

# Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 13

Las Vegas, NM

## Channel Study

REFERENCE		CH# 218D - 91.5 MHz, Pwr= 0.034 kW, HAAT= 0.0 M, COR= 2197 M								DISPLAY DATES	
35 36 13.1 N.		Average Protected F(50-50)= 4.3 km								DATA 05-14-22	
105 15 32.0 W.		Omni-directional								SEARCH 05-14-22	
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)
218C Albuquerque	KFLQ	LIC	CN NM	248.5 67.8	116.59 BMLED20121126AQQ	35 12 51.10 106 27 04.00	20.000 1232	190.6 3252	90.1 Family Life Broadcasting	-80.3*<	5.5 S
220A Las Vegas	KRRE	LIC	ZCN NM	263.9 83.9	0.05 BLED20160622AAW	35 36 12.90 105 15 34.30	0.100 117	0.7 2201	13.3 Regents Of The University	-5.0*<	-13.7*<
216C3 Las Vegas	KEDP	CP	CN NM	141.4 321.4	4.55 0000162299	35 34 17.70 105 13 38.80	7.000 -24	1.6 2010	16.4 Board Of Education Of The	-9.4*<	-12.3*<
216A Las Vegas	KEDP	LIC	HN NM	107.2 287.2	3.55 BLED20070118AAF	35 35 39.10 105 13 17.00	1.320 -61	1.6 1983	10.9 Board Of Education Of The	-9.0*<	-7.7*<
215D San Augustin	K215DT	LIC	DVN NM	163.7 343.7	22.99 BLFT20010403ABM	35 24 17.10 105 11 15.00	0.104 207	0.4 2085	8.5 Eastern New Mexico Univers	10.5	14.1
221D Wagon Mound, Etc.	K221DM	LIC	DHN NM	37.0 217.2	53.02 BLFT19940928TD	35 59 03.10 104 54 14.90	0.163 441	0.2 2579	11.7 Eastern New Mexico Univers	42.2	40.9
216D Espanola	K216GQ	LIC	DVN NM	293.3 113.0	51.51 BLFT20180820AAU	35 47 08.10 105 46 57.00	0.200 917	0.0 3688	2.9 Board Of Education Of The	47.2	48.2
216D Espanola	K216GQ	CP	DCN NM	293.3 113.0	51.51 0000143888	35 47 08.10 105 46 57.00	0.250 917	0.0 3688	2.0 Board Of Education Of The	47.2	49.1
217A Cimarron	KCNM	CP	CN NM	19.5 199.7	104.30 0000167266	36 29 19.80 104 52 08.90	3.600 40	35.8 2045	23.7 Labor Neighbor Research &	58.8	67.0
220C3 Espanola	KRAR	LIC	CN NM	311.2 130.7	93.15 BLED20080313ABY	36 09 08.10 106 02 23.10	5.900 162	2.8 2083	28.6 Regents Of The University	86.1	64.1
216C3 Espanola	767644	CP	DCN NM	305.5 125.0	95.31 0000167053	36 05 51.80 106 07 19.40	13.000 132	1.7 2040	25.6 Board Of Education Of The	89.3	69.3

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= West 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

Exhibit 13-A

FMCommander Single Allocation Study - 05-17-2022 - FCC NGDC 30 Sec  
K212EF's Overlaps (In= -80.27 km, Out= 5.53 km)

