

Channel Study

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

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.

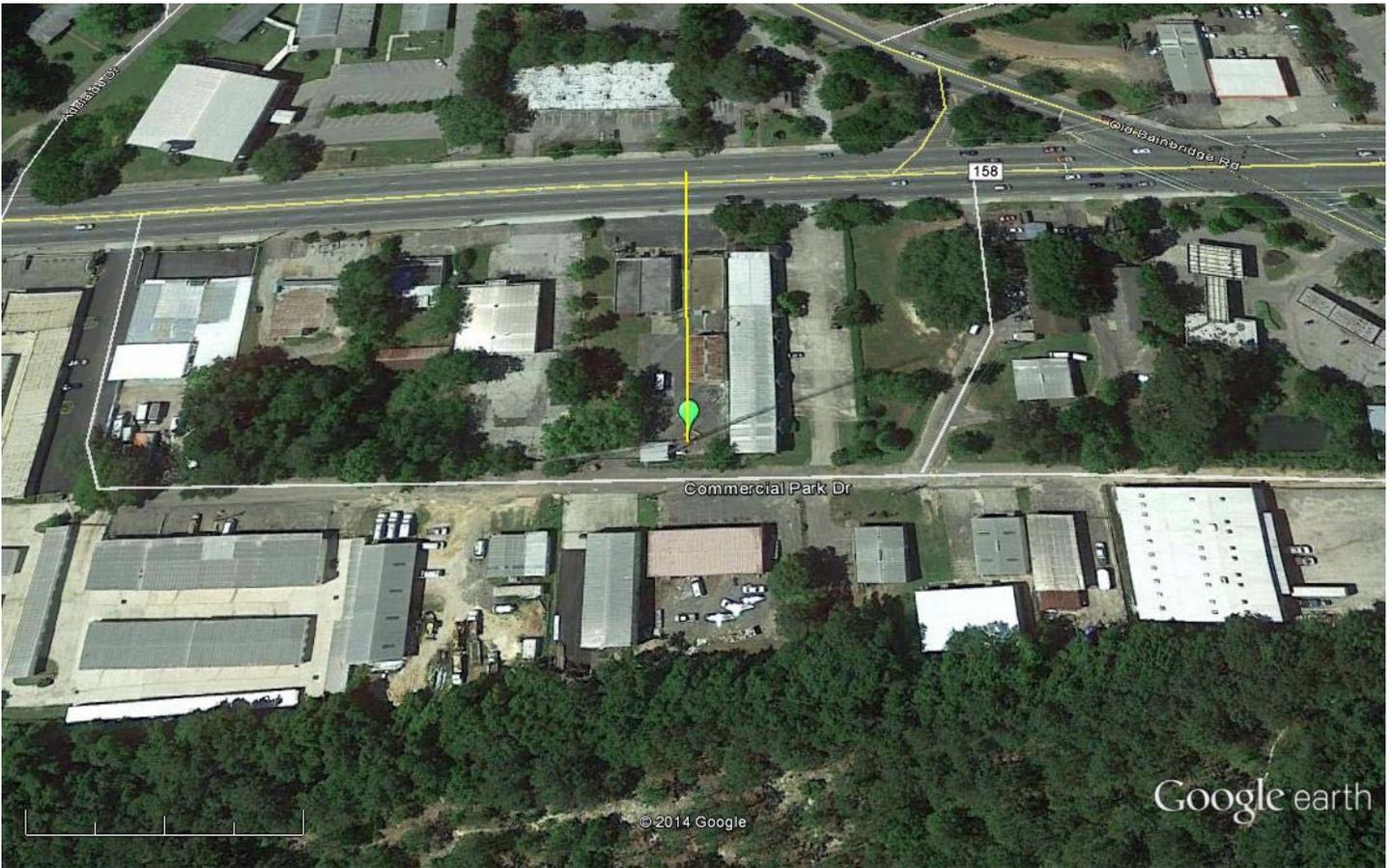
As can be seen in Exhibit 13–A2 there are no surrounding structures which are tall enough to enter the interfering contour within the 2.35m distance from the antenna.

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



Green Pin Marker:

NAD27

30 27' 46.0" N

84 18' 04.0" W

Yellow Marker:

96m at zero degrees true north