

Rural Life Foundation

Minor Modification of Application for Translator Construction Permit

Channel # 234D, 94.7 MHz

Pulaski, TN

Engineering Statement

Prepared by:
Jerry Mathis

Introduction

Rural Life Foundation, Savannah, TN, is filing an application for a Minor Modification of Application for Construction Permit for a new translator in Pulaski, TN. This modification became necessary when the FAA denied our application for a taller tower, and granted us a modified tower height.

This engineering statement and application supplies complete engineering and technical data in support of Rural Life Foundation's request. All calculations have been made and determined in accordance with current Rules and Regulations.

Interference Study

A detailed interference study was performed for this application and is shown as Exhibit #1 in this report. This study shows that no prohibited overlap would occur and the proposed facilities would comply with Rule 74.1204.

Elevation and Contour Data

The average elevation of the terrain within 3 to 16 kilometers and the Height Above Average Terrain (HAAT) were calculated using the Vsoft software program. The distance to the contours utilized the translator's proposed ERP of 250 watts. Exhibit #2 shows the proposed 60-dBu contour. Exhibit #3 shows the average elevation and HAAT, as well as the distance to the 60 dBu contour for the 12 radials, in tabulated form.

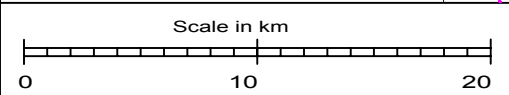
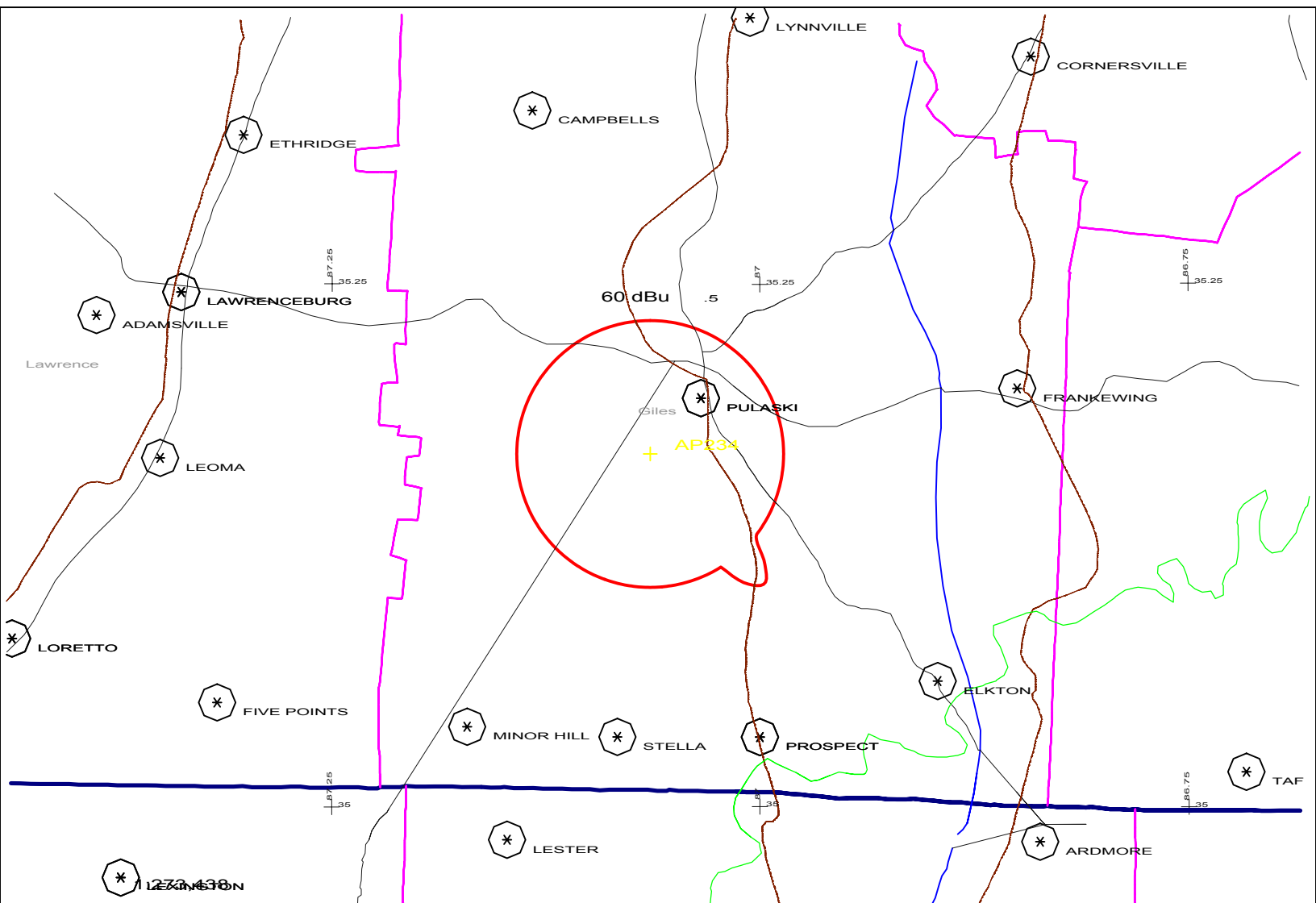
List of Exhibits

