

ENGINEERING REPORT

FM Translator “Long Form” Filing for Original Construction Permit Application

NEW284D – Fort Myers, FL
File No. BNPFT-20030314CFM
Facility ID No. 139201

Long-Form “Singleton Filing pursuant
to Auction 83 (AUC-03-83-D)

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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 an original Construction Permit “Long Form” Filing for FM Translator Application BNPFT-20030314CFM (Facility ID No. 139201). The pending “Short-Form” Application specified operation on CH284D (104.7 MHz) with 0.020 kW ERP of non-directional power at an antenna COR of 39 meters AMSL. Revised Operating Parameters will be requested in this “Long-Form” Filing. Continued operation on Channel CH284D (104.7 MHz) with a power of 0.25 kW ERP is requested from a new site location. A circularly polarized directional antenna will be utilized at the revised antenna COR height of 51 meters AMSL. The translator will rebroadcast primary station WOLZ(FM) – Fort Myers, FL, CH237C1 (Facility ID No. 13898) as a commercial “fill-in” FM Translator.

The facility will be located on an existing communications tower bearing Antenna Structure Registration number 1037657. A copy of the Antenna Structure Registration has been included in **Exhibit 13.1**. The vertical antenna system has been plotted in **Exhibit 13.2**. This proposal will not increase the overall structure height therefore the FAA need not be notified.

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 13.5**. There are two (2) existing facilities close enough to merit further study. Therefore supplemental contour protection studies have been provided toward co-channel station WSGF(FM) – Naples, FL (CH284C2) as included in **Exhibit 13.6(a)** and towards first adjacent channel station WCVU(FM) – Solana, FL (CH285A) as included in **Exhibit 13.6(b)**. It is believed sufficient clearance exists precluding the need for additional contour protection showings.

The applicant would like to note the use of the NGDC 30 Second Terrain Database for the Allocation Study, Coverage maps, and HAAT calculations.

The proposed 60 dBμ contour of the Translator is wholly contained inside the WOLZ(FM) primary 60 dBμ contour. A map of the proposed service contour in relation to the primary station service contour has been included in **Exhibit 13.4**.

The proposed operating parameters have been changed from the original “Short-Form” values, however the proposed service contour serves a portion of the short form service area as seen in **Exhibit 13.3**.

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 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 properly marked with signs, and entry is restricted by means of fencing with locked doors and/or gates. Any other means as may be required to protect employees and the general public will be employed.

Discussion (continued)

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 HAAT tabulation has been taken from the NGDC 30 second terrain database. The max HAAT value has been calculated to be 51.0 meters.

N. Lat. = 263751.0 W. Lng. = 815140.0						
HAAT and Distance to Contour,						
3-16 km, 51 pts Method - NGDC 30 SEC						
154925, University Of Northwestern St, BNPFT20030314CFM						
Azi.	AV EL	HAAT	ERP kW	dBk	Field	60-F5
000	3.3	47.7	0.0500	-13.01	0.447	5.96
030	2.1	48.9	0.2500	-6.02	1.000	9.16
060	0.0	51.0	0.2500	-6.02	1.000	9.37
090	1.8	49.2	0.2500	-6.02	1.000	9.18
120	3.1	47.9	0.1502	-8.23	0.775	7.87
150	0.3	50.7	0.0200	-16.98	0.283	4.94
180	0.0	51.0	0.0200	-16.98	0.283	4.96
210	0.0	51.0	0.0999	-10.01	0.632	7.32
240	0.0	51.0	0.2500	-6.02	1.000	9.37
270	1.9	49.1	0.2500	-6.02	1.000	9.18
300	1.7	49.3	0.0299	-15.24	0.346	5.37
330	3.1	47.9	0.0200	-16.98	0.283	4.79
Ave El= 1.45 M HAAT= 49.55 M AMSL= 51 M						