

# Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 13

Stockton, CA

## Channel Study

| REFERENCE                |          | CH# 275D - 102.9 MHz, Pwr= 0.038 kW, HAAT= 74.0 M, COR= 81 M |              |                |                           |                           |                    |                   |                                    | DISPLAY DATES    |                 |
|--------------------------|----------|--|--------------|----------------|---------------------------|---------------------------|--------------------|-------------------|------------------------------------|------------------|-----------------|
| 37 57 30.0 N.            |          | Average Protected F(50-50)= 6.9 km                           |              |                |                           |                           |                    |                   |                                    | DATA             | 05-11-15        |
| 121 16 55.0 W.           |          | Omni-directional   |              |                |                           |                           |                    |                   |                                    | SEARCH           | 05-11-15        |
| CH<br>CITY               | CALL     | TYPE   | ANT<br>STATE | AZI.<br><--    | DIST<br>FILE #            | LAT.<br>LNG.              | Pwr(kW)<br>HAAT(M) | INT(km)<br>COR(M) | PRO(km)<br>LICENSEE                | *IN*<br>(Overlap | *OUT*<br>in km) |
| 277B<br>Modesto          | KATM     | LIC  | CN<br>CA     | 188.4<br>8.4   | 43.01<br>BLH19840418DD    | 37 34 30.0<br>121 21 13.0 | 50.000<br>152      | 9.4<br>434        | 85.8<br>Radio License Holding Cbc, | 26.6             | -43.6*          |
| 275B<br>Berkeley         | KBLX-FM  | LIC  | CX<br>CA     | 253.9<br>73.2  | 105.87<br>BLH20141219ACO  | 37 41 21.0<br>122 26 08.0 | 7.200<br>387       | 133.4<br>445      | 69.6<br>Entercom License, Llc      | -34.8*           | 1.6             |
| 275B<br>Berkeley         | KBLX-FM  | LIC  | CX<br>CA     | 253.9<br>73.2  | 105.85<br>BMLH20131127BJS | 37 41 20.0<br>122 26 07.0 | 6.600<br>393       | 132.5<br>450      | 69.0<br>Entercom License, Llc      | -33.9*           | 2.2             |
| 275D<br>Stockton         | K275BT!  | CP   | C<br>CA      | 0.0<br>0.0     | 0.00<br>BNPFT20130322ACY  | 37 57 30.0<br>121 16 55.0 | 0.019<br>106       | 23.6<br>116       | 7.1<br>Educational Media Foundati  | -30.4            | -29.8           |
| 275C<br>South Lake Tahoe | KWYL     | LIC  | C<br>CA      | 38.5<br>219.4  | 193.27<br>BLH19991208AAR  | 39 18 38.0<br>119 53 01.0 | 39.000<br>892      | 194.1<br>2969     | 92.1<br>Radio License Holding Cbc, | -7.5*            | 78.8            |
| 273B<br>Woodland         | KSFM     | LIC  | CN<br>CA     | 331.3<br>151.0 | 80.01<br>BMLH19940318KD   | 38 35 20.0<br>121 43 30.0 | 50.000<br>152      | 6.2<br>165        | 66.3<br>Cbs Radio Of Sacramento, I | 66.8             | 12.8            |
| 275D<br>Patterson        | K275CE   | CP   | C<br>CA      | 145.2<br>325.3 | 43.85<br>BNPFT20130822AFR | 37 38 03.0<br>120 59 50.0 | 0.070<br>51        | 22.6<br>74        | 6.7<br>The Association For Commun  | 14.5             | 14.4            |
| 272A<br>Modesto          | KJSN     | LIC  | C<br>CA      | 134.4<br>314.6 | 44.09<br>BMLH20100211ABM  | 37 40 50.0<br>120 55 26.0 | 6.000<br>88        | 2.7<br>121        | 27.2<br>Capstar Tx Llc             | 34.7             | 16.5            |
| 275D<br>Elk Grove        | K275BH   | LIC  | C<br>CA      | 354.0<br>173.9 | 55.25<br>BLFT20080819ACS  | 38 27 12.0<br>121 20 55.0 | 0.023<br>85        | 22.6<br>103       | 6.8<br>Your Christian Companion N  | 25.8             | 25.5            |
| 275D<br>Pleasanton       | KBLX-FM2 | LIC  | DV<br>CA     | 261.5<br>81.1  | 56.57<br>BLFTB20010302ABP | 37 52 55.0<br>121 55 05.0 | 0.185<br>927       | 17.0<br>1155      | 2.1<br>Entercom License, Llc       | 32.4             | 30.4            |
| 273B<br>Salinas          | KDON-FM  | LIC  | CX<br>CA     | 188.3<br>8.2   | 134.80<br>BLH20040723ABH  | 36 45 23.0<br>121 30 05.0 | 15.000<br>723      | 7.5<br>1018       | 95.4<br>Cc Licenses, Llc           | 120.4            | 38.6            |
| 278A<br>Sacramento       | KHHM     | LIC  | DCN<br>CA    | 345.7<br>165.6 | 69.67<br>BLH20000128AAE   | 38 33 59.0<br>121 28 47.0 | 6.000<br>95        | 2.3<br>103        | 23.9<br>Entravision Holdings, Llc  | 60.5             | 45.4            |
| 275L1<br>Davis           | NEW      | CP   | CA           | 328.1<br>147.8 | 79.87<br>BNPL20131113BPO  | 38 34 02.0<br>121 46 05.8 | 0.100<br>14        | 31                |                                    | 54.2             | 50.4            |
| 276L1<br>Sacramento      | NEW      | CP   | CA           | 345.7<br>165.6 | 69.68<br>BNPL20131114BXU  | 38 33 59.2<br>121 28 46.6 | 0.100<br>29        | 37                |                                    | 54.7             | 54.0            |
| 276D<br>Vacaville        | K276EK   | LIC  | DC<br>CA     | 303.1<br>122.7 | 73.99<br>BLFT20061205ADQ  | 38 19 09.0<br>121 59 30.0 | 0.010<br>231       | 12.6<br>315       | 8.8<br>Educational Media Foundati  | 54.2             | 54.9            |
| 275D<br>Placerville      | K275BJ   | LIC  | C<br>CA      | 26.5<br>206.9  | 94.54<br>BLFT20110726AHW  | 38 43 07.0<br>120 47 40.0 | 0.010<br>120       | 29.2<br>713       | 8.8<br>Ihr Educational Broadcasti  | 58.6             | 63.4            |
| 274D<br>Sonora           | K274CG   | CP   | C<br>CA      | 87.8<br>268.3  | 78.37<br>BNPFT20130328AQE | 37 58 57.1<br>120 23 26.0 | 0.010<br>-29       | 10.9<br>556       | 7.7<br>Sonora Seventh-day Adventi  | 60.8             | 61.2            |