1. Interference Study
2. Map of proposed 60 dBu contour.
3. Tabulation of 12 radials showing average elevation, HAAT, and contour distances.

New Translator, Pulaski, TN											
EXHIBIT #1											
REFERENCE		CH# 234D - 94.7 MHz, Pwr= 0.25 kw, HAAT=0.0 M, COR= 237 M								DISPLAY DATES	
35 10 08 N		Average Protected F(50-50)= 7.09 km								DATA 05-20-04	
87 03 51 W		Ave. F(50-10) 40 dBu= 23.8 54 dBu= 10.1 80 dBu= 2.3 100 dBu= 1.1								SEARCH 06-23-04	
CH	CALL	TYPE		AZI.	DIST	LAT.	Pwr(kw)	COR(M)	PRO(km)	*IN*	*OUT*
CITY		STATE		<--	FILE #	LNG.	HAAT(M)	INT(km)	LICENSEE	(Overlap in km)	
234D Pulaski	AP234	APP TN	C	0.0 180.0	0.00 BNPFT20030827ABS	35 10 08 87 03 51	0.250 -2	248 23.8	7.1	-30.85*	-30.85*
234D Pulaski	AP234	APP TN	C	0.0 180.0	0.00 BNPFT20030310BLO	35 10 08 87 03 51	0.250 -2	248 23.8	7.1	-30.85*	-30.85*
234D Hollywood	AP234	APP TN	C	5.7 185.7	35.15 BNPFT20030317FCE	35 29 03 87 01 33	0.010 110	373 20.3	6.2	7.72	5.24
234D Columbia	AP234	APP TN	C	4.7 184.7	45.64 BNPFT20030310BLP	35 34 44 87 01 23	0.250 -44	225 23.8	7.1	14.79	14.79
234D Moores Mill	AP234	APP AL	C	130.6 310.6	57.85 BNPFT20030317CTD	34 49 47 86 34 58	0.038 27	272 14.0	4.4	36.15	27.65
234D Moores Mill	AP234	APP AL	C	130.6 310.6	57.85 BNPFT20030828BAO	34 49 47 86 34 58	0.038 28	273 14.0	4.4	36.15	27.65
234D Trinity	W234AD	LIC AL	CN	182.6 2.6	65.30 BLFT19940404TA	34 34 51 87 05 47	0.130 141	320 43.6	13.0	14.63	28.57
236C2 Huntsville	WRTTFM	LIC AL	ZC	136.7 316.7	56.50 BLH20000522AAT	34 47 53 86 38 24	12.000 262	519 5.0	49.1	42.41	6.27
236C2 Huntsville	ALLO	USE AL		139.8 319.8	65.86	34 42 56 86 35 55	50.000 147	377 5.9	51.8	50.83	12.91
232A Lewisburg	WJMJFM	LIC TN	C	39.1 219.1	40.43 BMLH20001121AFA	35 27 03 86 46 57	5.500 -13	280 1.5	15.4	31.81	23.94
