

1776 K STREET NW  
WASHINGTON, DC 20006  
PHONE 202.719.7000

www.wileyrein.com

2018 JUL 12 PM 1:55

ORIGINAL

Accepted / Filed

JUL 11 2018

Federal Communications Commission  
Office of the Secretary

Gregory L. Masters  
202.719.7370  
gmasters@wileyrein.com

July 11, 2018

**BY HAND VIA COURIER**

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
12<sup>th</sup> Street Lobby, TW-A325  
Washington, DC 20554

Re: **Alpha Media Licensee LLC – FRN: 0022491476**  
**Station WIBW(AM), Topeka, KS (Fac. ID 63169)**  
**Application for Direct Measurement of Power**

Dear Ms. Dortch:

On behalf of Alpha Media Licensee LLC, licensee of AM station WIBW, Topeka, Kansas, we are submitting herewith an original and two copies of an application on FCC Form 302-AM for direct measurement of power. There is no filing fee associated with this application.

Should there be any questions concerning this application, please contact the undersigned.

Sincerely,

Gregory L. Masters

Enclosure

Accepted / Filed

Federal Communications Commission  
Washington, D. C. 20554

Approved by OMB  
3060-0627  
Expires 01/31/98

FOR  
FCC  
USE  
ONLY

JUL 11 2018

Federal Communications Commission  
Office of the Secretary

**FCC 302-AM  
APPLICATION FOR AM  
BROADCAST STATION LICENSE**

(Please read instructions before filling out form.)

FOR COMMISSION USE ONLY

FILE NO.

137-20180712ABQ

<b>SECTION I - APPLICANT FEE INFORMATION</b>			
1. PAYOR NAME (Last, First, Middle Initial)			
MAILING ADDRESS (Line 1) (Maximum 35 characters)			
MAILING ADDRESS (Line 2) (Maximum 35 characters)			
CITY	STATE OR COUNTRY (if foreign address)		ZIP CODE
TELEPHONE NUMBER (include area code)	CALL LETTERS	OTHER FCC IDENTIFIER (If applicable)	
2. A. Is a fee submitted with this application?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
B. If No, indicate reason for fee exemption (see 47 C.F.R. Section			
<input type="checkbox"/> Governmental Entity	<input type="checkbox"/> Noncommercial educational licensee	<input checked="" type="checkbox"/> Other (Please explain): Non-feeable application	
C. If Yes, provide the following information:			
Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter fee amount due in Column (C).			
(A) FEE TYPE CODE	(B) FEE MULTIPLE	(C) FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
	0 0 0 1	\$	
To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.			
(A)	(B)	(C)	FOR FCC USE ONLY
	0 0 0 1	\$	
ADD ALL AMOUNTS SHOWN IN COLUMN C, AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.		TOTAL AMOUNT REMITTED WITH THIS APPLICATION	FOR FCC USE ONLY
		\$	

<b>SECTION II - APPLICANT INFORMATION</b>		
1. NAME OF APPLICANT ALPHA MEDIA LICENSEE LLC		
MAILING ADDRESS 1211 SW 5TH AVENUE, SUITE 750		
CITY PORTLAND	STATE OR	ZIP CODE 97204

2. This application is for:

- Commercial       Noncommercial  
 AM Directional       AM Non-Directional

Call letters WIBW	Community of License TOPEKA, KS	Construction Permit File No. N/A	Modification of Construction Permit File No(s). N/A	Expiration Date of Last Construction Permit N/A
----------------------	------------------------------------	-------------------------------------	--	--

3. Is the station now operating pursuant to automatic program test authority in accordance with 47 C.F.R. Section 73.1620?

Yes  No

If No, explain in an Exhibit.

Not applicable - Direct Measurement application

Exhibit No.

4. Have all the terms, conditions, and obligations set forth in the above described construction permit been fully met?

Yes  No

If No, state exceptions in an Exhibit. Not applicable - Direct Measurement application

Exhibit No.

5. Apart from the changes already reported, has any cause or circumstance arisen since the grant of the underlying construction permit which would result in any statement or representation contained in the construction permit application to be now incorrect?

Yes  No

If Yes, explain in an Exhibit. Not applicable - Direct Measurement application

Exhibit No.

