

ENGINEERING REPORT

PROPOSED KMOL-DT

CHANNEL 58
SAN ANTONIO, TEXAS

[MODIFICATION OF BPCDT-19991101AGP]

NOVEMBER, 2001

C O N T E N T S

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EXHIBIT C	Antenna Pattern Data
EXHIBIT D	Proposed Operating Parameters
EXHIBIT E	Predicted Service Contours

FCC Form 301, Section III-D

SMITH AND FISHER • BROADCASTING AND TELECOMMUNICATIONS CONSULTANTS

SUITE A • 2237 TACKETT'S MILL DRIVE • LAKE RIDGE, VIRGINIA 22192 • PHONE: (703) 494-2101 • FAX: (703) 494-2132

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of CLEAR CHANNEL BROADCASTING, INC., permittee of KMOL-DT, Channel 58 in San Antonio, Texas, in support of its Application for Modification of Construction Permit BPCDT-19991101AGP to specify a change in effective antenna height and a reduction in effective radiated power.

It is proposed that the KMOL-DT antenna be mounted atop the KMOL-TV tower, as shown in Exhibit B. Antenna data appears as Exhibit C, and a tabulation of operating parameters comprises Exhibit D. Exhibit E is a map of the digital service contours. It is not expected that the proposed facility would cause objectionable interference to KMOL-TV or any other authorized station in the antenna farm, but the permittee recognizes its obligation to correct any such interference that may occur.

It is important to note that this application specifies less effective radiated power than the KMOL-DT allotment and is therefore classified as a "checklist" filing. As a result, no interference study is required.

Since there is to be no change in the location or overall height of the existing KMOL-TV tower, the FAA has not been advised of this proposal. The FCC has issued Antenna Structure Registration Number 1226610 to this tower.

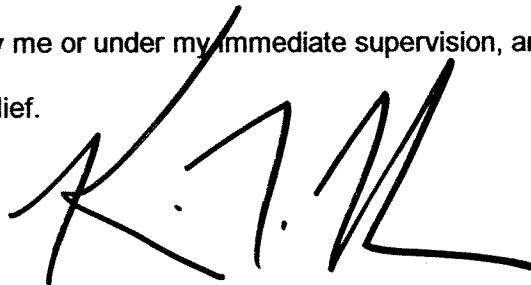
We have studied the RF transmissions of this facility with regard to their environmental effect. Employing the methods set forth in *OET Bulletin No. 65* and assuming a relative

EXHIBIT A

field value of 20 percent at the steeper elevation angles for the proposed antenna, we calculate maximum power density two meters above ground from the proposed facility to be 0.0031 mw/cm² near the tower base, which is but 0.6 percent of the 0.49 mw/cm² reference at this frequency (734-740 MHz) for uncontrolled areas (areas with access to the public). Since this value represents less than five percent of the FCC's reference value for such stations, this facility may be excluded from consideration with respect to ground-level public and occupational exposure to nonionizing electromagnetic radiation.

Further, the owners of KMOL-DT will take whatever preventive steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive RF energy.