K212EF CH 218 D

Lat= 35 36 13.10, Lng= 105 15 32.00

0.034 kW 0 m HAAT, 2197 m COR

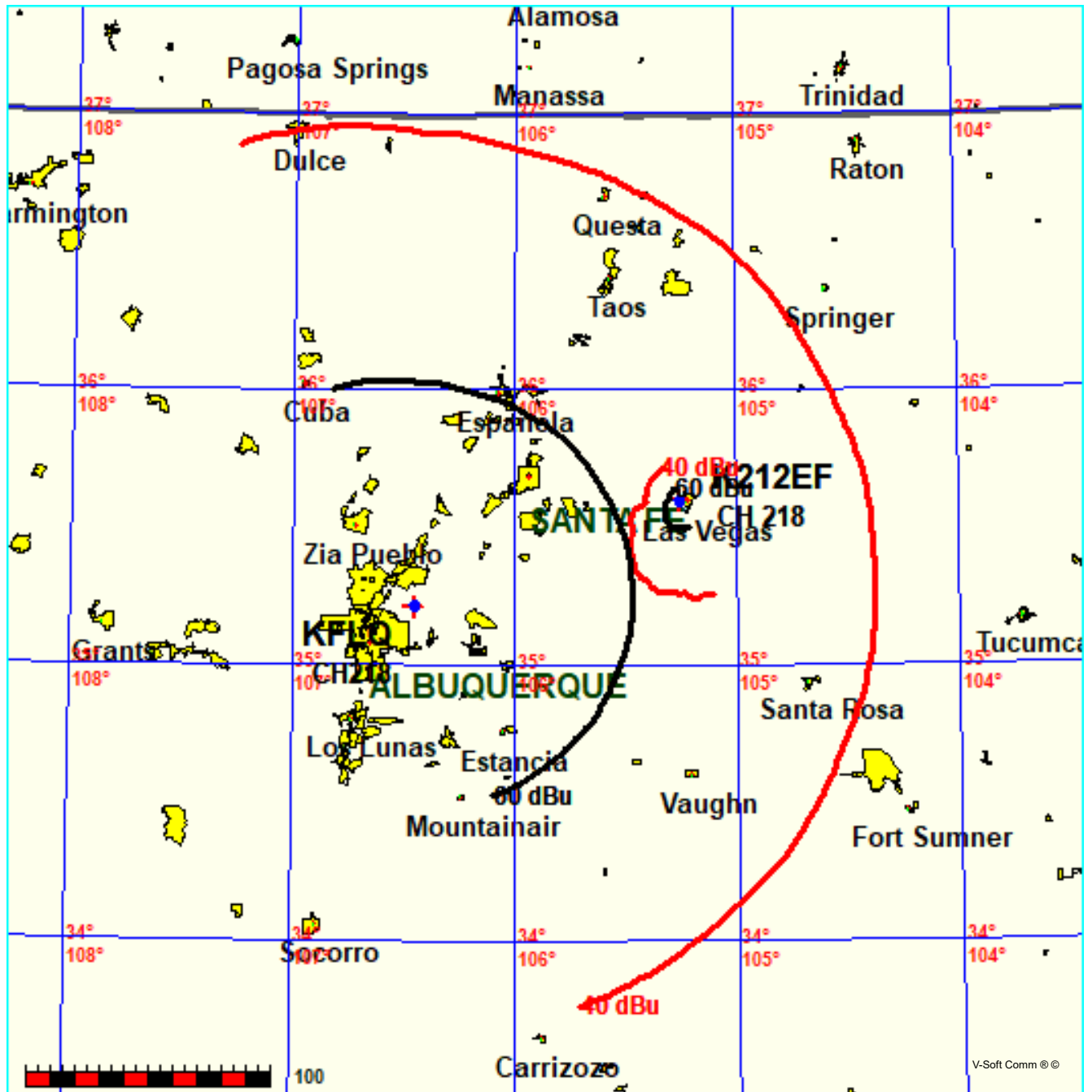
Prot.= 60 dBu, Intef.= 40 dBu

KFLQ CH 218 C BMLED20121126AQQ

Lat= 35 12 51.10, Lng= 106 27 04.00

20.0 kW 1232 m HAAT, 3252 m COR

Prot.= 60 dBu, Intef.= 40 dBu



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Exhibit 13-A

Las Vegas, NM

## K212EF.P vs. KFLQ

05-22-2022      Terrain Data: FCC NGDC 30 Sec      FMOver Analysis

KFLQ    BMLED20121126AQG

K212EF.P

Channel = 218C  
Max ERP = 20 kW  
RCAMSL = 3252 m  
N. Lat. 35 12 51.10  
W. Lng. 106 27 04.00  
Protected  
60 dBu

