

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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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 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.



Timothy L. Warner, P.E.
Post Office Box 8045
Asheville, North Carolina 28801
(828) 258-1238
twarner@tlwinc.net
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													
CH# 290D - 105.9 MHz, Pwr= 0.013 kw, HAAT= 120.4 M, COR= 301 M													
Average Protected F(50-50)= 6.8 km													
Omni-directional													
DISPLAY DATES													
DATA 03-28-13													
SEARCH 03-28-13													
CH	CALL	TYPE	ANT	AZI.	DIST	LAT.			Pwr(kw)	INT(km)	PRO(km)	*IN*	*OUT*
CITY			STATE	<--	FILE #	LNG.			HAAT(M)	COR(M)	LICENSEE	(Overlap	in km)
291C1	WRDU	LIC	C	97.3	88.85	35 40	28.0	27.500	105.0	71.2	-22.8*	8.1	
Knightsdale			NC	277.8	BLH20090601APS	78 31	40.0	489	567	Capstar Tx Llc			
291D	634642	APP	C	270.0	0.00	35 46	45.5	0.013	9.3	6.6	-15.4*	-15.2*	
Liberty			NC	90.0	BNPFT20030312AMA	79 30	04.9	120	301	Triad Family Network, Inc			
Tech Box application for which this is the long form filing.													
289C1	WMKS	LIC	NCX	310.7	102.48	36 22	36.4	30.000	109.8	74.5	-13.1*	19.9	
Clemmons			NC	130.2	BLH20110902AAJ	80 22	08.6	472	794	Clear Channel Broadcasting			
288A	WFJA	LIC	NCX	155.3	41.11	35 26	34.0	2.300	2.4	27.9	32.1	12.9	
Sanford			NC	335.4	BLH20081029ACZ	79 18	41.0	148	254	Wwgp Broadcasting Corporat			
291L1	WEJM-LP<<	LIC		331.3	38.88	36 05	10.0	0.100	12.8	58.8	14.5R	24.4M	
Mount Zion			NC	151.1	BLL20060215AAL	79 42	35.0	21	255	M&m Community Development,			
293C1	WEND	LIC	CN	258.8	104.15	35 35	32.0	84.000	9.9	71.5	87.6	32.3	
Salisbury			NC	78.1	BLH19990302KD	80 37	44.0	319	552	Capstar Tx Llc			
290D	W290AD	LIC	CN	172.9	65.20	35 11	46.0	0.019	21.0	6.3	37.6	38.2	
Southern Pines			NC	353.0	BLFT19960304TE	79 24	46.0	90	213	Bible Broadcasting Network			
Translator For WYFQ, Wadesboro, NC													
288D	W288BU	CP	DC	67.1	63.14	35 59	54.0	0.250	0.8	12.2	55.7	50.1	
Durham			NC	247.5	BMPFT20120622AAD	78 51	21.0		235	Truth Broadcasting Corpora			
289D	W289BD	APP	C	88.9	74.34	35 47	21.0	0.250	17.0	11.7	50.8	53.0	
Raleigh			NC	269.4	BPFT20130228AAR	78 40	45.0		222	Truth Broadcasting Corpora			
289D	W289BD	LIC	C	88.9	74.34	35 47	21.0	0.115	13.5	9.7	54.3	55.0	
Raleigh			NC	269.4	BLFT20130107AAL	78 40	45.0		222	Truth Broadcasting Corpora			
288D	W288BU	LIC	C	67.1	63.14	35 59	54.0	0.009	0.2	6.5	56.3	56.3	
Durham			NC	247.5	BLFT20070926AQN	78 51	21.0	131	235	Truth Broadcasting Corpora			
289C3	WGQR	LIC	NCX	150.7	132.73	34 44	05.0	7.700	56.8	38.3	69.4	85.0	
Rennert			NC	331.1	BLH20110217AAC	78 47	25.0	178	212	Christian Listening Networ			
290D	DW289AJ	CP	C	3.2	102.93	36 42	20.0	0.010	27.4	8.2	69.4	75.0	
Danville			VA	183.2	BPFT20100414AAU	79 26	14.0	165	368	Calvary Chapel Of Twin Fal			
291D	W291AN	LIC	V	343.4	84.20	36 30	21.0	0.020	5.3	3.7	73.0	72.4	
Eden			NC	163.2	BLFT20001222ACG	79 46	18.0	-19	188	Calvary Chapel Of Twin Fal			

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.

Timothy L. Warner, Inc.

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

Liberty



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

Franklinville
Ramseur

Siler City

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

Chatham



V-Soft Communications LLC ©