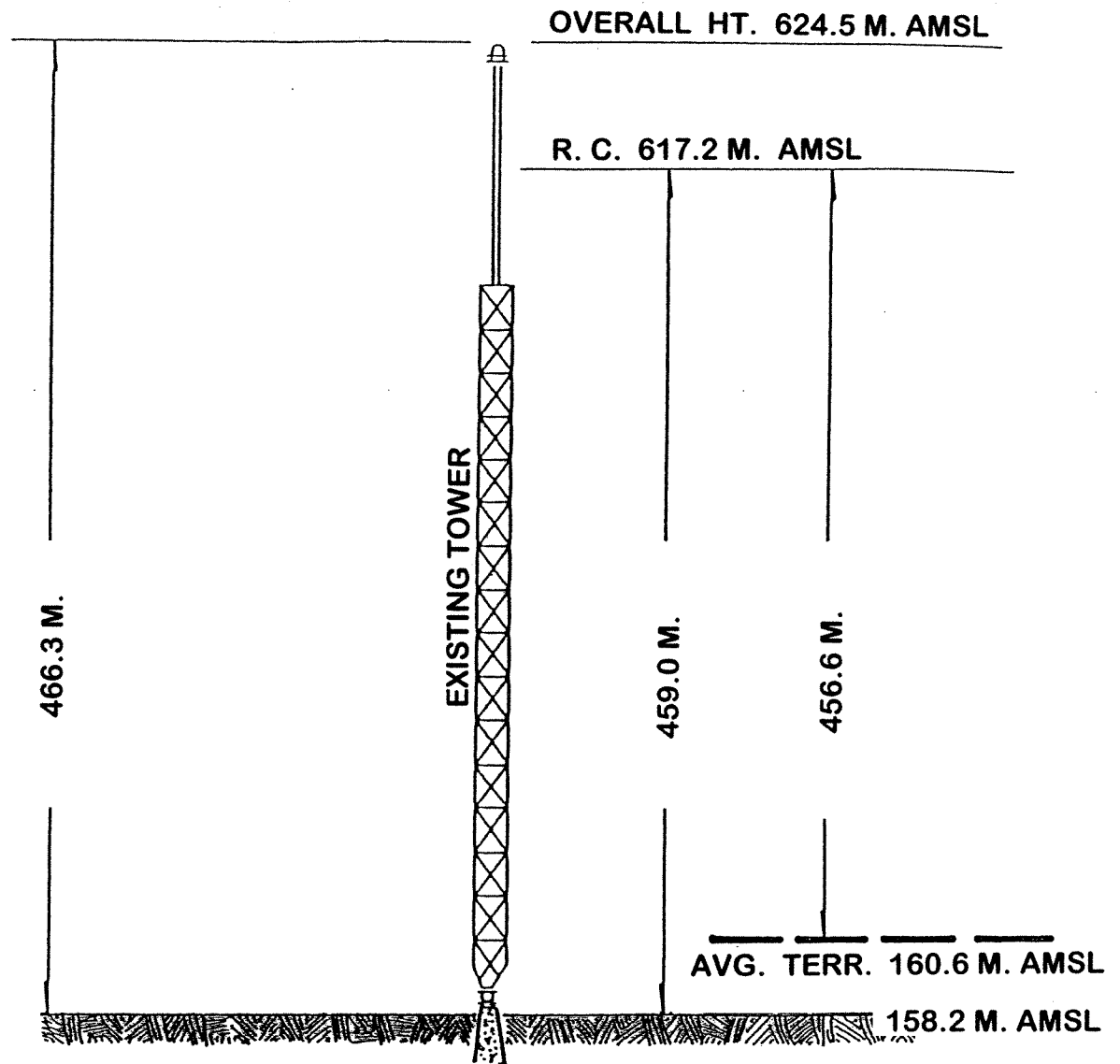
I declare under penalty of perjury that the foregoing statements and the attached Engineering Report, which was prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in black ink, appearing to read 'K. T. Fisher', with a large, stylized 'F' at the end.

KEVIN T. FISHER

November 27, 2001

NOT TO SCALE



SITE COORDINATES :

29 ° 16 ' 11 "

98 ° 15 ' 55 "

EXHIBIT B

ELEVATION OF ANTENNA STRUCTURE

PROPOSED KMOL-DT
CHANNEL 58 - SAN ANTONIO, TEXAS
[MODIFICATION OF BPCDT-19991101AGP]

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EXHIBIT C

ANTENNA ELEVATION PATTERN

**PROPOSED KMOL-DT
CHANNEL 58 - SAN ANTONIO, TEXAS
[MODIFICATION OF BPCDT-19991101AGP]**

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MEASURED ELEVATION PATTERN

RMS Gain at Main Lobe	24.50	(13.89 dB)	Beam Tilt	0.75 deg
			Frequency	737.00 MHz
			Plane	Typical