Channel = 218D  
Max ERP = 0.034 kW  
RCAMSL = 2197 m  
N. Lat. 35 36 13.10  
W. Lng. 105 15 32.00  
Interfering  
40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
065.0	020.0000	1155.0	090.0	258.0	000.0340	0042.8	026.9	32.12	
066.0	020.0000	1155.5	090.0	254.7	000.0340	0053.4	026.6	34.30	
067.0	020.0000	1156.6	090.0	251.3	000.0340	0059.4	026.4	35.33	
068.0	020.0000	1158.1	090.1	247.9	000.0340	0065.5	026.4	36.16	
069.0	020.0000	1159.4	090.1	244.5	000.0340	0072.0	026.4	36.93	
070.0	020.0000	1160.3	090.1	241.1	000.0340	0072.2	026.6	36.83	
071.0	020.0000	1160.4	090.1	237.8	000.0340	0074.4	026.9	36.88	
072.0	020.0000	1159.5	090.1	234.6	000.0340	0077.4	027.4	36.95	
073.0	020.0000	1158.0	090.1	231.5	000.0340	0089.4	027.9	37.93	
074.0	020.0000	1156.0	090.0	228.7	000.0340	0101.3	028.6	38.69	
075.0	020.0000	1153.3	090.0	226.0	000.0340	0111.8	029.4	39.13	
076.0	020.0000	1149.5	089.9	223.4	000.0340	0122.0	030.2	39.36	
077.0	020.0000	1144.4	089.8	221.1	000.0340	0125.8	031.2	39.07	
078.0	020.0000	1137.9	089.7	219.0	000.0340	0131.5	032.2	38.90	
079.0	020.0000	1131.4	089.6	217.1	000.0340	0140.1	033.3	38.88	
080.0	020.0000	1126.3	089.5	215.3	000.0340	0149.6	034.5	38.88	
081.0	020.0000	1122.1	089.4	213.7	000.0340	0158.2	035.7	38.77	
082.0	020.0000	1117.9	089.4	212.1	000.0340	0164.1	036.9	38.47	
083.0	020.0000	1113.6	089.3	210.8	000.0340	0167.7	038.2	38.03	
084.0	020.0000	1108.9	089.2	209.5	000.0340	0171.1	039.5	37.57	
085.0	020.0000	1104.5	089.1	208.4	000.0340	0174.9	040.8	37.13	
086.0	020.0000	1100.9	089.1	207.3	000.0340	0177.6	042.2	36.63	
087.0	020.0000	1098.3	089.0	206.4	000.0340	0178.6	043.5	36.07	
088.0	020.0000	1095.7	089.0	205.5	000.0340	0178.5	044.9	35.47	
089.0	020.0000	1094.8	088.9	204.7	000.0340	0178.2	046.3	34.87	
090.0	020.0000	1093.9	088.9	203.9	000.0340	0177.9	047.7	34.29	
091.0	020.0000	1093.0	088.9	203.2	000.0340	0178.0	049.2	33.74	
092.0	020.0000	1092.0	088.9	202.6	000.0340	0178.6	050.6	33.20	
093.0	020.0000	1090.7	088.9	202.1	000.0340	0179.7	052.1	32.69	
094.0	020.0000	1088.5	088.8	201.6	000.0340	0181.1	053.6	32.18	
095.0	020.0000	1085.7	088.8	201.2	000.0340	0182.9	055.1	31.69	

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

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KRRE, channel 220A, Las Vegas, NM. 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 K212EF.P:	34 watts
The proposed COR for K212EF.P:	21 meters
KRRE F(50/50) contour at proposed site:	121.6 dBu
The F(50/10) contour of proposed K212EF.P	161.6 dBu
The predicted distance to K212EF.P interference contour:	0.3 meters

As can be seen in Exhibit 13–D (green contour), there are no regularly occupied structures within the predicted interfering contour.

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

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

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KEDP and KEDP.CP, channel 216, Las Vegas, NM. 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 K212EF.P:	34 watts
The proposed COR for K212EF.P:	21 meters
KEDP F(50/50) contour at proposed site:	79.1 dBu
The F(50/10) contour of proposed K212EF.P	119.1 dBu

The proposed ERP for K212EF.P:	34 watts
The proposed COR for K212EF.P:	21 meters
KEDP.CP F(50/50) contour at proposed site:	82.0 dBu
The F(50/10) contour of proposed K212EF.P	122.0 dBu





As can be seen in Exhibit 13–D (KEDP red contour and KEDP.CP blue contour) , there are no regularly occupied structures within the predicted interfering contour.


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

# Exhibit 13-D

Interference contours

## Legend

-  35 36 13.1 N , 105 15 32 W
-  K212EF.P (218) - 50 10 Field Strength: 119.1 dBu FCC [FCC 30 US/VS 03 US]
-  K212EF.P (218) - 50 10 Field Strength: 122.0 dBu FCC [FCC 30 US/VS 03 US]
-  K212EF.P (218) - 50 10 Field Strength: 161.6 dBu FCC [FCC 30 US/VS 03 US]

 35 36 13.1 N , 105 15 32 W

