

Channel Study

REFERENCE		CH# 233D - 94.5 MHz, Pwr= 0.25 kW, HAAT= 134.9 M, COR= 260 M								DISPLAY DATES	
32 19 42.0 N.		Average Protected F(50-50)= 14.9 km								DATA 05-02-16	
88 41 29.0 W.		Omni-directional								SEARCH 05-06-16	
CH CITY	CALL	TYPE STATE	ANT	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
233D Marion	W233AS!	LIC C MS		0.0 0.0	0.00 BLFT20121205ACK	32 19 42.0 88 41 29.0	0.200 135	48.2 260	14.5 Educational Media Foundati	-63.6	-65.2
236C2 Marion	WKZB	LIC NCN MS		176.8 356.8	0.92 BLH19900222KB	32 19 12.0 88 41 27.0	26.000 182	5.6 307	50.6 New South Communications,	-17.8*<	-50.8*<
233C2 Jackson	WHOD	LIC NC AL		137.6 318.1	126.65 BLH19991102ABM	31 28 59.0 87 47 27.0	30.000 195	130.2 257	51.0 Capital Assets, Inc.	-18.1*<	27.0
232C2 Sandersville	WKZW	CP CX MS		210.4 30.1	103.32 BPH20131118BCM	31 31 29.0 89 14 40.0	50.000 150	80.1 221	53.9 Blakeney Communications, I	7.1	25.3
232C2 Sandersville	WKZW	LIC ZCN MS		203.5 23.2	108.49 BLH20000719AAM	31 25 50.0 89 08 51.0	50.000 150	77.4 219	51.6 Blakeney Communications, I	16.0	34.2
234C Jackson	WJLV	LIC C MS		268.4 87.6	151.09 BMLED20111129DJP	32 16 53.0 90 17 41.0	100.000 340	111.7 435	76.1 Educational Media Foundati	23.4	51.0
233C0 Birmingham	WJOX-FM	LIC NC AL		53.2 234.2	213.33 BLH20000929AEE	33 27 45.0 86 50 59.0	100.000 309	173.3 491	73.3 Radio License Holding Cbc,	25.8	92.0
231C0 Carrollton	WZBQ	LIC C AL		29.2 209.5	113.38 BLH20040726ADJ	33 13 07.0 88 05 47.0	100.000 307	10.4 385	73.8 Capstar Tx, Llc	87.8	38.5

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= East Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding. Call signs with exclamation marks need not be protected.
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 restricted contour.
< = Contour Overlap

Educational Media Foundation

5700 W Oaks Blvd
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*Exhibit 13-A
Marion, MS*

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60dBu contour of second adjacent channel station WKZB, channel 236C2, Memphis, TN. 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 W233AS.P:	250 watts
The proposed COR for W233AS.P:	65 meters
WKZB F(50/50) contour at proposed site:	121.7dBu
The F(50/10) contour of proposed W233AS.P:	161.7dBu

The predicted distance to the 161.7dbu interfering contour is .92 meters. Taking into account the vertical elevation pattern of the RFS CPF500 single bay antenna and the height above ground of 65M, it has been determined that the interfering contour of 161.7dbu does not reach the ground. As seen in Exhibit 13-A1, the lowest elevation for this interfering contour is 64.5M above ground at a distance of .62m from the antenna.