6. Has the permittee filed its Ownership Report (FCC Form 323) or ownership certification in accordance with 47 C.F.R. Section 73.3615(b)?

Yes  No

Does not apply

If No, explain in an Exhibit.

Exhibit No.

7. Has an adverse finding been made or an adverse final action been taken by any court or administrative body with respect to the applicant or parties to the application in a civil or criminal proceeding, brought under the provisions of any law relating to the following: any felony; mass media related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?

Yes  No

If the answer is Yes, attach as an Exhibit a full disclosure of the persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), and the disposition of the litigation. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 U.S.C. Section 1.65(c), the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

Exhibit No.



8. Does the applicant, or any party to the application, have a petition on file to migrate to the expanded band (1605-1705 kHz) or a permit or license either in the existing band or expanded band that is held in combination (pursuant to the 5 year holding period allowed) with the AM facility proposed to be modified herein?

Yes  No

If Yes, provide particulars as an Exhibit.

Exhibit No.

The APPLICANT hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because use of the same, whether by license or otherwise, and requests and authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended).


The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

### CERTIFICATION

1. By checking Yes, the applicant certifies, that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b).

Yes  No

2. 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.

Name Donna L. Heffner	Signature 	
Title Secretary	Date 7/11/2018	Telephone Number (503)517-6200

**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**

**FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT**

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The Commission will use the information provided in this form to determine whether grant of the application is in the public interest. In reaching that determination, or for law enforcement purposes, it may become necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Your response is required to obtain the requested authorization.

Public reporting burden for this collection of information is estimated to average 639 hours and 53 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Records Management Branch, Paperwork Reduction Project (3060-0627), Washington, D. C. 20554. Do NOT send completed forms to this address.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.



**SECTION III - LICENSE APPLICATION ENGINEERING DATA**

Name of Applicant  
**ALPHA MEDIA LICENSEE LLC**

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)

- Station License
  Direct Measurement of Power

<b>1. Facilities authorized in construction permit</b>					
Call Sign <b>WIBW</b>	File No. of Construction Permit (if applicable) N/A	Frequency (kHz) 580	Hours of Operation  UNLIMITED	Power in kilowatts	
				Night 5.0	Day 5.0
<b>2. Station location</b>					
State <b>KS</b>			City or Town <b>TOPEKA</b>		
<b>3. Transmitter location</b>					
State <b>KS</b>	County <b>SHAWNEE</b>		City or Town <b>TOPEKA</b>	Street address (or other identification) 1807 NW LANDON ROAD	
<b>4. Main studio location</b>					
State <b>KS</b>	County <b>SHAWNEE</b>		City or Town <b>TOPEKA</b>	Street address (or other identification) 5600 SW 6TH STREET	
<b>5. Remote control point location (specify only if authorized directional antenna)</b>					
State <b>KS</b>	County <b>SHAWNEE</b>		City or Town <b>TOPEKA</b>	Street address (or other identification) 5600 SW 6TH STREET	

6. Has type-approved stereo generating equipment been installed?  Yes  No
7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68?  Yes  No
- Not Applicable

Attach as an Exhibit a detailed description of the sampling system as installed.

Exhibit No. TECH EXHIBIT
-----------------------------

<b>8. Operating constants:</b>						
RF common point or antenna current (in amperes) without modulation for night system 10.25			RF common point or antenna current (in amperes) without modulation for day system 9.9			
Measured antenna or common point resistance (in ohms) at operating frequency Night 51.5                                      Day 51.0			Measured antenna or common point reactance (in ohms) at operating frequency Night 0.0    Day -25.9			
<b>Antenna indications for directional operation</b>						
Towers	Antenna monitor Phase reading(s) in degrees		Antenna monitor sample current ratio(s)		Antenna base currents	
	Night	Day	Night	Day	Night	Day
1 (SW)	- 107.0	N/A	0.740	N/A	N/A	N/A
2 (NE)	0.0	N/A	1.000	N/A	N/A	N/A
Manufacturer and type of antenna monitor: <b>POTOMAC INSTRUMENTS AM-19 (204)</b>						

