

K03II-D MINOR MODIFICATION TO LICENSE FCC FILE #0000178488  
CH 3 3 kW DIRECTIONAL RC 468.8 M AMSL MANHATTAN, KANSAS  
ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS  
FEBRUARY 2024

### **Proposed Change in Facilities**

K03II-D is a licensed LPTV DTV facility authorized in file number 0000178488. The proposed facility is believed to qualify as a minor change:

The applicant proposes herein to move to FCC Tower registration ASR 1276612. The site change and proposed facilities are believed to comply with FCC policy and rules based on the following:

The proposed CH 3 LPTV protected contour and the licensed contour have an area of common overlap as depicted on Figure 1 attached.

The proposed site is located a distance of 39.32 kilometers (24.4 miles) from the licensed site coordinates in compliance with rule section 74.787 (b) (iii).

The proposed antenna system consists of two Kathrein VHF log periodic antennas model CL-24, stacked vertically, horizontally polarized without beam tilt. The antenna radiation center is 113.7 meters AGL. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 1.00 has been used to calculate the power density 2 meters above ground. The maximum power density is 8 uw/cm squared calculated for an ERP of 3,000 watts H. polarization. This value is 4% of the Public Exposure MPE of 200 microwatts per centimeter squared. Based on this analysis it is believed that the proposed facility is in compliance with OET-65 Guidelines.

The applicant will reduce power or cease transmission as required to meet FCC OET-65 Guidelines.

The proposed tower is existing along with the transmitter building, access road and power.

Below is a copy of the TVStudy interference analysis for CH 3 based on the facilities described above with the antenna pattern lobe oriented at 60 degrees true. As can be seen at the conclusion of the report there is no impermissible caused interference or received interference above 2%. It is believed that the proposed facility provides full protection to other television facilities.

### **TVStudy Report**

Study created: 2024.02.08 10:18:56

Study build station data: LMS TV 2024-02-04

Proposal: K03II-D D3 LD LIC MANHATTAN, KS  
File number: BLANK0000178488  
Facility ID: 183493  
Station data: User record  
Record ID: 1466  
Country: U.S.

No protected stations found.

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D3  
Mask: Full Service  
Latitude: 38 58 34.00 N (NAD83)  
Longitude: 95 48 34.00 W  
Height AMSL: 468.8 m  
HAAT: 0.0 m  
Peak ERP: 3.00 kW  
Antenna: KAT CL-24 ID 38574 60.0 deg  
Elev Pattn: Generic

43.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.033 kW	168.1 m	25.3 km
45.0	2.36	180.5	56.8
90.0	1.29	151.4	49.4
135.0	0.003	155.8	13.8
180.0	0.000	134.1	7.4
225.0	0.006	118.3	14.5
270.0	0.004	128.3	13.5
315.0	0.000	158.8	8.1

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m    Computed HAAT: 149 m

Distance to Canadian border: 1063.8 km

Distance to Mexican border: 1143.9 km

Conditions at FCC monitoring station: Grand Island NE  
Bearing: 314.9 degrees    Distance: 310.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 281.9 degrees    Distance: 816.5 km

Study cell size: 0.50 km  
Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%  
Maximum new IX to LPTV: 2.00%

No IX check failures found.

The foregoing was prepared on behalf of Roseland Broadcasting, Inc. by Clarence M. Beverage of Communications Technologies, Medford, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements she believes them to be true and correct.



Clarence M. Beverage  
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Medford, New Jersey  
February 10, 2024