

Technical Report Minor Modification to W299AN

This technical report has been developed in support of a minor modification to the translator W299AN at Union City, TN, FCC file no. BLFT-19980921TA. A change to channel 300 and relocation to a new tower site is requested for the facility to serve as a fill-in to rebroadcast WQAK(FM) 289A at Union City, TN, facility I.D. 68611.

The following exhibits are provided in support of the form 349 application:

- E-1 W299AN to Ch. 300 Overlap Study
- E-2 60 dBu Contour Plots
- E-3 ASR 1239795

W299AN Modification Analysis:

W299AN is to be relocated at a new tower site, ASR 1239795 at coordinates:

36 24 48N 89 08 59W NAD27.

The translator will use a Shively 6812B three bay, full wavelength, nondirectional antenna mounted at a COR AGL of 145 meters, and operate at 0.030 kW ERP. The attached exhibits show that the modification to W299AN overlaps its current 60 dBu licensed contour, will not interfere with any other facilities, and is contained within the primary WQAK(FM) 60 dBu contour.

RF Exposure Calculation:

The RF contribution was calculated using the Commission's FMMODEL program. The resulting RF for the 0.030 kW facility is calculated to be $0.009 \mu\text{W}/\text{cm}^2$ at

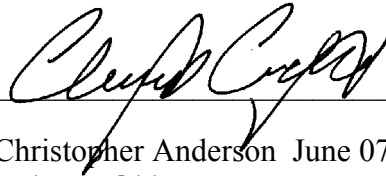
Anderson Associates

Broadcast Consultants
1519 Euclid Avenue
Bowling Green, KY 42103

a distance of 75 meters from the tower, which is well below 5% of the $200 \mu\text{W}/\text{cm}^2$ maximum permissible for general public exposure, allowing its exclusion from consideration.

Conclusion:

It is concluded that the minor modification of W299AN complies with all Commission policies and rules.



Christopher Anderson June 07, 2009
andersce@bham.rr.com
© 2009 Anderson Associates

E-1 W299AN Overlap Study

REFERENCE
36 24 48.0 N.
89 08 59.0 W.

