Express

Tracking No: 186384433540

DORTCH, MARLENE
TW-B204F

Phone: 418-1449
Received On: 10-02-2020 09:41am

ORIGIN ID:
DO NOT RETURN
FEDEX/WASA CUSTOMER SERVICE
1501 ECKINGTON PL NE

WASHINGTON, DC 20002
UNITED STATES US

CAD:

BILL RECIPIENT

TO

FCC
9050 JUNCTION DR

ANNAPOLIS JUNCTION MD 20701
(800) 927-9979
REF: 771676032796

Received & Inspected
OCT 02 2020
FCC Mailroom

FedEx
Express

TRK# 0201 1863 8443 3540

FRI - 02 OCT 10:30A
PRIORITY OVERNIGHT

18 ZFEA

20701
MD-US BWI

Part # 156148-434 RIT EXP 09/20

RT 629 4 F
ST 25 10:30 3540
10.02

ORIGIN ID:CLLA (979) 846-1150
BEN DOWNS
WTAW RADIO
2700 RUDDER FWY
SUITE 5000
COLLEGE STATION, TX 77845
UNITED STATES US

SHIP DATE: 30SEP20
ACTWGT: 0.50 LB
CAD: 5498213/INET4280

BILL SENDER

TO OFFICE OF THE SECRETARY
FEDERAL COMMUNICATIONS COMM
445 12TH ST SW

WASHINGTON DC 20554
(800) 927-9979 REF:
INV:
PO: DEPT:

56BJ2/A27E/B766

FedEx Express

E

J202020071401uv

THU - 01 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 0201 7716 7603 2796

20554
XC WASA DC-US IAD

Received & Inspected
OCT 02 2020
FCC Mailroom

RT 807 1 10:30 B
FZ 2796 10.01

Insert shipping document here.

...ly
...e container and
...d conditions and
...cable FedEx
...nt FedEx Service
...s services,
...o fedex.com,
...n.

FedEx

The Flagship of Aggie Athletics

BRYAN BROADCASTING

Accepted / Filed

OCT 02 2020

Federal Communications Commission
Office of the Secretary

September 30, 2020

Ms. Marlene Dortch
Office of the Secretary 1800B2
Federal Communications Commission
445 12th Street, S.W.
Room TW-204
Washington, DC 20554

Ms. Dortch,

Please find enclosed three original signed copies of an application for Direct Measurement of Power for AM station KZNE (FIN 7632) licensed to College Station, Texas.

Please contact me if there are any questions.

With regards,

Ben Downs
Vice President
Bryan Broadcasting LC

ENGINEERING EXHIBIT E-3

APPLICATION FOR DIRECT

MEASUREMENT OF POWER

KZNE(AM) - COLLEGE STATION, TX

Bryan Broadcasting License Corporation
College Station, TX

September 30, 2020

Prepared for: Mr. Ben Downs
Bryan Broadcasting License Corp.
P.O. Box 3248
Bryan, TX 77805-3248

CARL E. SMITH CONSULTING ENGINEERS

2324 N. CLEVE-MASS RD., BOX 807 330/659-4440 FAX: 330/659-9234 BATH, OHIO 44210-0807

CONTENTS

Federal Communications Commission
Washington, D. C. 20554

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

FOR FCC USE ONLY

FCC 302-AM
APPLICATION FOR AM BROADCAST STATION LICENSE

(Please read instructions before filling out form.

FOR COMMISSION USE ONLY
FILE NO.

SECTION I - APPLICANT FEE INFORMATION

1. PAYOR NAME (Last, First, Middle Initial)

Bryan Broadcasting License Corporation

MAILING ADDRESS (Line 1) (Maximum 35 characters)
P.O. Box 3248

MAILING ADDRESS (Line 2) (Maximum 35 characters)

CITY	STATE OR COUNTRY (if foreign address)	ZIP CODE
Bryan	TX	77805-3248

TELEPHONE NUMBER (include area code)	CALL LETTERS	OTHER FCC IDENTIFIER (If applicable)
(979) 695-9595	KZNE	7632

2. A. Is a fee submitted with this application? ☐ Yes ☑ No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section

☐ Governmental Entity ☐ Noncommercial educational licensee ☑ Other (Please explain):

