

W221EU
Mattoon Waiver to Provide
First Local Night Service to Major Portions of
Rural Todd, County, KY

§ 74.1233(a)(1) *Mattoon* waiver:

This application requests a *Mattoon Waiver* in accordance with the waiver granted for the move of W263AQ (DA-11-1495), see *The Cromwell Group, Inc. Of Illinois, Letter, 26 FCC Rcd (12685) (MB2011)*.

It is also noted that the previous changes to the W221EU facility were to an adjacent channel, increase in ERP and primary station change at its existing site which did not constitute a "hop". Several similar waivers have been granted (e.g. W222CZ among others).

The W221EU proposed co-channel 40 dBu F(50-10) contour overlaps the licensed 60 dBu F(50-50) contour (exhibit E-4).

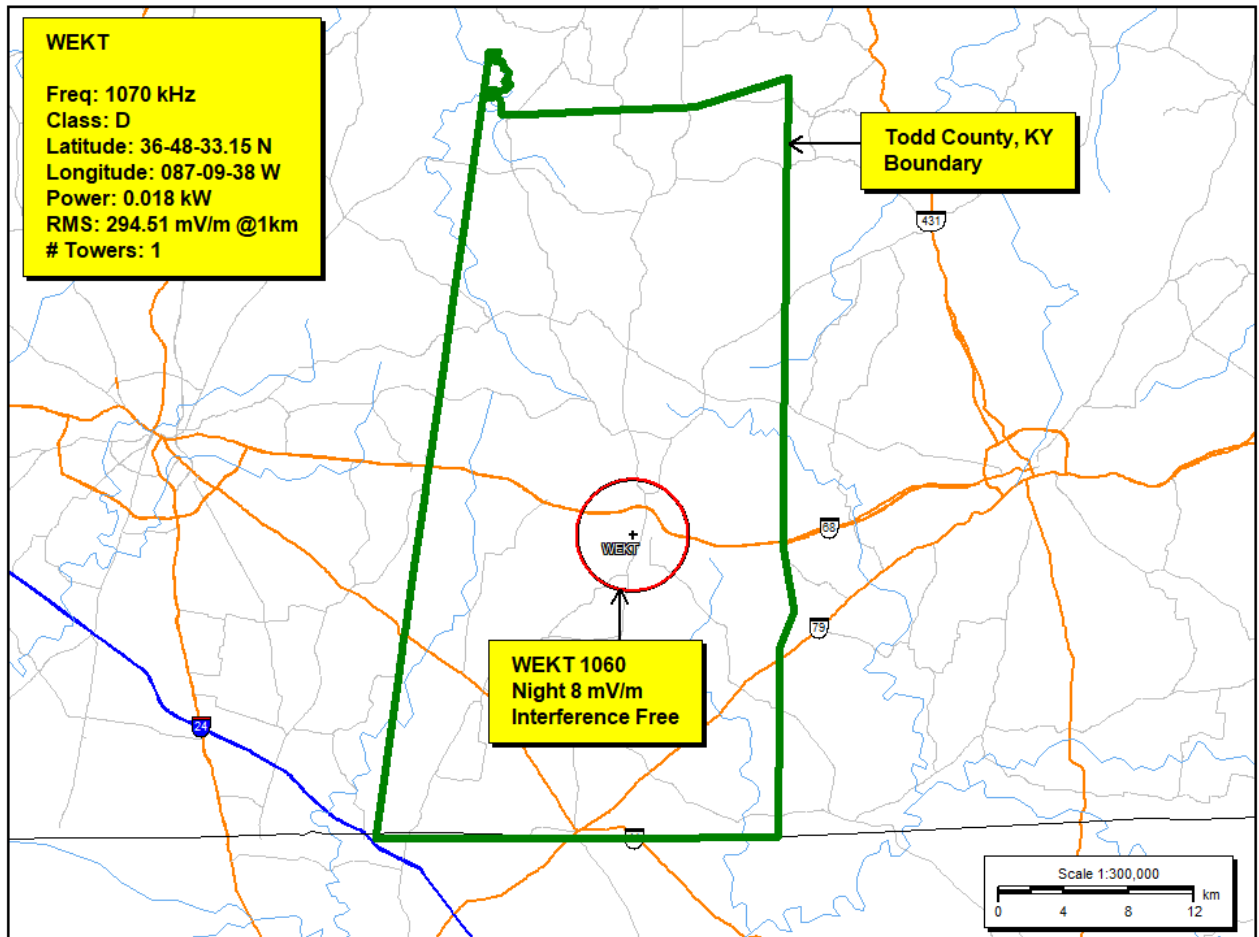
This application of the *Mattoon Waiver* is a prime example of the reason it was established by Commission staff. In this case, the new licensee of WEKT(AM), the only aural service licensed to Todd county, seeks to establish new night service to the county to expand the very limited secondary 18 Watt AM night signal (see below). The new licensee is a native of Todd County and an award winning broadcaster recognized for her exemplary service to her stations' communities. Unfortunately, the prior WEKT(AM) licensee did not participate in any of the FM translator windows. Therefore, the *Mattoon Waiver* represents the only means of providing an FM translator's full-time service with its emergency alerts, news and high school sporting events.