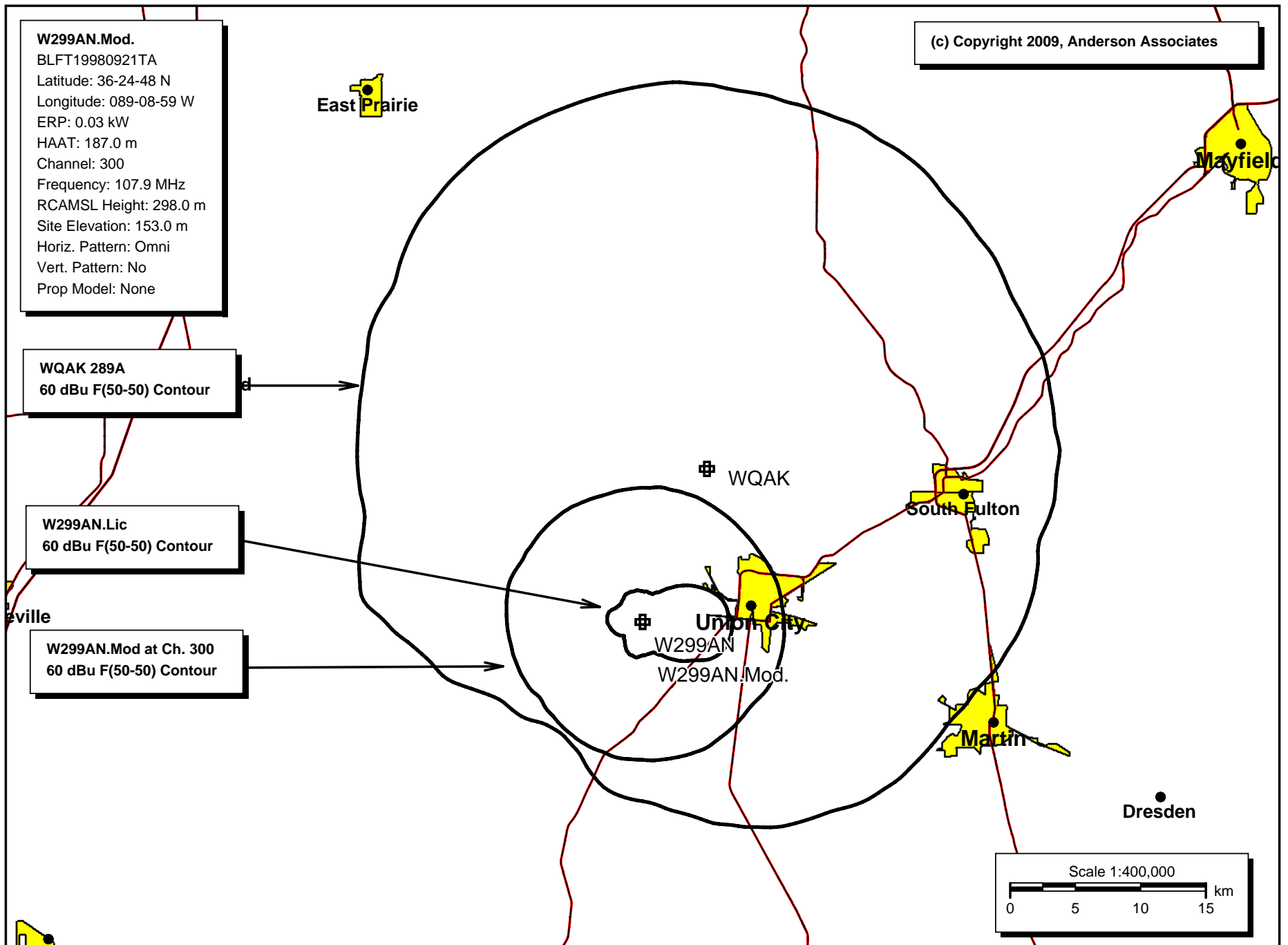
CH# 300D - 107.9 MHz, Pwr= 0.03 kW, HAAT= 187.0 M, COR= 298 M
Average Protected F(50-50)= 10.54 km
Omni-directional

