

TECHNICAL EXHIBIT  
APPLICATION FOR AUXILIARY STATION  
STATION KLAQ(FM) (FACILITY ID 48670)  
EL PASO, TEXAS  
CH 238C 1 KW 400 M

Technical Narrative

The technical exhibit of which this narrative is part was prepared on behalf of radio station KLAQ(FM) at El Paso, Texas. The KLAQ main facility is presently licensed on Channel 238C with an effective radiated power of 100 kilowatts and antenna height above average terrain of 424 meters.<sup>1</sup> By this instant application, KLAQ is proposing an auxiliary facility at a lower location on the KLAQ main tower. The FCC tower registration number (ASRN) for the existing structure is 1041244. It is believed that this proposal conforms to all applicable rules and regulations of the FCC.

Transmitter Location

The proposed auxiliary site location is uniquely described by the following NAD-27 coordinates (same as main):

31° 47' 47" North Latitude  
106° 28' 55" West Longitude

A sketch showing the antenna and supporting structure is shown on Figure 1. It is proposed to operate with a non-directional ERP of 1 kilowatt.

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<sup>1</sup> See FCC File No. BLH-7759

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Blanketing Contour

The 115 dBu predicted blanketing contour of the station would extend radially 3.9 kilometers from the transmitting site. The applicant recognizes its responsibility to resolve complaints of blanketing interference as required by Section 73.318.

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.

The average terrain elevations from 3 to 16 kilometers along eight radials evenly spaced at 45 degree intervals were obtained from the National Geophysical Data Center's (NGDC) 30-second terrain database. The terrain elevations were then used in combination with the effective radiated power for determining the distances to coverage contours.

Figure 2 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 Considerations

The proposed KLAQ auxiliary facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. Assuming a conservative downward relative field of 0.4 the calculated power density at ground level is  $0.0098 \text{ mW/cm}^2$  or less than 5% of the FCC's recommended limit of  $0.2 \text{ mW/cm}^2$  for FM frequencies in an "uncontrolled" environment.

It is noted that this technical exhibit only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be provided to the FCC by the tower owner as part of the tower registration process.

Access to the transmitting site is restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower or any nearby adjacent towers, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

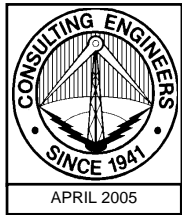


Jonathan N. Edwards

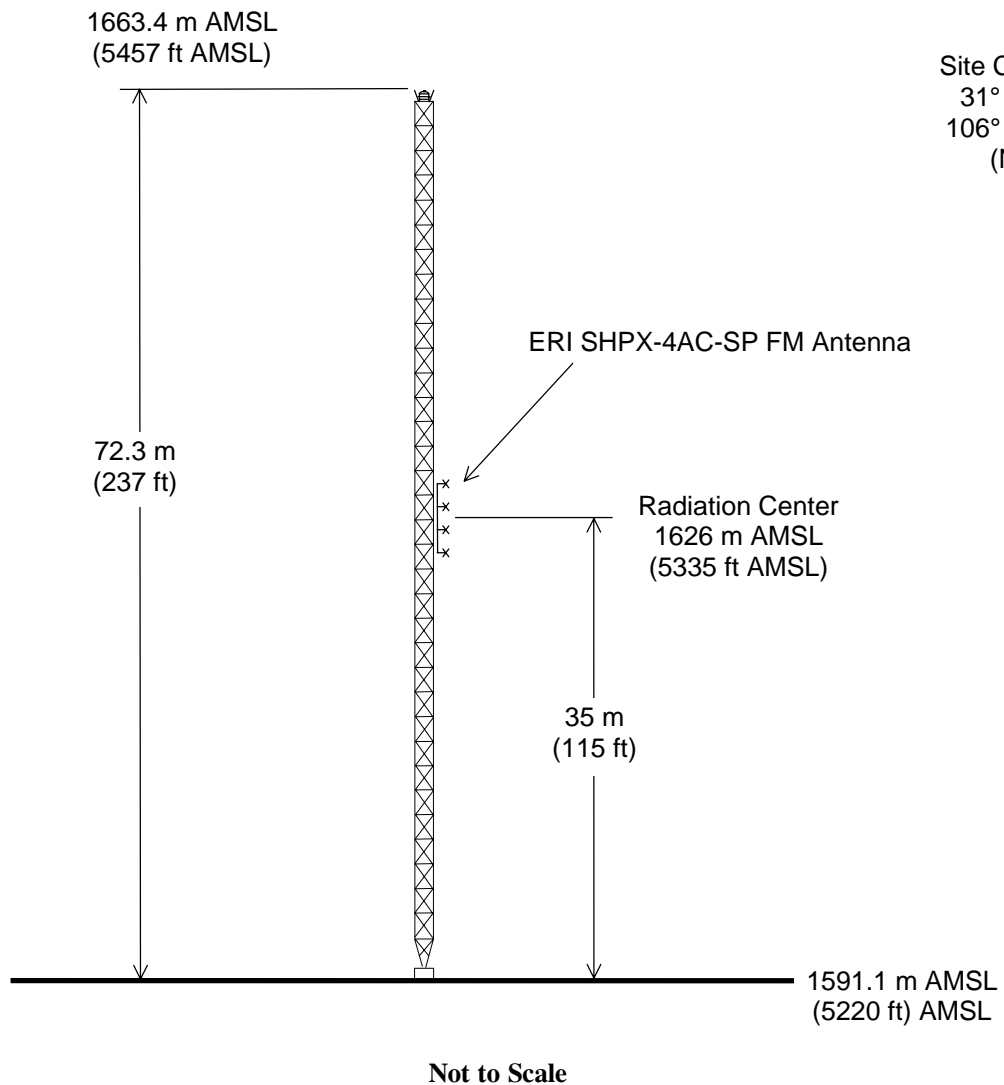
du Treil, Lundin & Rackley, Inc.  
201 Fletcher Avenue  
Sarasota, Florida 34237  
941.329.6000

