



OWL ENGINEERING & EMC TEST LABS, INC.

CONSULTING COMMUNICATIONS ENGINEERS · EMC TEST LABORATORIES

5844 Hamline Avenue North, Shoreview, MN 55126
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**ENGINEERING STUDY ON BEHALF OF
ARMADA MEDIA – MCCOOK, INC
KJBL RADIO MARKET ANALYSIS
JULESBURG, COLORADO**

April 29, 2019



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ENGINEERING STATEMENT

Owl Engineering, Inc. has been retained by Armada Media – MCCook, Inc (hereafter “**AMC**”) to complete this local radio market analysis in connection with AMC’s proposed upgrade and change in location of station KJBL, Julesburg, Colorado.

The community of license for KJBL is not located in a county which BIA and Nielsen define as part of a Nielsen Metro nor has the station appeared “above the line” in any Nielsen Ratings as reported by BIA in the previous two years. Therefore, the modified contour overlap method was employed to demonstrate compliance with §73.3555.

It was determined that there are two Mutual Overlap Markets consisting of KJBL and other stations attributable to AMC. These two markets are as follows:

Market #1: KJBL and KSTH

Market #2: KJBL and KADL

The appropriate principal community coverage contours of all broadcast stations overlapping these two markets were calculated. Each station involved in coverage overlap is included in the market count. Stations attributable to AMC that do not define the market are not included in the denominator.

For FM stations: A comprehensive search of all FM broadcast stations surrounding the market area was conducted. The 70 dBuV 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 §73.333 of the Commission’s Rules Community.

For AM stations: A comprehensive search of all AM broadcast stations surrounding the market area was performed. The 5 mV/m contour for each station was calculated every 5 degrees using the FCC metric curves and M3 map conductivity data.

Market #1- Figure 1 depicts the contours of the following two stations in the Mutual Overlap Area forming Market #1: KJBL and KSTH (two FM stations).

The results of the analysis with all of the contributing stations within the mutually overlapping contours for Market 1 are shown in **Figure 1**. The results of the contour study determined that the following additional stations overlap in the Market #1 area. They are:



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Total number of overlapping contours: 11

Reference:

| Callsign | Type | Chan | City | St | File Number | Dist (km) | Azi (deg) |
|----------|------|-------|-----------|----|----------------|-----------|-----------|
| KJBL.A | FM | 243C1 | Julesburg | CO | BPH20160613AAP | 0.0 | 0.0 |
| KSTH.A | FM | 221C1 | Holyoke | CO | BPH20160628AAS | 54.1 | 210.2 |

Overlapping Contours:

| Callsign | Type | Chan | City | St | File Number | Dist (km) | Azi (deg) |
|----------|------|-------|--------------|----|----------------|-----------|-----------|
| KSTH* | FM | 222A | Holyoke | CO | BLH20050713AAW | 54.0 | 210.2 |
| KATR-FM | FM | 252C1 | Otis | CO | BLH19991115AAT | 104.3 | 232.2 |
| KNNG | FM | 284C1 | Sterling | CO | BLH19810402AB | 98.8 | 242.3 |
| KPNE-FM | FM | 219C1 | North Platte | NE | BLD20060530AKC | 71.1 | 87.8 |
| KZTL | FM | 228C1 | Paxton | NE | BLH20071031AAY | 56.0 | 82.6 |
| KOGA-FM | FM | 259C1 | Ogallala | NE | BLH19880809LC | 56.0 | 82.6 |
| KRNP | FM | 264C1 | Sutherland | NE | BLH20071031ABD | 56.0 | 82.6 |
| KMCX-FM | FM | 293C1 | Ogallala | NE | BLH19820520AC | 29.5 | 59.8 |
| KRDZ | AM | 1440 | WRAY | CO | BL19791025AC | 103.3 | 189.1 |
| KOGA | AM | 930 | OGALLALA | NE | BL19890906AG | 28.7 | 56.7 |

*Not counted in total

Distance and bearing calculations from coordinates: 41-00-03 N, 101-59-55 W

Conclusion for Market #1:

In a radio market with 14 or fewer (inclusive) full-power, commercial and noncommercial radio stations, the applicant may not be commonly attributable to more than 5 radio stations in total and not more than 3 in the same service. Thus, AMC's proposal to upgrade KJBL complies with Section 73.3555(a) in Market #1.

