

# Educational Media Foundation

Exhibit 13

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Thousand Oaks, PA

## Channel Study

REFERENCE		CH# 220D - 91.9 MHz, Pwr= 0.01 kW DA, HAAT= 606.5 M, COR= 870 M							DISPLAY DATES		
34 05 09.0 N.		Average Protected F(50-50)= 13.8 km							DATA	02-15-19	
118 47 06.0 W.		Standard Directional							SEARCH	02-15-19	
CH CITY	CALL	TYPE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
220D Thousand Oaks	K220FR!	LIC DV	CA	0.0 0.0	0.00 BLFT20190123AAG	34 05 09.0 118 47 06.0	0.100	870	---Reference--- Educational Media Foundati		
222B Los Angeles	KRRL	LIC CY	CA	76.5 256.9	68.13 BMLH19921021KA	34 13 36.0 118 03 57.0	43.000 887	12.6 1787	116.1 Amfm Broadcasting Licenses	54.9	-48.0*<
218B Los Angeles	KUSC	LIC DC	CA	77.8 258.2	68.21 BLED20000404ABH	34 12 48.0 118 03 41.0	39.000 891	10.3 1689	94.1 University Of Southern Cal	57.3	-25.9*<
220B Santa Barbara	KCSB-FM	LIC CN	CA	294.7 114.1	118.47 BLED19840928DF	34 31 31.0 119 57 29.0	0.620 879	116.1 1239	46.5 Regents Of The University	-6.1<	42.1
220B San Bernardino	KVCR	LIC ZC	CA	95.1 275.9	139.20 BLED20010511AAG	33 57 57.0 117 17 05.0	3.800 494	138.9 939	60.0 San Bernardino Community C	-0.4<	74.1
06+-- Big Bear Lake	KZNO-LP« CP CN		77.8 68.19 CA		34 12 46.1 0000056235	0.730 118 03 41.6	51.5 -999	51.6R 1680	16.6M		
06--- Big Bear Lake	KZNO-LP« LI CN		77.8 68.19 CA		34 12 46.1 0000019005	0.500 118 03 41.6	47.9 -999	47.9R 1680	20.3M		
220D Studio City	K220HC	LIC DC	CA	83.2 263.5	38.78 BLFT20140127ADE	34 07 34.0 118 22 03.0	0.010 263	17.4 469	5.4 Educational Media Foundati	20.7	27.8
218D Santa Clarita	KUSC-FM1	LIC DC	CA	32.2 212.3	32.01 BLFTB20070920AAC	34 19 47.0 118 35 57.0	0.200	0.1 1140	10.1 University Of Southern Cal	23.5	21.8
06Z-- Camarillo	KUHD-LD« LI D N		300.2 58.51 CA		34 20 56.9 119.9 BLTVL-20100402ABY	0.999 119 20 07.0	35.1 -999	35.6R 642	22.9M		
06 -- Banning	KRVD-LD« APP DCN		77.8 68.21 CA		34 12 47.9 0000054864	3.000 118 03 41.1	40.8 -999	40.8R 1680	27.4M		
06--- Big Bear Lake	KZNO-LD/K« CP CN		77.8 68.21 CA		34 12 47.9 0000011368	0.220 118 03 41.1	40.0 -999	40.0R 1680	28.2M		
220B Ridgecrest	KWTD	LIC NCX	CA	32.3 213.0	183.56 BLED20050621AAO	35 28 38.0 117 41 58.0	7.000 390	145.9 1355	63.7 Westside Christian Fellows	29.4	86.9
220D Studio City	K220HC.P	PRO D		83.2 263.5	38.78	34 07 34.0 118 22 03.0	0.200 263	6.7 469	1.9 User	31.4	31.2
220D Studio City	K220HC	CP DV	CA	83.2 263.5	38.78 BPFT20180327AAG	34 07 34.0 118 22 03.0	0.200	6.7 469	1.9 Educational Media Foundati	31.4	31.2
06--- Victorville	KCIO-LP« LI D N		81.4 132.55 CA		34 15 19.0 262.2 BLTVL-20090428AAP	0.499 117 21 42.8	6.6 -999	6.7R 1715	125.9M		

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 2A, 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 restricted contour.  
< = Contour Overlap  
Reference station has protected zone issue: Mexico

**Educational Media Foundation**  
5700 West Oaks Boulevard  
Rocklin, CA 95765

*Exhibit 13-A*  
*Thousand Oaks, CA*

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

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KRRL, channel 222B, Los Angeles, 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 K220FR.P:	10 watts
The proposed COR for K220FR.P:	10 meters
KRRL F(50/50) contour at proposed site:	72.3 dBu
The F(50/10) contour of proposed K220FR.P	112.3 dBu

As can be seen in the attached Google Earth plot, the potential interfering contour is predicted to not reach 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

interferring contour for  
K220FR.P vs. KRRL

## Legend

-  16.1km Circle
-  Castro Peak



Castro Peak Moraine

Google Earth

© 2018 Google



700 ft



**Educational Media Foundation**  
5700 West Oaks Boulevard  
Rocklin, CA 95765

*Exhibit 13-B*  
*Thousand Oaks, CA*

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

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KUSC, channel 218B, Los Angeles, 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 K220FR.P:	10 watts
The proposed COR for K220FR.P:	10 meters
KUSC F(50/50) contour at proposed site:	70.3 dBu
The F(50/10) contour of proposed K220FR.P	110.3 dBu

As can be seen in the attached Google Earth plot, the potential interfering contour is predicted to not reach any nearby occupied structure (see Exhibit 13-B1).



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



# Exhibit 13-B1

interfering contour for  
K220FR.P vs. KUSC

## Legend

-  16.1km Circle
-  Castro Peak

Google Earth

© 2018 Google

Castro Peak Motorway

Newton Mtwy



1000 ft



Exhibit 13-C  
Educational Media Foundation

FMCommander Single Allocation Study - 02-19-2019 - FCC NGDC 30 Sec  
K220FR.P's Overlaps (In= 20.74 km, Out= 27.79 km)

K220FR.P CH 220 D DA  
Lat= 34 05 09.0, Lng= 118 47 06.0  
0.01 kW 606.5 m HAAT, 870 m COR  
Prot.= 60 dBu, Intef.= 40 dBu

K220HC CH 220 D DA BLFT20140127ADE  
Lat= 34 07 34.0, Lng= 118 22 03.0  
0.01 kW 262.8 m HAAT, 469 m COR  
Prot.= 60 dBu, Intef.= 40 dBu

