



# **OWL ENGINEERING & EMC TEST LABS, INC.**

CONSULTING COMMUNICATIONS ENGINEERS - EMC TEST LABORATORIES

MINNESOTA OFFICE  
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**ENGINEERING STUDY ON BEHALF OF  
ARMADA MEDIA  
MCCOOK NEBRASKA  
RADIO MARKET ANALYSIS**

**September 29, 2006**



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Owl Engineering, Inc. has been retained by Armada Media (hereafter “**Armada**”) to complete this radio market analysis. This study was completed to determine the number of AM and FM broadcast stations located in the competitive market consisting of radio stations KRKU-FM, KFNF-FM, KICX-FM, Mc Cook CP and KBRL-AM. Figure 1 shows the market area defined by these stations with the AM station shown in “red” contours and the FM stations shown in “blue”. The other stations involved in the purchase are shown in “green”, and as can be seen are not part of the McCook market. Radio station KRKU-FM has a construction permit that permits the station to be moved out of the market. This figure clearly shows that the new location does not overlap the McCook market.

To determine which stations are located in a given competitive market, the appropriate principal community coverage contours of all broadcast stations in the vicinity of the market must be calculated and a determination must be made if there is any overlap of these contours. Each station involved in coverage overlap is included in the market count. The 3.16 mV/m (70 dBu) contour level is utilized when studying overlap of FM stations. The 5 mV/m contour level is utilized when studying overlap of AM stations.

## FM STATIONS IN THE MARKET

A comprehensive search of all FM broadcast stations surrounding the McCook Nebraska market area was conducted. The 70 dBu contour for each station was calculated for each of the eight standard 45-degree spaced radials in conjunction with the F(50,50) metric curves of Figure 1 of Section 73.333 of the Commissions Rules. The results of the search are shown in Figure 2. It was determined that nine (9) additional FM stations serve the McCook Nebraska area market. There is also a Construction Permit for Mc Cook, NE that is yet to be constructed included in this acquisition.

The additional FM stations are:

KQLS	Colby, KS
KCVN	Cozad, NE
KRVN	Lexington, NE
KLNE	Lexington, NE
KSWN	McCook, NE
KIOD	McCook, NE
KJLT	North Platte, NE
KOEN	Oberlin, KS
KHZY	Overton, KS



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## AM STATIONS IN THE MARKET

A comprehensive search of all AM broadcast stations surrounding the market area was conducted. The 5 mV/m contour for each station was calculated every 5 degrees using the FCC metric curves and M3 map conductivity data. The results of the search are shown in Figure 3. It was determined that five (5) additional AM stations serve the McCook Nebraska area market.

The additional AM stations are:

KXXX	Colby, KS
KAMI	Cozad, NE
KRVN	Lexington, NE
KNGN	McCook, NE
KQNK	Norton, KS

None of the overlapping signals has a transmitter site more than 92 kilometers from the point of overlap.

Based on the above findings, it can be determined that an additional fourteen (14) stations serve the McCook Nebraska market. As a result, “**Armada**” is allowed to own, operate, or control up to 6 commercial radio stations with not more than 4 of which are in the same service pursuant to Rule Section 73.3555. The combination of KRKU-FM, KFNF-FM, KICX-FM, Mc Cook CP and KBRL-AM satisfies this limit even with KRKU-FM considered to be part of the McCook market.

A handwritten signature in black ink that reads "Garrett G. Lysiak". The signature is written in a cursive, flowing style.

Garrett G. Lysiak, P.E.  
September 29, 2006

Prop. model: FCC-EDX  
 Time: 50.0% Loc.: 50.0%  
 Prediction Confidence Margin: 0.0dB  
 Climate: Continental Temperate  
 Land use (clutter): none  
 Atmospheric Abs.: none  
 K Factor: 1.333  
 RX Antenna - Type: OMNI  
 Height: 9.2 m AGL Gain: 0.00 dBd

Field strength at remote

= 70.0 dBμV/m

Display threshold level: -120.0 dBmW

Reference Grid (spacing: 30')

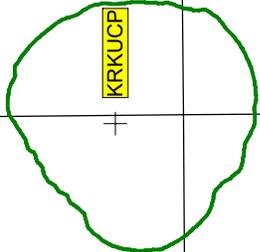


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MC COOK MARKET

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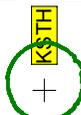
FIGURE 1



KBRL-AM

KRKU - KICX - CP

KFNF-FM



N39°00'00.00"  
W102°30'00.00"