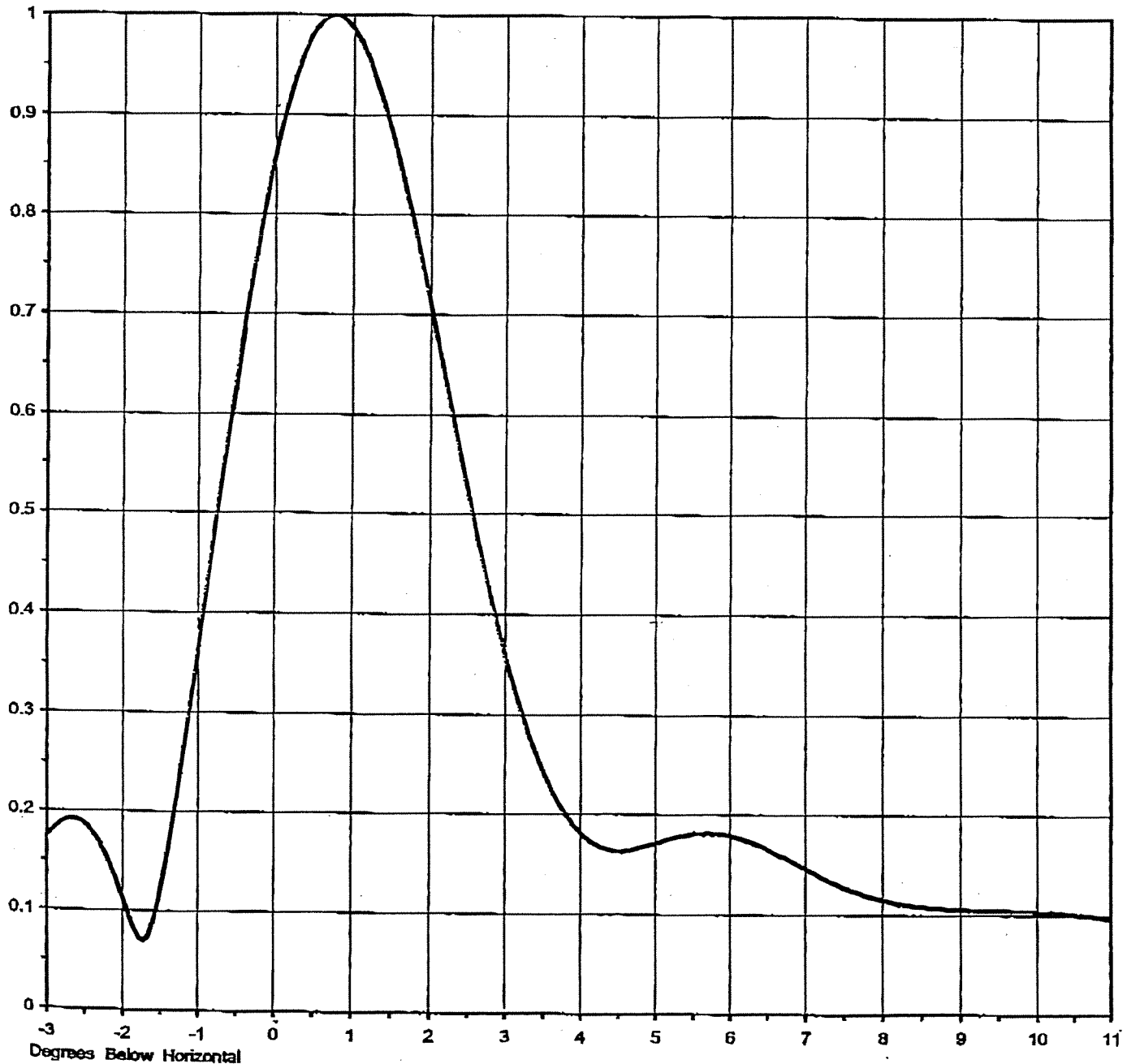


EXHIBIT D

PROPOSED OPERATING PARAMETERS

PROPOSED KMOL-DT
CHANNEL 58 - SAN ANTONIO, TEXAS
[MODIFICATION OF BPCDT-19991101AGP]

Transmitter power output	13.98 dbk, 25 kw
Transmission line loss	1.85 db
Antenna input power	12.13 dbk
Antenna gain, main lobe, max.	14.68 db
ERP, main lobe, max.	26.81dbk, 480 kw

