

# Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 13

Monterey, CA

## Channel Study

REFERENCE 36 35 09.0 N. 121 55 19.0 W.		CH# 207D - 89.3 MHz, Pwr= 0.25 kW DA, HAAT= 200.8 M, COR= 259 M Average Protected F(50-50)= 18.6 km Standard Directional								DISPLAY DATES DATA 08-02-19 SEARCH 08-02-19	
CH CITY	CALL	TYPE STATE	ANT STATE	AZI. <--	DIST FILE #	LAT. LNG.	Pwr (kW) HAAT (M)	INT (km) COR (M)	PRO (km) LICENSEE	*IN* (Overlap in km)	*OUT*
207D Monterey	K208CW!	CP	DC CA	0.0 0.0	0.00 BMPFT20190507ABM	36 35 09.0 121 55 19.0	0.250	266	---Reference---		
*205B Santa Cruz	KLVM	LIC	CN CA	101.8 282.0	27.57 BLED19930524KB	36 32 05.0 121 37 14.0	1.250 761	2.4 1084	53.9	19.9	-26.5*<
208D Monterey	K208CW!	LIC	DV CA	101.8 282.0	27.69 BLFT20090522AFG	36 32 05.0 121 37 09.0	0.074 770	1065	---Reference---		
**209B Prunedale	KNVM	LIC	DCN CA	63.1 243.3	42.05 BLED20060822AJC	36 45 22.0 121 30 06.0	0.450 715	1.4 1013	44.5	33.5	-2.6*<
**209B1 Prunedale	KNVM.P	CP	DCN CA	63.1 243.3	42.05 BPED20190507ABL	36 45 22.0 121 30 06.0	0.330 715	1.2 1013	41.6	33.7	0.3
207A Santa Cruz	KZJV	LIC	DH CA	346.0 165.9	56.04 BLED20160119ACG	37 04 32.7 122 04 28.7	0.300 -110	40.2 166	11.7	7.8	17.3
207D Santa Cruz	K207CN	LIC	C CA	348.3 168.2	42.46 BLFT20140402AQO	36 57 37.5 122 01 10.0	0.050	15.0 15	4.7	19.6	11.3
206D Hollister	K206BQ	LIC	DC CA	63.1 243.3	42.05 BLFT20170628AAR	36 45 22.0 121 30 06.0	0.150	20.8 1025	11.9	14.0	19.8
210A Santa Cruz	KFER	LIC	CN CA	354.5 174.4	47.57 BLED19920212KB	37 00 45.0 121 58 25.0	0.200 8	1.0 174	16.0	39.2	31.5
207A San Jose	KMTG	LIC	DCX CA	4.5 184.5	68.55 BLED20040803ABX	37 12 06.0 121 51 42.0	0.300 -95	10.9 185	3.4	50.4	40.3
207A Pescadero	KPDO	LIC	CX CA	329.5 149.3	85.01 BLED20180226AAA	37 14 40.0 122 24 33.0	0.100 -7	18.6 67	5.6	57.4	49.3
210A Morgan Hill	KHCF	LIC	HX CA	25.7 205.9	63.27 BLED20131017APM	37 05 55.3 121 36 43.4	0.160 -178	0.9 104	6.3	53.7	56.7
205D Los Gatos	K205BN	CP	DV CA	1.0 181.0	63.69 BPFT20190621AAE	37 09 35.0 121 54 32.0	0.033	0.0 1037	1.5	56.5	62.0
205D Los Gatos	K205BN	LIC	DV CA	0.9 180.9	63.69 BLFT20130110AGU	37 09 35.0 121 54 38.0	0.010 709	0.0 1051	0.9	56.5	62.7
210A Soledad	KFRS	LIC	VX CA	120.6 301.0	67.95 BLED20020408ABB	36 16 25.0 121 16 12.0	0.250 93	1.1 386	7.1	61.2	60.7
207B San Luis Obispo	KLFF	LIC	CX CA	139.7 320.4	177.63 BMLED20161021ABY	35 21 37.0 120 39 17.0	4.400 466	109.3 799	44.3	64.5	121.2
209B1 Los Altos	KFJC	LIC	C CA	346.6 166.5	83.84 BMLED19961105KB	37 19 14.0 122 08 29.0	0.110 562	0.7 820	15.1	75.1	68.6

Terrain database is NGDC 30 SEC

\* NOTE: According to 74.1203(d) "A fill-in FM translator operating on the first, second or third adjacent channel to its primary station's channel... may cause limited interference to its primary station's signal...", therefore, Educational Media Foundation requests that this application be granted since KLVM is the primary station for this proposed facility.