232A Lewisburg	ALLO	USE TN		39.1 219.1	40.43	35 27 03 86 46 57	6.000 55	348 2.2	21.5	31.14	17.78
235C3 Collinwood	WMSRFM	LIC TN	ZC	256.9 76.9	67.55 BLH19990226KKB	35 01 46 87 47 07	5.668 179	414 54.3	36.6	6.12	20.79
235C3 Collinwood	ALLO	USE TN		267.4 87.4	69.74	35 08 16 87 49 43	25.000 72	353 54.1	33.7	8.54	25.91
287D Lawrenceburg	W287AA	LIC TN	CN	279.6 99.6	24.32 BLFT19950817TB	35 12 18 87 19 39	0.049 119	409 9.4	9.4	3.2R	21.1M
287D Lawrenceburg	W287AA	CP TN	C	292.1 112.1	25.60 BPFT20011019AAK	35 15 18 87 19 30	0.038 78	351 7.1	7.1	3.2R	22.4M
231A Meridianville	ALLO	USE AL		124.9 304.9	53.41	34 53 36 86 35 03	6.000 88	341 2.6	26.6	43.73	25.73
233C2 Lobelville	WFGZ	LIC TN	NCN	313.9 133.9	96.03 BLH19940208KA	35 45 56 87 49 50	22.000 220	385 76.1	51.6	12.85	34.33
288A Fayetteville	WYTMFM	LIC TN	CN	95.9 275.9	44.39 BLH4751	35 07 37 86 34 47	3.000 130	338 29.1	27.1	10.0R	34.4M
288A Fayetteville	ALLO	USE TN		95.9 275.9	44.39	35 07 37 86 34 47	6.000 137	345 35.7	32.6	10.0R	34.4M
233C2 Lobelville	ALLO	USE TN		312.9 132.9	99.04	35 46 21 87 52 05	50.000 135	318 75.9	50.2	16.07	38.69
235D Chestnut Ridge	AP235	APP TN	C	66.9 246.9	53.23 BNPFT20030317FCH	35 21 18 86 31 30	0.010 122	396 9.1	6.5	37.08	36.63
234C Cookeville	WGSQ«	LIC TN	CN	53.8 233.8	191.57 BLH19900329KA	36 10 26 85 20 37	100.000 481	822 189.4	85.6	-4.89	82.24
231A Meridianville	RDEL	DEL AL		134.5 314.5	68.16	34 44 16 86 31 57	6.000 87	330 2.6	26.5	56.88	40.51
231A Meridianville	WXQW	LIC AL	ZCN	134.5 314.5	68.16 BLH19950602KCC	34 44 16 86 31 57	0.410 339	582 1.4	26.9	58.06	40.13
234C Cookeville	ALLO«	USE TN		52.2 232.2	193.21	36 13 15 85 21 47	100.000 610	975 198.4	92.2	-12.30	77.26