Transmitter:	Type-accepted
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Transmission Line:	Andrew 7-3/16" rigid line 1670 feet; loss: 0.111 db/100 feet
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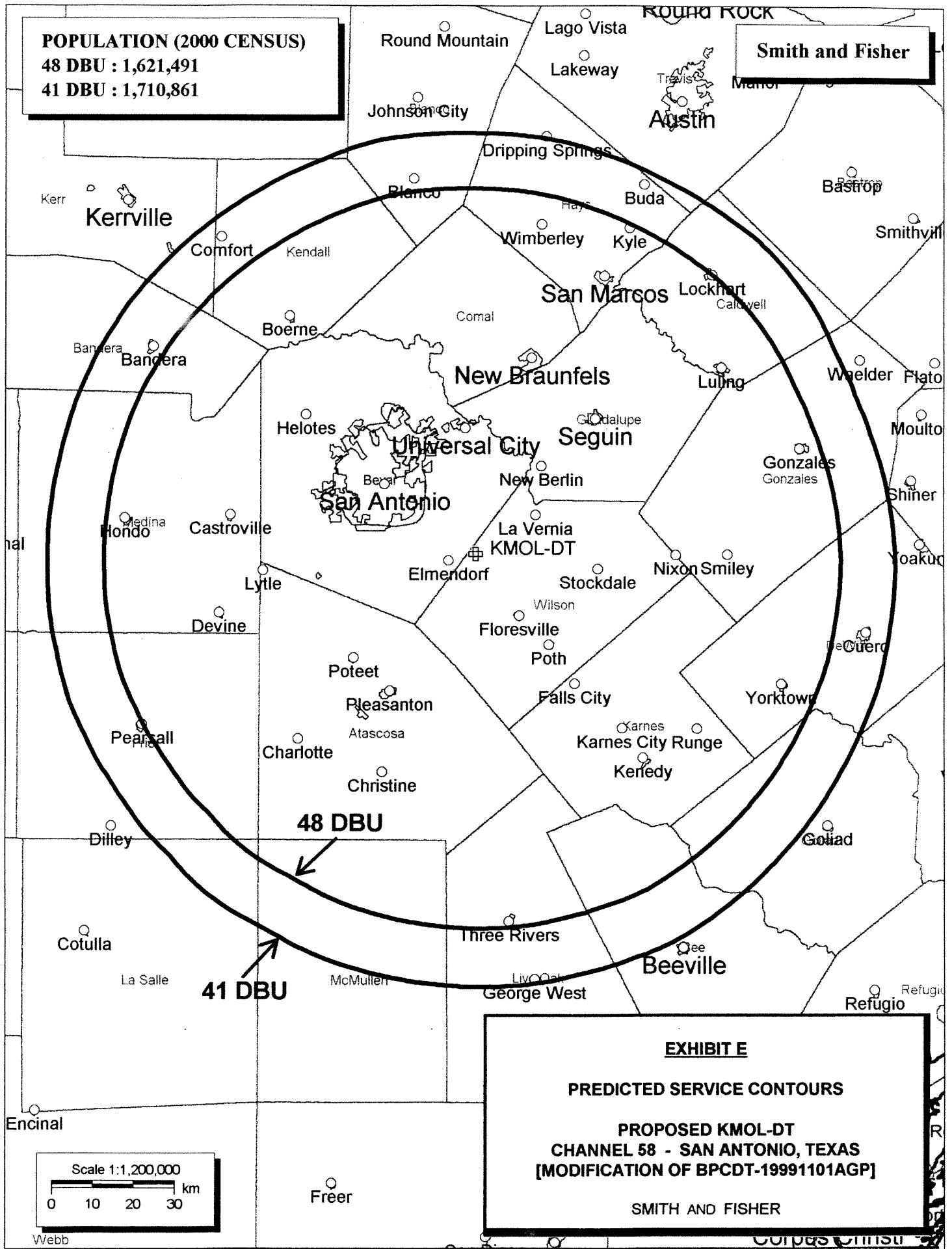
Antenna:	Dielectric TFU-28GTH-R04
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POPULATION (2000 CENSUS)

48 DBU : 1,621,491

41 DBU : 1,710,861

Smith and Fisher



SECTION III-D - DTV Engineering

Complete Questions 1-5 of the Certification Checklist and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.

