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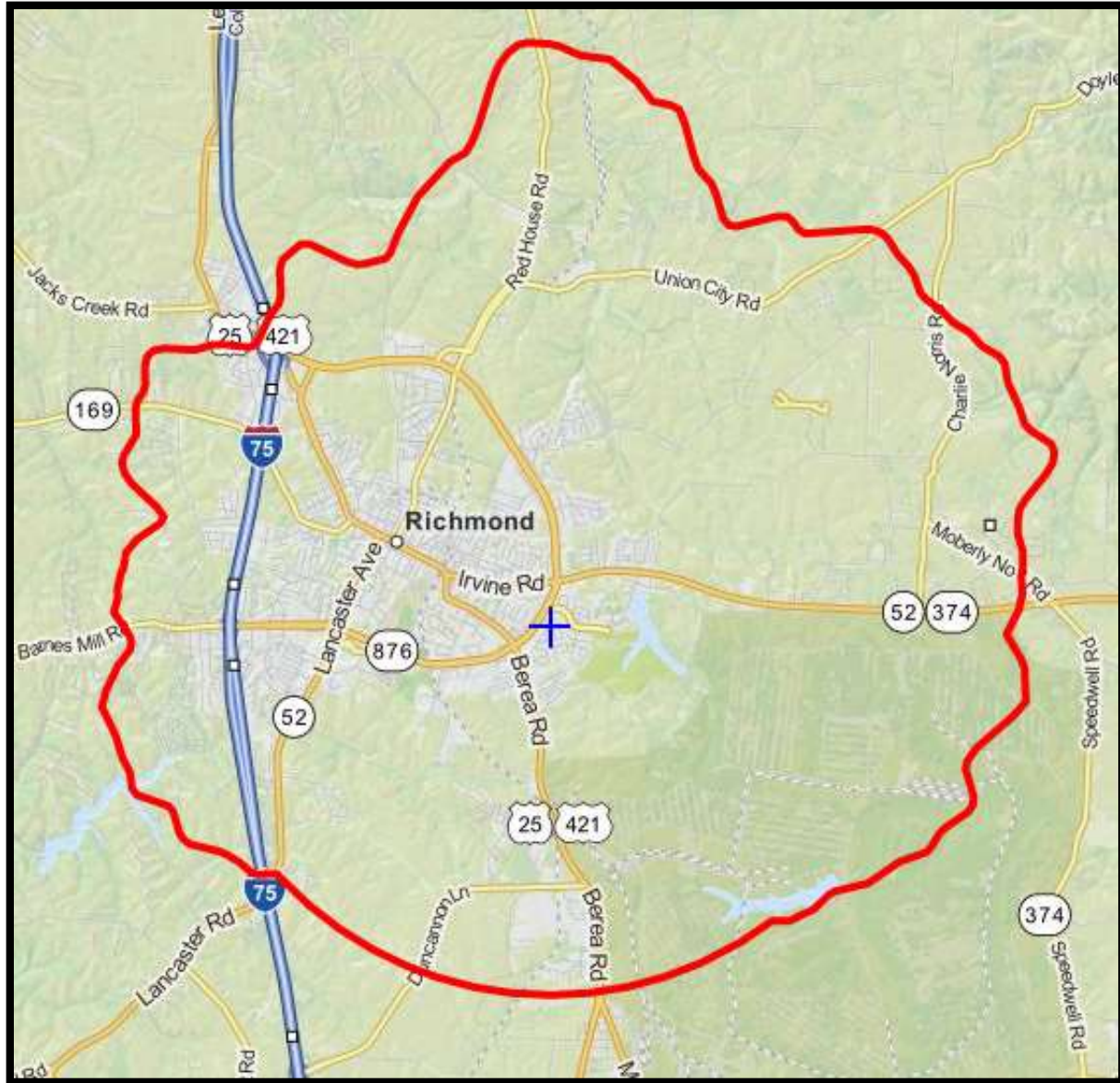
CP Modify for WMKK-LP