\*\* NOTE: The facility contemplated herein is being filed contingently with an application for KNVM, Prunedale, CA according to the guidelines of 47 C.F.R. 73.3517(e). The proposed KNVM facility is labeled KNVM.P.

**K208CW vs. KLVM**

According to 74.1203(d) "A fill-in FM translator operating on the first, second or third adjacent channel to its primary station's channel... may cause limited interference to its primary station's signal...".

As can be seen in Exhibit 13-A, the predicted K208CW interfering contour contains 146 persons and 0.7 sq. km. This is a minor fraction of the population covered by KLVM and thus meets the limited nature of the interference allowed by 74.1203(d).

Therefore, Educational Media Foundation requests that this application be granted.

## Exhibit 13-A

### K208CW.P

Latitude: 36-35-09 N  
Longitude: 121-55-19 W  
ERP: 0.25 kW  
Channel: 207  
Frequency: 89.3 MHz  
AMSL Height: 259.0 m  
Horiz. Pattern: Directional

### KLVM

BLED19930524KB  
Latitude: 36-32-05 N  
Longitude: 121-37-14 W  
ERP: 1.25 kW  
Channel: 205  
Frequency: 88.9 MHz  
AMSL Height: 1084.0 m  
Horiz. Pattern: Omni

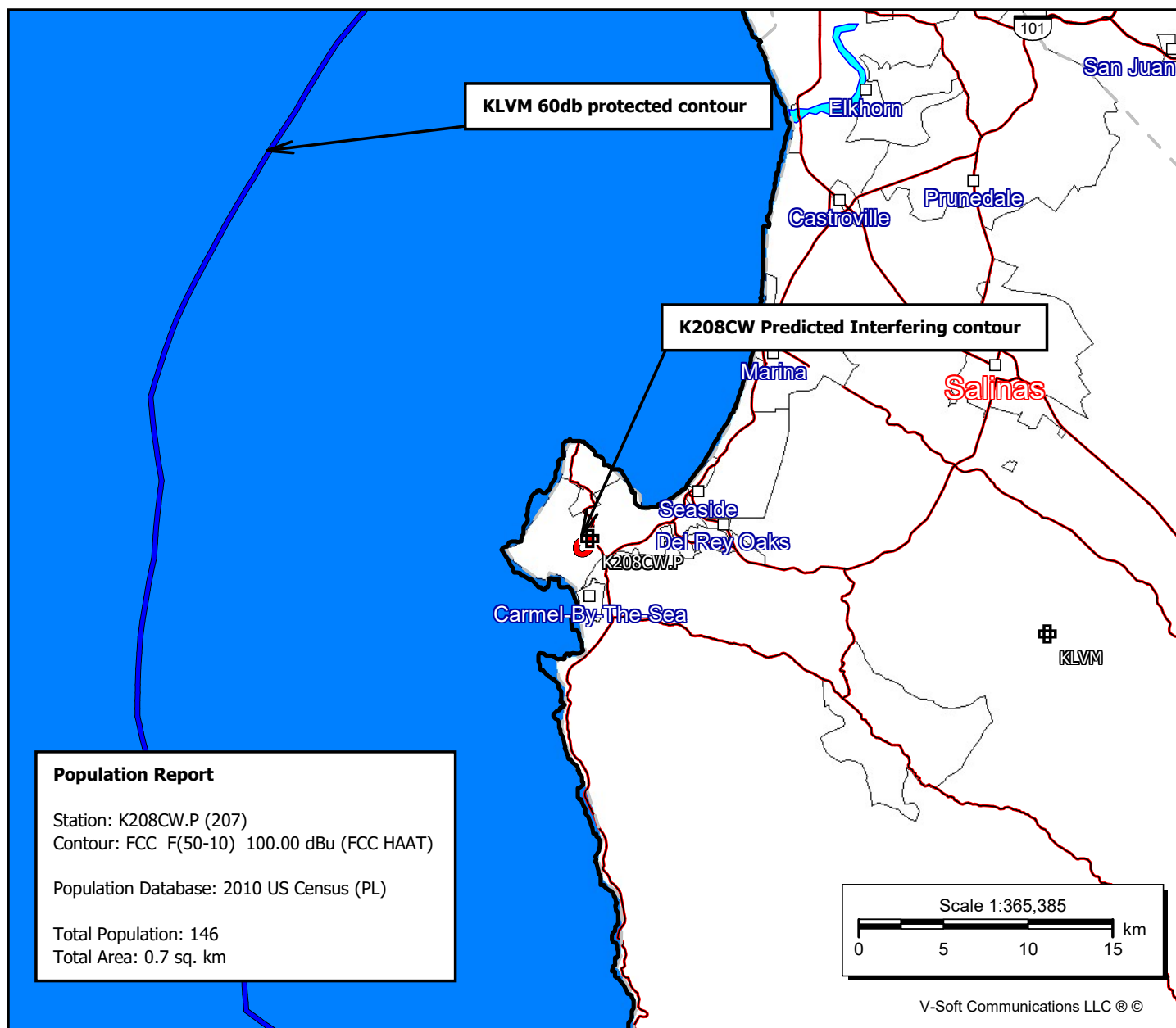
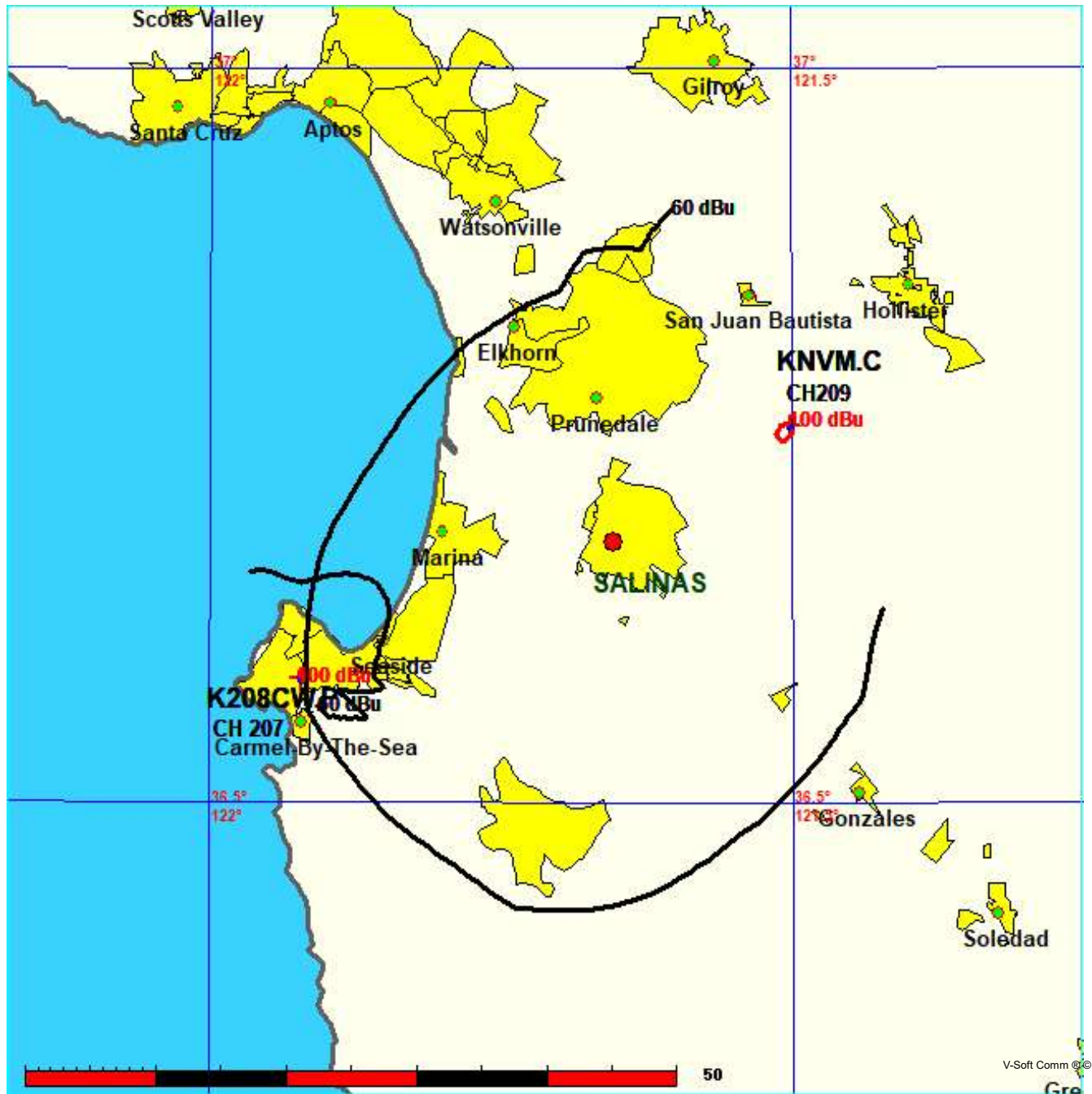


