

Educational Media Foundation

Exhibit 13

5700 West Oaks Boulevard ♦ Rocklin ♦ California ♦ 95765

New Braunfels, TX

Channel Study

REFERENCE CH# 280D - 103.9 MHz, Pwr= 0.25 kW DA, HAAT= 126.6 M, COR= 387 M DISPLAY DATES
29 40 20.0 N. Average Protected F(50-50)= 14.4 km DATA 08-27-13
98 14 43.0 W. Standard Directional SEARCH 08-27-13

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)
280D New Braunfels	1550928	APP DC	TX	0.0 0.0	0.00 BNPFT20030314BTP	29 40 20.0 98 14 43.0	0.250	12.5 387	4.0 Educational Media Foundati	-21.6*	-33.9*
283C1 San Antonio	KZEP-FM	LIC CX	TX	219.3 39.2	36.40 BLH20070830AAX	29 25 06.0 98 29 01.0	100.000 202	7.9 408	62.3 Citicasters Licenses, Inc.	26.2	-25.9*
278C0 San Marcos	KBPA	LIC CX	TX	40.2 220.4	54.30 BMLH20110913ABR	30 02 42.0 97 52 50.0	100.000 383	11.1 608	77.1 Emmis Austin Radio Broadca	28.3	-23.9*
280A Smiley	AL5227	VAC	TX	124.9 305.3	84.02 RM10537	29 14 17.0 97 32 07.0	6.000 100	86.5 185	28.1 Linda Crawford	-5.0*	46.3
281C1 Pearsall	KSAH-FM	LIC CX	TX	205.5 25.2	116.78 BLH20020712AAC	28 43 16.0 98 45 43.0	100.000 299	104.3 430	71.8 Bmp San Antonio License Co	10.1	41.4
280A Burnet	KBEY	CP NCX	TX	357.3 177.3	115.35 BPH20121204AAX	30 42 42.0 98 18 09.0	2.400 155	88.9 499	32.4 Victory Publishing Company	18.0	54.8
279D San Antonio	K279AB	CP DC	TX	240.0 59.9	36.54 BPFT20110118ABN	29 30 28.0 98 34 20.0	0.250 120	13.4 378	9.6 San Antonio Radioworks, Ll	20.9	23.6
281D Pearsall	KSAH-FM1	LIC DC	TX	205.7 25.5	93.04 BLFTB20060327AJE	28 54 57.4 98 39 39.1	20.000	69.4 467	46.7 Bmp San Antonio License Co	21.3	42.7
279D San Antonio	K279AB	LIC DV	TX	240.0 59.9	36.54 BLFT19970804TI	29 30 28.0 98 34 20.0	0.081 119	11.1 378	7.9 San Antonio Radioworks, Ll	23.2	25.3
280A Burnet	KBEY	LIC C	TX	356.7 176.6	118.72 BLH20120109ABM	30 44 29.0 98 19 05.0	1.800 184	84.5 540	30.0 Victory Publishing Company	25.9	61.0
227D San Antonio	K227BH<	LIC C	TX	219.3 39.2	36.39 BLFT20130410AAB	29 25 06.5 98 29 01.0	0.250	84.9 384	28.6 Mary H. Lopez	9.5R	26.9M
278D Terrell Wells	1551350	APP C	TX	212.4 32.2	43.73 BNPFT20030314BBQ	29 20 21.0 98 29 14.0	0.128	0.8 192	6.0 Primera Iglesia Evangelica	40.6	37.7
280D Del Valle	1569256	APP DV	TX	17.5 197.7	96.89 BNPFT20130815ACV	30 30 17.6 97 56 22.6	0.010	17.9 392	5.4 Kevin J. Youngers	67.4	52.0
280C Ciudad Acuna	AL9005	AL	CI	262.2 80.9	262.70	29 19 33.0 100 55 51.0	100.000 600	197.9 906	92.0	62.7	163.4
280D Marble Falls	KBEY-FM1	LIC DC	TX	358.6 178.6	103.15 BLFTB20120503AEV	30 36 09.0 98 16 18.0	0.700	30.9 316	9.1 Victory Publishing Company	63.5	65.1
282C2 Taylor	KLQB	LIC NCN	TX	44.8 225.2	119.79 BLH19980616KB	30 26 04.0 97 21 53.0	48.000 150	6.0 308	52.8 Univision Radio License Co	98.7	65.9