RICHMOND, KY

RICHMOND COMMUNITY RADIO INC

BNPL-20131024ALJ

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



RICHMOND, KY – Channel 228L1 (93.5 MHz) ~ ERP 0.100 kW

Elev: 282 meters ~ RCAGL: 28 meters ~ RCAMSL: 310 meters

Overall tower height: 60.6 meters – ASR: None: no nearby airports/under 200 feet

HAAT: 30 meters **based on GLOBE terrain data**

NAD83 Latitude: 37° 44' 09.9" NL – Longitude: 84° 16' 04.6" WL

NAD27 Latitude: 37° 44' 09.6" NL – Longitude: 84° 16' 04.8" WL

R E C NETWORKS
CHANNEL REPORT

NAD27 LATITUDE: 37 - 44' 09.6" - LONGITUDE: 84 - 16' 04.8"
CHANNEL: 228 - CLASS: LPFM(LP-100)

CHAN	FREQ	CALL	LOCATION	CLS	DIST	REQ	CLEAR	BEAR
225	92.9	WFHG-FM : BRISTOL BROADCASTING COMPANY, INC.	BLUFF CITY	TN C2	236.6	0.0	236.6	133.0
225	92.9	WLXX : CUMULUS LICENSING LLC * Does not meet third adjacent channel spacing under LCRA Sect 7.	LEXINGTON	KY C1	35.7	0.0	35.7	340.6
225	92.9	WGTZ : ALPHA MEDIA LICENSEE LLC	EATON	OH B	233.4	0.0	233.4	357.1
225	92.9	WJXA : MIDWEST COMMUNICATIONS, INC.	NASHVILLE	TN C	300.1	0.0	300.1	233.9
227	93.3	W227CW : EDGEWATER BROADCASTING, INC.	LEXINGTON-FAYETTE	KY D	41.3	28.0	13.3	332.3
228	93.5	WAIN-FM : TRI-COUNTY RADIO BROADCASTING CORP.	COLUMBIA	KY A	113.4	67.0	46.4	232.1
228	93.5	WMKK-LP : RICHMOND COMMUNITY RADIO INC : Current facility	RICHMOND	KY L1	5.7	24.0	-18.3	73.0
228	93.5	WMMG-FM : MEADE COUNTY COMMUNICATIONS, INC.	BRANDENBURG	KY A	170.9	67.0	103.9	279.9
228	93.5	W228CL : SOUTHERN BELLE, LLC	FRANKFORT	KY D	78.3	32.0	46.3	313.7
228	93.5	WMMG-FM : MEADE COUNTY COMMUNICATIONS, INC.	BRANDENBURG	KY A	168.5	67.0	101.5	280.0
228	93.5	WAXM : VALLEY BROADCASTING AND COMMUNICATIONS, INC.	BIG STONE GAP	VA C2	152.2	91.0	61.2	126.5
229	93.7	WDGG : FIFTH AVENUE BROADCASTING CO., INC	ASHLAND	KY C1	158.3	100.0	58.3	62.2
230	93.9	WSEK : CAPSTAR TX LLC	BURNSIDE	KY C2	66.8	53.0	13.8	194.6
231	94.1	WLYE-FM : FOREVER COMMUNICATIONS, INC.	GLASGOW	KY A	164.8	0.0	164.8	239.8
231	94.1	WNNF : CUMULUS LICENSING LLC	CINCINNATI	OH B	154.6	0.0	154.6	352.5
231	94.1	WMXK : EDUCATIONAL MEDIA FOUNDATION	MORRISTOWN	TN A	186.9	0.0	186.9	153.4

