

Channel Study

REFERENCE		CH# 279D - 103.7 MHz, Pwr= 0.01 kW, HAAT= 133.0 M, COR= 163 M								DISPLAY DATES	
30 27 46.0 N.		Average Protected F(50-50)= 6.7 km								DATA 11-25-14	
84 18 04.0 W.		Omni-directional								SEARCH 11-25-14	
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*
279D Tallahassee	W279CU	CP	C FL	0.0 0.0	0.00 BNPFT20130926AWG	30 27 46.0 84 18 04.0	0.250 133	48.4 163	14.4 Educational Media Foundati	-54.9*	-36.1*
281C0 Tallahassee	WGLF	LIC	CX FL	92.6 272.8	27.82 BMLH20111005AJA	30 27 04.0 84 00 42.0	100.000 430	12.0 459	82.2 Cumulus Licensing Llc	9.3	-54.6*<
276C2 Tallahassee	WVOF	LIC	CN FL	61.7 241.8	7.38 BLH19970530KB	30 29 39.0 84 13 60.0	42.000 165	5.9 201	52.3 Red Hills Broadcasting, Ll	-5.1<	-45.2*<
279D Thomasville	W279BD	APP	C GA	36.5 216.6	51.69 BPFT20140320ACS	30 50 12.0 83 58 44.0	0.180	36.8 147	10.8 Lenrob Enterprises, Inc.	8.6	19.9
279D Thomasville	W279BD	APP	C GA	36.5 216.6	51.69 BPFT20140320ACS	30 50 12.0 83 58 44.0	0.180	36.8 147	10.8 Lenrob Enterprises, Inc.	8.6	19.9
278C1 Callaway	WKNK	LIC	CX FL	255.0 74.4	119.07 BMLH20050623ABR	30 10 51.0 85 29 45.0	100.000 129	83.6 137	54.2 Powell Broadcasting Compan	28.8	55.4
279C1 Gainesville	WRUF-FM	LIC	CN FL	114.1 295.0	201.89 BLH19850820KL	29 42 34.0 82 23 40.0	100.000 234	166.2 275	67.4 The University Of Florida	29.2	112.9
279D Thomasville	W279BD	LIC	C GA	43.0 223.2	58.57 BLFT20071205ADN	30 50 51.0 83 52 56.0	0.016 88	20.4 148	6.2 Lenrob Enterprises, Inc.	31.9	31.6
279D Colquitt	W279AS	LIC	C GA	345.5 165.4	82.37 BLFT20070330BCO	31 10 54.0 84 31 08.0	0.013 108	22.3 150	6.7 Augusta Radio Fellowship I	53.5	53.6

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= East 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.
< = Contour Overlap

Educational Media Foundation

5700 W Oaks Blvd
Rocklin, CA 95765

*Exhibit 13-A
Tallahassee, FL*

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60dBu contour of second adjacent channel station WGLF, channel 281C0, Tallahassee, FL. 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 W279CU.P:	10 watts
The proposed COR for W279CU.P:	96 meters
WGLF F(50/50) contour at proposed site:	85.4dBu
The F(50/10) contour of proposed W279CU.P:	125.4dBu

The predicted distance to the 125.4dbu interfering contour is 11.9 meters. Taking into account the vertical elevation pattern of the Nicom BKG77 single bay antenna and the height above ground of 96M, it has been determined that the interfering contour of 125.4dbu does not reach the ground. As seen in Exhibit 13-A1, the lowest elevation for this interfering contour is 90.7M above ground at a distance of 8.23m from the antenna.

As can be seen in Exhibit 13-A2 there are no surrounding structures which are tall enough to enter the interfering contour within the 11.9m distance from the antenna.

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
W279CU
Tallahassee, FL

ERP (kw): 0.01
Height of Antenna above Ground (m): 96
Translator's IX Contour: 125.4
Antenna Type: Nicom BKG77

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.0100	11.9124	96.000
5	0.999	0.0100	11.9005	94.963
10	0.982	0.0096	11.6980	93.969
15	0.954	0.0091	11.3644	93.059
20	0.918	0.0084	10.9356	92.260
25	0.872	0.0076	10.3876	91.610
30	0.818	0.0067	9.7384	91.131
35	0.758	0.0057	9.0296	90.821
40	0.691	0.0048	8.2315	90.709
45	0.616	0.0038	7.3381	90.811
50	0.538	0.0029	6.4089	91.091
55	0.465	0.0022	5.5393	91.462
60	0.391	0.0015	4.6578	91.966
65	0.313	0.0010	3.7286	92.621
70	0.239	0.0006	2.8471	93.325
75	0.176	0.0003	2.0966	93.975
80	0.129	0.0002	1.5367	94.487
85	0.103	0.0001	1.2270	94.778
90	0.104	0.0001	1.2389	94.761

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*Exhibit 13-A
Tallahassee, FL*

Compliance with C.F.R. 74.1204

The proposed FM Translator is located within the protected 60dBu contour of third adjacent channel station WWOFF, channel 276C2, Tallahassee, FL. 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 W279CU.P:	10 watts
The proposed COR for W279CU.P:	96 meters
WWOF F(50/50) contour at proposed site:	96.3dBu
The F(50/10) contour of proposed W279CU.P:	136.3dBu

The predicted distance to the 136.3dbu interfering contour is 3.396 meters. Taking into account the vertical elevation pattern of the Nicom BKG77 single bay antenna and the height above ground of 96M, it has been determined that the interfering contour of 136.3dbu does not reach the ground. As seen in Exhibit 13-A1, the lowest elevation for this interfering contour is 94.491M above ground at a distance of 2.35m from the antenna.

