

Exhibit 40 - Statement A
PROPOSED ANTENNA SYSTEM
prepared for
KWTX/KBTX License Corp.
KWTX-DT Waco, Texas
Facility ID 35903
Ch. 53 1,000 kW (MAX-DA) 515 m

KWTX/KBTX License Corp., licensee of analog station KWTX-TV (Channel 10), has been granted authority to construct the paired KWTX-DT facility on Channel 53¹ (file number BPCDT-19991026ABV, Facility ID 35903). The purpose of the instant minor change application is to specify a different main lobe orientation for the proposed directional antenna system. No other changes to the construction permit are sought.

The proposed KWTX-DT antenna system will be side-mounted on the existing KWTX-TV tower structure, having FCC Antenna Structure Registration number 1046229. This site is the same site as is authorized in the KWTX-DT construction permit.²

The proposed transmitting antenna, a *Dielectric* model TFU-30DSC-R T120, is directional in the horizontal plane. This antenna will employ 0.75 degrees of electrical beam tilt. The effective radiated power will be 1,000 kilowatts, horizontally polarized. The antenna system will be installed in accordance with the manufacturer's instructions. Said installation will be supervised on-site by a competent technical representative of the applicant. The antenna's horizontal plane pattern, expressed in terms of relative field and power, is supplied as **Exhibit 40 - Figure 1** and **Exhibit 40 - Figure 1A**, properly oriented relative to True North. **Exhibit 40 - Figure 2** and **Exhibit 40 - Figure 2A** present the theoretical vertical plane (elevation) pattern for the antenna system.

¹In the Commission's Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders on Advanced Television ("SMO&O"), (see MM Docket 87-268, *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, FCC 98-315, released December 18, 1998) DTV Channel 53 was allotted as a "paired" DTV Channel for KWTX-TV.

²A difference in facility coordinates exists (from the "reference" coordinates) of four seconds in longitude as a result of the station's compliance with the antenna structure registration program.



