

Rose Hill, North Carolina
Amendment to BPFT-20110128AEU
Application for Minor Modification of FM Translator W263BE
On Channel 263
by
Conner Media Corporation

Exhibit 12
Interference Analysis

May 2011

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Table of Contents

Description	Page
Declaration.....	2
Narrative	3
White Area Waiver Request	3
Allocations	4
Height Above Average Terrain Calculations.....	4
Height Above Average Terrain Tabulation.....	5
Source of Data	5
Television Channel 6 Protection	6
Table 1: Allocations.....	7
Licensed and Proposed Contours White Area Coverage	Figure 1

Declaration

I declare, under penalty of perjury, that I am a technical consultant to broadcasting and other communications systems, that I have over twenty-five years of experience in the engineering of broadcast and other communications systems, that I am familiar with the Federal Communications Commission's Rules found in the Code of Federal Regulations Title 47, that I am a Professional Engineer registered in North Carolina, that I have prepared or supervised the preparation of the attached Exhibit 12, Interference Analysis, for Conner Media Corporation, and that all of the facts therein, except for facts of which the Federal Communications Commission may take official notice, are true to the best of my knowledge and belief.



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Narrative

This Exhibit supports an amendment to a minor modification application, file number BPFT-20110128AEU, for FM translator W263BE, Rose Hill, North Carolina. The modifications proposed are a change of location and height, an increase in Effective Radiated Power and a request for a waiver to provide coverage to a white area. The amendment corrects the coordinates in the Tech Box of FCC Form 349, and changes the height. There is no change in the existing noncommercial primary station.

This a minor modification as shown in Figure 1. Allocation details are provided in this exhibit. This proposal complies fully with the requirements of 74 C.F.R. §74.1204(a).

The proposed modified facilities create no mutual exclusivities as shown in the allocation table in this exhibit.

Figure 1 shows the licensed 60 dBu F(50,50) coverage area and the proposed 60 dBu F(50,50) coverage area. As shown in Figure 1, this application proposes a minor modification.

White Area Waiver Request

Figure 1 also shows the 60 dBu F(50,50) contour of an alternate facility, W263BEmod_std, an omnidirectional facility with 13 Watts ERP, the standard maximum for the Height Above Average Terrain for the proposed antenna location. A waiver of the standard power limit in FCC Rules 47 C.F.R. §74.1235(b)(1) is requested to provide noncommercial service to an area which does not receive noncommercial service. The unserved area is shown in red. The standard power contour only reaches a minor portion of the unserved area. The waiver is necessary in order to reach the unserved area.

In Docket 88-140, the Commission indicated that it would be favorably disposed to allowing powers up to 250 Watts where the additional coverage was white area.¹ For this facility, the white area extends beyond that which can be covered with 250 Watts.

All licensed noncommercial facilities whose contours approach the proposed service contour are shown.

Allocations

This application proposes service to Rose Hill, North Carolina, on channel 263. An updated Table 1: Allocations is included in this exhibit with a list of the stations, construction permits, allocations, and applications studied. All are protected by this application. The allocations table was prepared using the NED 03 arcsecond terrain database which is described below.

Height Above Average Terrain Calculations

This is a non fill-in translator East of the Mississippi. The height above average terrain (HAAT) was calculated for each of the radials required in §74.1235(b). Elevation data is extracted from the NED03 3 arcsecond terrain database described below. Data is extracted at 0.1 kilometer intervals from 3 to 16 kilometers, inclusive, from the tower site. The HAAT and distance to the 60 dBu F(50,50) contour is tabulated below.

¹ Report and Order, Proceeding Terminated, In the Matter of Amendment of Part 74 of the FM Commission's Rules Concerning Translator Stations, FCC 90-375, at paragraph 5.

Height Above Average Terrain Tabulation

Bearing (deg)	Distance (km)	HAAT (m)
0.0	13.6	112.6
30.0	14.0	118.5
60.0	14.3	124.3
90.0	14.1	121.0
120.0	14.4	125.5
150.0	14.4	126.6
180.0	14.2	121.9
210.0	14.0	119.2
240.0	14.0	119.2
270.0	13.7	114.2
300.0	13.4	109.1
330.0	13.6	111.9

Source of Data

Transmitter location, effective radiated power, directional antenna pattern, and elevation data are extracted from the Commission's CDBS. All contours for existing and proposed facilities are calculated using height above average terrain calculated at one degree horizontal increments.

The contours were also evaluated using terrain extracted from the V-Soft Communications NED 03 terrain database. The NED 03 database is derived from the USGS National Elevation Data 30 meter terrain database. The USGS National Elevation Dataset has been developed by merging the highest-resolution, best-quality elevation data available across the United States into a seamless raster format. NED is the result of the maturation of the USGS effort to provide 1:24,000-scale Digital Elevation Model (DEM) data for the conterminous US and 1:63,360-scale DEM data for Alaska.

All population data is from 2000 U.S. Census SF1 data files. Population is counted by considering the location of the centroid of each census block. The data for each block is

counted if it falls within the area being counted. Census 2010 PL data files are now available. Data will be provided upon request.

