

## TECHNICAL NARRATIVE

This Technical Statement and attached exhibits were prepared on behalf of Saver Media, LLC (“Saver”), licensee of KQTC, Facility ID No. 190414, Channel 258C2, Christoval, Texas. Saver herein is filing an FCC minor modification application to license an auxiliary antenna for KQTC. The proposed auxiliary site is an existing pole which is less than 200 feet and does not have an Antenna Structure Registration Number ("ASR"). The pole is 16 meters in overall height. The application site coordinates are 31° 25' 28.9" North Latitude, 100° 26' 35.4" West (NAD83). The proposed KQTC auxiliary station would operate with 500 watts ERP non-directional at 14 meters above ground level and will not result in extension of the licensed main facility FCC F(50,50) 60 dBu contour in any direction as required in Section 73.1675(a). Attached to this narrative is Exhibit 1, a contour map demonstrating compliance of Section 73.1675(a).

Compliance with environmental processing is demonstrated in an attached exhibit in the Technical Certifications.

**KQTC**

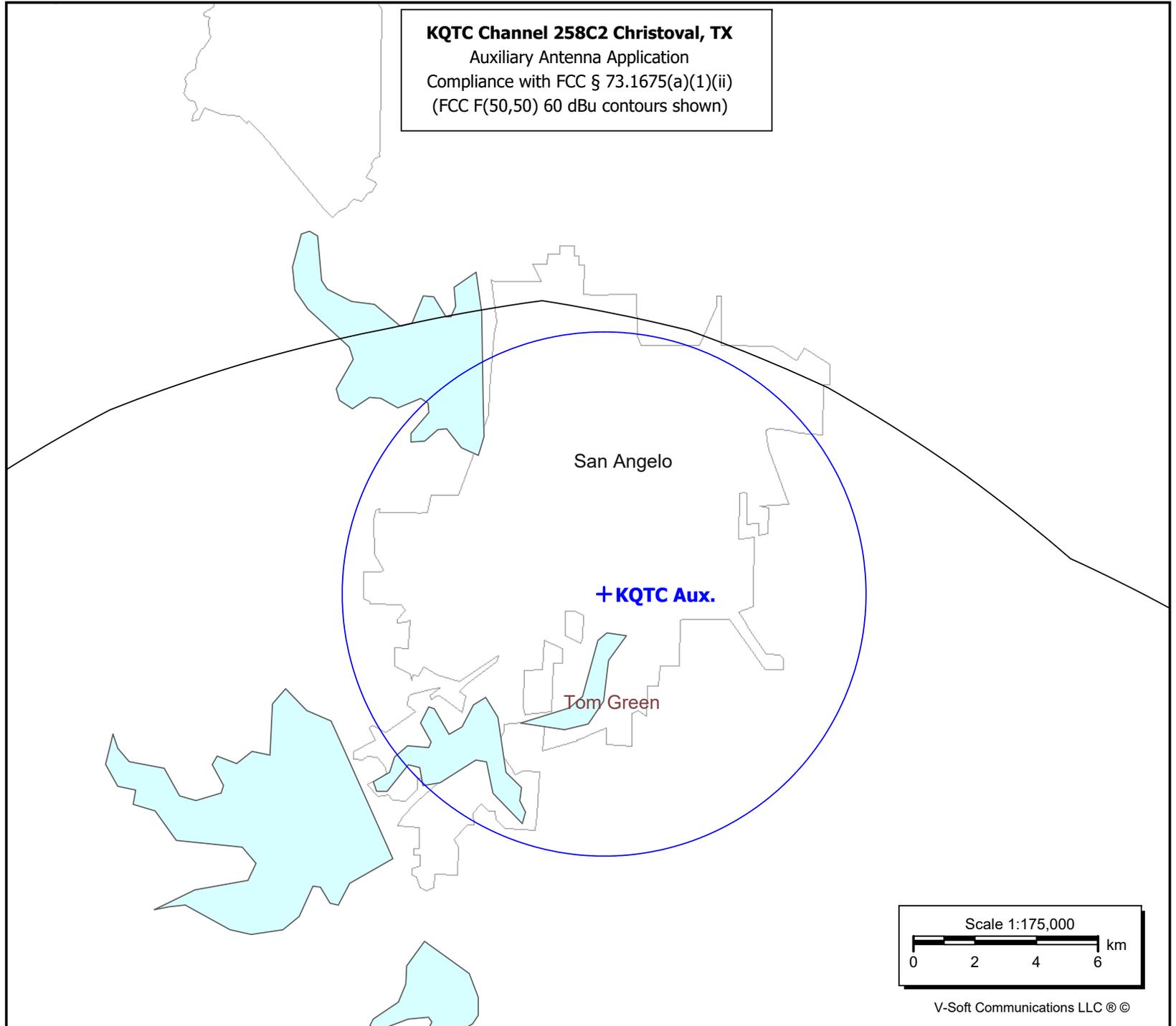
Christoval, TX  
BLH20160120AAR  
Latitude: 31-00-32.90 N  
Longitude: 100-30-55.90 W  
ERP: 50.00 kW  
HAAT: 121.0 m  
Channel: 258  
Frequency: 99.5 MHz  
AMSL Height: 828.0 m  
Elevation: 705.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

**KQTC Aux.**

Christoval, TX  
Latitude: 31-25-28.90 N  
Longitude: 100-26-35.40 W  
ERP: 0.50 kW  
HAAT: -5.37 m  
Channel: 258  
Frequency: 99.5 MHz  
AMSL Height: 575.0 m  
Elevation: 562.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