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 2A, 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.

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

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KATM, channel 277B, Modesto, CA. 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 K275BT.P:            | 38 watts  |
| The proposed COR for K275BT.P:            | 76 meters |
| KATM F(50/50) contour at proposed site:   | 73.0 dBu  |
| The F(50/10) contour of proposed K275BT.P | 113.0 dBu |

By taking into account the antenna vertical elevation pattern for the Nicom BKG77 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.

EXHIBIT 13 - A1  
74.1204(d) Showing  
K275BT  
Stockton, CA

ERP (kw): 0.038  
Height of Antenna above Ground (m): 76  
Translator's IX Contour: 113  
Antenna Type: Nicom BKG77

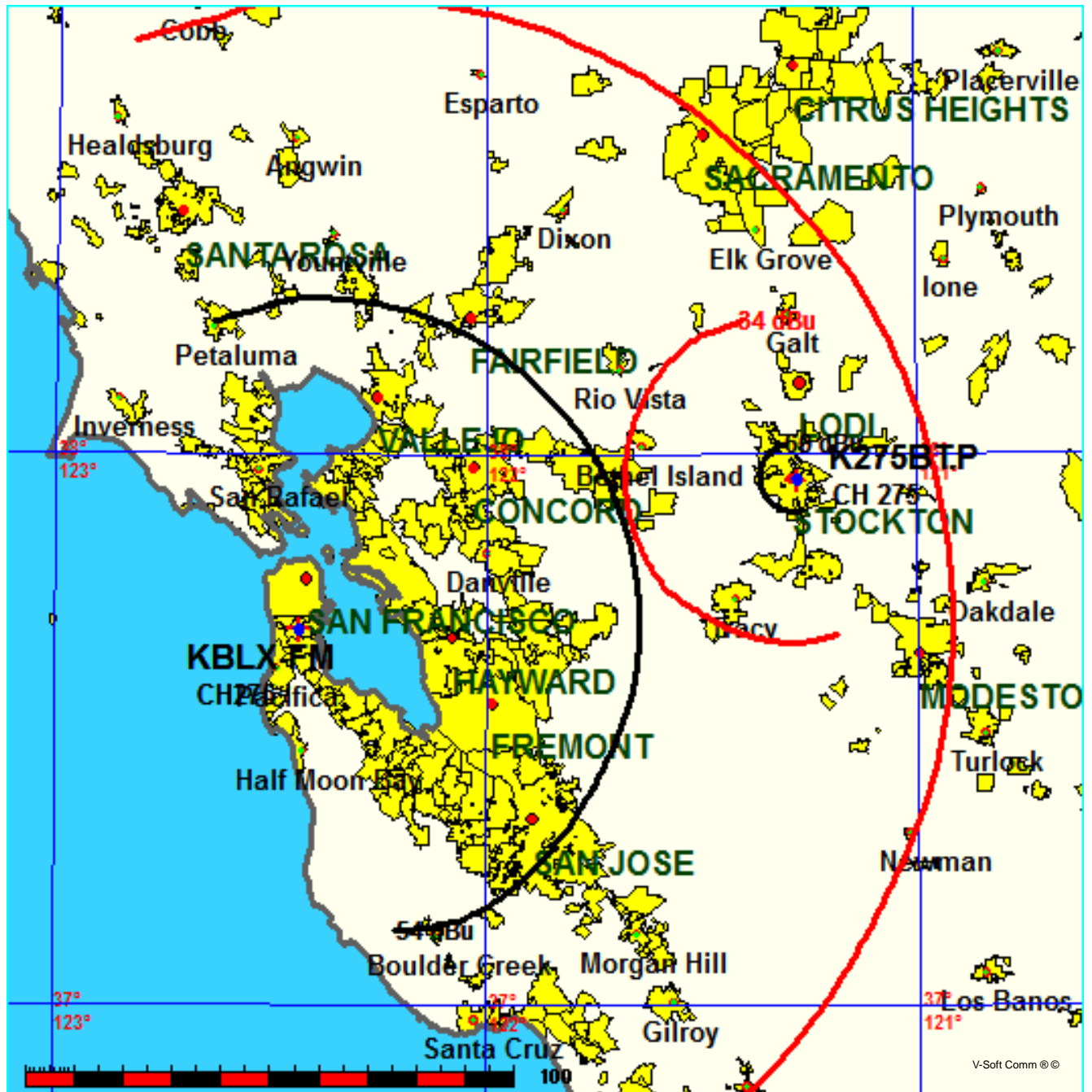
| <u>Depression Angle<br/>from Horizon</u> | <u>Antenna<br/>Relative Field</u> | <u>ERP (kw)<br/>from the Antenna RF</u> | <u>Dist. To IX Contour (m)</u> | <u>Height IX Contour Above<br/>Ground (m)</u> |
|--|-----------------------------------|---|--------------------------------|---|
| 0  | 1.000                             | 0.0380                                  | 96.8037                        | 76.000  |
| 5  | 0.999                             | 0.0379                                  | 96.7069                        | 67.571  |
| 10                                       | 0.982                             | 0.0366                                  | 95.0612                        | 59.493  |
| 15                                       | 0.954                             | 0.0346                                  | 92.3507                        | 52.098  |
| 20                                       | 0.918                             | 0.0320                                  | 88.8658                        | 45.606  |
| 25                                       | 0.872                             | 0.0289                                  | 84.4128                        | 40.326  |
| 30                                       | 0.818                             | 0.0254                                  | 79.1370                        | 36.432  |
| 35                                       | 0.758                             | 0.0218                                  | 73.3772                        | 33.913  |