April 27, 2005

Figure 1



Registration No. 1041244



## ANTENNA AND SUPPORTING STRUCTURE

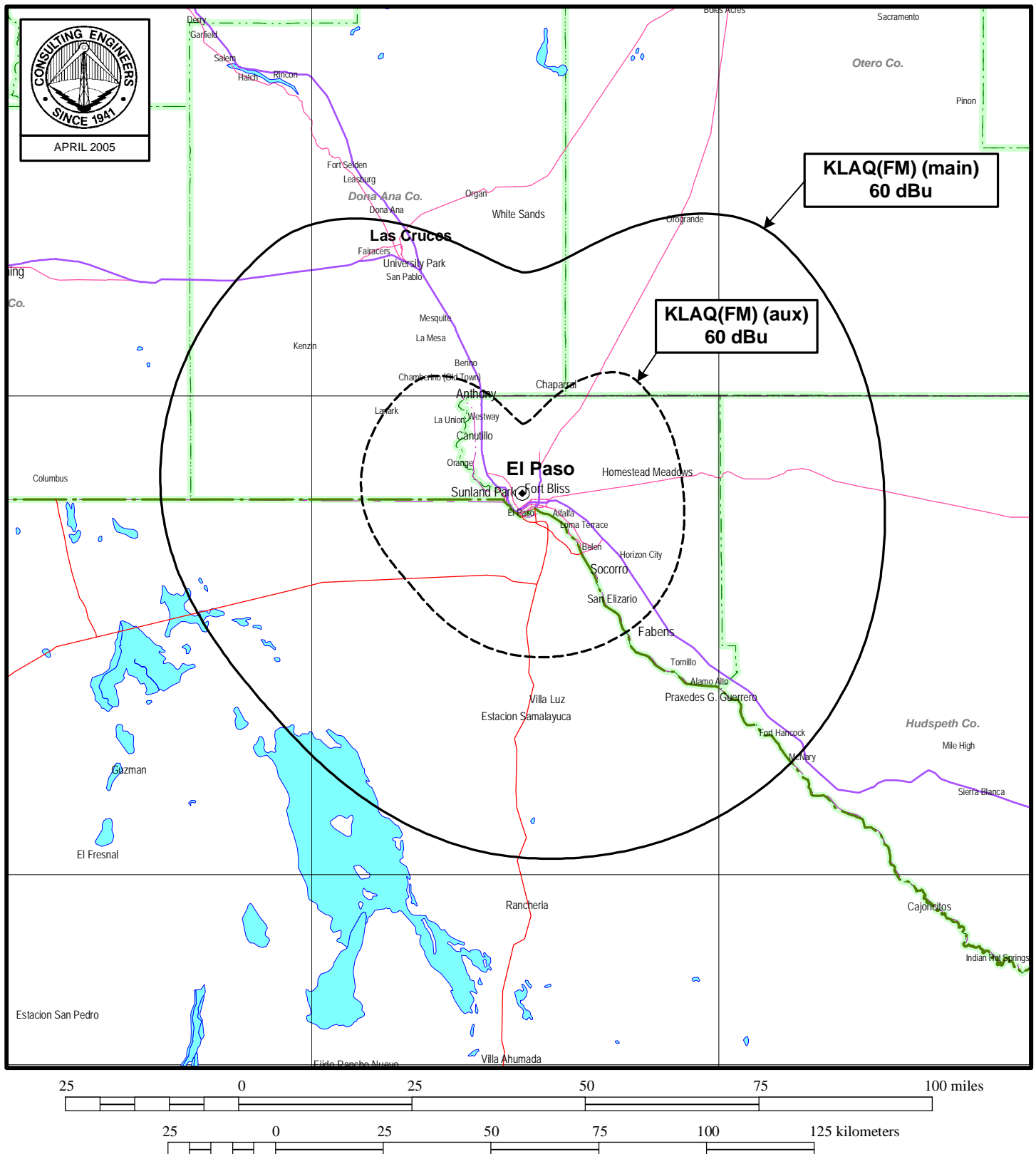
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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

### Figure 2



## PREDICTED COVERAGE CONTOURS

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du Treil, Lundin & Rackley, Inc Sarasota, Florida