

# Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 13

Calera, AL

## Channel Study

REFERENCE		CH# 241D - 96.1 MHz, Pwr= 0.008 kW DA, HAAT= 90.0 M, COR= 269 M								DISPLAY DATES	
33 13 31.0 N.		Average Protected F(50-50)= 5.2 km								DATA 06-29-11	
86 48 03.0 W.		Standard Directional								SEARCH 07-04-11	
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)
241D	W241BD	LIC	C	0.0	0.0	33 13 31.0	0.008	19.4	5.9	-20.0*	-8.9*
Calera			AL	0.0	BLFT20110225ACS	86 48 03.0		269	Educational Media Foundati		
243C0	WMJJ	LIC	CX	343.2	25.3	33 26 38.0	100.000	10.5	74.0	14.3	-48.6*
Birmingham			AL	163.2	BMLH20030207AAL	86 52 47.0	313	494	Capstar Tx Llc		
239C2	WBHJ	LIC	ZCX	349.7	26.5	33 27 37.0	12.000	5.3	51.7	20.6	-25.2*
Midfield			AL	169.7	BLH20050527BFJ	86 51 07.0	306	487	Cox Radio, Inc.		
241D	W241AI.P	USR		358.9	28.7	33 29 04.0	0.043	51.5	15.5	-23.3*	10.2
Gorgas			AL	178.9		86 48 25.0	338	525			
241D	640540	APP	C	251.2	44.7	33 05 42.0	0.050	32.0	9.5	10.7	28.5
Vance			AL	70.9	BNPFT20030317MNH	87 15 16.0	129	255	Cxr Holdings, Inc.		
241D	W241AI	LIC	C	16.5	43.4	33 36 01.0	0.010	27.6	8.2	15.2	32.6
Gorgas			AL	196.6	BLFT20070510ACQ	86 40 02.0	198	421	Educational Media Foundati		
241A	WQKS-FM	LIC	NCN	152.0	107.7	32 22 03.0	0.900	79.9	28.0	22.9	64.1
Montgomery			AL	332.3	BLH19920130KA	86 15 42.0	250	306	Bluewater Broadcasting Com		
238D	W238BS	CP	C	157.1	42.1	32 52 31.0	0.175	0.9	9.8	36.2	32.1
Clanton			AL	337.2	BPFT20100128AIF	86 37 30.0	93	265	Christopher W. Johnson		
241D	640983	APP	C	267.9	47.7	33 12 31.0	0.019	12.2	3.8	34.9	40.9
Brockwood			AL	87.6	BNPFT20030317DTU	87 18 43.0	67	200	Educational Media Foundati		
238D	W238BS	LIC	C	157.1	42.1	32 52 31.0	0.019	0.3	5.5	36.8	36.4
Clanton			AL	337.2	BLFT20080215AEL	86 37 30.0	91	263	Christopher W. Johnson		
241D	651849	APP	C	57.9	76.0	33 35 10.0	0.013	22.2	6.7	53.3	66.8
Lincoln			AL	238.3	BNPFT20030317MIW	86 06 21.0	83	258	R & L Non-comm		
241D	978979	APP	C	57.9	76.0	33 35 10.0	0.013	22.2	6.7	53.3	66.8
Lincoln			AL	238.3	BNPFT20030827AOB	86 06 21.0	83	258	R & L Non-comm		
241C2	WXFL	LIC	CN	343.7	194.3	34 54 17.0	20.500	131.3	54.0	62.4	137.2
Florence			AL	163.4	BLH20000406AAT	87 24 02.0	238	441	Big River Broadcasting Cor		
241C0	WKLS	LIC	CY	73.5	237.5	33 48 27.0	100.000	173.6	73.4	63.4	161.7
Atlanta			GA	254.8	BLH19880104KC	84 20 26.0	300	581	Citicasters Licenses, Inc.		

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.

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.