**EXHIBIT 40 - FIGURE 1
ANTENNA HORIZONTAL PLANE RADIATION PATTERN
RELATIVE FIELD**

prepared September 2001 for
KWTX/KBTX License Corp.
KWTX-DT Waco, Texas

Ch. 53 1,000 kW 515 m

Cavell, Mertz & Davis, Inc.
Fairfax, Virginia

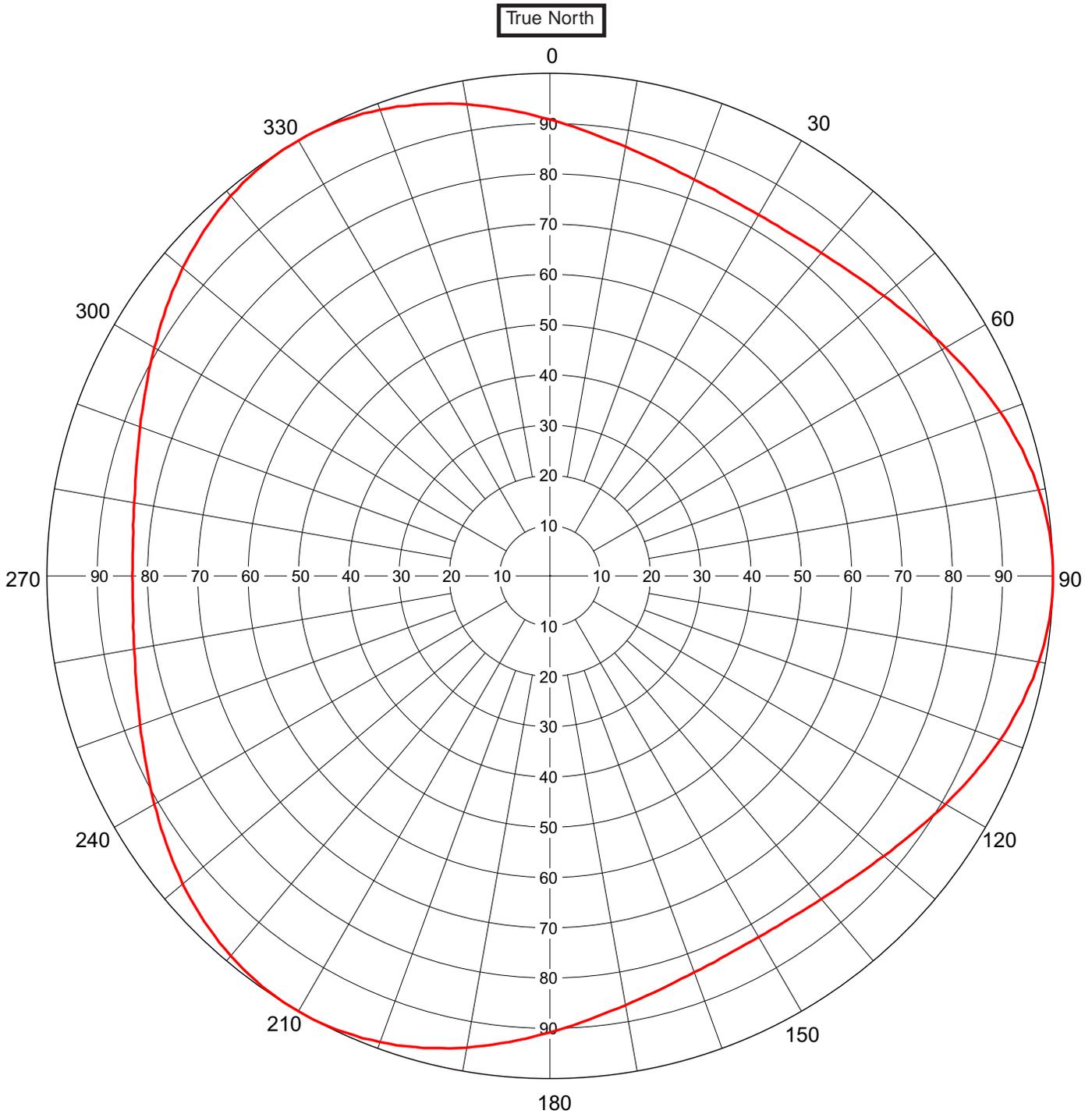


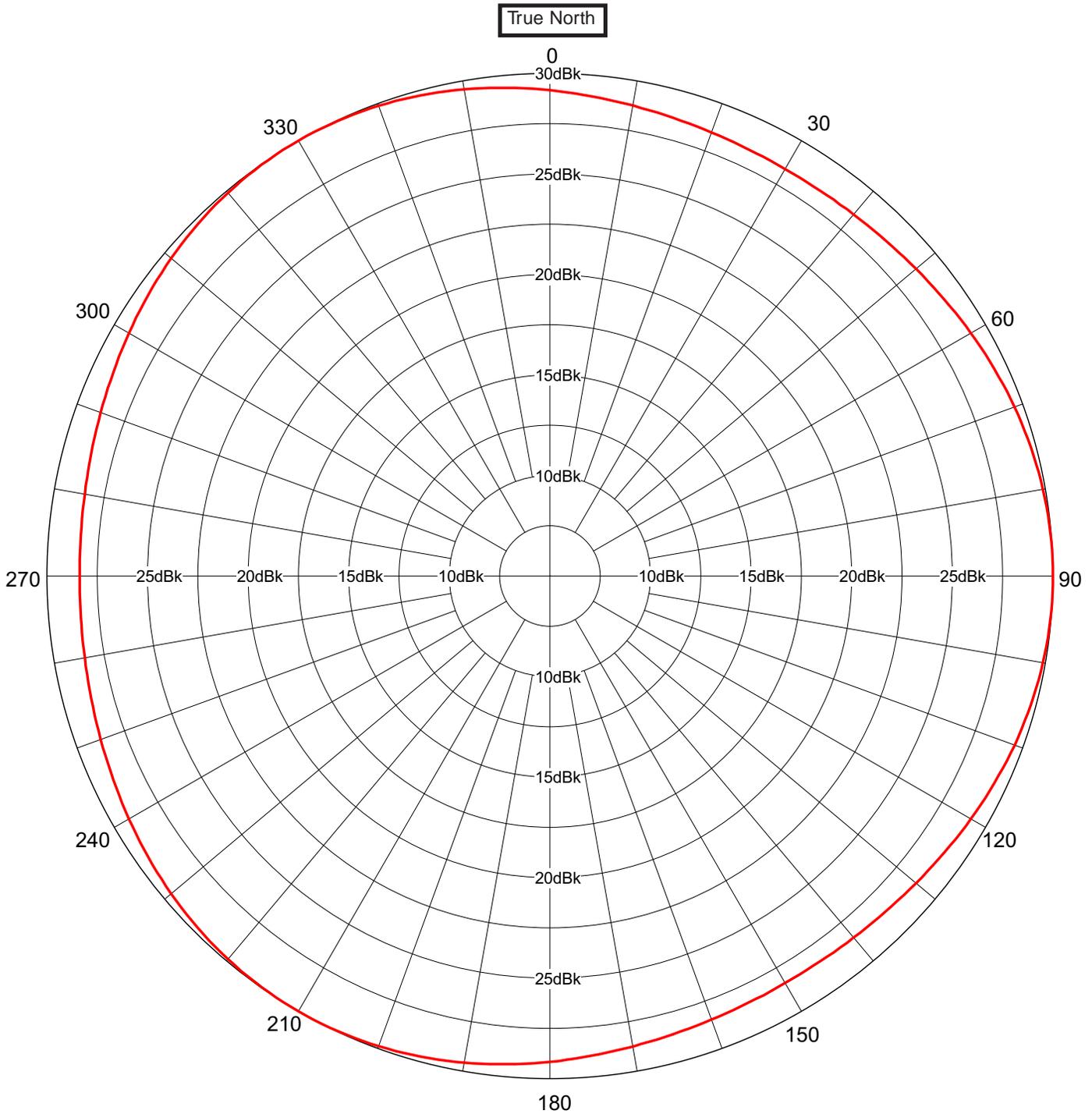


EXHIBIT 40 - FIGURE 1A
ANTENNA HORIZONTAL PLANE RADIATION PATTERN
POWER (dBk)