SECTION III - Page 2

9. Description of antenna system ((f directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary.)

Type Radiator  UNIFORM CROSS-SECTION, GUYED	Overall height in meters of radiator above base insulator, or above base, if grounded. 1: 129.2; 2: 92.9	Overall height in meters above ground (without obstruction lighting) 1: 134.7; 2: 98.2	Overall height in meters above ground (include obstruction lighting) 1: 135.6; 2: 99.1	If antenna is either top loaded or sectionalized, describe fully in an Exhibit. <div style="border: 1px solid black; padding: 2px; width: fit-content; margin-left: auto;">Exhibit No. N/A</div>
---	---	---	---	---

Excitation  Series  Shunt

Geographic coordinates to nearest second. For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

North Latitude 39 ° 05 ' 05 "	West Longitude 95 ° 46 ' 58 "
-------------------------------	-------------------------------

If not fully described above, attach as an Exhibit further details and dimensions including any other antenna mounted on tower and associated isolation circuits.

Exhibit No.  
N/A

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system.

Exhibit No.  
N/A

10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

NONE

11. Give reasons for the change in antenna or common point resistance.

REPLACEMENT OF ANTENNA MONITOR SAMPLING SYSTEM

AND READJUSTMENT OF ANTENNA SYSTEM

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Name (Please Print or Type) RONALD D. RACKLEY, P.E.	Signature ( 
Address (include ZIP Code) DUTREIL, LUNDIN & RACKLEY, INC. 3135 SOUTHGATE CIRCLE SARASOTA, FL 34239	Date JULY 10, 2018
	Telephone No. (Include Area Code) 941-329-6000

- |   |  |
|---|--|
| <input type="checkbox"/> Technical Director | <input checked="" type="checkbox"/> Registered Professional Engineer |
| <input type="checkbox"/> Chief Operator     | <input type="checkbox"/> Technical Consultant                        |
| <input type="checkbox"/> Other (specify)    |  |

*du Treil, Lundin & Rackley, Inc.*  
*Consulting Engineers*

---

TECHNICAL EXHIBIT  
PARTIAL PROOF-OF-PERFORMANCE  
ALPHA MEDIA LICENSEE LLC  
RADIO STATION WIBW  
TOPEKA, KANSAS  
580 KHZ 5.0 KW U DA-N

July 10, 2018



TECHNICAL EXHIBIT  
PARTIAL PROOF-OF-PERFORMANCE  
ALPHA MEDIA LICENSEE LLC  
RADIO STATION WIBW  
TOPEKA, KANSAS  
580 KHZ 5.0 KW U DA-N

Table of Contents

	Technical Statement
Figure 1	Tabulation of Meter Readings
Figure 2	Summary of Measured DA Field Strength Data
Figure 3	Tabulation of Measured DA Field Strength Data
Figure 4	Descriptions of New 90 and 127.5 Degree True Monitor Points
Figure 5	Map Showing New Monitor Point Locations

TECHNICAL EXHIBIT  
PARTIAL PROOF-OF-PERFORMANCE  
ALPHA MEDIA LICENSEE LLC  
RADIO STATION WIBW  
TOPEKA, KANSAS  
580 KHZ 5.0 KW U DA-N

Technical Statement

The technical exhibit of which this statement is part was prepared on behalf of the licensee of AM station WIBW in Topeka, Kansas. WIBW operates on 580 kilohertz with power of 5.0 kilowatt, utilizing a nondirectional antenna during daytime hours and a two-tower directional antenna at night.

The WIBW antenna system was recently upgraded to use new toroidal base current sampling devices and new sampling lines to connect them to the antenna monitor. Following the sampling system changes, the antenna parameters were adjusted to produce the required directional antenna pattern shape as confirmed by a partial proof-of-performance.

Included herein are the detailed partial proof-of-performance data. As can be seen from the information provided, the field strength measurements reflect operation of the WIBW directional antenna patterns within the FCC's Rules and the station's standard radiation pattern requirements.

Antenna and Ground System

The WIBW directional antenna pattern characteristics remain unchanged and no modifications were made to the towers or ground system. The phasing and coupling equipment remains unchanged other than for the replacement of the current sampling transformers at the tower bases.