C. If Yes, provide the following information: No Fee Required for Direct Measurement Application

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
	0001	$	

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
	0001	$	

	TOTAL AMOUNT REMITTED WITH THIS APPLICATION	FOR FCC USE ONLY
ADD ALL AMOUNTS SHOWN IN COLUMN C, AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.	$	

SECTION II - APPLICANT INFORMATION		
1. NAME OF APPLICANT Bryan Broadcasting License Corporation		
MAILING ADDRESS P.O. Box 3248		
CITY Bryan	STATE TX	ZIP CODE 77805-3248

2. This application is for:

☑ Commercial ☐ Noncommercial

☑ AM Directional ☐ AM Non-Directional

Call letters	Community of License	Construction Permit File No.	Modification of Construction Permit File No(s).	Expiration Date of Last Construction Permit
KZNE	College Station, TX	N/A	N/A	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.

Exhibit No. N/A

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.

Exhibit No. N/A

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.

Exhibit No. N/A

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. E-3

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	Signature	
Ben Downs		
Title	Date	Telephone Number
Vice President	9-30-20	(979) 695-9595

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

Bryan Broadcasting License Corporation

PURPOSE OF AUTHORIZATION APPLIED FOR: (check one)

☐ Station License ☑ Direct Measurement of Power

1. Facilities authorized in construction permit

Call Sign	File No. of Construction Permit (if applicable)	Frequency (kHz)	Hours of Operation	Power in kilowatts	
				Night	Day
KZNE	N/A	1150	Unlimited	0.5	1.0

2. Station location

State	City or Town
Texas	College Station

3. Transmitter location

State	County	City or Town	Street address (or other identification)
TX	Brazos	Bryan	146 Mobile Avenue

4. Main studio location

State	County	City or Town	Street address (or other identification)
TX	Brazos	College Station	2700 Earl Rudder Freeway South

5. Remote control point location (specify only if authorized directional antenna)

State	County	City or Town	Street address (or other identification)
TX	Brazos	College Station	2700 Earl Rudder Freeway South

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. E-3

8. Operating constants:

RF common point or antenna current (in amperes) without modulation for night system	RF common point or antenna current (in amperes) without modulation for day system
3.29	3.33
Measured antenna or common point resistance (in ohms) at operating frequency Night: 50.0 Day: 90.0	Measured antenna or common point reactance (in ohms) at operating frequency Night: +/- j0.0 Day: -j19.5

Antenna indications for directional operation

Towers	Antenna monitor Phase reading(s) in degrees		Antenna monitor sample current ratio(s)		Antenna base currents	
	Night	Day	Night	Day	Night	Day
1	-57.0		1.98			
2	+/-0.0		1.00			
3	+11.0		1.35			

Manufacturer and type of antenna monitor: Potomac Instruments 1901(4188), S/N 697

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	Overall height in meters of radiator above base insulator, or above base, if grounded.	Overall height in meters above ground (without obstruction lighting)	Overall height in meters above ground (include obstruction lighting)	If antenna is either top loaded or sectionalized, describe fully in an Exhibit.
1, 3 -Uniform Cross Section Guyed 2 - Tapered Self Supporting	1, 3 - 44.2m 2 - 67.7m	1, 3 - 44.2m 2 - 67.7m	1, 3 - 44.2m 2 - 68.0m	Exhibit No. N/A

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	West Longitude
30 ° 37 ' 54 "	96 ° 21 ' 27 "

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. E-3

Also, if necessary for a complete description, attach as an Exhibit a sketch of the details and dimensions of ground system. Exhibit No. No Change

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

N/A

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

Installation of an additional microwave dish and transmission line on Tower #1.

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)	Signature (check appropriate box below)
Derek R. Gorman	
Address (include ZIP Code) P.O. Box 807 2324 North Cleveland-Massillon Road Bath, OH 44210-0807	Date 9/30/2020 Telephone No. (Include Area Code) (330) 659-4440

☐ Technical Director ☐ Registered Professional Engineer

☐ Chief Operator ☑ Technical Consultant

☐ Other (specify)

ENGINEERING AFFIDAVIT

State of Ohio)
) ss:
County of Summit)

Roy P. Stype, III, being duly sworn, deposes and states that he is a graduate Electrical Engineer, a qualified and experienced Communications Consulting Engineer whose works are a matter of record with the Federal Communications Commission and that he is a member of the Firm of "Carl E. Smith Consulting Engineers" located at 2324 North Cleveland-Massillon Road in the Township of Bath, County of Summit, State of Ohio, and that the Firm has been retained by the Bryan Broadcasting License Corporation to prepare the attached "Engineering Exhibit E-3".

