

Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 13

Graysville, AL

Channel Study

REFERENCE CH# 293D - 106.5 MHz, Pwr= 0.034 kW DA, HAAT= 216.3 M, COR= 403 M DISPLAY DATES
33 29 03.0 N. Average Protected F(50-50)= 11.6 km DATA 07-19-13
86 48 31.0 W. Standard Directional SEARCH 07-22-13

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)
295C0 Homewood	WBPT	LIC	NCY AL	78.6 258.6	0.15 BLH20130207ABS	33 29 04.0 86 48 25.0	100.000 404	12.0 597	82.3 Summitmedia Llc	-22.8*	-82.6*
293D Graysville	649660	APP	C AL	0.0 0.0	0.00 BNPFT20030317IQC	33 29 03.0 86 48 31.0	0.010 207	29.5 394	8.8 Educational Media Foundati	-41.6*	-49.3*
290D Birmingham	1562392	APP	C AL	19.1 199.1	3.45 BNPFT20030317EUE	33 30 49.0 86 47 47.0	0.038	0.4 220	4.4 Radio Assist Ministry, Inc	-8.8*	-1.3*
292D Pelham	W292EH	CP	C AL	183.1 3.1	18.91 BNPFT20130325ABQ	33 18 50.0 86 49 11.0	0.010	5.4 222	3.8 Mark M. Snow	4.7	2.7
292D Warrior	W292EI	CP	C AL	357.0 177.0	41.25 BNPFT20130325AKF	33 51 20.0 86 49 56.0	0.010	10.2 295	7.2 Way Media , Inc.	19.0	16.4
293C3 Demopolis	WZNJ	LIC	CX AL	221.1 40.5	144.11 BMLH20100205ABH	32 30 08.0 87 49 07.0	25.000 93	114.5 130	39.9 Westburg Broadcasting Alab	20.9	75.1
293A Vernon	WJEC	LIC	C AL	290.3 109.6	120.65 BMLH20001026AAB	33 51 15.0 88 01 55.0	6.000 100	85.7 240	27.5 Lamar County Broadcasting	23.0	52.9
291D Odenville	W291CG	LIC	DC AL	67.5 247.7	41.01 BLFT20090508AAT	33 37 28.0 86 24 00.0	0.010 226	0.1 436	6.1 Glen Iris Baptist School	31.0	34.5
290C3 Brookwood	AL4924	RSV-A	 AL	241.6 61.3	63.79 RM10114	33 12 36.0 87 24 40.0	25.000 100	3.0 206	29.5	50.3	34.0
290C3 Brookwood	WRTR	LIC	ZCX AL	246.6 66.3	68.61 BLH20050829ACW	33 14 17.0 87 29 06.0	25.000 82	3.4 178	33.7 Capstar Tx Llc	54.2	34.6
292D Tuscaloosa	W292DU	LIC	C AL	241.4 61.0	74.95 BLFT20100223AEE	33 09 36.0 87 30 54.0	0.250 192	25.8 266	17.3 Tti, Inc.	38.8	43.1
292A Maplesville	WLGD	LIC	NCX AL	184.5 4.4	86.55 BLH20121220ACE	32 42 22.0 86 52 51.0	6.000 51	35.7 175	23.5 Valleydale Broadcasting, L	42.0	50.6
293C Chattanooga	WSKZ	LIC	CN TN	35.8 216.7	231.16 BLH7303	35 09 42.0 85 19 06.0	100.000 329	177.7 721	75.9 Radio License Holding Cbc,	42.2	117.8
291D Jasper	W291BT	LIC	C AL	310.6 130.4	61.17 BLFT20050428ABS	33 50 29.0 87 18 40.0	0.055 53	0.5 186	7.8 Glen Iris Baptist School	48.7	53.0
290A Southside	WKLS	CP	ZCX AL	54.1 234.5	82.74 BPH20091015ABV	33 55 07.0 86 04 59.0	1.600 196	2.2 380	26.9 Williams Communications, I	70.7	55.4

Terrain database is 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= East Zone, Co to 3rd
adjacent.