Antenna Monitor Sampling System

Identical current sampling devices are used at the two tower bases. They are shielded toroidal current transformers manufactured by Delta Electronics, Inc. for that purpose.

Radio Station WIBW  
Topeka, Kansas

Page 2

The sampling lines are equal length coaxial cables constructed of a copper-clad aluminum center conductor, low-loss cellular polyethylene foam dielectric, solid corrugated copper outer conductor, and a protective black polyethylene jacket. The connectors employed are the type recommended by the manufacturer. The system thus meets the FCC requirements for an approved sampling system.

#### Field Strength Measurements

Measurements were made on the four radials for which monitor points are specified on the WIBW license. The measurements were made out to the distances necessary to have at least eight ground points from the original proof-of-performance to include in the analysis for each of the partial proof radials within 15 kilometers of the array. Field strength readings were made at the monitor point locations specified on the station license and at other locations where radial field strength measurements were made at the time of the 1970 reference proof of performance.

The measurements were made for nighttime directional operation with an antenna input power at the common point of 5,400 watts, corresponding to 5,000 watts nominal power, in accordance with Section 73.51(b)(1) of the FCC Rules.

The field strength measurements were made by Mr. Mike Everhart and Mr. Roy Baum, engineers who are employed by the licensee of the station. Both are experienced in the making of directional antenna proof of performance field strength measurements.

The Field Strength meters used for the measurements were a Potomac Instruments PI-4100, serial number 161, and a Potomac Instruments FIM-41, serial number 1108. They were from the following group of four Potomac Instruments meters that were on hand for the project:

FIM41, S/N 1865, factory calibrated on March 18, 2010

FIM41, S/N 482, factory calibrated on December 12, 2002

FIM41, S/N 1108, factory calibrated on January 29, 1997

PI-4100, S/N 161, factory calibrated on February 12, 2009



Radio Station WIBW  
Topeka, Kansas

Page 3

The readings of all four meters were compared prior to the measurement effort and found to be in agreement within the limits of their rated accuracy, supporting the conclusion that all were reading accurately.

#### Field Strength Measurement Analysis

The field strength measurements were analyzed in accordance with Section 73.154 of the FCC's Rules. The logarithms of the ratios of the present and reference proof measured field strength values were averaged for each radial and the antilogarithm of the average logarithm was determined. The radial averages thus obtained were multiplied by the corresponding proof-of-performance measured nighttime directional unattenuated fields of the 1970 reference proof-of-performance to determine the present directional radiation values. The 1970 proof values were mathematically converted from their original units, mV/m at one mile, to mV/m at one kilometer for this analysis.

#### Direct Measurement of Power

The common point resistance for the nighttime directional pattern measurements contained herein was 51.5 ohms, as specified on the station license. The licensed value of antenna input current, 10.25 amperes, was maintained while the directional pattern field strength measurements were being made.

The daytime nondirectional antenna input impedance, measured at the point in the phasor cabinet where current metering for maintaining the daytime power takes place, was found to be 51.0  $-j25.9$ . For 5,000 watts daytime power, the current at this point is 9.9 amperes.

The impedance measurements were made with a Delta Electronics OIB-3 operating impedance bridge, using transmitter power. Prior to its use, its calibration was checked with a reference precision resistor and its indication was found to be in agreement with the reference resistor.

#### Monitor Points

The monitor points specified on the station license for the 90 degree true and 127.5 degree true radials have had their access become restricted. New monitor points have been selected to replace them. Figure 4 provides descriptions of the new monitor points. Figure 5 is a map showing their locations.

Radio Station WIBW  
Topeka, Kansas

Page 4

No changes are proposed for the other monitor points. They are the same ones that are shown on the present WIBW authorization.

Environmental Considerations

The measures to restrict human exposure to radiofrequency fields previously provided to the FCC remain in force at the WIBW transmitter site.

Conclusion

As can be seen from the data provided herein, the WIBW antenna system, as presently adjusted, meets the requirements of the FCC rules and the terms of the station authorization. It is requested that a modified license be issued specifying the operating parameters and new monitor point locations that are provided herein.