The deponent states that the Exhibit was prepared by him or under his direction and is true of his own knowledge, except as to statements made on information and belief and as to such statements, he believes them to be true.

Roy P. Stype, III

Subscribed and sworn to before me on **September 30, 2020.**

Nancy A. Adams
Notary Public

/SEAL/

Nancy A. Adams, Notary Public
Residence - Cuyahoga County
State Wide Jurisdiction, Ohio
My Commission Expires Sept. 27, 2025

ENGINEERING AFFIDAVIT

State of Ohio)
) ss:
County of Summit)

Derek R. Gorman, being duly sworn, deposes and states that he is a qualified and experienced Communications Consulting Engineer whose works are a matter of record with the Federal Communications Commission and that he is a member of the Firm of "Carl E. Smith Consulting Engineers" located at 2324 North Cleveland-Massillon Road in the Township of Bath, County of Summit, State of Ohio, and that the Firm has been retained by the Bryan Broadcasting License Corporation to prepare the attached "Engineering Exhibit E-3".

The deponent states that the Exhibit was prepared by him or under his direction and is true of his own knowledge, except as to statements made on information and belief and as to such statements, he believes them to be true.

Derek R. Gorman

Subscribed and sworn to before me on **September 30, 2020.**

Nancy A. Adams
Notary Public

Nancy A. Adams, Notary Public
Residence - Cuyahoga County
State Wide Jurisdiction, Ohio
My Commission Expires Sept. 27, 2025

/SEAL/

ENGINEERING STATEMENT

1.0 GENERAL

This engineering exhibit is prepared on behalf of the Bryan Broadcasting License Corporation, licensee of Radio Station KZNE(AM) - College Station, Texas. It supports an application for direct measurement of power for KZNE following the installation of a new microwave dish for a bidirectional 11 Ghz microwave link (WRHV-765 and WRHV-766) on Tower #1 of the KZNE nighttime directional array. Figure 1.0 is a vertical plan view of this tower depicting the location of this new dish, as well as the antennas for KACB-LP and Aural STL WMU-731 which were already located on this tower. Tower #2 of the KZNE directional array, which also serves as KZNE's daytime nondirectional tower supports the auxiliary antenna for KNDE(FM) as well as the antenna formerly used by FM translator K274CM, which recently moved to another site. Because all of the towers in the KZNE directional array are fed as folded unipoles, the transmission lines for all of these antennas are bonded directly to the tower.

KZNE operates on 1150 kHz with a non-directional daytime power level of 1.0 kilowatt and a nighttime power level of 0.5 kilowatts using a three-tower directional antenna system. Tower #2 of the KZNE array, is shared with KWBC(AM) - College Station, Texas, which operates on 1550 kHz using a two tower directional antenna system.

Following the installation of this microwave dish, the KZNE nighttime antenna monitor parameters were restored to the licensed values and a partial proof of performance was conducted on the KZNE nighttime directional antenna system as required by Section 1.30003(b) of the FCC Rules. While this partial proof shows the KZNE nighttime pattern to be in proper adjustment, the monitor point on the 50° radial exceeds the present FCC limit. As a result, the results of this partial proof are being filed as part of thie application for direct measurement of power to achieve a relaxation of the limit for this monitor point. The results of this partial proof of performance are contained in Section 2.0 of this exhibit.

KZNE is paired with expanded band AM station WTAW, which operates on 1620 kHz. Although WTAW has been licensed since February of 2001, both KZNE and

WTAW have continued to operate pursuant to special temporary authority subject to any action taken in MB Docket No. 07-294, and to any action taken in response to a pending or future request to extend or make permanent this station's dual operating authority.