Exhibit 13-B

FMCommander Single Allocation Study - 08-02-2019 - NGDC 30 SEC  
K208CW.P's Overlaps (In= 33.66 km, Out= 0.3 km)

K208CW.P CH 207 D DA  
Lat= 36 35 09.0, Lng= 121 55 19.0  
0.25 kW 200.8 m HAAT, 259 m COR  
Prot.= 60 dBu, Intef.= 100 dBu

KNVM-C CH 209 B1 DA BPED20190507ABL  
Lat= 36 45 22.0, Lng= 121 30 06.0  
0.33 kW 715 m HAAT, 1013 m COR  
Prot.= 60 dBu, Intef.= 100 dBu



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Monterey, CA

## K208CW.P vs. KNVM.P

08-02-2019      Terrain Data: NGDC 30 SEC      FMOver Analysis

KNVM-C    BPED20190507ABL

K208CW.P

Channel = 209B1  
Max ERP = 0.33 kw  
RCAMSL = 1013 m  
N. Lat. 36 45 22.0  
W. Lng. 121 30 06.0  
Protected  
60 dBu

Channel = 207D  
Max ERP = 0.25 kw  
RCAMSL = 259 m  
N. Lat. 36 35 09.0  
W. Lng. 121 55 19.0  
Interfering  
100 dBu

Azimuth (degrees)	ERP (kw)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kw)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
235.0	000.3300	0883.9	042.7	155.7	000.0069	-0004.6	006.2	46.76	
236.0	000.3300	0884.4	042.7	157.3	000.0076	-0021.0	005.5	49.37	
237.0	000.3300	0884.8	042.7	159.1	000.0085	-0039.8	004.7	52.21	
238.0	000.3300	0885.1	042.8	161.4	000.0110	-0054.7	004.0	56.15	
239.0	000.3300	0885.1	042.8	164.3	000.0157	-0048.9	003.3	61.18	
240.0	000.3300	0884.5	042.7	168.4	000.0235	-0027.1	002.6	67.46	
241.0	000.3194	0883.5	042.4	165.6	000.0179	-0040.9	001.8	73.00	
242.0	000.3090	0882.0	042.1	156.5	000.0073	-0013.5	001.0	85.77	
243.0	000.2987	0880.3	041.7	102.5	000.0077	0085.0	000.4	94.29	
244.0	000.2886	0878.7	041.3	026.5	000.0076	0255.9	000.8	87.49	
245.0	000.2787	0877.1	041.0	013.9	000.0052	0255.2	001.6	79.27	
246.0	000.2690	0875.9	040.6	010.0	000.0046	0254.9	002.4	74.80	
247.0	000.2594	0874.8	040.2	008.4	000.0044	0254.8	003.2	71.39	
248.0	000.2500	0874.0	039.9	007.7	000.0044	0254.8	003.9	68.61	
249.0	000.2408	0873.6	039.5	007.4	000.0043	0254.8	004.7	66.26	
250.0	000.2317	0873.7	039.2	007.3	000.0043	0254.8	005.5	64.28	

Exhibit 13-C

FMCommander Single Allocation Study - 08-02-2019 - NGDC 30 SEC  
K208CW.P's Overlaps (In= 7.84 km, Out= 17.33 km)

K208CW.P CH 207 D DA  
Lat= 36 35 09.0, Lng= 121 55 19.0  
0.25 kW 200.8 m HAAT, 259 m COR  
Prot.= 60 dBu, Intef.= 40 dBu

KZJV CH 207 A DA BLED20160119ACG  
Lat= 37 04 32.7, Lng= 122 04 28.7  
0.3 kW -110 m HAAT, 165.8 m COR  
Prot.= 60 dBu, Intef.= 40 dBu

