

Jamestown, North Carolina
Long Form Application for New FM Translator
BNPFT-20030312AKD
On Channel 285
by
Triad Family Network, Inc.

Exhibit 13
Interference Analysis

March 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 Triad Family Network, Inc., 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 in response to a filing window¹ for FM translator file number BNPFT-20030312AKD, CDBS application ID 649553, on Channel 285 in Jamestown, North Carolina. Allocation details are provided in this exhibit. The application proposes minor modification changes from the tech box filing. Specific changes are a change of the primary station to be rebroadcast, a change to fill-in, a change of site, a decrease in height, and an increase in Effective Radiated Power.

This proposal creates no new mutual exclusivities with any Auction 83 Tech Box filings.

Figure 1 shows the tech box 60 dBu F(50,50) coverage area, and the proposed 60 dBu F(50,50) coverage area. This application proposed is a minor modification of the Tech Box facilities. The 2 mV/m ground wave contour for primary station WMFR, High Point, North Carolina, is shown on Figure 1, along with a 25 mile radius (dashed) line. The proposed 60 dBu F(50,50) contour is within the 2 mV/m contour and within 25 miles of the WMFR site.

Allocations

This application proposes service to Jamestown, North Carolina, on channel 285. 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

¹ *Public Notice, Media Bureau Announces FM Translator Auction 83 Filing Window and Filing Procedures*, DA13-283, released February 26, 2013. (Singleton Notice)

Table 1: Allocations

Allocation Study Triad Family Network, Inc											
REFERENCE		CH# 285D - 104.9 MHz, Pwr= 0.09 kw, HAAT= 52.3 M, COR= 302 M						DISPLAY DATES			
35 55 09.0 N.		Average Protected F(50-50)= 7.2 km						DATA 03-27-13			
80 00 34.0 W.		Omni-directional						SEARCH 03-27-13			
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*
284C0 Charlotte	WKQC	LIC	DCY NC	219.7 39.3	96.18 BLH19920416KB	35 15 06.0 80 41 12.0	100.000 369	115.4 570	78.1 Cbs Radio Stations Inc.	-26.4*	9.0
285D Jamestown	634553	APP	C NC	14.8 194.8	4.11 BNPFT20030312AKD	35 57 18.0 79 59 52.0	0.019 81	18.8 327	5.7 Triad Family Network, Inc	-21.0*	-22.7*
Tech Box application for which this is the long form filing.											
286C1 Durham	WDCG	LIC	NCX NC	101.6 282.3	110.07 BLH20080310ADT	35 42 50.0 78 49 04.0	73.000 339	104.7 443	71.9 Capstar Tx LLC	-2.9	26.6
284D Greensboro	W284BN	LIC	C NC	49.9 230.0	28.28 BLFT20070928BBU	36 04 58.0 79 46 08.0	0.013 103	8.2 342	5.9 Wake Forest University	12.4	11.5
285D Mount Airy	W285DJ	LIC	CN NC	327.6 147.4	60.43 BLFT19941212TG	36 22 41.0 80 22 16.0	0.010 381	39.8 702	11.5 Triad Family Network, Inc,	14.2	27.6
Translator For WBFJFM, Winston-Salem, NC											
285C2 Roanoke	WJJS	LIC	ZCX VA	2.6 182.6	161.50 BLH20040723ADP	37 22 23.0 79 55 40.0	14.500 282	138.3 699	58.2 Capstar Tx LLC	17.2	82.8
283D Burlington	634524	APP	C NC	70.2 250.5	46.55 BNPFT20030312AJX	36 03 35.0 79 31 23.0	0.055 49	0.5 260	6.7 Triad Family Network, Inc	37.8	38.6
287C1 Gaffney	WOSF	LIC	CX SC	240.2 59.5	123.14 BLH20100429ADK	35 21 51.0 81 11 13.0	51.000 395	9.6 644	72.8 Gaffney Broadcasting, Inco	105.9	49.5
288A Sanford	WFJA	LIC	NCX NC	129.8 310.2	82.38 BLH20081029ACZ	35 26 34.0 79 18 41.0	2.300 148	2.4 254	27.3 wwgp Broadcasting Corporat	71.2	53.8

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.
 Reference station has protected zone issue: WGOS, HIGH POINT, NC, L, NDD at 242.4° at a distance of .7 km

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.