Azimuth	Field	ERP	HAAT	Contour	Latitude	Longitude
0	1.000	0.100	74.1	8.894	37.8161	84.2679
5	1.000	0.100	71.0	8.702	37.8141	84.2593
10	1.000	0.100	65.0	8.316	37.8098	84.2515
15	1.000	0.100	59.5	7.951	37.8052	84.2445
20	1.000	0.100	49.4	7.201	37.7970	84.2399
25	1.000	0.100	43.6	6.741	37.7911	84.2355
30	1.000	0.100	49.8	7.232	37.7925	84.2268
35	1.000	0.100	51.4	7.355	37.7903	84.2199
40	1.000	0.100	58.1	7.857	37.7902	84.2105
45	1.000	0.100	56.7	7.757	37.7854	84.2055
50	1.000	0.100	55.3	7.652	37.7804	84.2012
55	1.000	0.100	57.7	7.829	37.7765	84.1950
60	1.000	0.100	60.6	8.023	37.7722	84.1889
65	1.000	0.100	58.9	7.911	37.7662	84.1864
70	1.000	0.100	62.5	8.151	37.7612	84.1808
75	1.000	0.100	53.7	7.527	37.7536	84.1852
80	1.000	0.100	50.6	7.294	37.7475	84.1862
85	1.000	0.100	49.9	7.240	37.7418	84.1859
90	1.000	0.100	47.4	7.040	37.7361	84.1879
95	1.000	0.100	50.4	7.279	37.7304	84.1855
100	1.000	0.100	50.5	7.287	37.7247	84.1863
105	1.000	0.100	45.0	6.852	37.7202	84.1926
110	1.000	0.100	44.2	6.789	37.7152	84.1954
115	1.000	0.100	46.0	6.930	37.7098	84.1965
120	1.000	0.100	43.5	6.733	37.7058	84.2016
125	1.000	0.100	39.2	6.385	37.7032	84.2084
130	1.000	0.100	36.7	6.183	37.7004	84.2140
135	1.000	0.100	33.4	5.913	37.6985	84.2203
140	1.000	0.100	32.3	5.825	37.6960	84.2253
145	1.000	0.100	26.6	5.636	37.6946	84.2311
150	1.000	0.100	17.4	5.636	37.6922	84.2358
155	1.000	0.100	14.7	5.636	37.6901	84.2408
160	1.000	0.100	11.4	5.636	37.6884	84.2459
165	1.000	0.100	10.2	5.636	37.6871	84.2513
170	1.000	0.100	8.9	5.636	37.6861	84.2567
175	1.000	0.100	12.9	5.636	37.6856	84.2623

Azimuth	Field	ERP	HAAT	Contour	Latitude	Longitude
180	1.000	0.100	16.4	5.636	37.6854	84.2678
185	1.000	0.100	24.8	5.636	37.6855	84.2734
190	1.000	0.100	21.2	5.636	37.6861	84.2790
195	1.000	0.100	20.5	5.636	37.6871	84.2844
200	1.000	0.100	17.2	5.636	37.6884	84.2898
205	1.000	0.100	16.8	5.636	37.6901	84.2949
210	1.000	0.100	18.7	5.636	37.6921	84.2999
215	1.000	0.100	22.4	5.636	37.6945	84.3046
220	1.000	0.100	27.5	5.636	37.6972	84.3090
225	1.000	0.100	27.8	5.636	37.7001	84.3132
230	1.000	0.100	33.0	5.881	37.7020	84.3191
235	1.000	0.100	35.2	6.058	37.7047	84.3243
240	1.000	0.100	40.5	6.486	37.7068	84.3317
245	1.000	0.100	40.1	6.455	37.7114	84.3344
250	1.000	0.100	44.9	6.844	37.7149	84.3410
255	1.000	0.100	45.0	6.852	37.7200	84.3432
260	1.000	0.100	46.5	6.968	37.7250	84.3460
265	1.000	0.100	42.3	6.635	37.7307	84.3431
270	1.000	0.100	40.8	6.510	37.7359	84.3420
275	1.000	0.100	42.4	6.643	37.7411	84.3433
280	1.000	0.100	41.7	6.585	37.7462	84.3418
285	1.000	0.100	36.5	6.167	37.7503	84.3358
290	1.000	0.100	45.9	6.922	37.7572	84.3420
295	1.000	0.100	46.6	6.976	37.7624	84.3400
300	1.000	0.100	49.1	7.177	37.7682	84.3388
305	1.000	0.100	51.8	7.385	37.7740	84.3369
310	1.000	0.100	43.3	6.717	37.7748	84.3266
315	1.000	0.100	37.5	6.249	37.7757	84.3184
320	1.000	0.100	39.9	6.440	37.7804	84.3152
325	1.000	0.100	46.4	6.960	37.7873	84.3136
330	1.000	0.100	41.2	6.544	37.7870	84.3054
335	1.000	0.100	36.6	6.175	37.7864	84.2978
340	1.000	0.100	41.2	6.544	37.7914	84.2936
345	1.000	0.100	47.1	7.015	37.7970	84.2889
350	1.000	0.100	51.3	7.348	37.8012	84.2827
355	1.000	0.100	69.7	8.620	37.8133	84.2768

WAIVER OF §73.870(a) REQUESTED

WMKK-LP
Richmond, KY
Channel 228L1 (93.5 MHz)

The move proposed in this application is 5.675 km from the currently authorized site. Section §73.870(a) of the Commission's Rules states that an LPFM station can move up to 5.600 kilometers as a minor change¹.