Prop. model: FCC-EDX  
 Time: 50.0% Loc.: 50.0%  
 Prediction Confidence Margin: 0.0dB  
 Climate: Continental Temperate  
 Land use (clutter): none  
 Atmospheric Abs.: none  
 K Factor: 1.333  
 RX Antenna - Type: OMNI  
 Height: 9.2 m AGL Gain: 0.00 dBd

Field strength at remote  
 = 70.0 dBμV/m  
 Display threshold level: -120.0 dBmW  
 Reference Grid (spacing: 30')

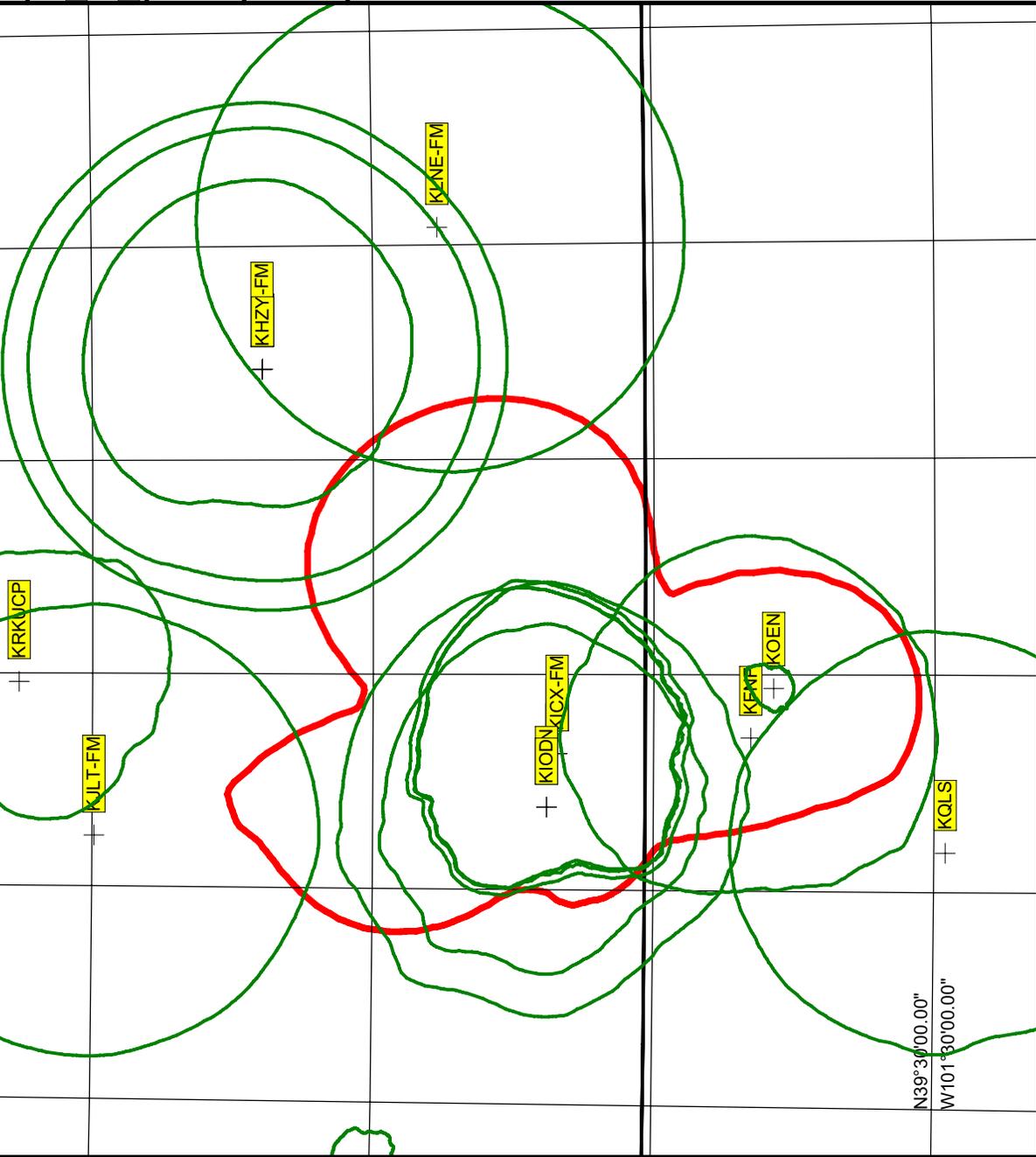


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MC COOK FM MARKET

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FIGURE 2



N39°30'00.00"  
 W101°30'00.00"