Ronald D. Rackley, P.E.  
du Treil, Lundin & Rackley, Inc.  
3135 Southgate Circle  
Sarasota, Florida 34239  
(941) 329 6008  
ron@dlr.com

July 10, 2018

Figure 1

TECHNICAL EXHIBIT  
 PARTIAL PROOF-OF-PERFORMANCE  
 ALPHA MEDIA LICENSEE LLC  
 RADIO STATION WIBW  
 TOPEKA, KANSAS  
 580 KHZ 5.0 KW U DA-N

Tabulation of Meter Readings

Night-DA	Tower 1 (SW)	Tower 2 (NE)
Antenna Monitor Ratio	0.740	1.000
Antenna Monitor Phase (Degrees)	-107.0	0.0

	DA
Common Point Resistance (Ohms)	51.5
Common Point Current (Amperes)	10.25
Antenna Input Power (Watts)	5,400



TECHNICAL EXHIBIT  
 PARTIAL PROOF-OF-PERFORMANCE  
 ALPHA MEDIA LICENSEE LLC  
 RADIO STATION WIBW  
 TOPEKA, KANSAS  
 580 KHZ 5.0 KW U DA-N

Summary of Measured Night-DA Field Strength Data

Radial Azimuth (Degrees True)	Unattenuated Field Strength at 1.0 Kilometer (mV/m)		
	1970** Proof	DA Present	DA Standard
25..0*	132.3	178.3	193.9
57.5*	223.7	205.6	270.7
90.0*	146.6	151.1	193.9
127.5*	342.8	316.1	436.0

\* - Monitor point radial.

\*\* - The values have been mathematically converted from the original units of the 1970 proof-of-performance, mV/m at one mile, to mV/m at one kilometer.

TECHNICAL EXHIBIT  
PARTIAL PROOF-OF-PERFORMANCE  
ALPHA MEDIA LICENSEE LLC  
RADIO STATION WIBW  
TOPEKA, KANSAS  
580 KHZ 5.0 KW U DA-N

Tabulation of Measured Night-DA Field Strength Data

25.0 Degree True Radial

Point Number	Distance (KM)	1970 Proof (mV/m)	Date (2018)	Time (CST)	Present (mV/m)	Present/1970 Ratio
21 MP	4.31	26.5	05/08	1416	32.5	1.226
22	5.52	26.0	“	1421	28.5	1.096
23	7.24	22.0	“	1429	28.5	1.295
25	9.01	16.7	“	1436	21.5	1.287
27	10.80	10.5	“	1443	14.0	1.333
28	12.59	9.3	“	1449	14.5	1.559
29	12.91	8.6	“	1453	13.0	1.512
30	14.37	7.10	“	1516	11.0	1.549

Radial Average Logarithmic Ratio		1.348
1970 DA-N Radial Unattenuated Field	(mV/m at 1.0 Kilometer)	132.3
Present DA-N Radial Unattenuated Field	(mV/m at 1.0 Kilometer)	178.3
Standard DA-N Field	(mV/m at 1.0 Kilometer)	193.9

TECHNICAL EXHIBIT  
PARTIAL PROOF-OF-PERFORMANCE  
ALPHA MEDIA LICENSEE LLC  
RADIO STATION WIBW  
TOPEKA, KANSAS  
580 KHZ 5.0 KW U DA-N

Tabulation of Measured Night-DA Field Strength Data

57.5 Degree True Radial

Point Number	Distance (KM)	1970 Proof (mV/m)	Date (2018)	Time (CST)	Present (mV/m)	Present/1970 Ratio
20 MP	3.52	63.5	05/08	1721	49.5	0.780
23	5.73	30.0	“	1732	28.4	0.947
24	5.91	29.5	“	1737	28.3	0.959
25	6.42	28.8	“	1700	27.8	0.965
27	7.95	32.5	“	1640	24.9	0.766
29	9.27	22.5	“	1623	21.0	0.933
31	12.54	17.1	“	1615	17.0	0.994
32	13.92	14.5	“	1607	14.0	0.966
33	14.08	14.0	“	1556	14.0	1.000

Radial Average Logarithmic Ratio		0.919
1970 DA-N Radial Unattenuated Field	(mV/m at 1.0 Kilometer)	223.7
Present DA-N Radial Unattenuated Field	(mV/m at 1.0 Kilometer)	205.6
Standard DA-N Field	(mV/m at 1.0 Kilometer)	270.7