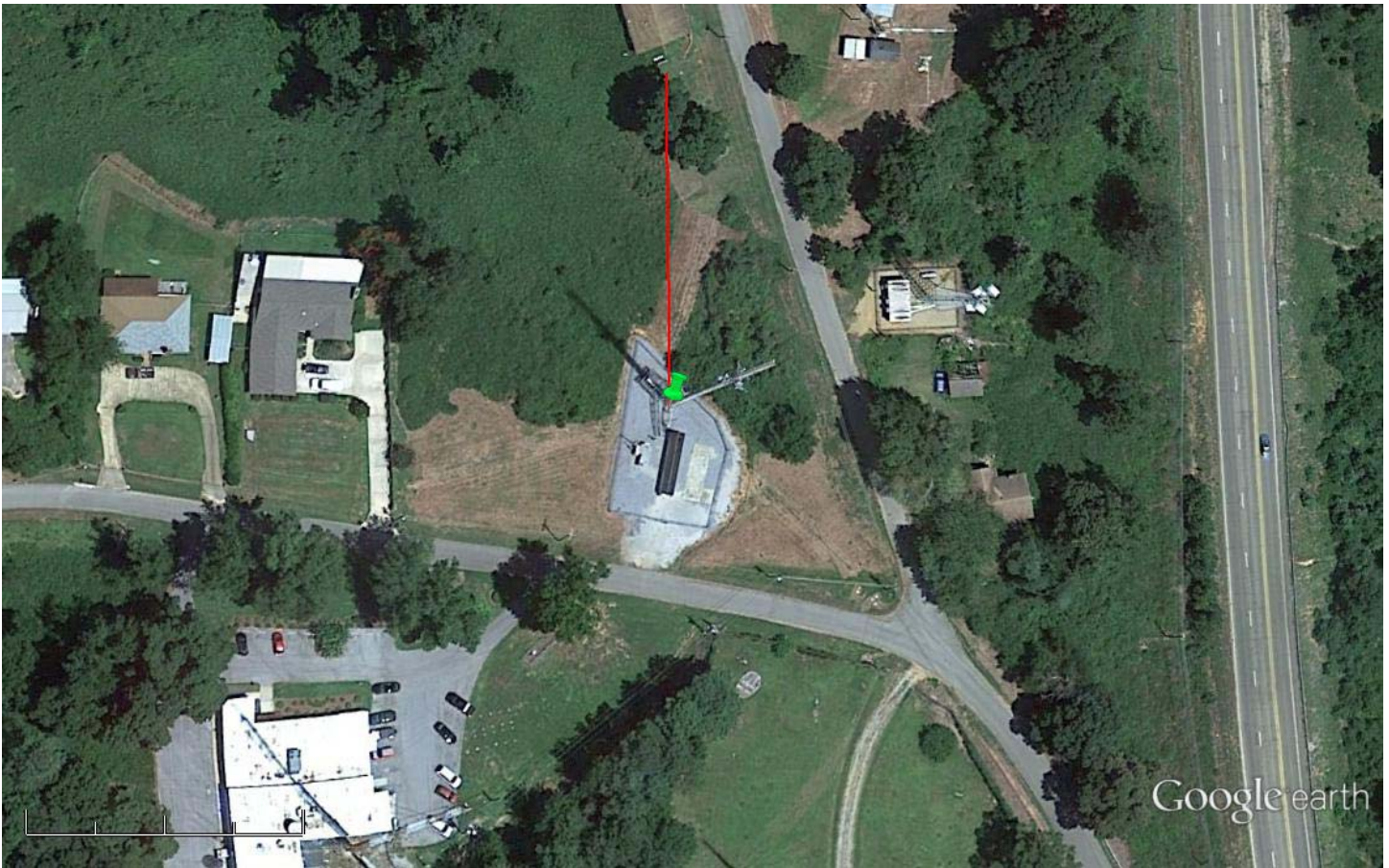
As can be seen in Exhibit 13–A2 there are no surrounding structures which are tall enough to enter the interfering contour within the .9m distance from the antenna.

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
W233AS
Marion, MS

ERP (kw): 0.25
Height of Antenna above Ground (m): 65
Translator's IX Contour: 161.7
Antenna Type: RFS CPF-500

<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	0.2500	0.9119	65.000
5	0.997	0.2483	0.9088	64.921
10	0.986	0.2430	0.8992	64.844
15	0.969	0.2345	0.8833	64.771
20	0.945	0.2231	0.8614	64.705
25	0.914	0.2089	0.8337	64.648
30	0.878	0.1927	0.8006	64.600
35	0.836	0.1748	0.7625	64.563
40	0.789	0.1557	0.7198	64.537
45	0.738	0.1362	0.6731	64.524
50	0.683	0.1167	0.6230	64.523
55	0.625	0.0977	0.5700	64.533
60	0.565	0.0797	0.5148	64.554
65	0.502	0.0631	0.4581	64.585
70	0.439	0.0482	0.4005	64.624
75	0.376	0.0353	0.3427	64.669
80	0.313	0.0245	0.2853	64.719
85	0.251	0.0158	0.2291	64.772
90	0.191	0.0091	0.1745	64.826



Google earth

feet 400
meters 100



Green Pin Marker

NAD 27

32 19' 42.3" N 88 41' 28.9" W

Red Line Marker: 65m at zero degrees true north