ENGINEERING REPORT

Requesting Construction Permit for Minor Change
and Class C1 Upgrade to
KJTY (FM) – Topeka, KS
Channel 201C2 (88.1 MHz.)
File No. BLED-20120307AAY

September 2012

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(Exhibit numbering is in response to FCC Online Form 340, Section VII)

DISCUSSION OF REPORT

Family Life Broadcasting, Inc., licensee of KJTY(FM), Topeka, Kansas, file number BLED-20070830ACV, is licensed to operate on Channel 201C2 with 35.0 kW at 466 meters COR AMSL and 178 meters HAAT utilizing a non-directional antenna. This minor change to our existing Construction Permit for 100.0 kW at 488.0 meters COR AMSL and 195.1 meters HAAT from a site 20 km east of Topeka, Kansas only modifies the Directional Antenna Relative Field Values from 190 through 220 degrees to each equal "1". The class of operation will be increased be C1. The station will remain licensed to Topeka on Channel 201. A summary of the specifications of the proposed facility is shown in **Exhibit 15.1**.

The antenna will be mounted on an existing tower with an Antenna Structure Registration number of 1213857. A copy of this ASR has been included as **Exhibit 15.2**.

The present and proposed service contours have been calculated in accordance with the rules, and the data obtained has been tabulated and plotted in this report. The plotted contours are found as **Exhibit 16** of this report. This exhibit shows the overall service that is provided by the 1.0 mV/m contour of the proposed facility. The tabulation of the distances to the respective contours shown in this discussion is based on the use of the standard eight cardinal bearings, which were also used for the computation of the HAAT. However, the plotted contours shown in **Exhibit 16** are based on the use of a full 360 terrain radials and the USGS 03 SEC Terrain Database.

The proposed site for the Class C1 operation meets all of the contour protection requirements towards other stations in the allocation. A tabulation of the proposed protections to each of the other relevant stations is found in **Exhibit 18.1.** A map showing the current KJTY 60-dBu Service Contour and the proposed 60-dBu [50:50] Service and the 40-dBu, 54 dBu, and 100-dBu [50:10] Interfering contours is shown in **Exhibit 18.2.** Compliance with 47 CFR §73.316(c) relating to use of a directional transmission antenna is shown in **Exhibit 18.3**.

Clearance between the proposed facility and other existing or applied for facilities where the pertinent service and interfering contours are within 10 km are shown in **Exhibits 18.4 through 18.8**. It is believed there is sufficient clearance to preclude the need for further study with respect to the other protected stations shown in the allocation study.

The transmitter site is not located within 320 km of the common border between the United States and Canada or Mexico. Therefore, international concurrence need not be sought.

Exhibit 21 shows that the transmitter site proposed in this application is not within the affected radius of any Channel 6 television station – only a Proposed Rule Making, which does not need protection. Thus, full protection is provided to the Channel 6 facilities according the Commission's rules and regulations.

The remainder of the information in this report and exhibit numbering is responsive to the Rules of the Commission, and provides the data for FCC Form 340.

This FM Broadcast facility proposed in this application will not have a significant environmental impact in that: a) it proposes no change to the antenna support structure; b) it proposes RF radiation on the ground well below the 200.00 μWcm^2 limit for Un-Controlled areas as shown in **Exhibit 24**; and c) it complies with the Commission's rules under §1.1306(b). The facility is properly marked with signs, and entry is restricted by means of fencing with locked

doors and/or gates. Any other means as may be required to protect employees and the general public will be employed.

In the event work would be required in proximity to the antenna such that the person or persons working in the area would be potentially exposed to fields in excess of the guidelines set forth in OET Bulletin No. 65 (Edition 97-01), the transmitter power will be reduced or the station will cease operating during the critical period.

The table below shows the distances to the 60-dBu contour from the proposed facility using an ERP of 100.0 kW at an HAAT of 195.1 meters. These distances have been calculated based on the FCC f(50-50) curves.

N. Lat. = 39-02-21.0 W. Long. = 095-26-59.0
HAAT and Distance to Contour = FCC Method – USGS 03 SEC

Bearing (deg)	Distance (km)	HAAT (m)
0.0	64.3	205.8
45.0	63.6	197.8
90.0	62.4	227.7
135.0	61.9	179.9
180.0	62.8	189.3
225.0	57.6	153.0
270.0	63.6	198.1
315.0	64.6	208.7

Average HAAT for radials shown: 195.1 meters