

# Educational Media Foundation

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

Exhibit 13

Sandia, NM

## Channel Study

REFERENCE CH# 298D - 107.5 MHz, Pwr= 0.099 kW DA, HAAT= 1231.6 M, COR= 3241 M

DISPLAY DATES

35 13 00.2 N.

106 27 06.6 W.

Average Protected F(50-50)= 37.4 km

DATA 06-29-11

Standard Directional

SEARCH 06-30-11

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*
298D Sandia	K298BK	LIC	DV NM	148.7	0.2	35 12 54.0	0.020	9.3	1.0	-11.2*	-16.6*
				328.7	BLFT20110504ACV	106 27 02.0	1253	3257	Educational Media Foundati		
300C Albuquerque	KBQI	LIC	CN NM	155.4	0.6	35 12 43.0	22.500	9.6	94.9	-11.1*	-94.4*
				335.5	BLH19790416AD	106 26 57.0	1259	3277	Citicasters Licenses, Inc.		
298C1 Los Alamos	KQBA	LIC	C NM	21.4	104.1	36 05 21.0	100.000	184.0	80.8	-82.0*	5.2
				201.7	BLH20000410ABB	106 01 41.0	243	2140	Hutton Broadcasting, Llc		
296C2 Armijo	KNKT	LIC	CY NM	244.1	41.2	35 03 15.0	24.500	6.0	53.3	-5.6	-12.8*
				63.8	BLH19880422KC	106 51 31.0	215	1899	Calvary Chapel Of Alberquerque		
298D Los Alamos&santa Fe	KQBA-FM1	LIC	DV NM	39.1	67.8	35 41 20.0	12.000	78.0	26.8	-12.3*	22.6
				219.4	BLFTB20100125ACZ	105 58 42.0		2156	Hutton Broadcasting, Llc		
298A Alamo Community	NEW	CP	CX NM	227.4	130.7	34 25 01.0	6.000	81.1	23.9	10.8	1.8
				46.8	BNPED20100223AAA	107 30 04.0	-60	1917	Alamo Navajo School Board,		
296D Los Alamos	647588	APP	C NM	4.4	74.5	35 53 09.0	0.010	0.2	13.9	72.2	60.5
				184.5	BNPFT20030317MBV	106 23 16.0	554	3105	Northern New Mexico Radio		

