

Liberty, North Carolina
Long Form Application for New FM Translator
BNPFT-20030312AMA
On Channel 290
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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28 March 2013

Narrative

This Exhibit supports a long form application in response to a filing window¹ for FM translator file number BNPFT-20030312AMA, CDBS application ID 634342, on Channel 290 in Liberty, North Carolina. Allocation details are provided in this exhibit. The application proposes a minor change from the tech box filing. Specifically, the frequency is changed to the lower first adjacent channel.

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

Figure 1 shows the tech box and proposed 60 dBu F(50,50) coverage area. Because the parameters, other than frequency, are unchanged, the contours are unchanged.

Allocations

This application proposes service to Liberty, North Carolina, on channel 290. 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# 290D - 105.9 MHz, Pwr= 0.013 kw, HAAT= 120.4 M, COR= 301 M								DISPLAY DATES		
35 46 45.5 N.		Average Protected F(50-50)= 6.8 km								DATA 03-28-13		
79 30 04.9 W.		Omni-directional								SEARCH 03-28-13		
CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap	*OUT* in km)	
291C1 Knightsdale	WRDU	LIC	C NC	97.3 277.8	88.85 BLH20090601APS	35 40 28.0 78 31 40.0	27.500 489	105.0 567	71.2 Capstar Tx LLC	-22.8*	8.1	
291D Liberty	634642	APP	C NC	270.0 90.0	0.00 BNPFT20030312AMA	35 46 45.5 79 30 04.9	0.013 120	9.3 301	6.6 Triad Family Network, Inc	-15.4*	-15.2*	
Tech Box application for which this is the long form filing.												
289C1 Clemmons	WMKS	LIC	NCX NC	310.7 130.2	102.48 BLH20110902AAJ	36 22 36.4 80 22 08.6	30.000 472	109.8 794	74.5 Clear Channel Broadcasting	-13.1*	19.9	
288A Sanford	WFJA	LIC	NCX NC	155.3 335.4	41.11 BLH20081029ACZ	35 26 34.0 79 18 41.0	2.300 148	2.4 254	27.9 Wwgp Broadcasting Corporat	32.1	12.9	
291L1 Mount Zion	WEJM-LP«	LIC	 NC	331.3 151.1	38.88 BLL20060215AAL	36 05 10.0 79 42 35.0	0.100 21	12.8 255	58.8 M&m Community Development,	14.5R	24.4M	
293C1 Salisbury	WEND	LIC	CN NC	258.8 78.1	104.15 BLH19990302KD	35 35 32.0 80 37 44.0	84.000 319	9.9 552	71.5 Capstar Tx LLC	87.6	32.3	
290D Southern Pines	W290AD	LIC	CN NC	172.9 353.0	65.20 BLFT19960304TE	35 11 46.0 79 24 46.0	0.019 90	21.0 213	6.3 Bible Broadcasting Network	37.6	38.2	
Translator For WYFQ, Wadesboro, NC												
288D Durham	W288BU	CP	DC NC	67.1 247.5	63.14 BMPFT20120622AAD	35 59 54.0 78 51 21.0	0.250	0.8 235	12.2 Truth Broadcasting Corpora	55.7	50.1	
289D Raleigh	W289BD	APP	C NC	88.9 269.4	74.34 BPFT20130228AAR	35 47 21.0 78 40 45.0	0.250	17.0 222	11.7 Truth Broadcasting Corpora	50.8	53.0	
289D Raleigh	W289BD	LIC	C NC	88.9 269.4	74.34 BLFT20130107AAL	35 47 21.0 78 40 45.0	0.115	13.5 222	9.7 Truth Broadcasting Corpora	54.3	55.0	
288D Durham	W288BU	LIC	C NC	67.1 247.5	63.14 BLFT20070926AQN	35 59 54.0 78 51 21.0	0.009 131	0.2 235	6.5 Truth Broadcasting Corpora	56.3	56.3	
289C3 Rennert	WGQR	LIC	NCX NC	150.7 331.1	132.73 BLH20110217AAC	34 44 05.0 78 47 25.0	7.700 178	56.8 212	38.3 Christian Listening Networ	69.4	85.0	
290D Danville	DW289AJ	CP	C VA	3.2 183.2	102.93 BPFT20100414AAU	36 42 20.0 79 26 14.0	0.010 165	27.4 368	8.2 Calvary Chapel Of Twin Fal	69.4	75.0	
291D Eden	W291AN	LIC	V NC	343.4 163.2	84.20 BLFT20001222ACG	36 30 21.0 79 46 18.0	0.020 -19	5.3 188	3.7 Calvary Chapel Of Twin Fal	73.0	72.4	

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.

634642

BNPFT20030312AMA
Latitude: 35-46-45.50 N
Longitude: 079-30-04.90 W
ERP: 0.013 kW
Channel: 291 106.1 MHz
AMSL Height: 301.0 m
Elevation: 214.0 m
Horiz. Pattern: Omni

634642m

Long Form Application
Latitude: 35-46-45.50 N
Longitude: 079-30-04.90 W
ERP: 0.013 kW
Channel: 290 105.9 MHz
AMSL Height: 301.0 m
Elevation: 214.0 m
Horiz. Pattern: Omni

Timothy L. Warner, Inc.

Franklinville

Ramseur

Liberty

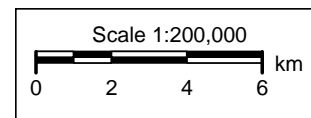
634642
634642m

Tech Box and Proposed F(50-50) 60.00 dBu

Siler City

Liberty, North Carolina
BNPFT-20030312AMA
Tech Box and Proposed Contours
March 2013
Figure 1

Chatham



V-Soft Communications LLC ©