

ENGINEERING REPORT COVERING
REQUEST FOR CONSTRUCTION PERMIT
ON BEHALF OF KOVAS COMMUNICATIONS, INC.
FOR WCGO(AM) 1590 KILOHERTZ
EVANSTON, ILLINOIS

JANUARY 2014

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SUMMARY

The engineering report of which this statement is part was prepared on behalf of Kovas Communications, Inc., hereinafter referred to as “Kovas”, in support of an application for construction permit for station WCGO(AM) Evanston, Illinois. Kovas is the licensee of WCGO. WCGO operates on 1590 kilohertz with power of 7 kilowatts daytime non-directional and 2.5 kilowatts nighttime directional. In addition, Kovas has a pending modification of license application, file number BL-20131113BUZ, to cover construction authorized in permit BMP-20130305AAU. This permit authorizes WCGO to increase daytime power to 7.2 kilowatts.

The purpose of this application is to request a daytime power increase to 10 kilowatts using the existing non-directional antenna system. No other changes of any kind are sought.

DAYTIME ALLOCATION CONSIDERATIONS

The geographic area encompassed by the daytime allocation study is vast and as a consequence, a conventional allocation map would be hard to read. Accordingly, several maps that provide greater allocation detail in pertinent areas are provided in lieu of a conventional map.

Figure 1 is a co-channel allocation map. There is no overlap over land area, but there is a small area of overlap in Lake Michigan. Historically, the Commission has considered this type of overlap as acceptable. The first adjacent channel mapping is provided on Figure 2. Second adjacent channel mapping can be found on Figure 3 and third adjacent channel mapping is shown on Figure 4. The proposed WCGO daytime facilities will not cause prohibited overlap to any legally qualifying North American station.

CITY OF LICENSE SERVICE

The licensed WCGO daytime operation provides 5 mV/m coverage to 100% of WCGO's city of license, Evanston, Illinois. Since the proposed power increase is non-directional, it will improve service in all directions from the transmitter site. Accordingly, a map of the 5 mV/m city of license service contour for the proposed WCGO daytime operation is not provided.

BLANKETING INTERFERENCE

Figure 5 is a mapping of the proposed WCGO 1000 mV/m contour. Based on population in the proposed 25 mV/m contour of 924,080, the maximum permitted 1000 mV/m population is

9,240. The proposed WCGO operation is compliant with Section 73.24(g) of the rules, as the population count within the 1000 mv/m contour is 1,799 persons which is well under the 1% maximum.

FIELD MEASUREMENT DATA

All distance to contour calculations used in plotting the various allocation maps were based on M-3 soil conductivity data with several exceptions. Field strength measurements were taken on WCGO. In addition, field measurement data utilized in the grant of WCGO (formerly identified as WONX) construction permit application BP-20070404ABB for the licensed WCGO facility was incorporated as well. A summary of all measured conductivity data follows.

SUMMARY OF MEASURED CONDUCTIVITY DATA

WCGO 7 kw ND 1590 khz Evanston, Illinois

Bearing Cond. Dist. Cond. Dist. Cond. Dist. Cond. Dist. Cond. Dist. Cond. Dist.

15	5.0	12.1	10.0	24.1									
45	5.0	11.3	8.0	24.1									
158	4.0	8.9	2.0	29.7									
170	5.0	2.7	6.0	8.2	3.0	25.1							
190	3.0	11.7	2.0	25.2									
234	6.0	2.2	20.0	3.0	6.0	8.7	4.0	24.4	3.0	63.8	4.0	118	
254	4.0	3.0	5.0	7.1	3.0	12.9	4.0	39.4	3.0	45.4			
290	1.0	3.8	1.5	8.4	2.0	49.6	3.0	85.7					
325	6.0	10.5	5.0	31.0	4.0	48.0							
345	5.0	38.7	7.0	111	5.0	205							
350	5.0	203											
355	5.0	1.6	7.0	2.4	4.0	5.0	3.0	75.5	5.0	89.2			

SUMMARY OF MEASURED CONDUCTIVITY DATA

WNTS 5 kw DA 1590 khz Beech Grove, Indiana

Bearing Cond. Dist. Cond. Dist. Cond. Dist. Cond. Dist. Cond. Dist.

325 4.0 4.1 3.0 18.9 4.0 44.9 5.0 81.5 3.0 110

345 7.0 6.8 4.0 12.0 3.0 29.1 6.0 117

WTVB 5 kw ND 1590 khz Coldwater, Michigan

Bearing Cond. Dist. Cond. Dist. Cond. Dist.

215 3.0 11.4 2.0 24.5 1.5 43.4

235 3.0 16.3 2.0 37.3 1.5 42.4

255 3.0 13.8 2.0 22.9 1.5 39.7

275 3.0 7.7 2.0 32.0 1.5 47.9

295 2.0 12.0 3.0 21.3 2.0 47.9

315 3.0 18.8 2.0 49.7

WAIK 5 kw DA 1590 khz Galesburg, Illinois

Bearing Cond. Dist. Cond. Dist. Cond. Dist. Cond. Dist.

0 2.0 9.6 5.0 37.0

20 2.0 7.1 4.0 19.9 3.0 24.4

300 3.0 3.0 7.0 26.6 5.0 60.0

320 5.0 5.6 10.0 14.7 7.0 22.3 6.0 36.0

340 1.0 4.5 4.0 19.0 1.5 25.0

Field strength measurements were conducted for three WCGO radials, 234, 254 and 355 degrees true. The 234 degree radial is an extension of a radial used in the construction permit application (BP-20070404ABB) for the licensed WCGO facility. The gap in measured data on the middle section of the WCGO 355 degree radial is because that part of the radial crosses Lake Michigan.

The measurement data was taken by William L. Smith, who is employed by this firm as a senior field engineer. Mr. Smith has provided field measurement data for numerous Commission filings for over twenty years. Tables 1 - 3 are tabulations of the measurement data. Figures 6 -8 are analysis graphs of the measured data. The FCC conductivity reference graph which was employed for the soil measurement conductivity analysis is attached as Figure 9. The meter used for the measurements was a Potomac Instruments model FIM-41, serial number 118, last calibrated November 11, 2009. The meter was compared to similar meters of known calibration and found to be in excellent agreement on all pertinent scales.

ANSI RADIATION GUIDELINES

A study of the proposed facility was conducted with respect to standards set forth in FCC Bulletin OST Number 65, Edition 97-01, regarding human exposure to radiofrequency radiation. The study was based on power of 10 kilowatts from data provided in Tables 1 and 2 of Supplement A, "Predicted Distances for Compliance with FCC Limits". Based on Tables 1 and 2, a distance of 2.2 meters from the tower would have to be observed to achieve ANSI radiofrequency compliance. The existing fencing distance for the licensed WCGO operation exceeds 2.2 meters from the tower. Therefore, the proposed WCGO 10 kilowatt operation will be compliant with the ANSI radiation guidelines.

When it is necessary for workers to be within the hazard area near the tower, an appropriate power reduction or temporary cessation of broadcasting will be implemented. Access to the towers is prevented by a fence with a locked gate. Signs, warning of a RF hazard, are conspicuously posted at the site.

DECLARATION

The foregoing was prepared by or under the immediate supervision of Charles A. Hecht of Charles A. Hecht & Associates, Inc., Freehold, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. All statements herein are true and correct of his knowledge except such statements made on information and belief, and as to those statements, he believes them to be true and correct under the penalty of perjury.

Respectfully submitted,

/s/

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