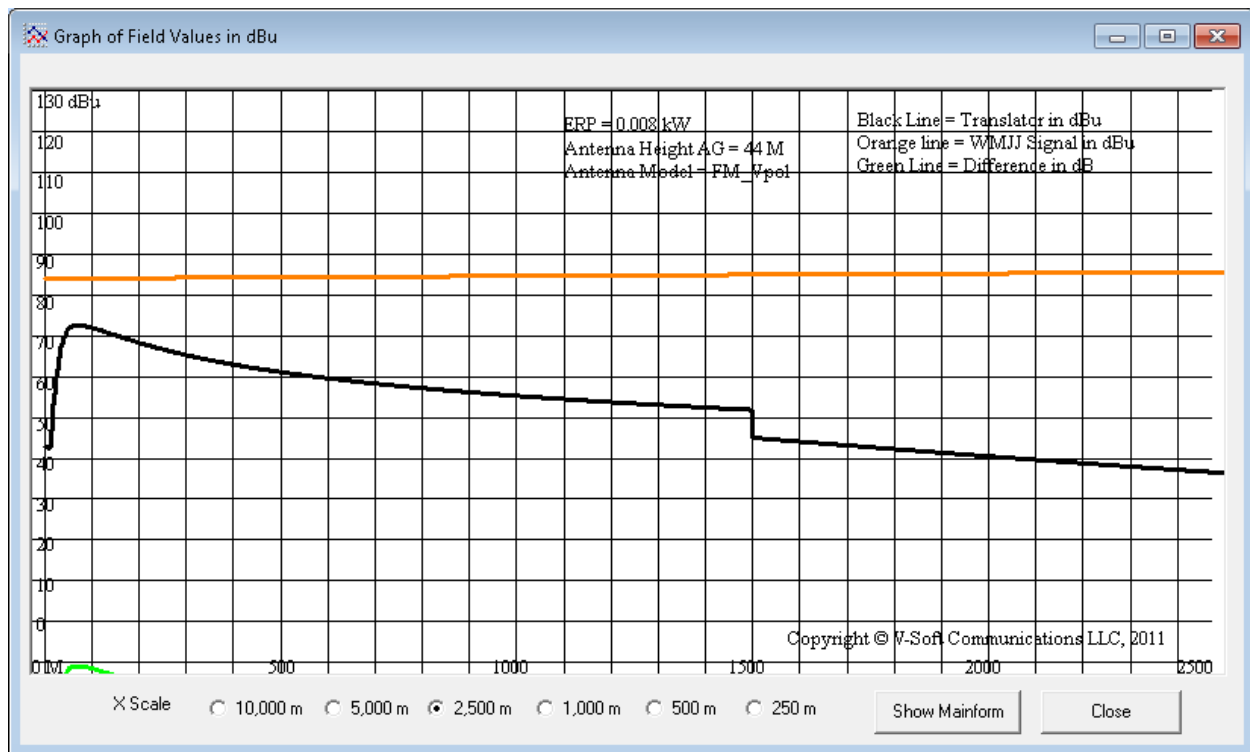
\*Note: The facility contemplated herein is being filed contingently with an application for W241AI Gorgas, AL according to the guidelines of 47 C.F.R. 73.3517(e). The proposed contingent facilities are marked with a "P" following the call sign.

### **Compliance with C.F.R. 74.1204**

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station WMJJ (channel 243C0) Birmingham, AL. According to 74.1204(a)(3), in order to protect second adjacent facilities, the difference in dB between the two facilities must not exceed 40dB.

EMF has investigated the proposed W241BD facility using V-Soft Communication's X-Field program. This program calculates the incoming signal of the station to be protected, and then calculates the interfering contour of the proposed facility based on the proposed ERP, antenna height above ground, and the actual characteristics of the antenna being used (e.g. vertical plane, directionality, number of bays). In this case W241BD's proposed facility has an ERP of 0.008 watts, height AG of 44m, and is using an CLFMRX(V) 1 bay antenna.

As can be seen in the graph below, at no point does the interfering contour of the proposed facility exceed the required 40dB difference (green line on graph). Therefore, the proposed facility does not cause interference at any point.



### **Compliance with C.F.R. 74.1204**

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station WBHJ (channel 239C2) Midfield, AL. According to 74.1204(a)(3), in order to protect second adjacent facilities, the difference in dB between the two facilities must not exceed 40dB.

EMF has investigated the proposed W241BD facility using V-Soft Communication's X-Field program. This program calculates the incoming signal of the station to be protected, and then calculates the interfering contour of the proposed facility based on the proposed ERP, antenna height above ground, and the actual characteristics of the antenna being used (e.g. vertical plane, directionality, number of bays). In this case W241BD's proposed facility has an ERP of 0.008 watts, height AG of 44m, and is using an CLFMRX(V) 1 bay antenna.

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