FCC Online Form 301, Section III-B.

The FM Broadcast facility proposed in this application will not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in §1.1310 and §1.1307(b)(3) concerning the five percent (5%) contribution rule for multiple transmitter sites. **Exhibit 29.1** provides the details of the study that was made to demonstrate compliance.

In the event work would be required in proximity to the antenna such that the person or persons working in the area would be potentially exposed to fields in excess of the guidelines set forth in OET Bulletin No. 65 (Edition 97-01), the transmitter power will be reduced or the station will cease operation during the critical period.

## DISCUSSION OF REPORT (continued)

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**DISTANCES TO CONTOURS:** The table below shows the distances to the 3.16 mV/m and 1.0 mV/m contours from the proposed facility using an ERP of 11.5 kW at an HAAT of 311 meters. These distances have been calculated based on the FCC F(50-50) curves.

N. Lat. = 27 50 15    W. Lng. = 81 56 53 HAAT and Distance to Contour - FCC Method - 30 Arc Sec.							
Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5	70-F5
000	49.7	300.3	11.5000	10.61	1.000	51.40	32.32
045	43.4	306.6	11.5000	10.61	1.000	51.82	32.66
090	37.4	312.6	11.5000	10.61	1.000	52.22	32.98
135	43.3	306.7	11.5000	10.61	1.000	51.83	32.66
180	38.3	311.7	11.5000	10.61	1.000	52.15	32.93
225	34.4	315.6	11.5000	10.61	1.000	52.41	33.14
270	38.4	311.6	11.5000	10.61	1.000	52.15	32.92
315	31.1	318.9	11.5000	10.61	1.000	52.63	33.31
Ave El= 39.48 M    HAAT= 310.52 M    AMSL= 350							