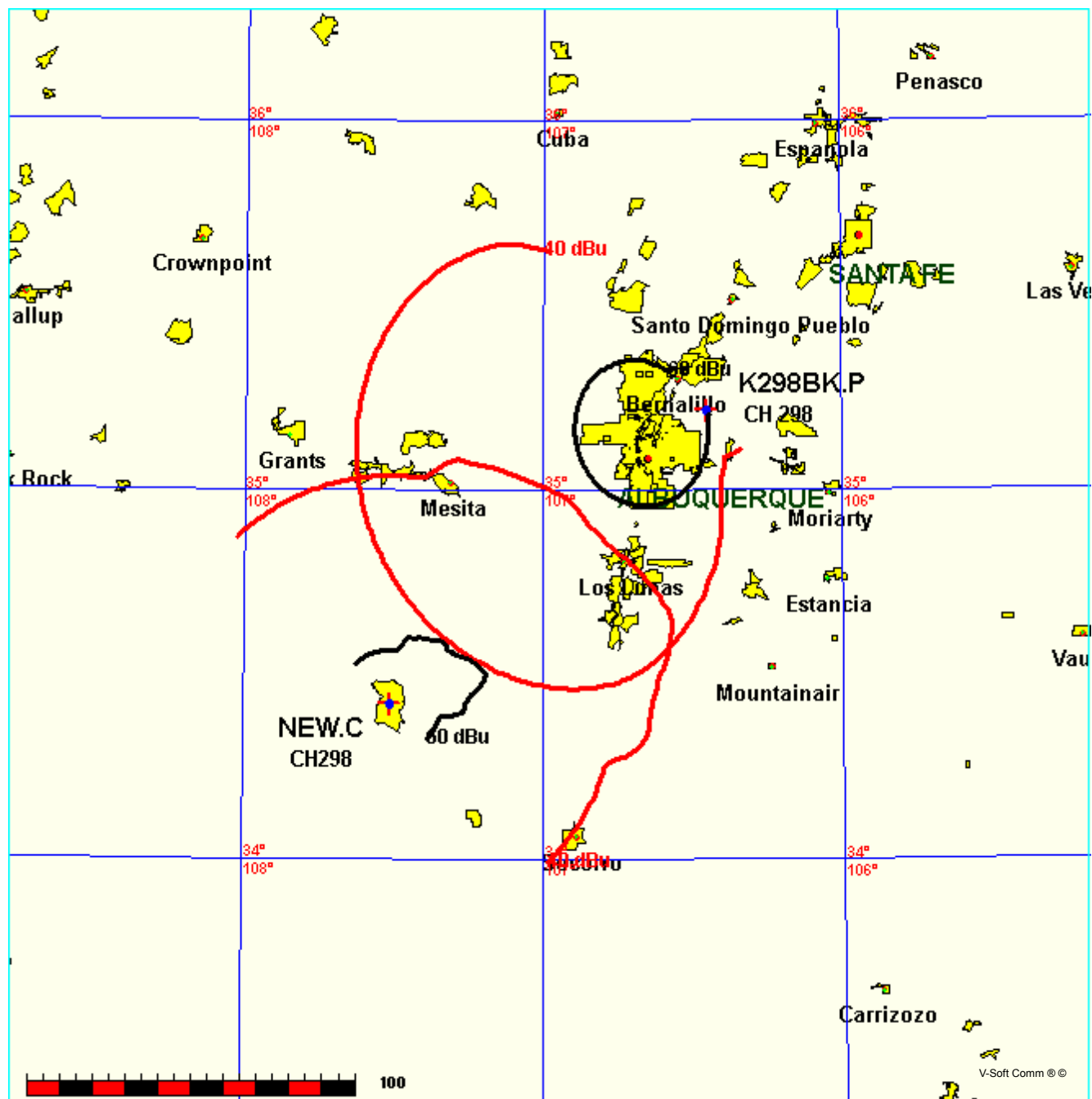
Terrain database is NGDC 30 SEC, R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM  
Contour distances are on direct line to and from reference station. Reference Zone= West Zone, Co to 3rd  
adjacent.

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtlt(Y,N,X)  
""affixed to 'IN' or 'OUT' values = site inside protected contour.

FMCommander Single Allocation Study - 06-30-2011 - NGDC 30 SEC  
K298BK.P's Overlaps (In= 10.81 km, Out= 1.79 km)

K298BK.P CH 298 D DA  
Lat= 35 13 00.2, Lng= 106 27 06.6  
0.099 kW 1231.6 M HAAT, 3241 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

NEW-C CH 298 A   BNPED20100223AAA  
Lat= 34 25 01.0,   Lng= 107 30 04.0  
6.0 kW -59.5 M HAAT, 1917 M COR  
Prot.= 60 dBu, Intef.= 40 dBu



