

Hickory, North Carolina  
Long Form Application for FM Translator 1564371  
File Number BNPFT-20030317LWZ  
On Channel 263  
by  
Conner Media Corporation

Exhibit 13  
Interference Analysis

August 2013

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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 13, 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 a long form application for CDBS application ID 1564371, an amended “Tech Box” application in response to a filing window<sup>1</sup> for FM translator file number BNPFT-20030317LWZ, CDBS application ID 651420, on Channel 263 in Hickory, North Carolina. Allocation details are provided in this exhibit. The application proposes no changes from the tech box filing.

This proposal creates no new mutual exclusivities with any Auction 83 Tech Box filings or any other facility. A preclusion showing, provided in the amendment, is unchanged.

Figure 1 shows the proposed 60 dBu F(50,50) coverage area. The primary station WKVS 60 dBu F(50,50) contour is also shown. Figure 1 also shows the original 2003 Tech Box proposed contour. The proposed facilities are a minor modification with respect to the original Tech Box proposal.

### Allocations

This application proposes service to Hickory, 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. Where the outgoing protection is provided by interference contours with a separation of less than 3.2 kilometers (2 miles), the lack of overlap is plotted in figures in this exhibit, and the output of the FM Over program is provided. For this application, there are no such facilities.

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<sup>1</sup> *Public Notice, Media Bureau Announces FM Translator Auction 83 Filing Window and Filing Procedures, August 30, 2013 Deadline Set for Form 349 Applications for Certain Non-Mutually Exclusive Tech Box Proposals*, Report No. AUC-03-83-E, DA13-1675, released July 31, 2013.

Table 1: Allocations

Allocation Study											
Conner Media Corporation											
REFERENCE		CH# 263D - 100.5 MHz, Pwr= 0.25 kW DA, HAAT= 79.0 M, COR= 453 M								DISPLAY DATES	
35 50 59.0 N.		Average Protected F(50-50)= 11.5 km								DATA 08-22-13	
81 26 40.0 W.		Standard Directional								SEARCH 08-22-13	
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*
263C0 Gray Court	WSSL-FM	LIC	NCX SC	203.3 22.9	154.27 BLH20050923AFT	34 34 18.0 82 06 44.0	100.000 381	181.1 587	78.1 Capstar Tx Llc	-39.7*	32.3
263D Hickory	1564371	APP	DC NC	0.0 0.0	0.00 BNPFT20030317LWZ	35 50 59.0 81 26 40.0	0.250	23.8 453	7.1 Conner Media Corporation	-30.8*	-30.8*
Tech Box filing for which this is the Long Form Application											
265D Hickory	640588	APP	C NC	148.1 328.1	14.06 BNPFT20030317BGV	35 44 32.0 81 21 43.0	0.055 31	0.5 352	4.8 Radio Training Network, In	0.1	8.3
264D Hickory	1564359	APP	DC NC	112.0 292.2	32.99 BNPFT20030317MAH	35 44 17.0 81 06 22.0	0.250	10.8 354	6.5 Conner Media Corporation	8.4	2.5
264A Banner Elk	WZJS	LIC	CX NC	313.6 133.4	54.02 BLH20080422AAN	36 11 03.0 81 52 48.0	0.150 593	39.1 1661	24.4 High Country Adventures, L	5.0	13.3
262L1 Morganton	WHGW-LP	LIC	 NC	242.3 62.1	35.32 BLL20040813AAZ	35 42 06.0 81 47 25.0	0.090 31	12.7 415	8.8 Morganton Christian Radio	9.3	6.7
261D Wilkesboro	633997	APP	C NC	48.4 228.6	37.98 BNPFT20030311ABR	36 04 34.0 81 07 43.0	0.010 292	0.2 705	9.5 Cumberland Communities Com	26.3	27.3
262C High Point	WVBZ	LIC	CN NC	84.3 265.3	146.80 BLH19880805LB	35 58 09.0 79 49 29.0	100.000 316	106.0 554	72.9 Capstar Tx Llc	26.8	53.5
263A Glade Spring	AL5370	RSV-A	 VA	351.8 171.7	106.23 RM11280	36 47 50.0 81 36 52.0	6.000 100	68.3 855	15.8	29.4	61.3
263A Glade Spring	WFYE	LIC	CX VA	354.7 174.7	107.30 BLH20080917AAF	36 48 45.4 81 33 20.4	6.000 -4	68.3 789	15.8 Hb Radio, Llc	30.8	67.7
260C Old Fort	AL7225	RSV-A	 NC	248.7 67.9	127.85 RM10197	35 25 32.0 82 45 25.0	100.000 600	14.5 1590	93.9	100.2	32.0
260C Old Fort	WKSF	LIC	C NC	248.7 67.9	127.85 BMLH20031105AEC	35 25 32.0 82 45 25.0	53.000 799	12.6 1781	93.9 Capstar Tx Llc	102.2	32.1
261D Boone	1564836	APP	DC NC	333.5 153.4	47.44 BNPFT20030317FSV	36 13 55.0 81 40 50.0	0.010	0.1 1328	8.0 Wake Forest University	37.2	37.6
265A Elkin	WIFM-FM	LIC	NCX NC	54.6 234.9	66.97 BLH20020619AAF	36 11 50.0 80 50 13.0	0.470 216	1.5 540	18.2 Yadkin Valley Broadcasting	53.5	45.9
210C1 Davidson	WDAV	LIC	DCX NC	129.1 309.4	70.58 BLED20130603AUH	35 26 54.0 80 50 23.0	100.000 246	8.1 474	39.6 The Trustees Of Davidson C	21.5R	49.1M
210C1 Davidson	WDAV	LIC	DC NC	129.1 309.4	70.58 BMLH20050902AAD	35 26 54.0 80 50 23.0	100.000 246	8.1 474	39.6 The Trustees Of Davidson C	21.5R	49.1M
261D Huntersville	W261BZ	CP	C NC	120.9 301.3	68.40 BNPFT20130325APS	35 31 57.0 80 47 47.0	0.170	0.9 356	12.2 Radio Training Network, In	53.3	55.0
261D Kings Mountain	W261AP	LIC	C NC	167.5 347.6	70.14 BLFT20070419AAL	35 13 57.0 81 16 36.0	0.007 241	0.2 482	7.7 Positive Alternative Radio	55.8	61.3
262D Charlotte	W262BM	LIC	DC NC	135.4 315.8	90.64 BLFT20081030ABQ	35 16 03.0 80 44 35.0	0.010 173	1.4 378	0.7 Isothermal Community Colle	75.8	69.4

Terrain database is NED 03 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM  
 In & Out distances between contours are shown at closest points. Reference Zone= East Zone, Co to 3rd adj.  
 All separation margins (if shown) include rounding  
 Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
 "\*"affixed to 'IN' or 'OUT' values = site inside protected contour.  
 < = Station meets FCC minimum distance spacing for its class.

### 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 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.

All population data is from 2010 U.S. Census PL 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.