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.
All separation margins (if shown) include rounding
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 protected contour.
< = Station meets FCC minimum distance spacing for its class.
Reference station has protected zone issue:

Educational Media Foundation
5700 West Oaks Boulevard
Rocklin, CA 95765

Exhibit 13-A
New Braunfels, TX

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KZEP-FM, channel 283C1 San Antonio, TX. 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 NB.P:	250 watts
The proposed COR for NB.P:	110 meters
KZEP-FM F(50/50) contour at proposed site:	72.8 dBu
The F(50/10) contour of proposed NB.P	112.8 dBu

By taking into account the antenna vertical elevation pattern for the Scala 2CL-FMV 2 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
NB.P
New Braunfels, TX

ERP (kw): 0.25
Height of Antenna above Ground (m): 110
Translator's IX Contour: 112.8
Antenna Type: Scala 2CL-FMV Full

Depression Angle from Horizon	Antenna Relative Field	ERP (kw) from the Antenna RF	Dist. To IX Contour (m)	Height IX Contour Above Ground (m)
0	1.000	0.2500	254.0797	110.000
5	0.943	0.2223	239.5972	89.118
10	0.812	0.1648	206.3127	74.174
15	0.615	0.0946	156.2590	69.557
20	0.390	0.0380	99.0911	76.109
25	0.177	0.0078	44.9721	90.994
30	0.010	0.0000	2.5408	108.730
35	0.129	0.0042	32.7763	91.200
40	0.204	0.0104	51.8323	76.683
45	0.218	0.0119	55.3894	70.834
50	0.185	0.0086	47.0047	73.992
55	0.131	0.0043	33.2844	82.735
60	0.078	0.0015	19.8182	92.837
65	0.043	0.0005	10.9254	100.098
70	0.020	0.0001	5.0816	105.225
75	0.010	0.0000	2.5408	107.546
80	0.010	0.0000	2.5408	107.498
85	0.010	0.0000	2.5408	107.469
90	0.100	0.0025	25.4080	84.592

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60 dBu contour of second adjacent channel station KBPA, channel 278C0 San Marcos, TX. 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 NB.P:	250 watts
The proposed COR for NB.P:	110 meters
KBPA(50/50) contour at proposed site:	70.0 dBu
The F(50/10) contour of proposed NB.P	110.0 dBu

By taking into account the antenna vertical elevation pattern for the Scala 2CL-FMV 2 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-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
74.1204(d) Showing
NB.P
New Braunfels, TX

ERP (kw): 0.25
Height of Antenna above Ground (m): 110
Translator's IX Contour: 110
Antenna Type: Scala 2CL-FMV Full

Depression Angle from Horizon	Antenna Relative Field	ERP (kw) from the Antenna RF	Dist. To IX Contour (m)	Height IX Contour Above Ground (m)
0	1.000	0.2500	350.7276	110.000
5	0.943	0.2223	330.7362	81.174
10	0.812	0.1648	284.7909	60.547
15	0.615	0.0946	215.6975	54.173
20	0.390	0.0380	136.7838	63.217
25	0.177	0.0078	62.0788	83.764
30	0.010	0.0000	3.5073	108.246
35	0.129	0.0042	45.2439	84.049
40	0.204	0.0104	71.5484	64.010
45	0.218	0.0119	76.4586	55.936
50	0.185	0.0086	64.8846	60.296
55	0.131	0.0043	45.9453	72.364
60	0.078	0.0015	27.3568	86.308
65	0.043	0.0005	15.0813	96.332
70	0.020	0.0001	7.0146	103.408
75	0.010	0.0000	3.5073	106.612
80	0.010	0.0000	3.5073	106.546
85	0.010	0.0000	3.5073	106.506
90	0.100	0.0025	35.0728	74.927