**KQTC Channel 258C2 Christoval, TX**

Auxiliary Antenna Application  
Compliance with FCC § 73.1675(a)(1)(ii)  
(FCC F(50,50) 60 dBu contours shown)



**Human Exposure to Radiofrequency Electromagnetic Field  
&  
Section 106 Compliance  
(Environmental)**

A study has been made to determine whether this proposal is in compliance with 47 C.F.R. 1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997, regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. Saver Media, LLC seeks an auxiliary license for KQTC Channel 258C2, Facility ID# 190414, licensed to Christoval, Texas. The proposed auxiliary site is an existing pole which is less than 200 feet in overall height and does not have an Antenna Structure Registration Number ("ASR"). The wood utility pole tower is 16 meters in overall height. The application site coordinates are 31° 25' 28.9" North Latitude, 100° 26' 35.4" West (NAD 83). The proposed transmit antenna is a Bext Model TFC2K two bay non-directional 0.75 wave circularly polarized antenna.

The proposed KQTC auxiliary facility would operate with 0.500 kW at 14 meters height above ground and -5.4 meters HAAT. Because this facility operates from an existing pole and no modifications of the tower are being made, it is believed to be exempt from a Section 106 review by the SHPO/THPO.

The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. The Bext antenna is included in the updated OET FM Model for Windows Program under Type 2 Opposed "V" dipole. Using EPA Element Type 2, the maximum calculated signal density near the tower at two meters above ground level attributable to the proposed facility is 13.683/cm<sup>2</sup> at 4.8 meters, which is 6.842 percent of the general population/uncontrolled maximum permitted exposure limit.

The applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower or occupy a hazardous area for maintenance or inspection.

# FM Model

## Radio Frequency Safety

[FCC Policy on Human Exposure](#)

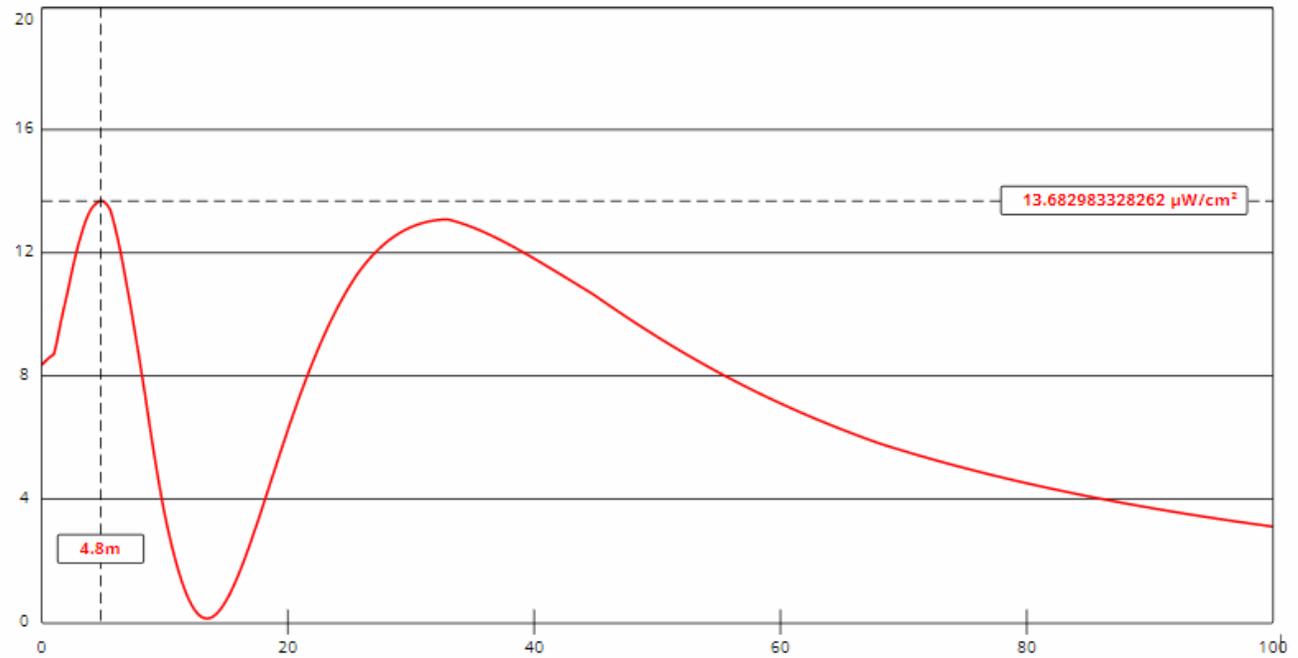
[RF Safety FAQ](#)

[Body Tissue Dielectric Parameters](#)

[RF Safety Highlighted Releases](#)

**FM Model**

The FM Model calculator determines the potential exposure from radiofrequency (RF) electromagnetic fields produced by FM broadcast station antennas at ground level. The FM Model software was originally developed by the FCC in 1997 as a standalone executable program and this improved version provides more precise predictions and runs via a JavaScript enabled web browser. The FM Model is originally based on measured data [published in 1985 by the EPA](#). [Show More....](#)



[View Tabular Results +](#)

Channel Selection	Channel 258 (99.5 MHz) ▾		
Antenna Type +	EPA Type 2: Opposed V Dipole ▾		
Height (m)	<input type="text" value="14"/>	Distance (m)	<input type="text" value="100"/>
ERP-H (W)	<input type="text" value="500"/>	ERP-V (W)	<input type="text" value="500"/>
Num of Elements	<input type="text" value="2"/>	Element Spacing (?)	<input type="text" value="0.75"/>
Num of Points	<input type="text" value="500"/>	<input type="button" value="Apply"/>	

**Bureau/Office:**  
[Engineering & Technology](#)