

**W267AM**  
**Winston-Salem, North Carolina**  
**Minor Modification Application for FM Translator**  
**BLFT-20091201ARG**  
**On Channel 267**  
**by**  
**Triad Family Network, Inc.**

**Exhibit 13**  
**Interference Analysis**

**May 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 May 2013

### Narrative

This Exhibit supports a minor modification application for FM translator W267AM, file number BLFT-20091201ARG, on Channel 267 in Winston-Salem, North Carolina. Allocation details are provided in this exhibit. This application proposes a change in site, a change to fill-in status for WSJS (AM), a directional antenna, an increase in height, and an increase in effective radiated power.

Figure 1 shows the licensed and proposed 60 dBu F(50,50) coverage area, the proposed 40 dBu F(50,50) co-channel interference contour, the WSJS (AM) 2 mV/m contour, the WSJS (AM) 25 mile radius circle.

While this application does not qualify as a minor change under Section 74.1233(a)(1), which requires that the 60 dBu contours of W267AM's existing and proposed facilities overlap, Triad respectfully requests waiver of Section 74.1233(a)(1) in accordance with the factors recently set forth by the Media Bureau in connection with an identical waiver granted to The Cromwell Group, Inc. with respect to W263AQ, Mattoon, IL, in FCC File No. BPFT-20101025ABR. (the "Cromwell Waiver")<sup>1</sup>

### Request for Waiver of Section 74.1233(a)(1)

In accordance with Section 1.3 of the Commission's Rules, "[a] waiver is appropriate when special circumstances warrant a deviation from the general rule and such deviation will serve the public interest." *Northwest Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166

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<sup>1</sup> See letter to John F. Garziglia, Esq., In re: W263AQ, Mattoon, IL., DA 11-1495, September 2, 2011.

(D.C. Cir. 1990). As with the recently granted Cromwell Waiver, Triad submits that such special circumstances are similarly present here.

The Media Bureau found that the Cromwell Waiver was in the public interest because (1) the license did not have a history of filing serial minor modification application; (2) the proposed site was mutually exclusive to the licensed facility; (3) the proposed move did not implicate the concerns raised by the Commission in the low-power FM proceeding; and (4) W263AQ would be rebroadcasting an AM station.

First, as with the Cromwell Waiver and as supported by the Commission's CDBS Media Bureau records, Triad does not have a history of filing multiple or "serial" modification applications and is not attempting to relocate W267AM to Winston-Salem via "hops." Rather, the direct result of the move proposed herein will be to provide service to Winston-Salem, and no further moves are contemplated.

Second, the instant application proposes facilities that are mutually exclusive with W267AM's licensed facilities. That is, W267AM's licensed 60 dBu F(50,50) primary service area would receive interference from the proposed 40 dBu F(50,10) interference area. See Table 1: Allocations, and Figure 1. As noted in the Cromwell Waiver, the translator modification rule is more restrictive than the general full-power minor change rule such that the instant proposal would be a minor modification if the facilities were full service FM facilities processed under Part 73 of the Commission's Rules. In addition, the proposed change will not foreclose competing applicants nor deprive potential applicants of opportunities for comparative consideration, since they are already precluded by mutual exclusivity with the existing licensed facilities of W267AM. Accordingly, as a practical matter, such mutual exclusivity alleviates any *Ashbacker* concerns.

Third, the instant application proposes a site in an area where the Commission has identified adequate frequencies available for Low Power FM stations. The proposed W267AM site is in the Greensboro-Winston-Salem-High Point, North Carolina, Market. The Greensboro-Winston-Salem-High Point market is listed as a Spectrum Available Market using a 30 minute grid in Appendix B of the Fourth Report and Order.<sup>2</sup> This exhibit contains a preclusion showing, identified as Test C, in Attachment B to the Singleton Window PN. The closest portion of the boundary of the Greensboro 30 minute LPFM grid is shown on Figure 1. The Height Above Average Terrain of the proposed facility is 106.0 meters. With the proposed 250 Watt ERP, the distance to the 60 dBu F(50,50) contour is 13.2 km, placing the station in the middle group of translators for protecting LPFM facilities. The 32, 21, and 14 kilometer preclusion arcs toward the Greensboro grid boundary are shown. The Greensboro market was studied using the Commissions LPFM6 program. No Greensboro point channel opportunities were identified on channels 265 through 269, corresponding to all co-channel, first and second adjacent. The summary section of the LPFM printout is included in this exhibit. Accordingly, as with the Cromwell Waiver, the proposed move for W267AM to Winston-Salem would not foreclose identified licensing opportunities in the Low Power FM service.

