

APPLICATION FOR CONSTRUCTION PERMIT FOR FM BROADCAST STATION  
WBKY(FM): STOUGHTON, WISCONSIN; FCC FACILITY ID: 39625  
CHANNEL 240, 95.9 MHZ; CLASS A  
ERP, 2.5 KW; OMNI-DIRECTIONAL ANTENNA; HAAT 156.75 METERS  
APPLICANT: MAGNUM COMMUNICATIONS, INC.

## ENGINEERING STUDY

Magnum Communications, Inc. Permittee/Applicant, by this Application for Minor Modification of construction permit (FCC Form Number: 301) specifies proposed technical facilities for Station WBKY(FM) permitted to operate on FM Channel 240A at Stoughton, Wisconsin at an antenna/tower location at geographic coordinates 42°-51'-15.4" North Latitude, 89°-17'-41" West Longitude.

Operation of Station WBKY(FM), as proposed at this location creates a 0.61 kilometer "Short-Spacing" to an upper "Second Adjacent" (plus 400 kilohertz) Channel 242B1 assignment at Sauk City, Wisconsin occupied by licensed FM Broadcast Station WMAD(FM); FCC File Number: BLH-20100114ADG; FCC Facility ID Number: 50055. Attachment A is a Channel 240A Minimum Spacing Study with the applicants proposed antenna tower coordinates as base reference.

This Application seeks an authorization pursuant to 47 Code of Federal Regulations §73.215, to prevent prohibited overlap of contours involving Station WMAD(FM), Sauk City, with Station WBKY(FM) as proposed modified, at Stoughton, Wisconsin.

The station WMAD(FM) License specifies an Effective Radiated Power (ERP) of 5,100 watts (5.10 kW), or 7.076 dBk, and an omni-directional antenna radiation center Height Above Average Terrain (HAAT) of 213 meters, less than "maximum" Class B1 FM station facilities. WMAD(FM) is also currently authorized under 73.215 rules.

Therefore, WBKY is only required to protect WMAD(FM) to it's currently authorized facility instead of a full class B1.

The Station WMAD(FM), Sauk City, Wisconsin protected 57.0 dBu, F(50,50) service contour is displayed in relation to the WBKY(FM) interfering 97.0 dBu, F(50,10) predicted contour.

The Station WMAD(FM), Sauk City, Wisconsin interfering 100.0 dBu, F(50,10) service contour is displayed in relation to the WBKY(FM) protected 60.0 dBu, F(50,50) predicted contour.