| 40                                       | 0.691                             | 0.0181                                  | 66.8913                        | 33.003  |
| 45                                       | 0.616                             | 0.0144                                  | 59.6311                        | 33.834  |
| 50                                       | 0.538                             | 0.0110                                  | 52.0804                        | 36.104  |
| 55                                       | 0.465                             | 0.0082                                  | 45.0137                        | 39.127  |
| 60                                       | 0.391                             | 0.0058                                  | 37.8502                        | 43.221  |
| 65                                       | 0.313                             | 0.0037                                  | 30.2995                        | 48.539  |
| 70                                       | 0.239                             | 0.0022                                  | 23.1361                        | 54.259  |
| 75                                       | 0.176                             | 0.0012                                  | 17.0374                        | 59.543  |
| 80                                       | 0.129                             | 0.0006                                  | 12.4877                        | 63.702  |
| 85                                       | 0.103                             | 0.0004                                  | 9.9708                         | 66.067  |
| 90                                       | 0.104                             | 0.0004                                  | 10.0676                        | 65.932  |

Exhibit 13-B

FMCommander Single Allocation Study - 05-11-2015 - NGDC 30 SEC  
K275BT.P's Overlaps (In= -34.78 km, Out= 1.64 km)

K275BT.P CH 275 D  
Lat= 37 57 30.0, Lng= 121 16 55.0  
0.038 kW 74 M HAAT, 81 M COR  
Prot.= 60 dBu, Intef.= 34 dBu

KBLX-FM CH 275 B BLH20141219ACO  
Lat= 37 41 21.0, Lng= 122 26 08.0  
7.2 kW 387 M HAAT, 445 M COR  
Prot.= 54 dBu, Intef.= 40 dBu



FMCommander Single Allocation Study - 05-11-2015 - NGDC 30 SEC  
K275BT.P's Overlaps (In= -33.88 km, Out= 2.23 km)

K275BT.P CH 275 D  
Lat= 37 57 30.0, Lng= 121 16 55.0  
0.038 kW 74 M HAAT, 81 M COR  
Prot.= 60 dBu, Intef.= 34 dBu

KBLX-FM CH 275 B BMLH20131127BJS  
Lat= 37 41 20.0, Lng= 122 26 07.0  
6.6 kW 393 M HAAT, 450 M COR  
Prot.= 54 dBu, Intef.= 40 dBu

