

ENGINEERING REPORT

FM Translator Minor Construction Permit Application

for

W262BF – Georgetown, DE
License No. BLFT-20140703AAJ
Facility ID No. 151579

SITE & FREQUENCY CHANGE

March, 2015

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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 Construction Permit Application for FM Translator W262BF - Georgetown, DE License No. BLFT-20140703AAJ (Facility ID: 151579). W262BJ presently operates on Channel 262D (100.3 MHz) with 0.130 kW of non-directional power with an antenna COR of 116 meters AMSL. Operation from a new site location is requested at a new antenna height. A new directional antenna will also be requested. Operation on the new frequency of CH264D (100.7 MHz) with 250 watts ERP (vertical only polarization) at 131 meters AMSL is proposed utilizing a new Scala CA2-FM-1DA(vertical only) directional antenna. The translator will rebroadcast new primary station WZBH(FM) - Georgetown, DE, CH228B1 (Facility ID: 25003) as an FM Fill-In Translator. The Translator will continue to remain licensed to the community of Georgetown, DE.

The translator will be mounted on the existing tower bearing Antenna Structure Registration Number 1034804. An error in coordinates for ASR #1034804 has been noted with the FAA concurrently notified. A copy of the corrected ASR #1034804 will be supplied upon receipt of the FAA "Determination of No Hazard". A copy of USGS Topographic Mapping and Aerial Photography of the corrected tower site has been included in **Exhibit 13.1** and **13.2**. The vertical antenna system has been plotted in **Exhibit 13.3**.

It has been determined the translator may be used in the area without interference to any existing FM broadcast station or facility. General allocation details are found in **Exhibit 13.6**. There is one (1) facility existing or proposed, close enough to merit further study. Therefore a supplemental contour protection study has been provided toward co-channel protection WZXL(FM) - Wildwood, NJ as included in **Exhibit 13.7**. It is believed sufficient clearance exists precluding the need for additional contour protection showings.

The applicant would like to note use of the NED 03 second terrain database for all allocation, contour and HAAT showings contained here-in.

The proposed 57 dB μ contour of the Fill-In translator lies wholly inside of the WZBH(FM) primary 57 dB μ service contour. A map of the proposed service area in relation to the primary station service contour has been included in **Exhibit 13.5**.

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 13.4**.

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).

Discussion (continued)

The FM Broadcast facility proposed in this application will not produce human exposure to radiofrequency radiation in excess of the applicable safety standards specified in §1.1307(b)(3) of the Commission's rules concerning RF contributors of less than 5%. **Exhibit 17.1** provides the details of the study that was made to demonstrate compliance. The facility is or will be properly marked with signs, and entry is restricted by means of fencing with locked doors and/or gates if required. Any other means as may be required to protect employees and the general public will be employed.

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. = 383128.0 W. Lng. = 751754.0 HAAT and Distance to Contour, FCC, FM 2-10 Mi, 51 pts Method - NED 03 SEC						
Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	8.4	122.6	0.0169	-17.72	0.260	7.32
030	6.4	124.6	0.0042	-23.74	0.130	5.22
060	2.4	128.6	0.0072	-21.41	0.170	6.08
090	6.7	124.3	0.2500	-6.02	1.000	14.31
120	8.7	122.3	0.2500	-6.02	1.000	14.20
150	10.6	120.4	0.2500	-6.02	1.000	14.09
180	11.0	120.0	0.2500	-6.02	1.000	14.07
210	11.2	119.8	0.2500	-6.02	1.000	14.05
240	15.1	115.9	0.2500	-6.02	1.000	13.83
270	12.9	118.1	0.2500	-6.02	1.000	13.96
300	14.4	116.6	0.2500	-6.02	1.000	13.87
330	12.1	118.9	0.2500	-6.02	1.000	14.00

Ave El= 9.99 M HAAT= 121.01 M AMSL= 131