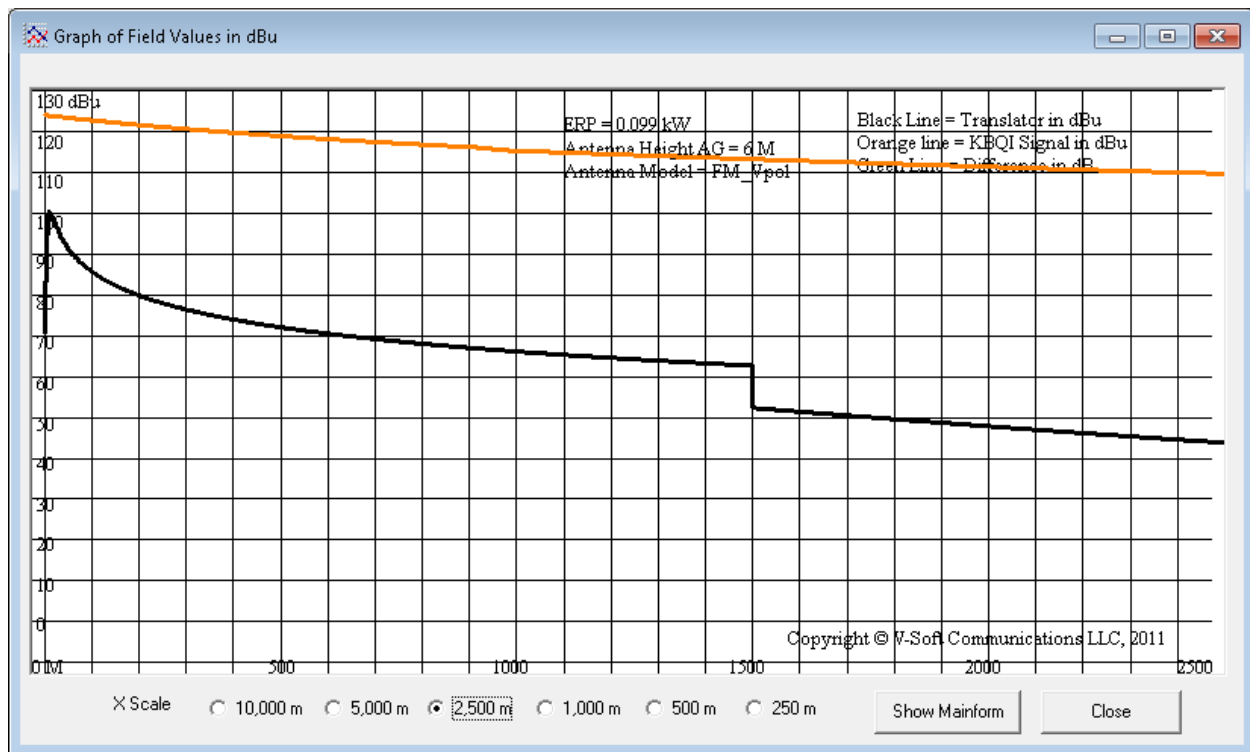
### **Compliance with C.F.R. 74.1204**

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KBQI (channel 300C) Albuquerque, NM. According to 74.1204(a)(3), in order to protect second adjacent facilities, the difference in dB between the two facilities must not exceed 40dB.

EMF has investigated the proposed K298BK facility using V-Soft Communication's X-Field program. This program calculates the incoming signal of the station to be protected, and then calculates the interfering contour of the proposed facility based on the proposed ERP, antenna height above ground, and the actual characteristics of the antenna being used (e.g. vertical plane, directionality, number of bays). In this case K298BK's proposed facility has an ERP of 99 watts, height AG of 6m, and is using a 1 bay CLFM(V) antenna.

As can be seen in the graph below, at no point does the interfering contour of the proposed facility exceed the required 40dB difference (green line on graph). Therefore, the proposed facility does not cause interference at any point.

\*Note that the green line does not show up since the value is so low



### Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KNKT (channel 298C2) Armijo, NM. According to 74.1204(a)(3), in order to protect second adjacent facilities, the difference in dB between the two facilities must not exceed 40dB.

EMF has investigated the proposed K298BK facility using V-Soft Communication's X-Field program. This program calculates the incoming signal of the station to be protected, and then calculates the interfering contour of the proposed facility based on the proposed ERP, antenna height above ground, and the actual characteristics of the antenna being used (e.g. vertical plane, directionality, number of bays). In this case K298BK's proposed facility has an ERP of 99 watts, height AG of 6m, and is using a 1 bay CLFM(V) antenna.

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