During this partial proof of performance it was determined that the description of the monitor point on the 87° radial was incorrect. Specifically, this monitor point is located 600 feet (not 600 meters) southwest of Carters Creek. The correct description is:

> *Direction of 87° True. The point is located on the northwest side of Harvey Road, 600 feet southwest of Carters Creek, opposite the 3rd utility pole southwest of Carters Creek. It lies 5.83 kilometers from the KZNE transmitter site.*

Following the installation of this microwave dish, the monitor points for the KWBC directional pattern were measured pursuant to the requirements of Section 1.30002(f) of the FCC Rules to insure that the installation of this dish had no adverse effect on the KWBC directional pattern. These monitor points all measured below the present FCC limit at each location and are in substantial agreement with values measured prior to the installation of this microwave dish. The results of these measurements have been placed in the KWBC engineering files.

As shown by the data contained in this exhibit, the KZNE nighttime directional antenna system is in proper adjustment followingg the installation of this microwave dish and the station has resumed the determination of its operating power by the direct method.

KZNEVP1 09/29/2020

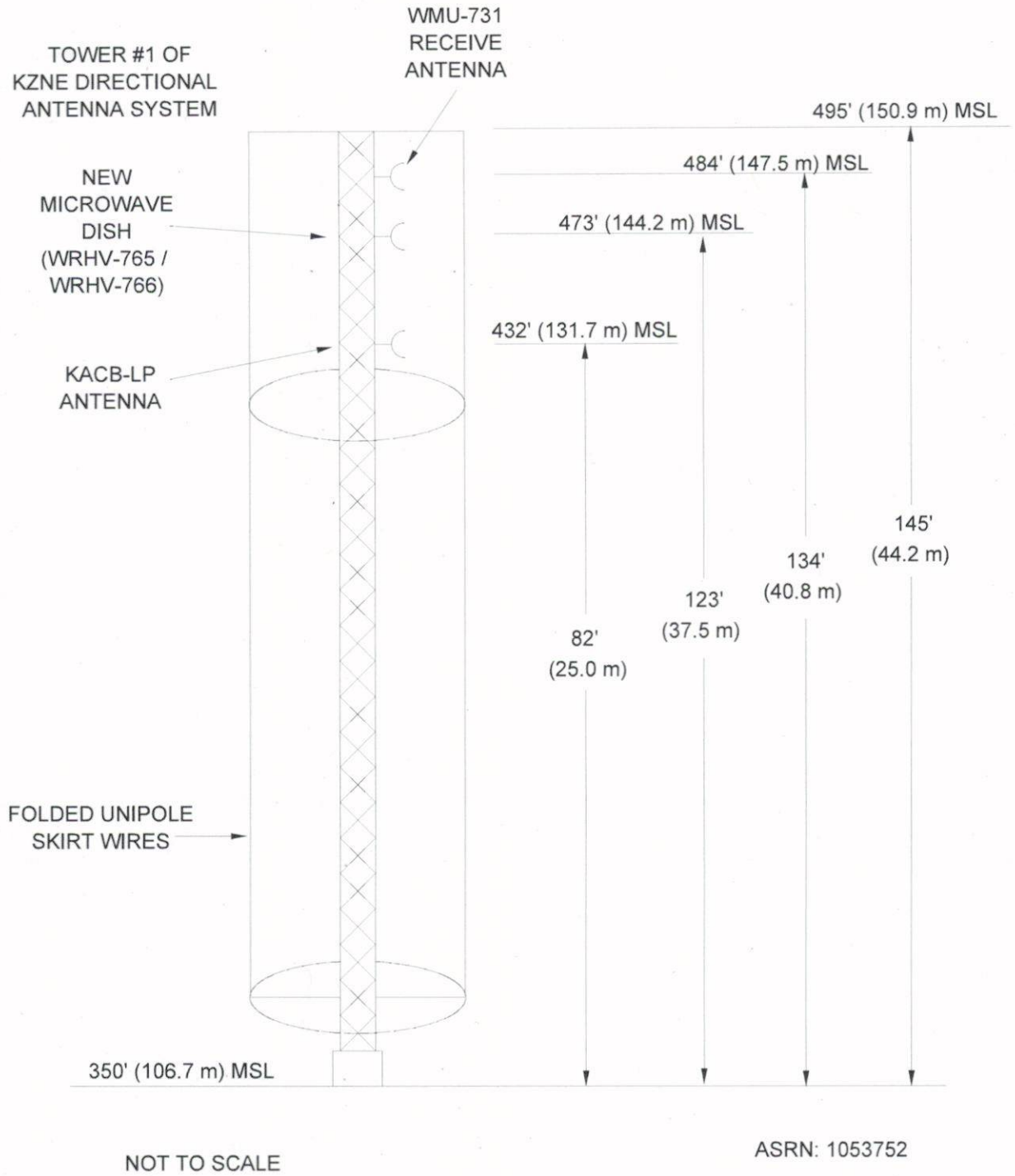


FIG. 1.0

KZNE TOWER #1
VERTICAL PLAN VIEW

BRYAN BROADCASTING LICENSE CORPORATION
COLLEGE STATION, TX

CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS., RD. BOX 807
BATH, OHIO 44210-0807
(330) 659-4440

2.0 FIELD STRENGTH MEASUREMENTS

Partial proof of performance measurements were conducted on each of the four monitor point radials (1°, 50°, 87°, 236°) that were measured in the 1978 full proof of performance for the KZNE nighttime directional antenna system. The measurements were conducted in the non-directional and nighttime directional modes of operation and consisted of eight points per radial. The Tower #2 base current was held at 3.33 amps to maintain an antenna input power of 1.0 kilowatts during the non-directional measurements while the nighttime directional measurements were conducted with the antenna system adjusted as described in this exhibit.