prepared September 2001 for
KWTX/KBTX License Corp.
KWTX-DT Waco, Texas

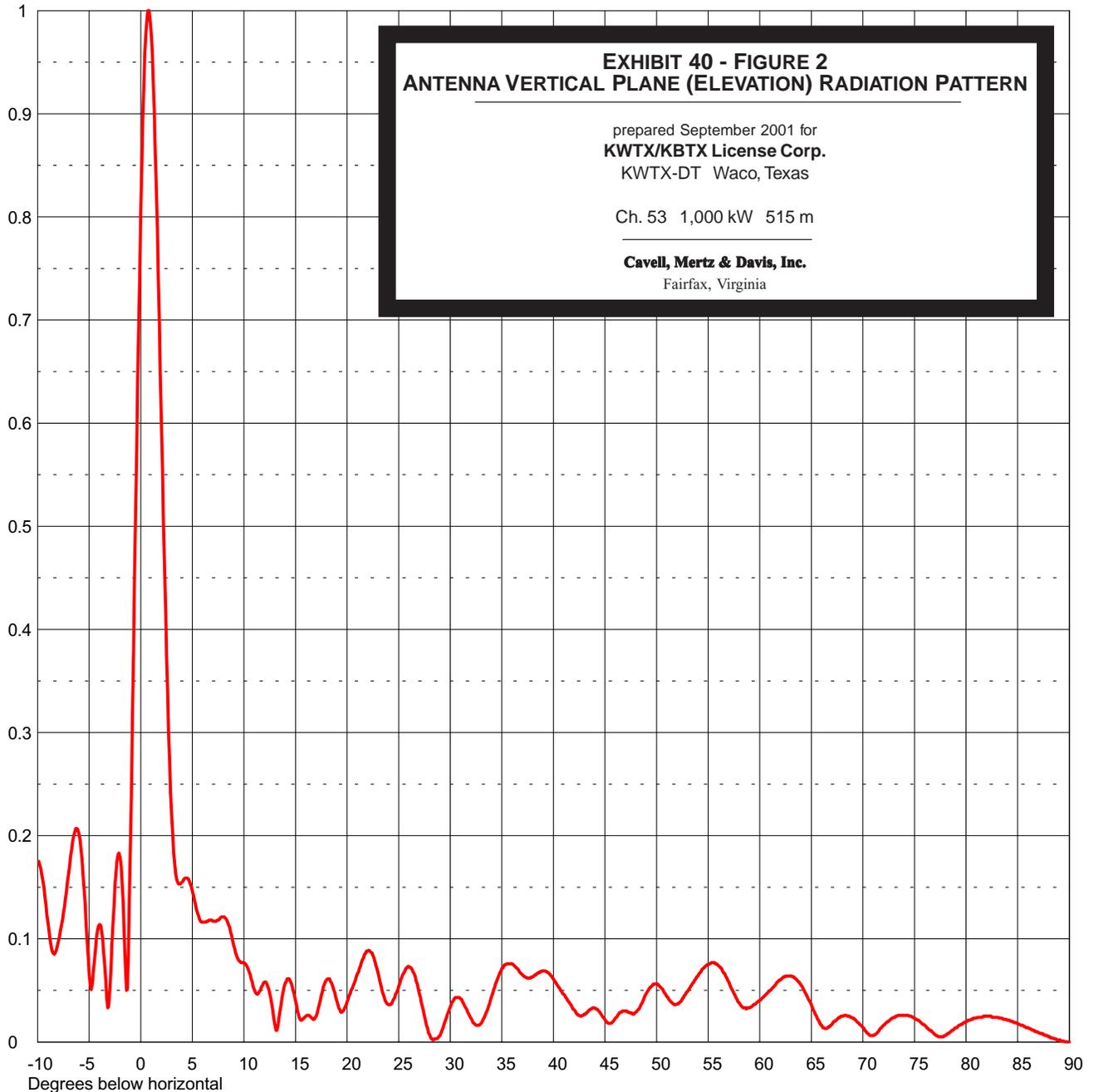
Ch. 53 1,000 kW 515 m

Cavell, Mertz & Davis, Inc.
Fairfax, Virginia



ELEVATION PATTERN

RMS Gain at Main Lobe	25.5 (14.07 dB)	Beam Tilt	0.75 Degrees
RMS Gain at Horizontal	16.6 (12.20 dB)	Frequency	707.00 MHz
Calculated / Measured	Calculated	Drawing #	30Q255075-90



ELEVATION PATTERN

RMS Gain at Main Lobe	25.5 (14.07 dB)	Beam Tilt	0.75 Degrees
RMS Gain at Horizontal	16.6 (12.20 dB)	Frequency	707.00 MHz
Calculated / Measured	Calculated	Drawing #	30Q255075

