

MULLANEY ENGINEERING, INC.

4937-G GREEN VALLEY ROAD
MONROVIA, MD 21770

ENGINEERING EXHIBIT EE-LIC:

**RADIO STATION KLBT (FM)
THE KING'S MUSICIAN
EDUCATIONAL FOUNDATION, INC.
BEAUMONT, TEXAS**

Ch. 201C2 30 KW-DA 145 M HAAT

MAY 2016

ENGINEERING STATEMENT IN SUPPORT OF
A LICENSE APPLICATION FOR A
MODIFIED FM STATION
USING A DIRECTIONAL ANTENNA SYSTEM

File No. BPED-20130404ACC - Facility ID: 86329



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**RADIO STATION KLBT (FM)
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NARRATIVE STATEMENT:

This engineering statement has been prepared on behalf of The Kings's Musician Educational Foundation, Inc., Licensee of Radio Station KLBT (FM) at Beaumont, Texas (Facility ID 86329). The purpose of this statement is to inform the Commission that construction has been completed and that the modified facility complies completely with its outstanding construction permit (BPED-20130404ACC). In accordance with the rules governing directional antenna facilities [Section 73.1620(a)(2)] KLBT (FM) is currently operating at one half (**50%**) of the authorized ERP and will continue to do so until formal full power program test authority is issued by the Staff.

In accordance with the Special Operating Conditions on the construction permit, KLBT (FM) coordinated the times and locations of construction such that no worker was exposed to excessive R.F. levels and it will continue to do so in the future. The facility is in full compliance with both the "controlled" & "un-controlled / public" FCC Radiation Guidelines.

Tolling of the CP Expiration was granted until 5/26/2016.

Figure 1 is a plot of the directional horizontal plane pattern for the FM antenna which has been installed by KLBT (FM). This figure shows the limitations imposed by the C.P. and as can be seen none of the C.P. limits have been exceeded. The RMS of the “**composite HV measured**” pattern is **73.3%** while the RMS of the “**composite FCC**” pattern authorized in the C.P. is **85.6%**. Thus, the “as built” pattern RMS is **85.6%** of the FCC pattern and this exceeds the 85% minimum specified by the rules [Section 73.1690(C)(2)(ii)].

Figure 2 is a map showing that the 60 dBu contour of the “measured” composite pattern covers **100%** of the city of license per Section 73.315 (NCE policy only requires 50%).

Required Certifications

Appendix A is a statement by a qualified local engineer that the antenna has been assembled in accordance with the manufacturer's instructions.

Appendix B is a statement by the antenna manufacturer (Shively) in which it provides the "as built" measured horizontal and vertical patterns. That certification provides the horizontal/vertical power gains and RMS values. The composite RMS is stated to be 73.3%. The required orientation of the directional antenna is stated to be **N-55-E**. The antenna is to be mounted parallel to a tower face which is oriented on **N-55-E**. The Shively statement also describes the methods used to measure the pattern.

H-ERP: 30 kW V-ERP: 28.5 kW

Appendix C is a statement from a local surveyor certifying the orientation of the antenna is **N-55-E**.

SUMMARY

The Kings's Musician Educational Foundation, Inc., Licensee of Radio Station KLBT (FM) herein files its license application indicating that construction has been completed and that the facility complies with its outstanding construction permit. KLBT (FM) is waiting formal full power authorization of Program Test Authority.

All facts contained herein are true of my own knowledge except where stated to be on information or belief, and as to those facts, I believe them to be true. Information concerning the technical equipment installed and compliance with special conditions was obtained directly from the licensee. No on-site inspection of the facility by Mullaney Engineering was made. I declare under penalty of perjury that the foregoing is true and correct.



John J. Mullaney, Consulting Engineer

May 10, 2016.