Market #2- Figure 2 depicts the Market Mutual Overlap Area of KJBL and KADL that form Market 2 and shows the results of the analysis with all of the contributing stations within the mutually overlapping contours for the combination of KJBL and KADL. They are as follows:

Total number of overlapping contours: 8

Reference:

| Callsign | Type | Chan | City | St | File Number | Dist (km) | Azi (deg) |
|----------|------|-------|-----------|----|----------------|-----------|-----------|
| KJBL.A | FM | 243C1 | Julesburg | CO | BPH20160613AAP | 0.0 | 0.0 |
| KADL.C | FM | 275C1 | Imperial | NE | BPH20160628AAI | 61.9 | 151.0 |

Overlapping Contours:

| Callsign | Type | Chan | City | St | File Number | Dist (km) | Azi (deg) |
|----------|------|-------|--------------|----|----------------|-----------|-----------|
| KPNE-FM | FM | 219C1 | North Platte | NE | BLD20060530AKC | 71.1 | 87.8 |
| KZTL | FM | 228C1 | Paxton | NE | BLH20071031AAY | 56.0 | 82.6 |
| KOGA-FM | FM | 259C1 | Ogallala | NE | BLH19880809LC | 56.0 | 82.6 |
| KRNP | FM | 264C1 | Sutherland | NE | BLH20071031ABD | 56.0 | 82.6 |
| KMCX-FM | FM | 293C1 | Ogallala | NE | BLH19820520AC | 29.5 | 59.8 |
| KOGA | AM | 930 | OGALLALA | NE | BL19890906AG | 28.7 | 56.7 |

Distance and bearing calculations from coordinates: 41-00-03 N, 101-59-55 W



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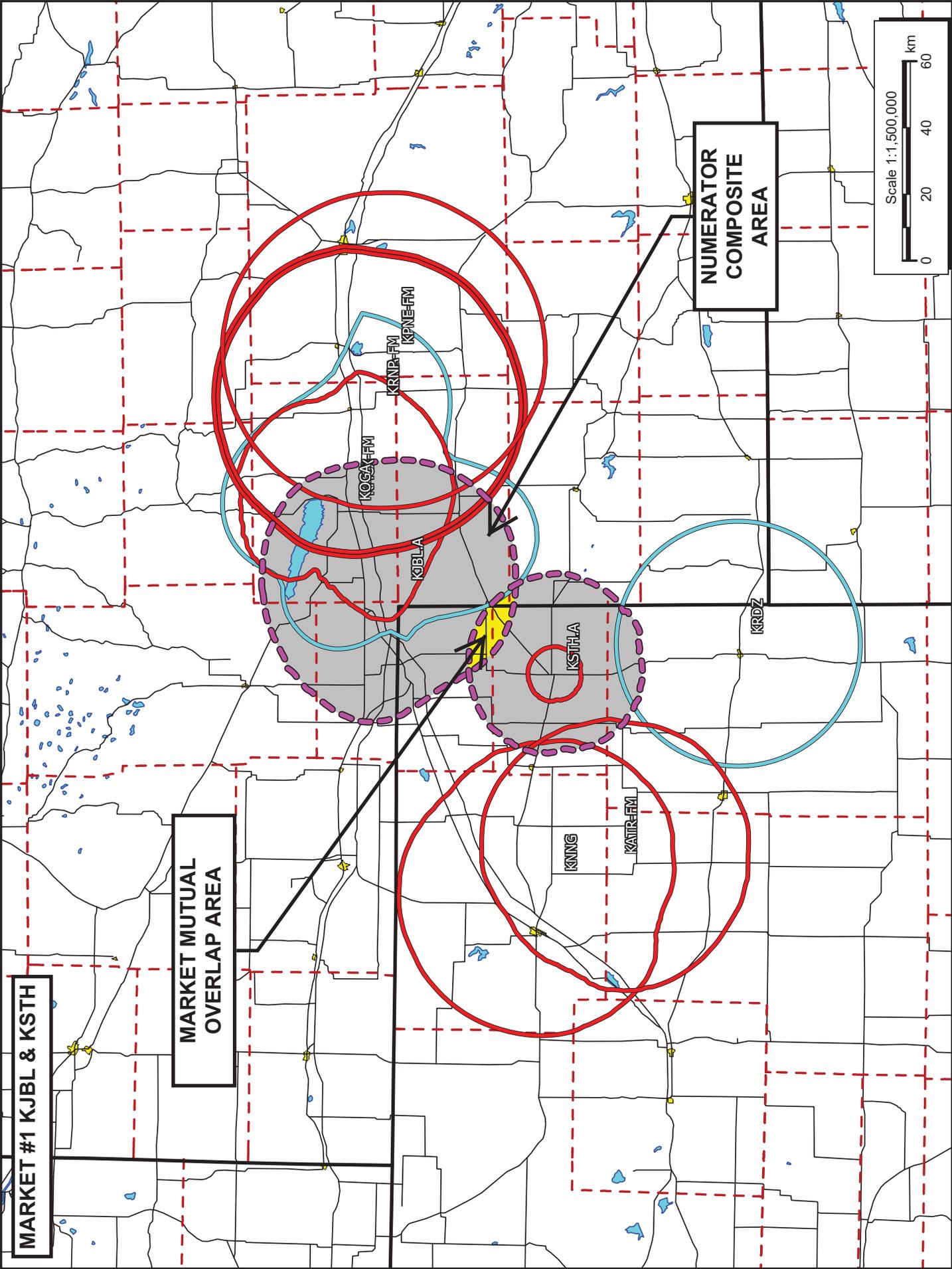
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Conclusion for Market #2:

In a radio market with fewer than 14 full-power, commercial and noncommercial radio stations, the applicant may not be commonly attributable to more than 5 commercial radio stations in total and not more than 3 in the same service. Thus, AMC's proposal to modify KJBL complies with Section 73.3555(a) in Market #2.