Fourth, the instant application proposes to change W267AM to be a fill-in for station WSJS (AM), Winston-Salem, North Carolina. The Commission has recognized that the use of FM translators for AM stations is having a positive impact on AM stations.

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<sup>2</sup> *In the Matter of Creation of a Low Power Radio Service, Amendment of Service and Eligibility Rules for FM Broadcast Translator Stations, Fourth Report and Order and Third Order on Reconsideration*, FCC 12-19, released March 19, 2012.

For the foregoing reasons, Triad respectfully submits that the instant request satisfies the Commission's waiver standard and is consistent with the factors in the Cromwell Waiver. Based on the four Cromwell Waiver factors, the instant application presents special circumstances that warrant deviation from 74.1233(a)(1), and such deviation will serve the public interest by permitting W267AM to provide improved service to the public. Since the circumstances presented herein are comparable to those upon which relief was granted in the Cromwell case, the Commission is bound to extend comparable relief here. *Melody Music, Inc. v. FCC*, 345 F. 2d 730, 733 (DC Cir 1965). Accordingly, Triad respectfully requests that the Commission waive Section 74.1233(a)(1) and permit the instant application to be processed as a minor change application.

### Allocations

This application proposes service to Winston-Salem, North Carolina, on channel 267. 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

Table 1: Allocations

Allocation Study  
Triad Family Network, Inc.

REFERENCE CH# 267D - 101.3 MHz, Pwr= 0.25 kW DA, HAAT= 106.0 M, COR= 366 M DISPLAY DATES  
36 06 59.0 N. Average Protected F(50-50)= 13.2 km DATA 05-28-13  
80 21 26.0 W. Standard Directional SEARCH 05-28-13

CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
266C0 Burlington	WYMY	LIC	CX NC	103.3 283.9	84.87 BLH20100708MZY	35 56 15.0 79 26 30.0	100.000 359	112.0 551	76.2 Carolina Radio Group, Inc.	-32.0*	2.1
267D Mocksville	W267AM	LIC	C NC	212.2 32.1	30.95 BLFT20091201ARG	35 52 50.0 80 32 26.0	0.033 38	14.4 262	4.2 Triad Family Network, Inc.	2.8	-20.7
Facility being modified.											
213C3 Winston-salem	WSNC	LIC	DCN NC	103.6 283.6	12.50 BLED19930218KA	36 05 24.0 80 13 20.0	10.000 59	12.8 319	58.8 Winston-salem State Univer	11.5R	1.0M
267D Salisbury	W267AG	LIC	CN NC	191.6 11.5	50.84 BLFT19951102TX	35 40 03.0 80 28 13.0	0.038 58	21.7 279	6.2 Triad Family Network, Inco	16.1	1.6
Translator for WBFJ(FM), Winston-Salem, NC											
267L1 Mt. Airy	WFOG-LP	LIC	NC	330.9 150.7	55.89 BLL20040922AAL	36 33 20.0 80 39 44.0	0.100	29.7 411	9.2 Mt. Airy Community Radio I	20.1	39.2
267D Wilkesboro	W267AN	LIC	C NC	290.6 110.1	83.24 BLFT20030408AAO	36 22 36.0 81 13 33.0	0.010 399	51.8 1136	14.0 Triad Family Network, Inc.	20.2	38.6
265A Elkin	WIFM-FM	LIC	NCX NC	281.9 101.6	44.09 BLH20020619AAF	36 11 50.0 80 50 13.0	0.470 216	1.5 540	22.3 Yadkin Valley Broadcasting	30.7	21.1
268C Raleigh	WRAL	LIC	C NC	106.1 287.1	171.55 BMLH20040903ABQ	35 40 35.0 78 32 08.0	100.000 555	133.4 646	89.3 wral-fm, Inc.	33.4	77.8
268D Mooresville	W268BU	CP	C NC	217.1 36.8	70.67 BNPFT20130328AGC	35 36 29.5 80 49 44.0	0.010	10.9 424	7.6 Triad Family Network, Inc	45.9	42.2
267C Sumter	WWDW	LIC	DEN SC	187.4 7.2	231.02 BMLH19980925KB	34 03 04.0 80 40 55.0	100.000 403	171.3 471	75.4 Ymf Media South Carolina L	46.8	115.4
268C Johnson City	WQUT	LIC	CY TN	276.0 94.9	179.06 BMLH19980904KD	36 16 07.0 82 20 21.0	100.000 457	115.9 1069	78.5 Radio License Holding Cbc,	51.3	82.7
270C0 Gastonia	WBVA-FM	LIC	CY NC	220.5 39.9	128.61 BLH19880129KD	35 13 57.0 81 16 35.0	100.000 301	10.4 552	73.9 Cbs Radio Stations Inc.	104.3	53.4
267A Narrows	WZFM	LIC	CX VA	343.1 162.8	137.25 BMLH20060814AAI	37 17 54.0 80 48 36.0	0.210 366	71.8 1084	23.5 wzfm, Llc	61.1	104.6
266L1 Hillsville	WXEZ-LP	LIC	VA	334.8 154.6	76.75 BLL20070208AAF	36 44 29.0 80 43 26.0	0.052 42	11.2 812	8.0 Community Broadcasting Of	61.6	64.9
264D Martinsville	W265CA	CP	DC VA	35.4 215.7	80.36 BPFT20130122AAI	36 42 17.0 79 50 05.0	0.180	0.8 402	11.3 Positive Alternative Radio	72.7	66.3
213A Martinsville	WPIM	LIC	DCN VA	35.4 215.7	80.33 BLED19961115KA	36 42 16.0 79 50 05.0	4.000 118	12.8 395	58.8 Positive Alternative Radio	9.5R	70.8M
214C0 Charlotte	WFAE	LIC	DCX NC	198.4 18.2	96.96 BLED20050223ACA	35 17 14.0 80 41 45.0	100.000 331	12.8 544	58.8 University Radio Foundatio	24.5R	72.5M
265D Martinsville	W265CA	LIC	C VA	35.4 215.7	80.33 BLFT20090812AAD	36 42 16.0 79 50 05.0	0.010 132	0.2 403	6.2 Positive Alternative Radio	73.2	72.9