The nighttime directional measurements were analyzed versus the non-directional measurements using log ratio analysis techniques. The log ratio for each radial was then multiplied by the radial's 1978 non-directional inverse field to obtain the current inverse field for the radial.

Tables 2.0 through 2.3 present the measurements and log ratio analysis for each radial. Table 2.4 is a tabulation of the log ratio for each radial, the 1978 non-directional inverse field strength, and the nighttime directional inverse field strength measured in this proof. The standard pattern limit for each radial is also listed in this table, showing that the measured nighttime directional inverse field strength does not exceed the limit on any radial.

TABLE 2.0
KZNE NIGHTTIME DIRECTIONAL
FIELD STRENGTH MEASUREMENTS
1.0 DEGREE RADIAL
Bryan Broadcasting License Corporation
College Station, TX

(1) POINT	(2) DISTANCE (miles)	(3) PRESENT NON-DIRECTIONAL FIELD STRENGTH (mV/m)	(4) PRESENT NIGHTTIME FIELD STRENGTH (mV/m)	(5) LOG RATIO (4)/(3)
21-MP	1.430	106.000	17.500	-0.7823
26	2.030	84.000	14.000	-0.7782
28	2.175	84.000	14.000	-0.7782
35	3.060	22.500	4.300	-0.7187
39	3.450	48.000	9.000	-0.7270
41	3.600	43.000	8.600	-0.6990
43	4.280	40.000	7.800	-0.7100
46	4.550	28.000	6.000	-0.6690
			LOG AVERAGE:	0.1850

ALL NON-DIRECTIONAL POINTS WERE MEASURED ON SEPTEMBER 1, 2020 BETWEEN 1400 AND 1500 CDT BY CHRIS DUSTERHOFF USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

ALL NIGHTTIME POINTS WERE MEASURED ON AUGUST 27, 2020 BETWEEN 1500 AND 1630 CDT BY CHRIS DUSTERHOFF USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

THIS FIELD INTENSITY METER WAS LAST CALIBRATED JUNE 2, 2015.

TABLE 2.1
KZNE NIGHTTIME DIRECTIONAL
FIELD STRENGTH MEASUREMENTS
50.0 DEGREE RADIAL
Bryan Broadcasting License Corporation
College Station, TX

(1) POINT	(2) DISTANCE (miles)	(3) PRESENT NON-DIRECTIONAL FIELD STRENGTH (mV/m)	(4) PRESENT NIGHTTIME FIELD STRENGTH (mV/m)	(5) LOG RATIO (4)/(3)
12-MP	2.070	78.000	39.000	-0.3010
16	2.700	74.000	28.500	-0.4144
17	2.860	72.000	28.000	-0.4102
18	3.650	55.000	21.000	-0.4181
18A	4.510	37.000	14.500	-0.4068
18B	4.920	34.000	13.000	-0.4175
18C	4.970	34.000	12.500	-0.4346
19	6.000	23.500	8.800	-0.4266
			LOG AVERAGE:	0.3948