A handwritten signature in black ink that reads "Garrett G. Lysiak".

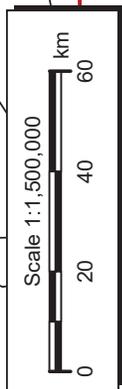
Garrett G. Lysiak, P.E.

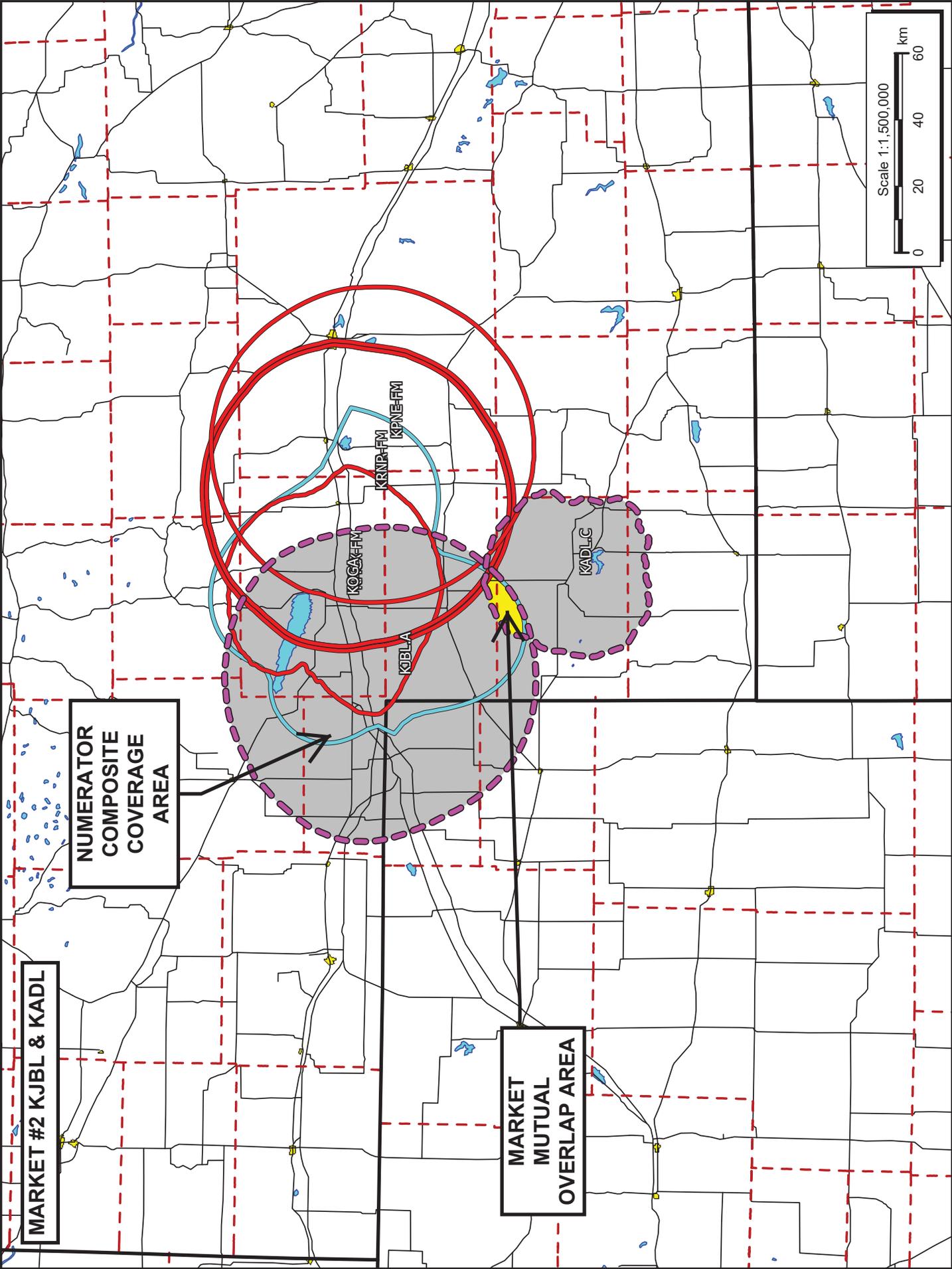


MARKET #1 KJBL & KSTH

MARKET MUTUAL OVERLAP AREA

NUMERATOR COMPOSITE AREA





MARKET #2 KJBL & KADL

**NUMERATOR
COMPOSITE
COVERAGE
AREA**

**MARKET
MUTUAL
OVERLAP AREA**

