

TECHNICAL EXHIBIT  
APPLICATION FOR AUXILIARY STATION  
RADIO STATION KOMA(FM) (FACILITY ID 72469)  
OKLAHOMA CITY, OKLAHOMA  
CH 223C 12 KW 299 M

Technical Narrative

The technical exhibit of which this narrative is part was prepared on behalf of radio station KOMA at Oklahoma City, Oklahoma. The KOMA main facility is presently licensed on channel 223C with an effective radiated power of 100 kilowatts and antenna height above average terrain of 300 meters.<sup>1</sup> KOMA is authorized to operate as a Class C operation from a new site located 1.5 kilometers to the north.<sup>2</sup> By this instant application, KOMA is proposing an auxiliary facility at its currently licensed transmitter site.

Transmitter Location

There is a slight correction being made to the transmitter site coordinates to agree with FCC antenna structure registration (ASRN: 1011487). It is believed that this proposal conforms to all applicable rules and regulations of the FCC. The herein proposed auxiliary facility will utilize an ERI 2-bay “rototiller” antenna mounted on same tower as the licensed KOMA antenna.

Blanketing Contour

The 115 dBu predicted blanketing contour of the station would extend radially 1.4 kilometers from the transmitting site. The applicant recognizes its responsibility to resolve complaints of blanketing interference as required by Section 73.318.

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<sup>1</sup> See FCC File No. BMLH-19960329KD

<sup>2</sup> See FCC File No. BPH-20050531ANM

Coverage Contours

The predicted 60 dBu coverage contours for the auxiliary operation and the existing main operation were calculated in accordance with the provisions of Section 73.313. In accordance with current FCC practice, the distances to the contours were calculated without consideration given to terrain roughness correction factors.

Figure 1 is a map showing the predicted 60 dBu coverage contours for the licensed and proposed operations. As the map illustrates, the predicted auxiliary's 60-dBu contour is entirely encompassed by the primary station's 60-dBu contour.

Radiofrequency Electromagnetic Field Exposure

The proposed KOMA auxiliary facility was evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. Using the FCC FM Model program and an ERI, "rototiller" type, two-bay, one-wavelength spaced antenna, the worst case power density level will not exceed  $1.5 \mu\text{W}/\text{cm}^2$  or less than 1% of the FCC's recommended limit of  $0.2 \text{ mW}/\text{cm}^2$  for FM frequencies in an "uncontrolled" environment.

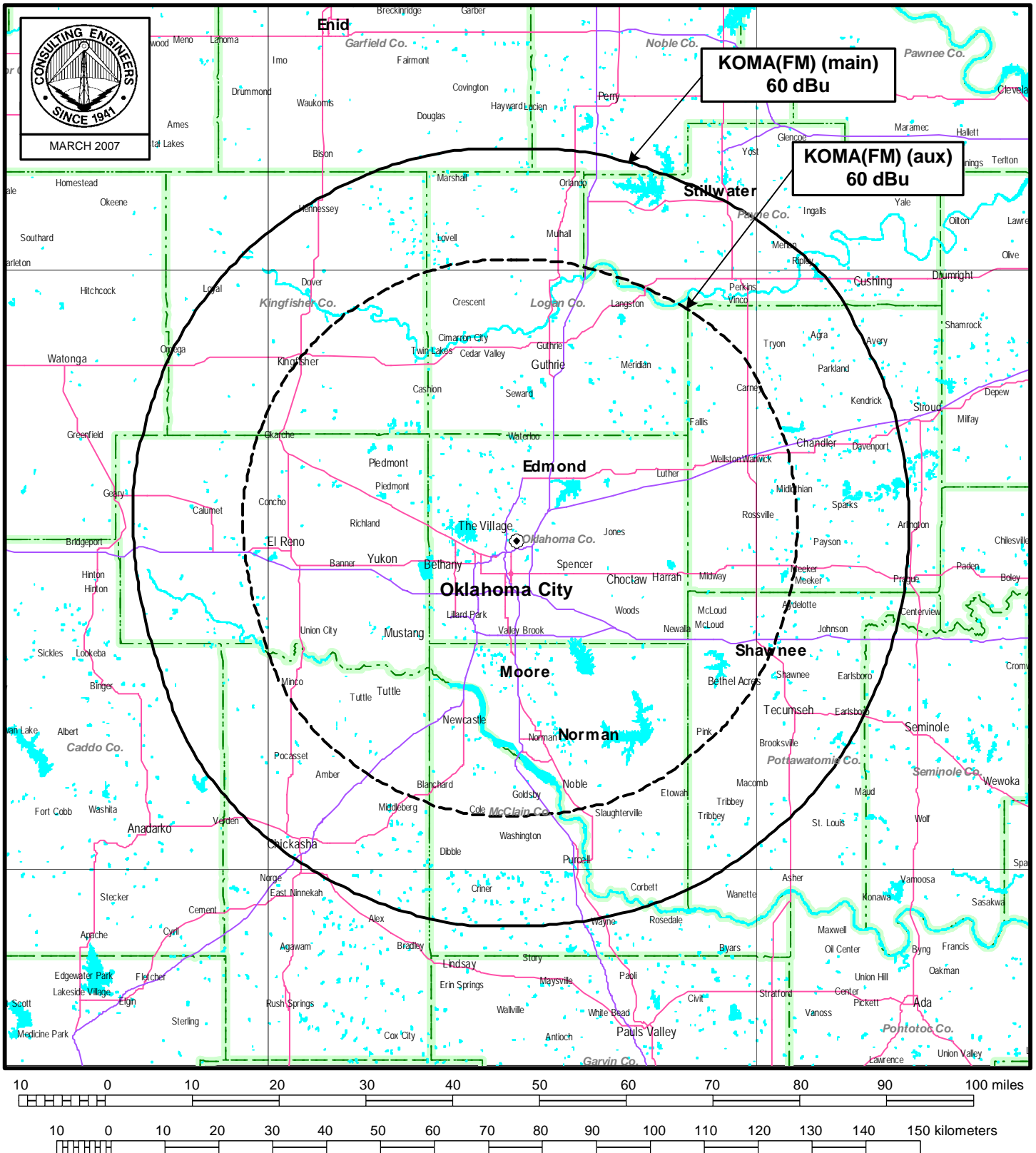


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Figure 1



## PREDICTED COVERAGE CONTOURS

AUXILIARY STATION KOMA  
OKLAHOMA CITY, OKLAHOMA  
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