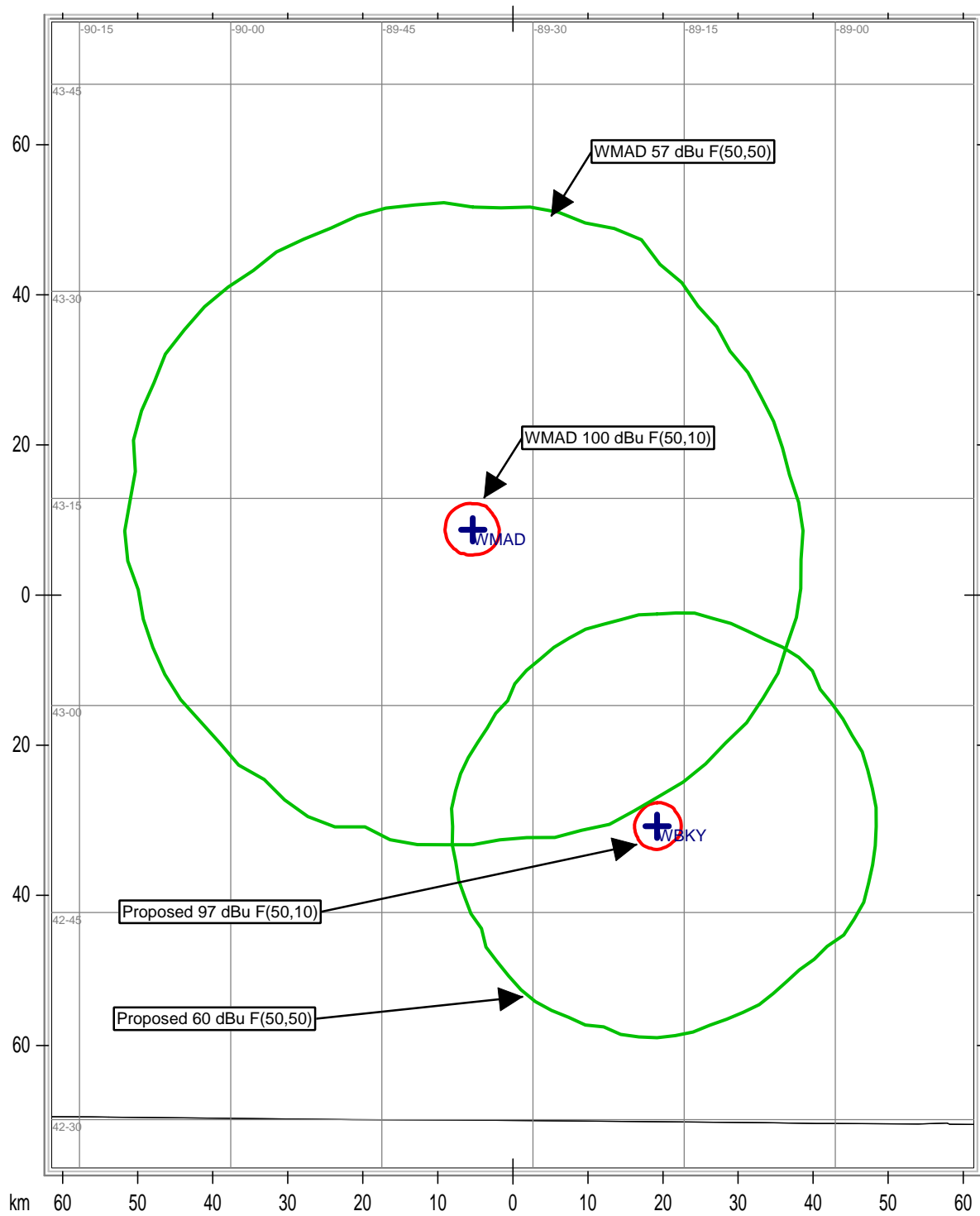
Attachment B is an "Interference Study Map", which clearly displays no prohibited contour overlap shall occur between affected stations.

EXHIBIT STUDY; CONCLUDED

ATTACHMENT A  
Channel 240 Minimum Spacings Study

REFERENCE		DISPLAY DATES
42 51 15.4 N.	CLASS = A	DATA 08-10-10
89 17 41.0 W.	Current Spacings to 3rd Adj.	SEARCH 08-10-10
----- Channel 240 - 95.9 MHz -----		

Call	Channel	Location	Azi	Dist	FCC	Margin
WBKY	LIC 240A	Portage	WI 345.7	89.92	114.5	-24.58
WBKY	CP -N 240A	Stoughton	WI 108.2	0.93	114.5	-113.57
WMAD	LIC-N 242B1	Sauk City	WI 328.2	46.89	47.5	-0.61
WRIT-FM	LIC 239B	Milwaukee	WI 76.4	115.54	112.5	3.04
WLKG	LIC-Z 241A	Lake Geneva	WI 111.1	74.84	71.5	3.34
WSEY	LIC-N 239A	Oregon	IL 186.7	87.50	71.5	16.00
KMXG	LIC 241C1	Clinton	IA 214.4	163.98	132.5	31.48
WERV-FM	LIC 240A	Aurora	IL 144.7	147.32	114.5	32.82
WRTB	LIC 237A	Winnebago	IL 170.3	63.53	30.5	33.03
WKCH	LIC-Z 293A	Whitewater	WI 82.5	44.75	9.5	35.25
WWQN	LIC 294A	Mount Horeb	WI 289.8	50.14	9.5	40.64
1170421	RSV 238A	Mineral Point	WI 270.8	72.33	30.5	41.83
R11701	ADD 238A	Mineral Point	WI 270.8	72.33	30.5	41.83
1168913	APP 238A	Mineral Point	WI 269.0	73.70	30.5	43.20
WTCX	LIC-Z 241A	Ripon	WI 23.1	116.84	71.5	45.34
WXRO	LIC-Z 237A	Beaver Dam	WI 28.9	78.24	30.5	47.74
WKLH	LIC 243B	Milwaukee	WI 76.1	116.49	68.5	47.99
WKSZ	LIC-N 240C3	De Pere	WI 31.8	197.79	141.5	56.29
548296	APP 294L1	Beaver Dam	WI 28.9	78.24	5.5	72.74
WXYM	LIC 241C2	Tomah	WI 317.2	179.17	105.5	73.67



National Borders
  State Borders
  Lat/Lon Grid