

Wilmington, North Carolina
Application for Minor Modification of FM Translator W277CF
On Channel 224
by
Conner Media Corporation

Exhibit 13
Interference Analysis

February 2014

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Timothy L. Warner, Inc.
Post Office Box 8045
Asheville, North Carolina 28814-8045
(828) 258-1238
twarner@tlwinc.net

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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.



Timothy L. Warner, P.E.
Post Office Box 8045
Asheville, North Carolina 28801
(828) 258-1238
twarner@tlwinc.net
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Narrative

This Exhibit supports an amendment to a minor modification application for FM translator W277CF, to Channel 224 in Wilmington, North Carolina. W277CF has licensed facilities, file number BLFT-20121210ADJ, with a pending application BPFT-20130930BSI. 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 with any licensed facilities, construction permits, or applications as shown in the allocation table in this exhibit.

This application proposes a move to New Hanover County, North Carolina, from Duplin County, North Carolina. The proposed site and the licensed site are both outside the any urbanized area as defined by the U.S. Census. The proposed site is in the Wilmington, North Carolina Arbitron metro area. The licensed site is outside any Arbitron metro area.

Figure 1 shows the licensed 60 dBu F(50,50) coverage area, and the proposed 60 dBu F(50,50) coverage area. Figure 1 shows the present and proposed contours, and fill-in status confirmation.

This application proposes a change of primary station to WHQR, Wilmington, North Carolina. Conner has notified the Commission that it is changing the primary station to WHQR at the W277CF licensed site. The modifications consist of a change to the I.F. frequency of the licensed facility, a new site and increased height (both proposed in the minor modification application on file), decreased power, change to an omnidirectional antenna pattern, and new primary station (already proposed).

Allocations

This application proposes service to Wilmington, North Carolina, on channel 224. 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.

AM Station Protection

The proposed facility is 1.5 kilometers from AM station WMFD, Wilmington, North Carolina.. The proposed antenna and transmission line will be mounted on an existing grounded tower. No additional construction is required. There is no anticipated impact on the WMFD coverage area or pattern.

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

Allocation Study Conner Media Corporation												
REFERENCE		CH# 224D - 92.7 MHz, Pwr= 0.15 kW DA, HAAT= 140.4 M, COR= 148 M								DISPLAY DATES		
34 17 08.0 N.		Average Protected F(50-50)= 13.4 km								DATA 02-01-14		
77 58 32.0 W.		Standard Directional								SEARCH 02-01-14		
CH CITY	CALL	TYPE STATE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*	
225C Dillon	WEGX	LIC	CX SC	274.6 93.8	124.29 BMLH20070316ACC	34 22 04.0 79 19 21.0	100.000 493	128.6 521	86.2 Qantum Of Florence License	-17.6*	17.9	
224D Rose Hill	W224CI	LIC	C NC	3.1 183.2	53.97 BLFT20130509ACM	34 46 17.0 77 56 35.0	0.015 119	23.6 133	7.0 Conner Media Corporation	16.8	1.5	
222C2 Jacksonville	WQSL	LIC	CN NC	61.6 241.9	55.02 BLH19950612KD	34 31 10.0 77 26 52.0	22.500 221	5.7 226	51.6 Nm Licensing LLC	36.0	2.5	
277D Burgaw	W277CF	LIC	DH NC	15.0 195.0	26.58 BLFT20121210ADJ	34 31 01.0 77 54 01.0	0.250 126	33.7 134	105.0 Conner Media Corporation	9.5R	17.1M	
Facility being modified.												
224C2 Pine Knoll Shores	WBNK	LIC	NCX NC	63.3 244.1	150.26 BLH20090102AAD	34 53 00.4 76 30 21.3	11.500 228	115.1 228	46.2 Tower Investment Trust, In	21.8	59.2	
227C Washington	WERO	LIC	CN NC	23.7 204.0	131.06 BLH19791206AF	35 21 55.0 77 23 38.0	100.000 543	13.0 554	89.3 Nm Licensing LLC	104.5	41.0	
221C1 Myrtle Beach	WMYB	LIC	NCX SC	232.3 51.7	125.61 BMLH20081006AAK	33 35 27.0 79 02 55.0	94.000 263	9.3 267	68.5 Nm Licensing LLC	103.1	56.2	
224D Kinston	W224CJ	LIC	C NC	17.1 197.3	113.03 BLFT20130528ALW	35 15 31.0 77 36 33.0	0.250 70	35.8 90	10.6 Conner Media Corporation	63.7	56.9	

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.
 Reference station has protected zone issue: AM station WMFD

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. 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 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.