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 Tower

LPFM Grid Study Parameters and Overall Results

Greensboro, NC  
 Latitude 36-04-21  
 Longitude 079-47-32  
 Grid Size 31 x 31  
 Micro FM 100 Watts at 30m HAAT  
 Co-Channel and 1st Adjacent Protected  
 2nd Adjacent Channel Protected  
 3rd Adjacent Channel Not Protected  
 I.F. Not Protected  
 TV Channel 6 Protected  
 CP Records Protected  
 APP Records Protected  
 FM Translators Protected  
 TV Channel 6 Translators/LP Protected  
 Auc83 FX App Records Protected

Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	
200	0	220	0	240	0	260	0	280	0	
201	0	221	0	241	21	261	0	281	0	
202	0	222	0	242	0	262	0	282	0	
203	0	223	0	243	91	263	0	283	2	
204	0	224	0	244	0	264	0	284	75	
205	0	225	0	245	0	265	0	285	170	
206	0	226	0	246	0	266	0	286	148	
207	0	227	0	247	0	267	0	287	1	
208	0	228	0	248	0	268	0	288	0	
209	0	229	0	249	10	269	0	289	0	
210	0	230	0	250	0	270	0	290	0	
211	0	231	0	251	0	271	0	291	30	
212	0	232	0	252	0	272	0	292	81	
213	0	233	0	253	0	273	0	293	0	
214	0	234	0	254	0	274	8	294	0	
215	0	235	0	255	0	275	0	295	24	
216	0	236	0	256	0	276	0	296	0	
217	0	237	0	257	0	277	0	297	0	
218	0	238	0	258	0	278	0	298	0	
219	0	239	0	259	0	279	0	299	0	
									300	0
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Total	661									

Total allotments, least preclusive spacing: 22  
 Total allotments, most preclusive spacing: 19