TECHNICAL EXHIBIT  
PARTIAL PROOF-OF-PERFORMANCE  
ALPHA MEDIA LICENSEE LLC  
RADIO STATION WIBW  
TOPEKA, KANSAS  
580 KHZ 5.0 KW U DA-N

Tabulation of Measured Night-DA Field Strength Data

90.0 Degree True Radial

Point Number	Distance (KM)	1970 Proof (mV/m)	Date (2018)	Time (CST)	Present (mV/m)	Present/1970 Ratio
30	4.28	28.5	05/08	1745	32.5	1.140
32	6.05	24.0	“	1737	18.8	0.783
34	7.74	18.85	“	1728	17.1	0.907
36	8.58	19.5	“	1723	19.8	1.015
38	8.96	18.5	“	1717	16.6	0.897
39	9.40	16.0	“	1713	17.2	1.075
41	10.77	13.5	“	1705	14.5	1.074
42 MP	10.91	11.5	“	1658	13.3	1.157
43	11.68	10.6	“	1640	14.2	1.340

Radial Average Logarithmic Ratio	1.031
1970 DA-N Radial Unattenuated Field (mV/m at 1.0 Kilometer)	146.6
Present DA-N Radial Unattenuated Field (mV/m at 1.0 Kilometer)	151.1
Standard DA-N Field (mV/m at 1.0 Kilometer)	193.9

TECHNICAL EXHIBIT  
PARTIAL PROOF-OF-PERFORMANCE  
ALPHA MEDIA LICENSEE LLC  
RADIO STATION WIBW  
TOPEKA, KANSAS  
580 KHZ 5.0 KW U DA-N

Tabulation of Measured Night-DA Field Strength Data

127.5 Degree True Radial

Point Number	Distance (KM)	1970 Proof (mV/m)	Date (2018)	Time (CST)	Present (mV/m)	Present/1970 Ratio
12	3.98	98.0	05/08	1539	99.0	1.010
14 MP	5.26	65.5	“	1522	68.1	1.040
16	5.97	53.0	“	1518	53.3	1.006
18	7.26	38.3	“	1508	39.8	1.039
20	8.56	38.8	“	1502	32.8	0.845
21	9.80	33.5	“	1454	23.1	0.690
22	10.25	30.0	“	1449	25.3	0.843
24	12.17	28.4	“	1433	28.0	0.986
26	13.70	21.5	“	1425	21.2	0.986
27	14.74	19.4	“	1418	16.4	0.845

Radial Average Logarithmic Ratio		0.922
1970 DA-N Radial Unattenuated Field	(mV/m at 1.0 Kilometer)	342.8
Present DA-N Radial Unattenuated Field	(mV/m at 1.0 Kilometer)	316.1
Standard DA-N Field	(mV/m at 1.0 Kilometer)	436.0

Figure 4  
Sheet 1 of 2



From the stop sign at the southwest corner of the intersection of NE Independence Ave. and NE Monroe St., walk 30 ft. to the southeast, and the point is on the west side of the road, in front of the house at 1947 NE Monroe St.

Radial Point Number: 42  
Distance to Antenna: 10.91 km  
Night-DA Field Strength: 13.3 mV/m

### 90 DEGREE TRUE DA-N MONITOR POINT

RADIO STATION WIBW  
TOPEKA, KANSAS  
580 KHZ 5 KW U DA-N

*du Treil, Lundin & Rackley, Inc.*



From the mailbox for 725 SW Westchester Rd. (south edge of the driveway), walk south 50 feet, then cross the street to the east. The monitor point is on the east side of SW Westchester Rd. Westchester Road is the western border of Gage Park.