DISPLAY DATES
DATA 06-05-09
SEARCH 06-06-09

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
299D Union City	W299AN	LIC	DCN	180.0 0.0	0.0 BLFT19980921TA	36 24 47.0 89 08 59.0	0.037 59	3.2 173	2.3 Heartland Ministries, Inc.	-13.8*	-17.1*
300C1 Fort Campbell	WCVO	LIC	_CN	83.5 264.4	134.0 BLH19880923KB	36 32 23.0 87 39 45.0	100.000 275	171.0 439	71.6 Saga Communications Of Tuc	-47.7*<	26.8
300C1 Jonesboro	KFIN	LIC	_CY	244.9 64.0	158.8 BLH6136	35 47 56.0 90 44 31.0	100.000 183	160.3 266	62.5 East Arkansas Broadcasters	-11.6*<	62.6
300D Sikeston	K300BU	LIC	_C_	323.5 143.3	56.0 BMLFT20090219ABE	36 49 05.0 89 31 27.0	0.018	19.7 169	6.0 Educational Media Foundati	26.0	15.7
298C3 Campbell	KFEB	LIC	NCN	278.8 98.3	63.9 BLH19981113KA	36 29 55.0 89 51 16.0	17.500 119	4.0 199	39.0 Eagle Bluff Enterprises	49.3	24.5
299C2 Henderson	WHHM-FM	LIC	ZEX	156.0 336.3	116.2 BLH20031022AAE	35 27 23.0 88 37 36.0	50.000 140	77.1 283	51.4 Thomas Radio, LLC	28.3	49.4
300L1 Cape Girardeau	KHIS-LP	LIC	---	339.6 159.4	105.6 BLL20071213AAU	37 18 15.0 89 33 58.0	0.043 45	20.7 172	6.2 Flat Foot Media, Inc.	74.8	65.7
297A Osceola	KQMJ	LIC	NCN	224.4 44.0	100.4 BLH19980714KD	35 45 59.0 89 55 43.0	1.600 102	1.9 171	21.0 Phoenix Broadcasting Group	88.5	79.0
297B Johnston City	AL6270	RSV	---	7.2 187.4	150.0 RM10628	37 45 15.0 88 56 05.0	50.000 150	5.8 286	64.1 133.8		85.1
297B Johnston City	WDDD-FM	LIC	_CX	7.2 187.4	150.0 BLH20050503ABU	37 45 15.0 88 56 05.0	50.000 150	5.8 285	64.0 Withers Broadcasting Of So	133.9	85.3
300L1 Somerville	WQFR-LP	LIC	---	186.7 6.6	130.9 BLL20050512AEV	35 14 31.0 89 19 03.0	0.095 30	15.6 160	4.9 Somerville Educational Bro	104.7	90.8
298A Germantown	WHBQ-FM	LIC	NCX	201.3 21.0	147.4 BLH20020529AAU	35 10 30.0 89 44 26.0	3.900 124	2.6 218	28.1 Flinn Broadcasting Corpora	134.4	118.9
298C1 Lebanon	WRVW	LIC	_CX	93.8 275.2	212.1 BLH20040607ADK	36 15 50.0 86 47 39.0	46.000 409	9.2 593	71.1 Capstar Tx Limited Partner	192.1	140.6
299C0 St. Louis	KSLZ	LIC	_C_	337.0 156.3	261.3 BMLH20061027ACR	38 34 24.0 90 19 30.0	100.000 313	108.8 466	74.8 Citicasters Licenses, Inc.	142.3	172.3
297C1 Florence	WOLT-FM	LIC	_CN	145.7 326.6	232.8 BLH20000120AAP	34 40 24.0 87 42 56.0	93.000 310	10.5 490	74.4 Big River Broadcasting Cor	211.6	157.9

Terrain database is FCC NGDC 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference zone = 2, Co to 3rd adjacent.
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.

E-2 W299AN.Mod 60 dBu Contour Plots



E-3 ASR 1239795

ASR Registration Search
Registration 1239795

 [Map Registration](#)

Registration Detail

Reg Number	1239795	Status	Granted
File Number	A0336494	Constructed	
FAA Study	2002-ASO-5002-OE	EMI	Yes
FAA Issue Date	12/10/2002	NEPA	No

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Communications Purposes

Location (in NAD83 Coordinates)

Lat/Long	36-24-47.8 N 089-08-59.0 W	2567 Dallas Hill Road
City, State	Union City , TN	
Center of AM Array		

Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
152.7	211.2
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
363.9	207.2

Painting and Lighting Specifications

FAA Chapters 4, 9, 12
Paint and Light in Accordance with FAA Circular Number 70/7460-1K
,

Owner & Contact Information

FRN	0004245569	Licensee ID	L00132269
-----	------------	-------------	-----------

Owner

Wood's Performance Center, Inc. dba Wood Communications
Attention To: Robin W. Wood, Jr.
417 W. Reelfoot Ave.
P.O. Box 716
Union City , TN 38281

P: (731)885-4792
E: robin@woodcommunications.com

Contact

P:
E:

Last Action Status

Status	Granted	Received	08/01/2003
Purpose	New	Entered	08/01/2003
Mode	Interactive		

Related Applications

08/01/2003 A0336494 - New (NE)

Comments

Comments

None

Automated Letters

08/09/2004	Construction Reminder, Reference 349252
08/04/2003	Authorization, Reference 295663