ENGINEERING REPORT

FM Translator Minor Change
Modification for
W258AH – Kalamazoo, MI
Increase in Height/ Decrease in Power

Lic No. BLFT-20040618AAI

July, 2006

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(Exhibit numbering is in response to FCC Online Form 349, Section III-A)

Discussion

This firm has been retained to prepare the required engineering report in support of a minor change modification for FM translator W258AH, Kalamazoo, MI, License No. BLFT-20040618AAI. W258AH is presently licensed to operate on 99.5 MHz with 19 watts of circularly polarized non-directional power with an antenna COR of 360 meters AMSL. Due to the addition of new antennas on the structure, W258AH will be relocated to a higher location on the same tower. W258AH proposes continued operation on CH258D, 99.5 MHz. Proposed operating parameters of 13 watts ERP at a COR of 373 meters AMSL are requested. Circularly polarized non-directional operation will be employed. The translator will rebroadcast parent station WSAE(FM) Spring Arbor, MI, CH295A.

The proposed tower bears Antenna Structure Registration No. 1007711. Overall tower height will not be altered as a result of this proposal, therefore the FAA need not be notified. A copy of the existing ASR has been included in ***Exhibit 12.1***. A copy of the vertical antenna system has been included in ***Exhibit 12.2***.

It has been determined the translator may be used in the area without interference to any existing FM broadcast station or translator. Allocation details are found in ***Exhibit 12.5***. The translator site lies outside of the primary contour of WSAE(FM), and the 1 mV/m (60 dBu) contour extends beyond the WSAE(FM) station 1 mV/m contour. A map of the proposed service area in relation to the primary station service contour has been included in ***Exhibit 12.4***.

Regarding protection of Canadian concerns, the present facility is and will remain within 320 km of the common border between the United States and Canada. No Canadian allotment nor facility has been noted in the proposed allocation.

The proposed operating parameters have been changed from the licensed values, however the proposed service contour serves a portion of the present service area as seen in ***Exhibit 12.3***.

The translator will employ a two bay circularly polarized antenna Shively 6812-2. As stated before, the antenna will be mounted on an existing tower, therefore the FAA need not be notified.

The proposed facility meets the requirements of the Rules for operation without a licensed operator in attendance. The transmitter site may be reached promptly at all hours and in all seasons. The transmitter will be equipped with proper control and interface circuits which will place the translator in a non-radiating condition in the event the proper incoming signal is absent. The transmitter and controls will be placed in a locked area to prevent unauthorized tampering with the equipment. A person or persons will be assigned to observe the signals of the station each day, and to take corrective action if required. The equipment proposed for operation is listed in the type-approved list of the Commission.

Discussion (continued)

RADIATION PROTECTION: The Commission requires an engineering study regarding compliance with the guidelines for human protection from radiofrequency radiation. This report section is in response to that provision of the Rules. The current Federal Communications Commission guidelines for RF radiation protection are set forth in OET Bulletin No. 65 (Edition 97-01), and the accompanying Supplement A, (Edition 97-01).

The facility proposed in this application is in compliance with the provisions of the FCC Rules and Guidelines concerning human exposure to radiofrequency radiation to observers located on the ground. Since the facility will operate with an ERP of less than 100 watts, §1.1307(b)(1) categorically exempts the facility from the requirement for special showings.

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.

DISTANCES TO CONTOURS: The following tabulation of the distances to the proposed service contours results from calculations performed in accordance with §73.313(d) and §73.333 Figure 1.

N. Lat. = 42 15 19 W. Lng. = 85 40 58
HAAT and Distance to Contour - FCC Method - NGDC 30 SEC

W258AH, Spring Arbor University , BLFT20040618AAI

Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	269.8	103.2	0.0130	-18.86	1.000	6.34
030	275.8	97.2	0.0130	-18.86	1.000	6.15
060	256.7	116.3	0.0130	-18.86	1.000	6.72
090	261.6	111.4	0.0130	-18.86	1.000	6.59
120	262.5	110.5	0.0130	-18.86	1.000	6.56
150	266.2	106.8	0.0130	-18.86	1.000	6.45
180	273.1	99.9	0.0130	-18.86	1.000	6.23
210	284.5	88.5	0.0130	-18.86	1.000	5.85
240	263.6	109.4	0.0130	-18.86	1.000	6.52
270	249.3	123.7	0.0130	-18.86	1.000	6.90
300	***246.7***	***126.3***	***0.0130***	***-18.86***	***1.000***	***6.96***
330	252.7	120.3	0.0130	-18.86	1.000	6.82

Ave El= 263.54 M HAAT= 109.46 M AMSL= 373 M