

Channel Study

REFERENCE		CH# 279D - 103.7 MHz, Pwr= 0.25 kW, HAAT= 131.6 M, COR= 163 M								DISPLAY DATES	
30 27 46.3 N.		Average Protected F(50-50)= 14.7 km								DATA 09-24-13	
84 18 04.4 W.		Omni-directional								SEARCH 09-25-13	
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*
281C0 Tallahassee	WGLF	LIC	CX FL	92.6 272.8	27.84 BMLH20111005AJA	30 27 04.0 84 00 42.0	100.000 430	12.0 459	82.2 Cumulus Licensing Llc	1.3	-55.5*<
279D Tallahassee	1564770	APP	C FL	164.3 344.3	8.87 BNPFT20030314AFS	30 23 09.0 84 16 34.0	0.013	21.5 145	6.5 Educational Media Foundati	-28.4*	-49.2
276C2 Tallahassee	WVOF	LIC	CN FL	61.8 241.9	7.38 BLH19970530KB	30 29 39.0 84 14 00.0	42.000 165	5.9 201	52.3 Opus Broadcasting Tallahas	-12.9*<	-46.0*<
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.	24.4	5.4
278C1 Callaway	WKNK	LIC	CX FL	255.0 74.4	119.06 BMLH20050623ABR	30 10 51.0 85 29 45.0	100.000 129	83.6 137	54.2 Powell Broadcasting Compan	20.6	42.3
279C1 Gainesville	WRUF-FM	LIC	CN FL	114.1 295.0	201.90 BLH19850820KL	29 42 34.0 82 23 40.0	100.000 234	166.2 275	67.4 The University Of Florida	21.4	86.2
279D Colquitt	W279AS	LIC	C GA	345.5 165.4	82.36 BLFT20070330BCO	31 10 54.0 84 31 08.0	0.013 108	22.3 150	6.7 Augusta Radio Fellowship I	45.4	26.7
280C2 Fort Rucker	WLDA	RSV-A	CX AL	307.5 126.9	152.32	31 17 28.0 85 34 20.0	50.000 150	79.4 233	53.3 Southeast Alabama Broadcas	58.3	76.9
280C2 Fort Rucker	WLDA	APP	CX AL	307.5 126.9	152.32 BPH20121119ANF	31 17 28.0 85 34 20.0	24.500 216	78.1 299	53.0 Southeast Alabama Broadcas	59.5	77.3
278C3 Leesburg	WJAD	LIC	CN GA	9.7 189.8	135.99 BLH19931213KC	31 40 18.0 84 03 32.0	12.500 141	60.5 212	40.7 Cumulus Licensing Llc	61.6	74.2
225D Carrabelle	643901	APP	V FL	207.6 27.5	75.87 BNPFT20030317JOS	29 51 24.0 84 40 01.0	0.120 42	0.0 43	0.0 Florida State University	9.5R	66.4M

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.

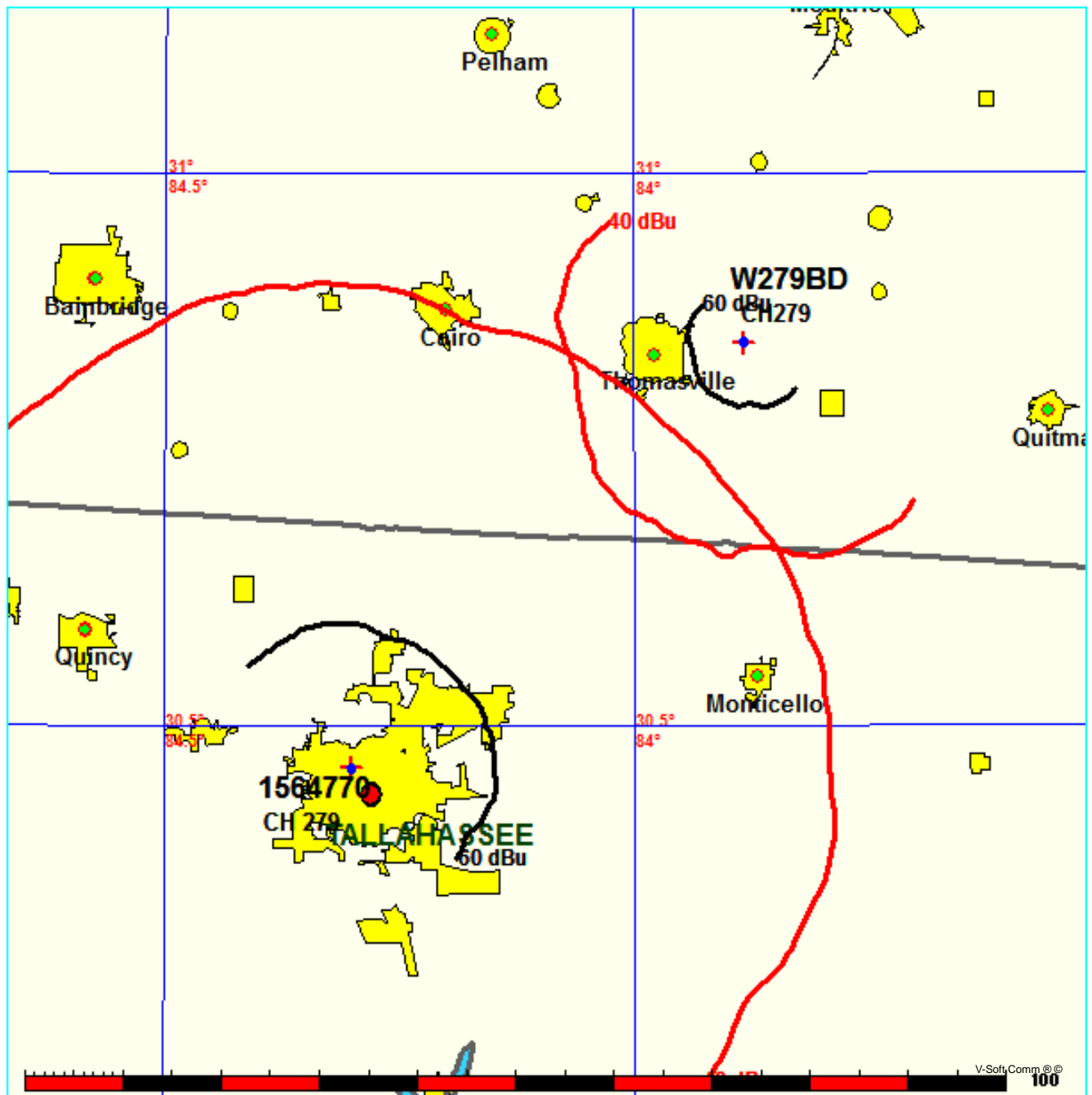
< = Station meets FCC minimum distance spacing for its class.