In the instant case, the applicant was unable to find an alternate site that was within 5.6 km of the currently authorized site. In addition, WMKK-LP is authorized to serve the Richmond, Kentucky area. The proposed move would place the station in a better position to serve Richmond. The proposed move will also move the transmitter closer to the organization's headquarters.

In *SRN Communications*, the Commission permitted a move of 8.5 kilometers due to not being able to find an alternate site that is closer.² SRN further states that the 5.6 km restriction is the strictest in the FM band where full power stations need only be mutually exclusive with the original and translators only require contour overlap.³

Furthermore, in *Sloan Canyon Communications*, the Commission permitted a move of 12.3 km citing a lack of available sites as well as moving the station to better serve its community of license.⁴

By allowing WMKK-LP to move to this proposed location, we are not jeopardizing localism. If anything, it is being improved as the station is being moved into the community of license that the station was originally authorized to serve.

Due to these extenuating circumstances and past precedence, WMKK-LP feels that it would be in the public interest to allow this site move of 5.675 km so WMKK-LP can better serve the people of Richmond, Kentucky.

With that, WMKK-LP is requesting a waiver of §73.870(a) of the Commission's Rules in respect to the instant application.

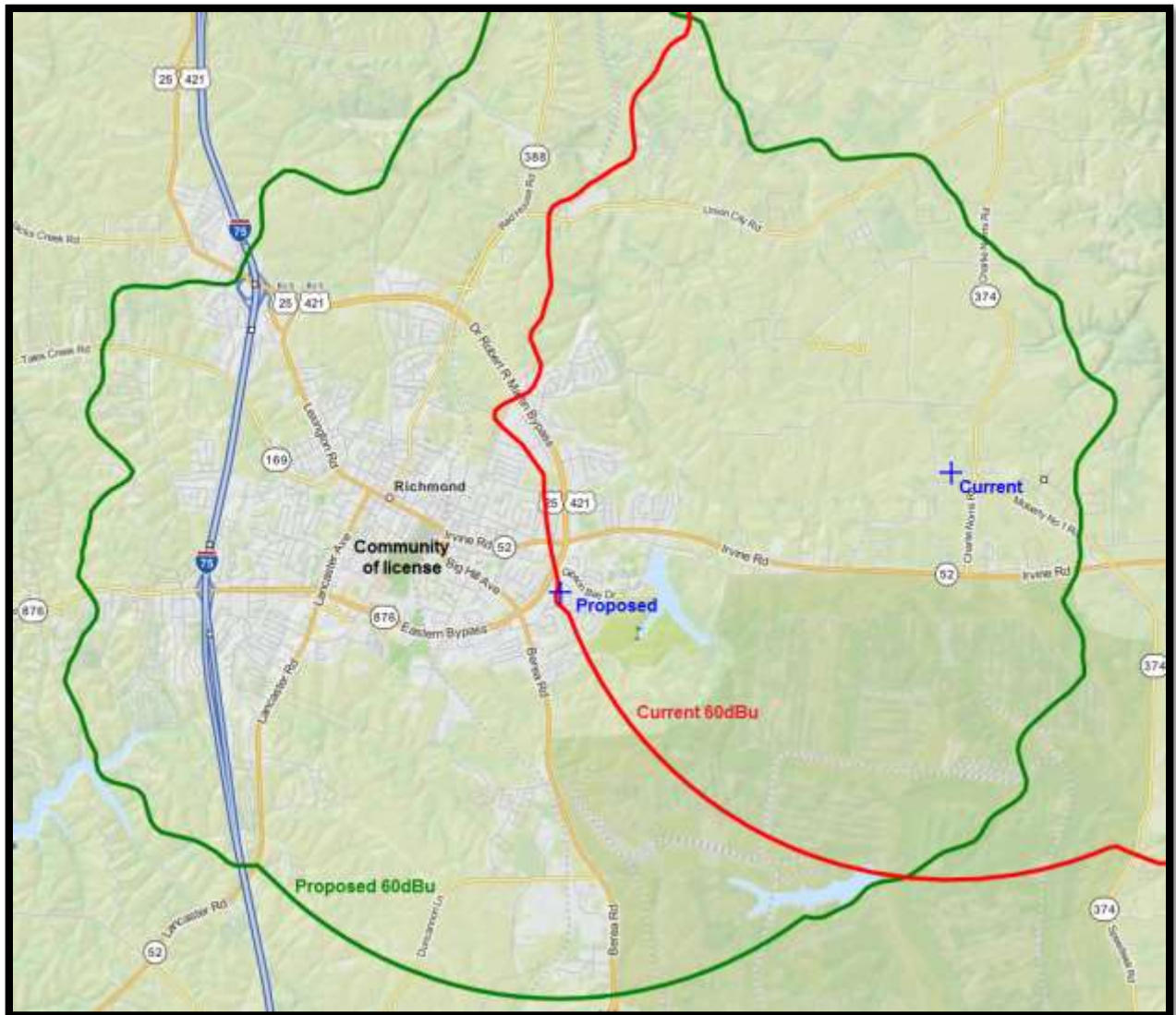
¹ - See 47 C.F.R. §73.870(a).

