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MEMBER AFCCE

**ENGINEERING STATEMENT RE:
CONSTRUCTION OF FM TRANSLATOR STATION K257EV
NORTH TEXAS PUBLIC BROADCASTING, INC.
C.P. FILE NO: BMPFT-20070110ACO
SHERMAN, TEXAS
FACILITY ID: 144426**

INTRODUCTION

This Firm has been retained by North Texas Public Broadcasting, Inc. ("NTPBI") permittee of translator station K257EV, Sherman, Texas to prepare Form 350 and the associated exhibits to cover construction permit file number BMPFT-20070110ACO. This exhibit will answer all questions of a technical nature on Form 350.

Form 350, Section III, Paragraph 4, Constructed Facility

The constructed facility consists of a Shively model 6812 three element non directional circularly polarized antenna having a power gain of 1.55 in each plane fed with 310 feet of 7/8 inch Andrew type LDF-5-50 coaxial cable having an efficiency of 76.10 percent. The antenna system is fed by an RVR model TEX300 transmitter.

Form 350, Section III, Paragraph 5, Special Operating Conditions

Condition 1: Prior to commencing programs test operations, the permittee must file Form 350.

The instant filing satisfies this condition. The facility has been constructed in exact accordance with the terms of the construction permit.

Condition 2: The permittee must cooperate with other users of the site to protect workers from Radiofrequency electromagnetic fields in excess of FCC guidelines.

This condition is understood by the permittee and the permittee will comply with the condition.

Condition 3: Notification of construction to Station KJIM & Partial Proof of Performance on Station KJIM radiation pattern.

The supporting tower for the instant translator station in neither insulated nor detuned. Out of an abundance of caution, NTPBI has taken pre-construction and post-construction measurements on the four specified radials of the KJIM construction permit & license, analyzed the resulting field data and prepared a Partial Proof of Performance in accordance with Section 73.154 of the Rules. The data revealed no substantial adverse effect on the KJIM directive array from the addition of the new antennae and transmission lines for the K-257EV facilities. A copy of the Partial Proof of Performance is attached as Exhibit E-1.

Form 350, Section III, Paragraph 6, Transmitter Power Output

The power output of the transmitter is calculated as follows:

$$\begin{aligned} \text{ERP/ANT GAIN/XMSN LINE EFFICIENCY} &= \text{TRANSMITTER POWER OUTPUT} \\ 0.170/1.55/0.7610 &= 0.140 \text{ KILOWATTS (140 WATTS)} \end{aligned}$$