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.

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60 dBu contour of third adjacent channel application 20030317EUE, channel 290D, Birmingham, AL. According to 74.1204(a)(3), in order to protect second and third adjacent facilities, the difference in dBu between the two facilities must not exceed 40dBu.

The proposed ERP for Graysville.P:	34 watts
The proposed COR for Graysville.P:	109 meters
20030317EUE F(50/50) contour at proposed site:	64.1 dBu
The F(50/10) contour of proposed Graysville.P	104.1 dBu

By taking into account the antenna vertical elevation pattern for the Scala FMV 1 bay, it has been determined that based on the height of the antenna, the signal is predicted to not reach the ground or any nearby occupied structure (see Exhibit 13-A1).

Therefore, EMF respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

In addition, EMF has studied the Birmingham application (20030317EUE) in order to show that there is no population within the area of predicted interference caused by said application.

The proposed ERP for 20030317EUE:	38 watts
The proposed COR for 20030317EUE:	31 meters
Graysville.P F(50/50) contour at proposed site:	78.6 dBu
The F(50/10) contour of proposed 20030317EUE	118.6 dBu

By taking into account the antenna vertical elevation pattern for the PSI FML-2(0.75) 2 bay, it has been determined that based on the height of the antenna, the signal is predicted to not reach the ground or any nearby occupied structure (see Exhibit 13-A2).

Therefore, EMF respectfully requests a waiver of C.F.R. 74.1204 based on no population within the area of predicted interference.

EXHIBIT 13 - A1
74.1204(d) Showing
TBD
Graysville, AL

ERP (kw): 0.034
Height of Antenna above Ground (m): 109
Translator's IX Contour: 104.1
Antenna Type: Scala FMV-1

Depression Angle from Horizon	Antenna Relative Field	ERP (kw) from the Antenna RF	Dist. To IX Contour (m)	Height IX Contour Above Ground (m)
0	1.000	0.0340	255.1170	109.000
5	0.995	0.0336	253.7904	86.881
10	0.982	0.0328	250.4484	65.510
15	0.956	0.0310	243.7898	45.903
20	0.918	0.0287	234.2740	28.874
25	0.867	0.0255	221.0844	15.566
30	0.803	0.0219	204.7569	6.622
35	0.727	0.0180	185.4956	2.604
40	0.645	0.0141	164.5250	3.245
45	0.558	0.0106	142.3808	8.322
50	0.472	0.0076	120.2877	16.854
55	0.388	0.0051	98.9854	27.916
60	0.315	0.0034	80.3619	39.405
65	0.240	0.0020	61.2281	53.509
70	0.176	0.0011	44.9516	66.759
75	0.119	0.0005	30.3334	79.700
80	0.067	0.0002	17.0673	92.192
85	0.019	0.0000	4.9238	104.095
90	0.025	0.0000	6.4800	102.520

EXHIBIT 13 - A2
74.1204(d) Showing
TBD
Birmingham, AL

ERP (kw): 0.038
Height of Antenna above Ground (m): 31
Translator's IX Contour: 118.6
Antenna Type: PSI FML-2-.75w

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.0380	50.8033	31.000
5	0.966	0.0355	49.0760	26.723
10	0.868	0.0286	44.0973	23.343
15	0.718	0.0196	36.4768	21.559
20	0.533	0.0108	27.0782	21.739
25	0.332	0.0042	16.8667	23.872
30	0.135	0.0007	6.8584	27.571
35	0.042	0.0001	2.1337	29.776
40	0.187	0.0013	9.5002	24.893
45	0.294	0.0033	14.9362	20.439
50	0.361	0.0050	18.3400	16.951
55	0.389	0.0058	19.7625	14.812
60	0.385	0.0056	19.5593	14.061
65	0.354	0.0048	17.9844	14.701
70	0.303	0.0035	15.3934	16.535
75	0.237	0.0021	12.0404	19.370
80	0.163	0.0010	8.2809	22.845
85	0.083	0.0003	4.2167	26.799
90	0.001	0.0000	0.0508	30.949