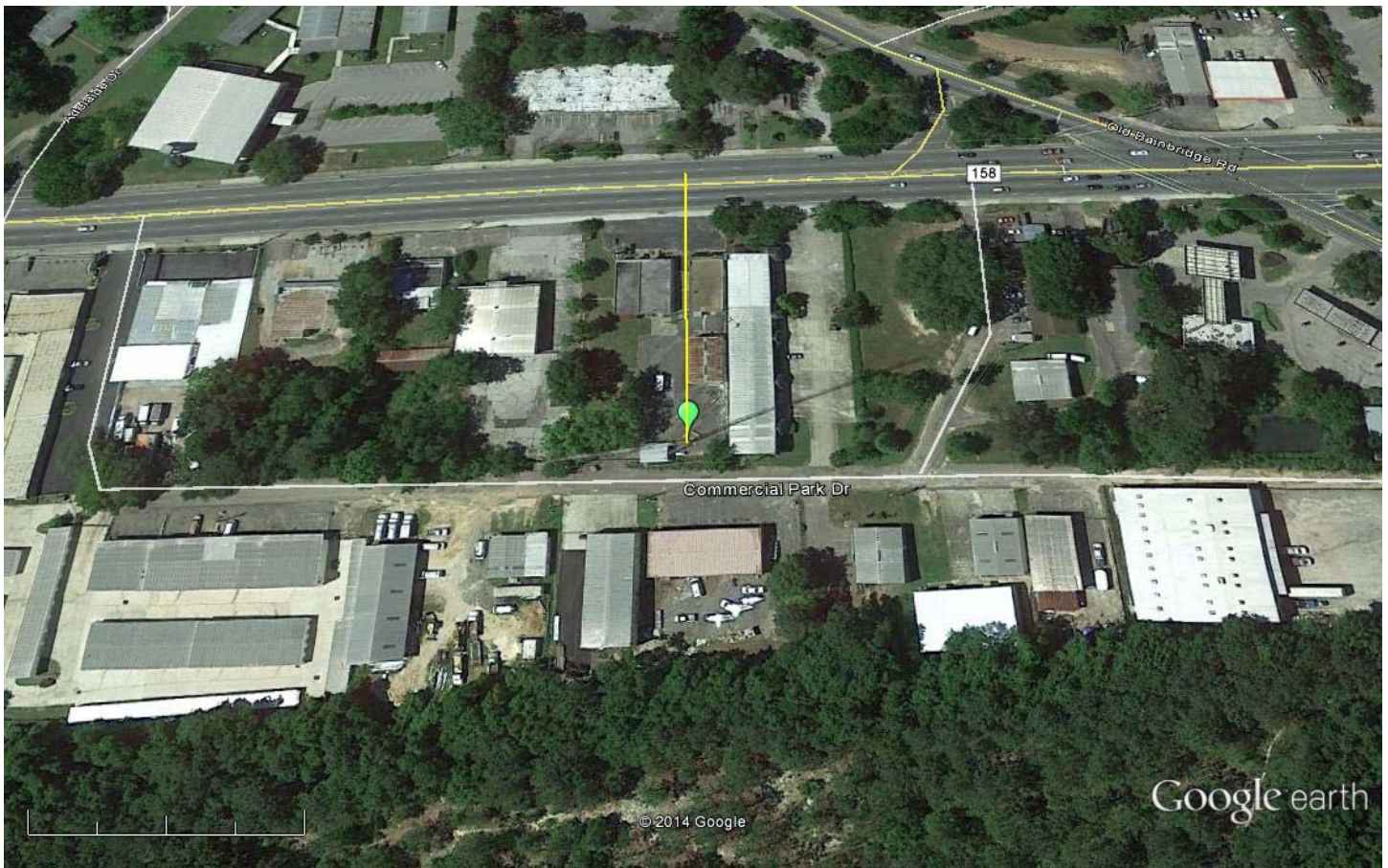
As can be seen in Exhibit 13–A2 there are no surrounding structures which are tall enough to enter the interfering contour within the 2.35m distance from the antenna.

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
W279CU
Tallahassee, FL

ERP (kw): 0.01
Height of Antenna above Ground (m): 96
Translator's IX Contour: 136.3
Antenna Type: Nicom BKG77

<u>Depression Angle from Horizon</u>	<u>Antenna Relative Field</u>	<u>ERP (kw) from the Antenna RF</u>	<u>Dist. To IX Contour (m)</u>	<u>Height IX Contour Above Ground (m)</u>
0	1.000	0.0100	3.3963	96.000
5	0.999	0.0100	3.3929	95.704
10	0.982	0.0096	3.3351	95.421
15	0.954	0.0091	3.2400	95.161
20	0.918	0.0084	3.1178	94.934
25	0.872	0.0076	2.9615	94.748
30	0.818	0.0067	2.7764	94.612
35	0.758	0.0057	2.5744	94.523
40	0.691	0.0048	2.3468	94.491
45	0.616	0.0038	2.0921	94.521
50	0.538	0.0029	1.8272	94.600
55	0.465	0.0022	1.5793	94.706
60	0.391	0.0015	1.3279	94.850
65	0.313	0.0010	1.0630	95.037
70	0.239	0.0006	0.8117	95.237
75	0.176	0.0003	0.5977	95.423
80	0.129	0.0002	0.4381	95.569
85	0.103	0.0001	0.3498	95.652
90	0.104	0.0001	0.3532	95.647



Google earth

feet
meters



Green Pin Marker:

NAD27

30 27' 46.0" N

84 18' 04.0" W

Yellow Marker:

96m at zero degrees true north