² - See *SRN Communications, Inc.*, BMPL-20140902ACG, granted September 15, 2014 at Exhibit 1.

³ - *Id.*

⁴ - See *Sloan Canyon Communications*, BMPL-20140623AAG, granted December 22, 2014 at Exhibit 11. See also, *Richmondradio, Inc.*, BMPL-20151013AAB, granted October 13, 2015 at Exhibit 11 (10.4 km move plus a non-adjacent channel change in the same community as the instant application).

PROPOSED SERVICE CONTOUR WOULD BETTER SERVE RICHMOND, KY



NEARBY AM STATIONS

WMKK-LP
Richmond, KY
Channel 228L1 (93.5 MHz)

The proposed modification for WMKK-LP will result in the proposed antenna being placed on the tower of WCBR, Richmond, Kentucky (Facility ID #70617).

WCBR is a non-directional single-tower AM station operating 0.25 kW daytime only.⁵

WMKK-LP has reached a pending agreement with WCBR and is coordinating this application with their engineering and management.

WCBR is performing a structural analysis and WMKK-LP will utilize an isocoupler to protect the constants of WCBR.

WMKK-LP acknowledges §1.30003 of the Commission's Rules that states that when an antenna is installed on a non-directional AM tower, the AM station shall determine operating power by indirect method per §73.51 of the Rules. If the resistance of the antenna changes by more than 2 percent, then WCBR must file a Form 302-AM which includes a tower sketch at the same time when WMKK-LP files Form 319 to cover the construction.

WMKK-LP acknowledges there will be a condition placed on the construction permit as such and will provide appropriate certification after completion of construction in coordination with WCBR.⁶

Report prepared by:

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October 27, 2015

⁵ - See BL-12615, granted August 4, 1970 (history card information) reflected as the only current record in CDBS.

⁶ - The proposed LPFM site is also 4,033 meters from WEKY, Richmond, Kentucky. WEKY operates on 1340 kHz (224 meters) and operates non-directional, unlimited. As this station is located more than one wavelength from the proposed LPFM site, no notification is required.

REQUEST TO USE GLOBE TERRAIN DATA

WMKK-LP
Richmond, KY
Channel 228L1 (93.5 MHz)

At the proposed location at the proposed radiation center above mean sea level (RCAMSL), FCC 30 second terrain data shows this site at 42 meters height above average terrain (HAAT).

However, using GLOBE terrain data, which is also accepted by the Commission, the same location and RCAMSL shows a HAAT of 30 meters.

WMKK-LP requests that the Commission apply GLOBE terrain data and as result, specify operation at 0.1 kW.

Antenna Height Above Average Terrain Calculations – Results

Input Data

Latitude **37° 44' 9.9" North**

Longitude **84° 16' 4.6" West (NAD 83)**

Height of antenna radiation center above mean sea level: **310 meters AMSL**

Number of Evenly Spaced Radials = **8** 0° is referenced to True North

Results

Calculated HAAT = **30 meters**

Antenna Height Above Average Terrain calculated
using 1 km [GLOBE terrain data](#)

Individual "Radial HAAT" Values, in meters

0°	60.8 m
45°	47.5 m
90°	38.3 m
135°	13.1 m
180°	7.8 m
225°	15.8 m
270°	32.6 m
315°	21.9 m

[Print Results?](#)

[New Calculation?](#)