CH CITY	CALL	TYPE STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kw) HAAT(M)	COR(M) INT(km)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
231A Gurley	RADD	ADD AL	133.0 313.0	69.55	34 44 29 86 30 26	6.000 76	341 2.5	24.8 Capstar Tx	58.84 Ltd Partnership	43.60
234D Nashville	AP234	APP DV TN	9.4 189.4	109.33 BNPFT20030312BBT	36 08 27 86 51 56	0.119 224	421 52.4	16.1 wycq, Inc.	49.88	69.46
234D Nashville	AP234	APP DV TN	9.4 189.4	109.33 BNPFT20030314BRM	36 08 27 86 51 56	0.119 224	421 52.4	16.1 wycq, Inc.	49.88	69.46
231A Gurley	WXQW.A	APP AL	137.2 317.2	73.85 BPH20040316AJY	34 40 49 86 30 55	0.510 360	583 1.6	29.2 Capstar Tx	63.20 Limited Partner	43.49
237D Killen	W237AQ	LIC AL	232.4 52.4	56.75 BLFT19920107TB	34 51 25 87 33 25	0.015 79	273 0.3	5.7 William P. Rogers	49.39	49.94
232D Decatur	W232AO	LIC AL	173.8 353.8	62.11 BLFT19950718TZ	34 36 44 86 59 28	0.120 28	207 0.8	5.9 Porter L. Batts	54.26	55.11
235D Shelbyville	AP235	APP TN	56.6 236.6	69.84 BNPFT20030312BBY	35 30 44 86 25 13	0.250 175	409 25.9	17.4 wycq, Inc.	36.84	42.30
232D Florence	W232AH	LIC DHN AL	231.7 51.7	70.60 BLFT19980402TG	34 46 27 87 40 14	0.000 59	219 0.0	0.0 Slatton & Associates	63.51 Broad	69.49
235D Franklin	AP235	APP TN	10.4 190.4	82.19 BNPFT20030317ICV	35 53 50 86 53 54	0.010 108	348 8.5	6.1 Educational Media Foundati	66.58	65.96
235D Centerville	AP235	APP TN	335.3 155.3	82.86 BNPFT20030317MSP	35 50 46 87 26 57	0.019 90	274 9.1	6.5 Radio Assist Ministry, Inc	66.65	66.25
288A Muscle Shoals	WVNAFM	CP AL	227.3 47.3	80.81 BMPH20031022AAL	34 40 27 87 42 48	4.400 145	297 33.9	31.0 Clear Channel Broadcasting	10.0R	70.8M
288A Muscle Shoals	ALLO	USE AL	227.3 47.3	81.03	34 40 24 87 42 56	6.000 127	279 34.4	31.5	10.0R	71.0M
288A Muscle Shoals	WVNAFM	LIC AL	227.3 47.3	81.03 BLH19961004KB	34 40 24 87 42 56	1.050 254	406 31.3	29.1 Clear Channel Broadcasting	10.0R	71.0M

ERP and HAAT are on direct line to and from reference station.
 "*"Affixed to 'IN' or 'Out' values = site inside protected contour.
 "<" = Station meets FCC minimum distance spacing for its class.



AP234 234D .25kW 237M AMSL
N. Lat. 35 10 08 W. Lng. 87 03 51

AP234 EXHIBIT #2
- 06/04

Contour.txt

EXHIBIT #3

N. Lat. = 35 10 08 W. Lng. = 87 03 51
HAAT and Distance to Contour - FCC Method - 30 Arc Sec.

Pulaski, TN						
Azi.	AV EL	HAAT	ERP kw	dBk	Field	60-F5
000	228.2	8.8	0.2500	-6.02	1.000	7.09
030	254.2	-17.2	0.2500	-6.02	1.000	7.09
060	254.5	-17.5	0.2500	-6.02	1.000	7.09
090	238.5	-1.5	0.2500	-6.02	1.000	7.09
120	216.2	20.8	0.2500	-6.02	1.000	7.09
150	216.8	20.2	0.2500	-6.02	1.000	7.09
180	250.4	-13.4	0.2500	-6.02	1.000	7.09
210	264.4	-27.4	0.2500	-6.02	1.000	7.09
240	279.8	-42.8	0.2500	-6.02	1.000	7.09
270	276.5	-39.5	0.2500	-6.02	1.000	7.09
300	245.6	-8.6	0.2500	-6.02	1.000	7.09
330	224.0	13.0	0.2500	-6.02	1.000	7.09

Ave El= 245.77 M HAAT= -8.77 M AMSL= 237 M