

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 MS | C | 0.0 | 0.00 | 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 MS | NCN | 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 AL | NC | 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 MS | CX | 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 MS | ZCN | 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 MS | C | 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 AL | NC | 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 AL | C | 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
Rocklin, CA 95765

*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.

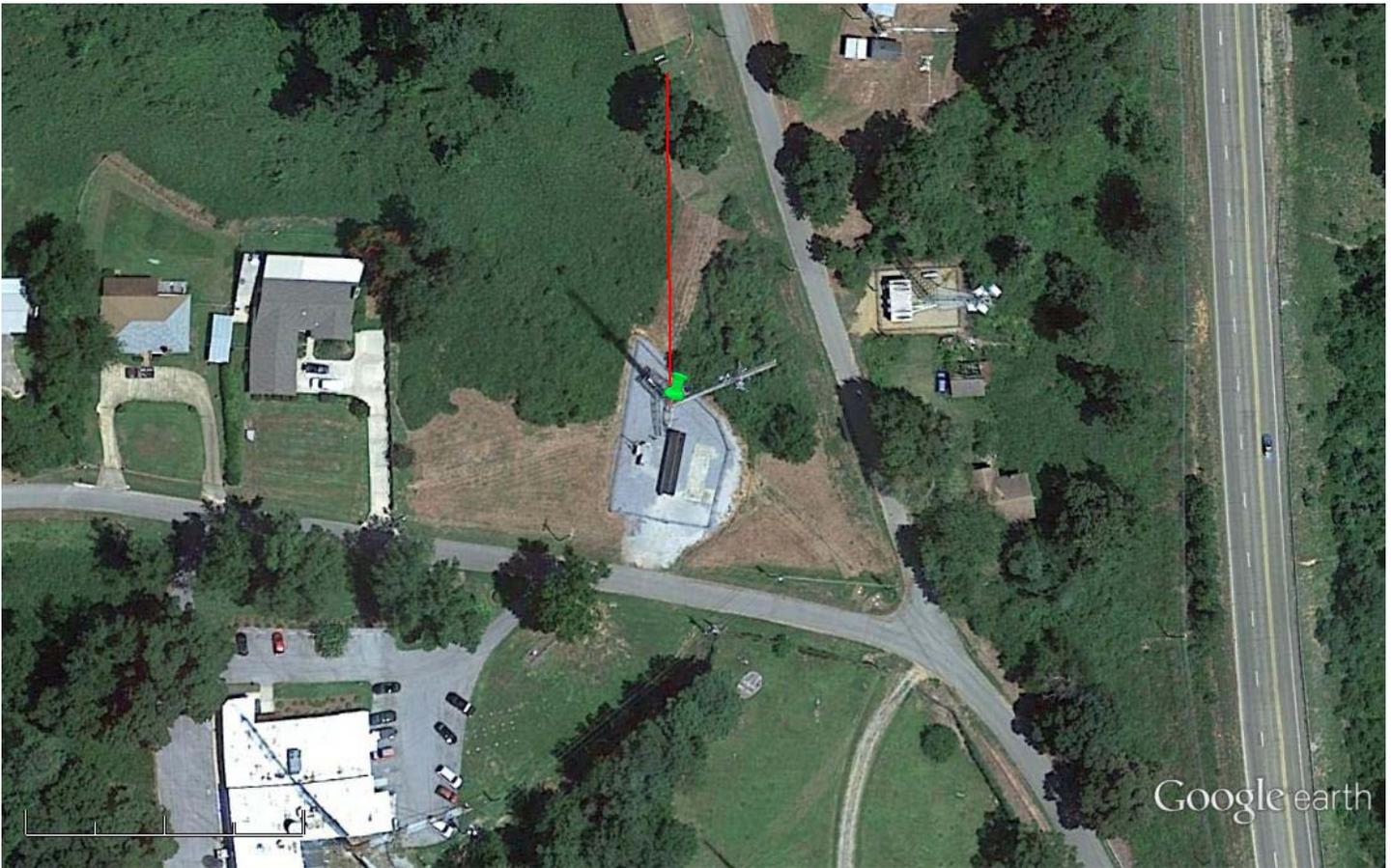
As can be seen in Exhibit 13–A2 there are no surrounding structures which are tall enough to enter the interfering contour within the .9m distance from the antenna.

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



Green Pin Marker

NAD 27

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

Red Line Marker: 65m at zero degrees true north