Certification Checklist: A correct answer of "Yes" to all of the questions below will ensure an expeditious grant of a construction permit. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:

- (a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622. ☒ Yes ☐ No
- (b) It will operate from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622. ☒ Yes ☐ No
- (c) It will operate with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622. ☒ Yes ☐ No

2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307. ☒ Yes ☐ No

Applicant must **submit the Exhibit** called for in Item 13.

- 3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community. ☒ Yes ☐ No
- 4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable. ☒ Yes ☐ No
- 5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7. ☒ Yes ☐ No

SECTION III-D DTV Engineering

TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

TECH BOX

1. Channel Number: DTV 58 Analog TV, if any 4
2. Zone: ☐ I ☐ II ☒ III
3. Antenna Location Coordinates: (NAD 27)
- | | | | | | | | | |
|-----------|---|-----------|---|-----------|---|---------------------------------------|---------------------------------------|-----------|
| <u>29</u> | ° | <u>16</u> | ' | <u>11</u> | " | <input checked="" type="checkbox"/> N | <input type="checkbox"/> S | Latitude |
| <u>98</u> | ° | <u>15</u> | ' | <u>55</u> | " | <input type="checkbox"/> E | <input checked="" type="checkbox"/> W | Longitude |
4. Antenna Structure Registration Number: 1226610
- ☐ Not applicable ☐ FAA Notification Filed with FAA
5. Antenna Location Site Elevation Above Mean Sea Level: 158.2 meters
6. Overall Tower Height Above Ground Level: 466.3 meters
7. Height of Radiation Center Above Ground Level: 459.0 meters
8. Height of Radiation Center Above Average Terrain: 456.6 meters
9. Maximum Effective Radiated Power (average power): 480 kW
10. Antenna Specifications:
- | | | |
|----|-----------------------------------|-------------------------------|
| a. | Manufacturer
<u>Dielectric</u> | Model
<u>TFU-28GTH-R04</u> |
|----|-----------------------------------|-------------------------------|
- b. Electrical Beam Tilt: 0.75 degrees ☐ Not Applicable
- c. Mechanical Beam -- degrees toward azimuth -- degrees True ☒ Not Applicable
- Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).
- | |
|------------------|
| Exhibit No.
C |
|------------------|
- d. Polarization: ☒ Horizontal ☐ Circular ☐ Elliptical

TECH BOX

e. Directional Antenna Relative Field Values: ☒ Not applicable (Nondirectional)

Rotation: _____ ° ☐ No rotation

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

If a directional antenna is proposed, the requirements of 47 C.F.R. Section 73.625(c) must be satisfied. **Exhibit required.** Does not apply

Exhibit No.
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11. Does the proposed facility satisfy the interference protection provisions of 47 C.F.R. Section 73.623(a)? (Applicable only if **Certification Checklist** Items 1(a), (b), or (c) are answered "No.") ☒ Yes ☐ No

If "No," attach as an Exhibit justification therefor, including a summary of any related previously granted waivers.

Does not apply

Exhibit No.
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12. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefor. (Applicable only if **Certification Checklist** Item 3 is answered "No.")

Does not apply

Exhibit No.
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13. **Environmental Protection Act.** Submit in an Exhibit the following:

- a. If **Certification Checklist** Item 2 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.

By checking "Yes" to **Certification Checklist** Item 2, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

If **Certification Checklist** Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

Exhibit No.
A

Proposal is believed to comply with pertinent provisions of §1.1305, §1.1306, and §1.1307 of FCC Rules [see also *Exhibit A*].

PREPARER'S CERTIFICATION IN SECTION III MUST BE COMPLETED AND SIGNED.

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT
(U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT
(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name KEVIN T. FISHER	Relationship to Applicant (e.g., Consulting Engineer) Broadcasting Consultant	
Signature	Date November 27, 2001	
Mailing Address SMITH and FISHER, Suite A, 2237 Tacketts Mill Drive		
City Lake Ridge	State or Country (if foreign address) Virginia	ZIP Code 22192
Telephone Number (include area code) (703) 494-2101	E-Mail Address (if available) KINGFISHERKEVIN@prodigy.net	

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(U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).