NON-DIRECTIONAL POINTS 12, 16, 17, 18, AND 19 WERE MEASURED ON AUGUST 28, 2020 BETWEEN 1300 AND 1430 CDT BY CHRIS DUSTERHOFF USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

NON-DIRECTIONAL POINTS 18A, 18B, AND 18C WERE MEASURED ON AUGUST 31, 2020 BETWEEN 1100 AND 1300 CDT BY STEPHEN CHASE JAMES USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

NIGHTTIME POINTS 12, 16, 17, 18, AND 19 WERE MEASURED ON AUGUST 26, 2020 BETWEEN 1300 AND 1430 CDT BY CHRIS DUSTERHOFF USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

NIGHTTIME POINTS 18A, 18B, AND 18C WERE MEASURED ON AUGUST 31, 2020 BETWEEN 1100 AND 1300 CDT BY STEPHEN CHASE JAMES USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

THIS FIELD INTENSITY METER WAS LAST CALIBRATED JUNE 2, 2015.

TABLE 2.2
KZNE NIGHTTIME DIRECTIONAL
FIELD STRENGTH MEASUREMENTS
87.0 DEGREE RADIAL
Bryan Broadcasting License Corporation
College Station, TX

(1) POINT	(2) DISTANCE (miles)	(3) PRESENT NON-DIRECTIONAL FIELD STRENGTH (mV/m)	(4) PRESENT NIGHTTIME FIELD STRENGTH (mV/m)	(5) LOG RATIO (4)/(3)
27	2.590	66.000	7.800	-0.9274
28	2.680	64.000	1.800	-1.5509
29	2.750	56.000	3.400	-1.2167
30	3.190	47.000	9.000	-0.7179
31-MP	3.620	44.000	3.500	-1.0994
32	3.850	40.000	6.000	-0.8239
33	5.190	16.500	2.600	-0.8025
33A	5.500	17.000	4.100	-0.6177
			LOG AVERAGE:	0.1073

ALL NON-DIRECTIONAL POINTS WERE MEASURED ON AUGUST 28, 2020 BETWEEN 1300 AND 1415 CDT BY CHRIS DUSTERHOFF USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

NIGHTTIME POINTS 27, 28, 29, 30, 31, AND 33 WERE MEASURED ON AUGUST 27, 2020 BETWEEN 1100 AND 1230 CDT BY CHRIS DUSTERHOFF USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

NIGHTTIME POINTS 32, AND 33A WERE MEASURED ON AUGUST 28, 2020 BETWEEN 1600 AND 1630 CDT BY CHRIS DUSTERHOFF USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

THIS FIELD INTENSITY METER WAS LAST CALIBRATED JUNE 2, 2015.

TABLE 2.3
KZNE NIGHTTIME DIRECTIONAL
FIELD STRENGTH MEASUREMENTS
236.0 DEGREE RADIAL
Bryan Broadcasting License Corporation
College Station, TX

(1) POINT	(2) DISTANCE (miles)	(3) PRESENT NON-DIRECTIONAL FIELD STRENGTH (mV/m)	(4) PRESENT NIGHTTIME FIELD STRENGTH (mV/m)	(5) LOG RATIO (4)/(3)
19-MP	2.190	98.000	64.000	-0.1850
21	2.580	54.000	33.000	-0.2139
22	3.720	31.000	18.000	-0.2361
25	4.220	37.000	24.000	-0.1880
29	6.920	12.500	6.300	-0.2976
30	7.680	9.600	5.400	-0.2499
31	7.960	6.400	3.400	-0.2747
32	8.600	11.000	5.400	-0.3090
			LOG AVERAGE:	0.5698

ALL NON-DIRECTIONAL POINTS WERE MEASURED ON SEPTEMBER 1, 2020 BETWEEN 1100 AND 1230 CDT BY CHRIS DUSTERHOFF USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

ALL NIGHTTIME POINTS WERE MEASURED ON AUGUST 27, 2020 BETWEEN 1630 AND 1800 CDT BY CHRIS DUSTERHOFF USING POTOMAC INSTRUMENTS FIM-41, S/N 2285.