Radial Point Number: 14  
Distance to Antenna: 5.26 km  
Night-DA Field Strength: 68.1 mV/m

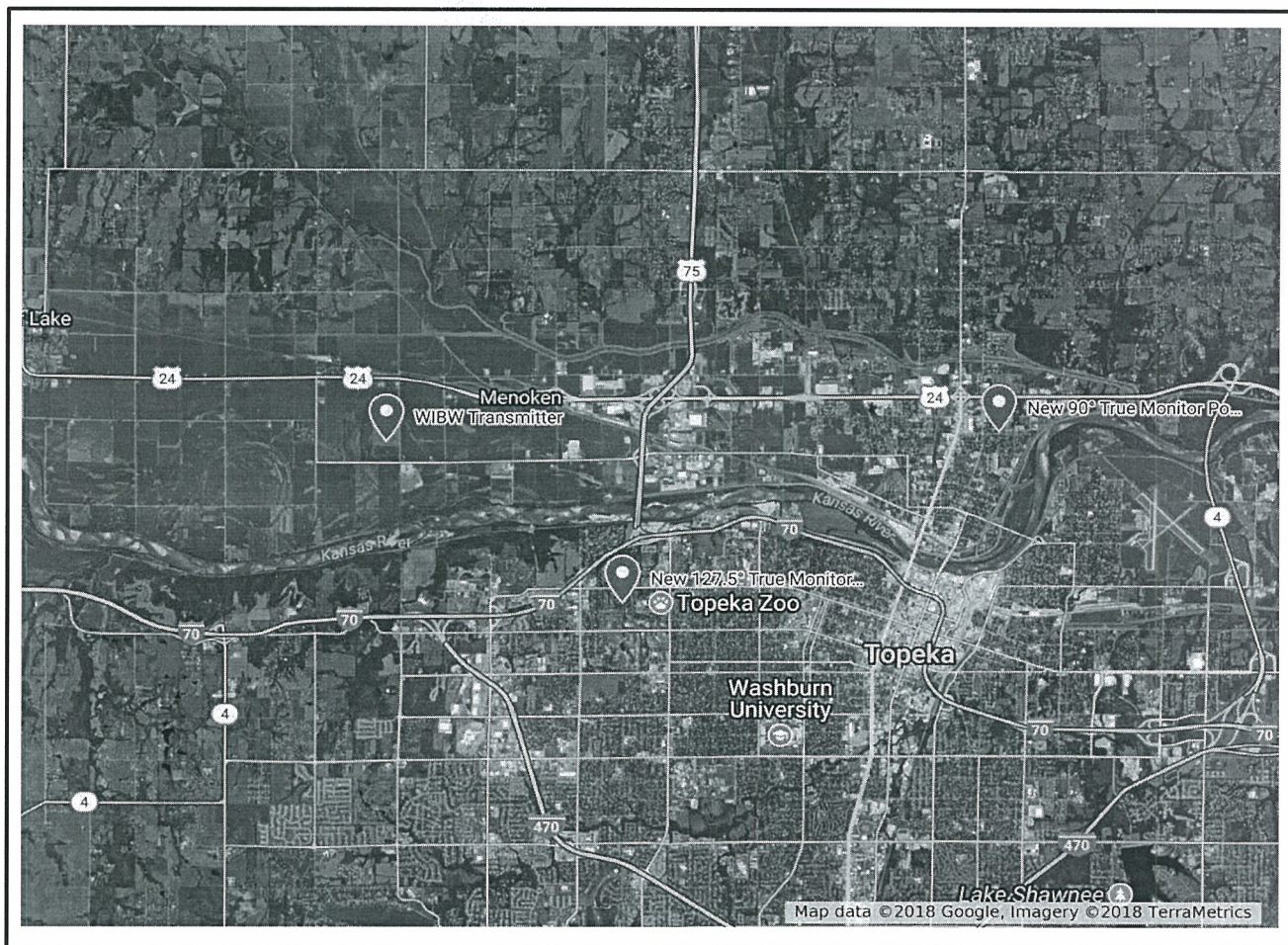
### 127.5 DEGREE TRUE DA-N MONITOR POINT

RADIO STATION WIBW  
TOPEKA, KANSAS  
580 KHZ 5 KW U DA-N

*du Treil, Lundin & Rackley, Inc.*



Figure 5



**MAP SHOWING NEW MONITOR POINT LOCATIONS**

RADIO STATION W I B W  
TOPEKA, KANSAS  
580 KHZ 5 KW U DA-N

*du Treil, Lundin & Rackley, Inc.*