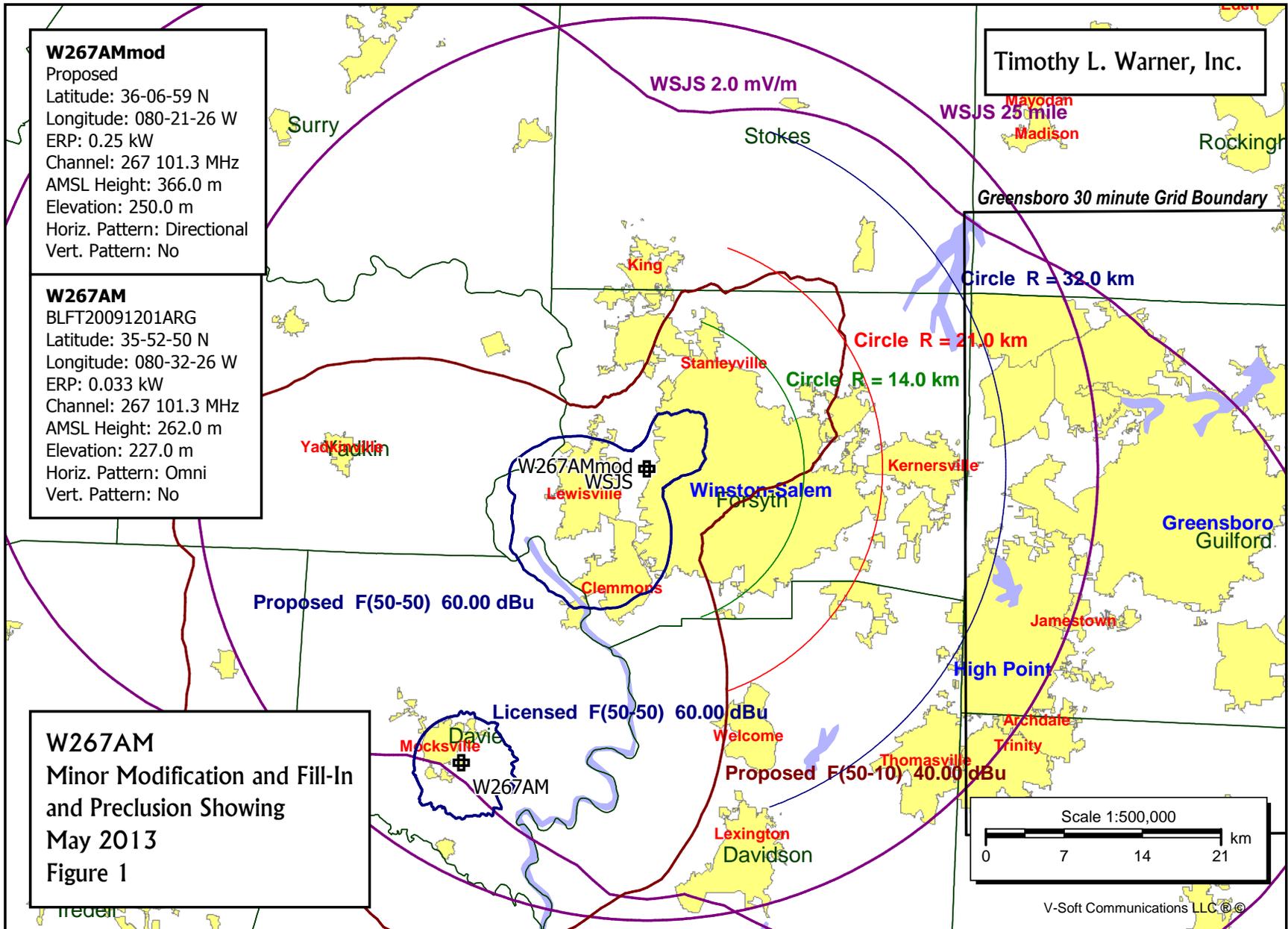
Note: Co-channel through second adjacent channel points shown highlighted above.

### 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.



**W267AMmod**  
 Proposed  
 Latitude: 36-06-59 N  
 Longitude: 080-21-26 W  
 ERP: 0.25 kW  
 Channel: 267 101.3 MHz  
 AMSL Height: 366.0 m  
 Elevation: 250.0 m  
 Horiz. Pattern: Directional  
 Vert. Pattern: No

**W267AM**  
 BLFT20091201ARG  
 Latitude: 35-52-50 N  
 Longitude: 080-32-26 W  
 ERP: 0.033 kW  
 Channel: 267 101.3 MHz  
 AMSL Height: 262.0 m  
 Elevation: 227.0 m  
 Horiz. Pattern: Omni  
 Vert. Pattern: No

**W267AM**  
 Minor Modification and Fill-In  
 and Preclusion Showing  
 May 2013  
 Figure 1

Timothy L. Warner, Inc.

Greensboro 30 minute Grid Boundary

Circle R = 32.0 km

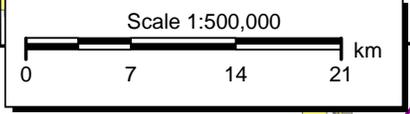
Circle R = 21.0 km

Circle R = 14.0 km

Proposed F(50-50) 60.00 dBu

Licensed F(50-50) 60.00 dBu

Proposed F(50-10) 40.00 dBu



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