Television Channel 6 Protection

There are no television channel 6 stations requiring protection. This application proposes a channel which is not subject to television channel 6 separation requirements.

Table 1: Allocations

Timothy L. Warner, Inc.
Asheville, North Carolina

Allocation Study
Conner Media Corporation
CH# 263D - 100.5 MHz, Pwr= 0.25 kw, HAAT= 118.1 M, COR= 134 M
Average Protected F(50-50)= 14.0 km
Omni-directional

DISPLAY DATES
DATA 05-26-11
SEARCH 05-26-11

REFERENCE
34 46 17.0 N.
77 56 35.0 W.

CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
263D Rose Hill	W263BE	APP	C NC	270.3 89.7	91.5 BPFT20110128AEU	34 46 17.0 78 56 35.0	0.250 67	38.3 110	11.2 Conner Media Corporation	39.5	33.6
This is the application being amended.											
263D Rose Hill	W263BE	LIC	C NC	319.8 139.7	13.4 BLFT20070727ABY	34 51 48.0 78 02 16.0	0.038 71	23.4 94	7.0 Conner Media Corporation	-23.5*	-39.9
This is the licensed facility being modified.											
264C Wake Forest	WRVA-FM	LIC	CX NC	351.1 171.0	119.1 BLH20100106AEL	35 49 53.0 78 08 50.0	100.000 600	136.3 664	91.6 Capstar Tx Llc	-30.8*<	7.1
262C1 Harkers Island	WLGW	LIC	NCX NC	87.5 268.1	95.0 BMLH20091102AAT	34 48 17.0 76 54 23.0	100.000 148	86.9 152	57.4 Barinowski Investment Comp	-6.1<	16.3
263D Wilmington	W263BA	LIC	C NC	171.5 351.6	58.0 BLFT20070220AAQ	34 15 15.0 77 50 59.0	0.019 99	22.3 104	6.7 Educational Media Foundati	21.4	2.9
260C2 Boiling Spring Lake	WKXB	LIC	NCX NC	180.8 0.8	80.0 BLH20100420AIE	34 03 02.0 77 57 20.0	35.000 178	5.9 181	52.3 Sunrise Broadcasting, Llc	59.9	26.6
266D Jacksonville	W266AV	LIC	C NC	92.8 273.1	48.5 BLFT20070727ACD	34 44 56.0 77 24 51.0	0.120 41	0.8 49	6.4 Conner Media, Inc.	33.6	40.9
263C3 Marion	WHLZ	LIC	ZCX SC	254.8 73.8	156.9 BLH20021101ABR	34 23 26.0 79 35 25.0	25.000 100	109.2 122	35.9 Cumulus Licensing Llc	34.0	73.9
265C2 Fairmont	WSTS	LIC	CN NC	239.0 58.4	107.0 BLH19941222KA	34 16 17.0 78 56 24.0	50.000 149	5.9 176	51.6 Davidson Media Station Wst	87.2	54.4
From Channel 265A Per D90-32											
209C3 Wilmington	WDVV	LIC	DVX NC	187.9 7.9	66.1 BLED20060908AAM	34 10 52.0 78 02 33.0	13.500 106	21.6 114	20.7 Caroloma Christian Radio I	11.5R	54.6M
209C3 Wilmington	WDVV	CP	DCX NC	187.9 7.9	66.1 BPED20100106AFN	34 10 52.0 78 02 33.0	13.500 106	21.6 114	20.7 Caroloma Christian Radio I	11.5R	54.6M
260C2 Holly Springs	WCMC-FM	LIC	NCX NC	332.0 151.7	114.0 BLH20100423ACB	35 40 35.0 78 32 08.0	26.500 206	6.0 297	53.1 wcmc-fm, Llc	94.3	59.8

Terrain database is NED 03 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference Zone= East Zone, Co to 3rd adjacent.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtlt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside protected contour.
< = Station meets FCC minimum distance spacing for its class.
< = Contour Overlap

	Service Pop	Running Total	%
1st Service	1,778	1,778	11.1
2nd Service	5,533	7,311	45.8
3rd Service (or >)	8,662	15,973	100.0

Timothy L. Warner, Inc.

- First Noncommercial Service
- Second Noncommercial Service
- Three or more noncommercial Services

W263BEmod
 BPFT20110128AEU.A
 Latitude: 34-46-17 N
 Longitude: 077-56-35 W
 ERP: 0.25 kW
 Channel: 263 100.5 MHz
 AMSL Height: 134.5 m
 Elevation: 13.5 m
 Horiz. Pattern: Omni

W263BE
 BLFT20070727ABY
 Latitude: 34-51-48 N
 Longitude: 078-02-16 W
 ERP: 0.038 kW
 Channel: 263 100.5 MHz
 AMSL Height: 94.0 m
 Elevation: 24.0 m
 Horiz. Pattern: Omni

- W263BE
- W263BEmod
- WZDG
- WHQR
- WJKA
- WTEB
- WFSS
- WKNS
- WAGO
- WWIL-FM
- WRAE
- W263BEmod_std

W263BE
 Licensed and Proposed Contours
 White Area Coverage
 26 May 2011
 Figure 1