< = Contour Overlap

FMCommander Single Allocation Study - 09-25-2013 - NGDC 30 SEC
1564770's Overlaps (In= 24.42 km, Out= 5.43 km)

1564770 CH 279 D
Lat= 30 27 46.3, Lng= 84 18 04.4
0.25 kW 131.6 M HAAT, 163 M COR
Prot.= 60 dBu, Intef.= 40 dBu

W279BD CH 279 D BLFT20071205ADN
Lat= 30 50 51.0, Lng= 83 52 56.0
0.016 kW 88.2 M HAAT, 148 M COR
Prot.= 60 dBu, Intef.= 40 dBu



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 New 1564770.P:	250 watts
The proposed COR for New 1564770.P:	96 meters
WGLF F(50/50) contour at proposed site:	85.3dBu
The F(50/10) contour of proposed New 1564770.P:	125.3dBu

The predicted distance to the 125.3dbu interfering contour is 60.25 meters. Taking into account the vertical elevation pattern of the Jampro JLCP two bay full waved spaced antenna and the height above ground of 96M, it has been determined that the interfering contour of 125.3dbu does not reach the ground. As seen in Exhibit 13-A1, the lowest elevation for this interfering contour is 74.382M above ground at 23.69m from the antenna.

As can be seen in Exhibit 13–A2 there are no surrounding structures which are tall enough to enter the 74.382 meter aperture in the 23.69m radius 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
1564770.P
Tallahassee, FL

ERP (kw): 0.25
Height of Antenna above Ground (m): 96
Translator's IX Contour: 125.3
Antenna Type: JLCP-2F

<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	0.2500	60.2518	96.000
5	0.957	0.2290	57.6610	90.975
10	0.834	0.1739	50.2500	87.274
15	0.646	0.1043	38.9227	85.926
20	0.433	0.0469	26.0890	87.077
25	0.212	0.0112	12.7734	90.602
30	0.001	0.0000	0.0603	95.970
35	0.176	0.0077	10.6043	89.918
40	0.308	0.0237	18.5576	84.071
45	0.394	0.0388	23.7392	79.214
50	0.445	0.0495	26.8120	75.461
55	0.438	0.0480	26.3903	74.382
60	0.411	0.0422	24.7635	74.554
65	0.364	0.0331	21.9317	76.123
70	0.314	0.0246	18.9191	78.222
75	0.249	0.0155	15.0027	81.509
80	0.180	0.0081	10.8453	85.319
85	0.140	0.0049	8.4353	87.597
90	0.100	0.0025	6.0252	89.975

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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 WWOV, 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 New 1564770.P:	250 watts
The proposed COR for New 1564770.P:	96 meters
WWOV F(50/50) contour at proposed site:	96.3dBu
The F(50/10) contour of proposed New 1564770.P:	136.3dBu

The predicted distance to the 136.3dbu interfering contour is 16.98 meters. Taking into account the vertical elevation pattern of the Jampro JLCP two bay full waved spaced 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 89.9M above ground at 7.44m from the antenna.

As can be seen in Exhibit 13–A2 there are no surrounding structures which are tall enough to enter the 89.9 meter aperture in the 7.44m radius 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
1564770.P
Tallahassee, FL

ERP (kw): 0.25
Height of Antenna above Ground (m): 96
Translator's IX Contour: 136.3
Antenna Type: JLCP-2F

<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	0.2500	16.9813	96.000
5	0.957	0.2290	16.2511	94.584
10	0.834	0.1739	14.1624	93.541
15	0.646	0.1043	10.9699	93.161
20	0.433	0.0469	7.3529	93.485
25	0.212	0.0112	3.6000	94.479
30	0.001	0.0000	0.0170	95.992
35	0.176	0.0077	2.9887	94.286
40	0.308	0.0237	5.2302	92.638
45	0.394	0.0388	6.6906	91.269
50	0.445	0.0495	7.5567	90.211
55	0.438	0.0480	7.4378	89.907
60	0.411	0.0422	6.9793	89.956
65	0.364	0.0331	6.1812	90.398
70	0.314	0.0246	5.3321	90.989
75	0.249	0.0155	4.2283	91.916
80	0.180	0.0081	3.0566	92.990
85	0.140	0.0049	2.3774	93.632
90	0.100	0.0025	1.6981	94.302

Exhibit 13-A2



Google earth

feet
meters

200
80



NAD 27

30 27' 46.3" N

84 18' 04.4" W

Yellow Marker: 60.25m at zero degrees true north