It is also noted that the new licensee has initiated substantial local programming and established a new state of the art studio on the Elkton town square. Commission staff's

Anderson Associates

Broadcast Engineering Consultants

approval of this application will have a dramatic and lasting effect on this station's service.



Christopher Anderson December 13, 2023
andersce@bham.rr.com
© 2023 Anderson Associates

E-1 W221EU Mod. Overlap Study

REFERENCE 36 48 48.00 N. 87 06 42.00 W.		CH# 221D - 92.1 MHz, Pwr= 0.25 kW DA, HAAT= 124.3 M, COR= 318.3 M Average Protected F(50-50)= 14.31 km Standard Directional					DISPLAY DATES DATA 12-07-23 SEARCH 12-13-23			
CH CITY	CALL	TYPE STATE	ANT AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
221A Goodlettsville	WQOK	LIC_CN TN	150.7 330.9	65.70 BLH20130125ACM	36 17 50.20 86 45 11.00	3.500 133	72.7 319	21.1 Cumulus Licensing LLC	-19.0*	1.8
221A Fredonia	WKYF	LIC_CN KY	297.6 117.1	88.92 BLED20080605ABV	37 10 51.10 88 00 04.00	4.600 114	81.4 261	25.8 Educational Media Foundati	-5.8	17.3
220A Clarksville	WAPX-FM	LIC_NCN TN	215.6 35.4	37.72 BLED20050303AAB	36 32 13.20 87 21 26.00	6.000 59	30.1 207	20.3 Austin Peay State Universi	-3.7	0.8
221D Central City	W221EU/W2	CP_CN KY	0.3 180.3	53.19 0000218520	37 17 30.50 87 06 31.10	0.120 189	26.6 189	7.9 Ham Broadcasting Company,	12.8	-0.6
221L1 Bowling Green	WSGJ-LP	LIC_CN KY	70.4 250.8	62.74 BLL20170209ABN	37 00 04.50 86 26 46.20	0.100 2	170	29.9 Columbus Club, Inc.		9.4
223C Owensboro	WBKR	LIC_CN KY	3.3 183.3	88.50 BLH19870121KD	37 36 29.20 87 03 15.00	100.000 320	10.5 453	73.9 Townsquare Media Of Evansv	63.8	13.4
222D Franklin	W222CZ	LIC_CN KY	99.7 280.0	48.37 0000222047	36 44 21.00 86 34 35.00	0.250 46	16.0 276	11.2 Newberry Broadcasting, Inc	18.1	15.7
221A Tompkinsville	WTKY-FM	LIC_NCN KY	89.3 270.2	129.31 BLH20030318ADL	36 49 07.20 85 39 31.80	5.300 107	87.3 372	29.3 Frank Keeton Aircasters, I	27.7	51.3
219A Bowling Green	WWHR	LIC_CN KY	67.6 248.0	56.51 BLED20020813ABG	37 00 19.20 86 31 23.00	1.300 114	1.8 285	19.6 Western Kentucky Universi t	40.6	34.9
218D Central City	W218CR	LIC_CN KY	0.3 180.3	53.18 0000162535	37 17 30.10 87 06 29.90	0.027 189	0.4 189	5.5 Ham Broadcasting Company,	38.8	46.6
218A Portland	WNTC/WPDQ	APP_DHN TN	115.5 295.8	60.76 0000126979	36 34 36.10 86 29 49.90	1.600 72	1.7 305	18.4 Southern Wabash Communi cat	45.2	41.2
218A Portland	WPDQ	CP_DHN TN	115.5 295.8	60.76 BPED20170526ABK	36 34 36.10 86 29 49.90	1.600 72	1.7 305	18.4 Southern Wabash Communi cat	45.2	41.3
223D Brentwood	W223BV	LIC_CN TN	155.0 335.2	67.35 0000177663	36 15 49.80 86 47 38.90	0.250 526	1.1 526	22.8 Educational Media Foundati	54.5	43.6
219A Madisonville	WNLJ	LIC_DCN KY	332.4 152.1	72.21 0000204868	37 23 17.50 87 29 26.80	6.000 74	2.4 206	24.7 Pennyri le Christian Commun	56.4	46.0

(1)

Terrain database is NED 30 Meter , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. 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 restricted contour.

(1) Note overlap using NED 30 meter terrain, FCC 30 meter terrain or FCC 30 second terrain.

E-4 W221EU Mod. Mattoon Overlap Plot