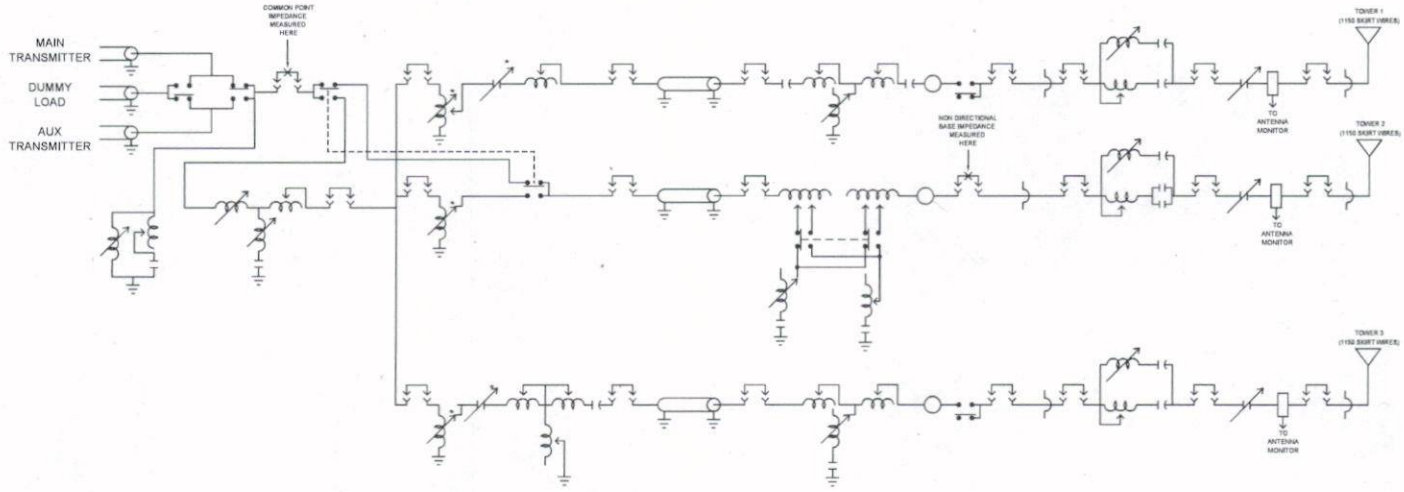
THIS FIELD INTENSITY METER WAS LAST CALIBRATED JUNE 2, 2015.

TABLE 2.4
TABULATION OF MEASURED
KZNE NIGHTTIME DIRECTIONAL
INVERSE FIELD STRENGTHS
Bryan Broadcasting License Corporation
College Station, TX

RADIAL (Degrees)	1978 NON-DIRECTIONAL INVERSE FIELD (mV/m) (mile)	(km)	LOG AVERAGE	PRESENT NIGHTTIME INVERSE FIELD (mV/m) (mile)	(km)	RADIATION LIMIT (mV/m) (mile)	(km)
1.0	200.0	321.9	0.1850	37.0	59.6	42.7	68.7
50.0	196.0	315.4	0.3948	77.4	124.5	83.2	133.9
87.0	188.0	302.6	0.1073	20.2	32.5	21.0	33.8
236.0	199.0	320.3	0.5698	113.4	182.5	133.1	214.2

3.0 IMPEDANCE MEASUREMENTS

Impedance measurements were conducted on the KZNE non-directional daytime tower (Tower #2) and the nighttime directional common point. These measurement were conducted on September 22, 2020, by Lance Parr using a Delta Electronics OIB-3 impedance bridge, S/N 1293, and are listed on the attached FCC Form 302, Section III. Figure 3.0 presents a diagram of the KZNE feeder system showing the points at which these impedance measurements were conducted.



CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807
BATH, OHIO 44210-0807
(330) 659-4440

FIG. 3.0
KZNE FEEDER SYSTEM

BRYAN BROADCASTING LICENSE CORPORATION
COLLEGE STATION, TX