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November 13, 2020

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Federal Communications Commission
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Attn: Media Bureau

Re: FCC Form 302-AM
Application for Direct Measurement of Power
WUZZ (AM), New Castle, PA
Facility ID 24997
FM Radio Licenses, LLC

Dear Secretary:

Enclosed are four copies of an FCC Form 302-AM application hereby filed by the Licensee to request direct measurement of power for AM station WUZZ, New Castle, Pennsylvania. No fee is enclosed as per Section 73.51 of the Commission's Rules.

Please stamp one of the FCC Form 302-AM forms and return it in the enclosed self-addressed, stamped envelope.

Should you have any questions concerning the enclosed, please contact the below undersigned directly at 412-221-1629, xt 106 or ldeppen@aol.com.

Respectfully submitted,

Lynn A. Deppen,
Member, FM Licenses, LLC
President, Forever Media, Inc.

Cc: WUZZ Public File

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)

FM Radio Licenses, LLC

MAILING ADDRESS (Line 1) (Maximum 35 characters)

One Forever Drive

MAILING ADDRESS (Line 2) (Maximum 35 characters)

CITY	STATE OR COUNTRY (if foreign address)	ZIP CODE
Hollidaysburg	PA	16648

TELEPHONE NUMBER (include area code)	CALL LETTERS	OTHER FCC IDENTIFIER (If applicable)
814-941-9800	WUZZ	Facility ID 24997

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:

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.	$ 0.00	

SECTION II - APPLICANT INFORMATION		
1. NAME OF APPLICANT FM Radio Licenses, LLC		
MAILING ADDRESS One Forever Drive		
CITY Hollidaysburg	STATE PA	ZIP CODE 16648

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
WUZZ	New Castle, PA	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. n/a

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	Signature	
Lynn A. Deppen		
Title	Date	Telephone Number
Member	11/13/2020	814-941-9800

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.

Consulting Engineers
CTJC
CARL T. JONES CORPORATION

ENGINEERING EXHIBIT
IN SUPPORT OF AN APPLICATION
FOR DIRECT MEASUREMENT OF POWER
STATION WUZZ – NEW CASTLE, PENNSYLVANIA
1280 kHz – 4.9 kW-D, 1 kW-N, U, DA-N
FACILITY ID: 24997

Applicant: FM Radio Licenses, LLC

November, 2020

7901 Yarnwood Court
Springfield, VA 22153-2899

tel: (703) 569-7704
fax: (703) 569-6417

email: info@ctjc.com
www.ctjc.com

TABLE OF CONTENTS

SECTION III OF FCC FORM 302-AM

ENGINEERING STATEMENT OF JAMES D. SADLER

FIGURE

SECTION III - LICENSE APPLICATION ENGINEERING DATA

Name of Applicant
FM Radio Licenses, LLC

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
WUZZ	N/A	1280	Unlimited	1.0	4.9

2. Station location

State	City or Town
Pennsylvania	New Castle

3. Transmitter location

State	County	City or Town	Street address (or other identification)
PA	Lawrence	New Castle	219 Savannah Gardner Rd

4. Main studio location

State	County	City or Town	Street address (or other identification)
PA	Lawrence	New Castle	219 Savannah Gardner Rd

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

State	County	City or Town	Street address (or other identification)

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. On File

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
4.65	7.38

Measured antenna or common point resistance (in ohms) at operating frequency		Measured antenna or common point reactance (in ohms) at operating frequency	
Night	Day	Night	Day
50	90	-j 2	+j 62.7

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 (E)	0.0		1.0			
2(W)	+7.0		0.85			

Manufacturer and type of antenna monitor: Potomac Instruments AM-19 (204)

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	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.
Square tapered, self-supporting	65.2	66.4	67.7	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
40 ° 57 ' 14 "	80 ° 19 ' 05 "

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. Eng Stmt

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

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.

Eng Stmt

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)
James D. Sadler	
Address (include ZIP Code)	Date
Carl T. Jones Corporation 7901 Yarnwood Ct Springfield, VA 22153	November 12, 2020
	Telephone No. (Include Area Code) (703) 569-7704

☐ Technical Director

☐ Registered Professional Engineer

☐ Chief Operator

☑ Technical Consultant

☐ Other (specify)

Consulting Engineers
CTJC
CARL T. JONES CORPORATION

STATEMENT OF JAMES D. SADLER
IN SUPPORT OF AN APPLICATION
FOR DIRECT MEASUREMENT OF POWER
STATION WUZZ – NEW CASTLE, PENNSYLVANIA
1280 kHz – 4.9 kW-D, 1 kW-N, U, DA-N
FACILITY ID: 24997

Applicant: FM Radio Licenses, LLC

I am a Technical Consultant, an employee in the firm of Carl T. Jones Corporation with offices located in Springfield, VA. My education and experience are a matter of record with the Federal Communications Commission.

Introduction

This office has been authorized by FM Radio Licenses, LLC, licensee of Station WUZZ, to prepare this statement, Section III of FCC Form 302-AM, and the associated figures in support of an Application for Direct Measurement of Power. Radio Station WUZZ, New Castle, Pennsylvania, is licensed to operate on a frequency of 1280 kHz, on an unlimited time basis, with a daytime power of 4.9 kW and a nighttime power of 1 kW. The station utilizes a non-directional antenna during daytime hours and a two tower directional antenna during nighttime hours (DA-N).

FM Translator Station W248DJ (FCC File No. BNPFT-20181022ACG) and FM Translator Station W250CW (FCC File No. BMPFT-20181022ACI) both hold

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Springfield, VA 22153-2899
tel: (703) 569-7704
fax: (703) 569-6417
email: info@ctjc.com
www.ctjc.com

construction permits to mount a new FM transmitting antenna on tower number 1 of the WUZZ directional antenna array. A special operating condition was placed on both Construction Permits requiring the permittee to conduct a partial proof of performance as defined in Section 73.154 of the Commission's Rules both before and after construction to show that the AM Station has not been adversely affected.

A single shared antenna, transmission line, and FM isocoupler has been installed on the WUZZ tower. A combiner is used to operate the two stations into the horizontally polarized yagi antenna. Following the installation of the equipment, a partial proof of performance was performed on the WUZZ nighttime directional antenna pattern.

FIELD STRENGTH MEASUREMENTS

The nighttime antenna monitor parameters were set to the licensed values and the common point impedance matching network was set for Z = 50 +j 0 ohms. The transmitter was adjusted such that the common point current was 4.65 amperes.

Nighttime field strength measurements were performed along each of the four nighttime monitored radial paths contained in the 1941 Full Proof-of-Performance. A minimum of 8 field strength measurements were taken at accessible locations previously established in the 1941 Proof, including the authorized monitoring points, at distances generally between 3 kilometers and 15 kilometers from the transmitter site.

All measurements were made during the time period between two hours after local sunrise and two hours before local sunset.

After an exhaustive search of the FCC archived files it was determined by FCC staff that the original 1941 proof of performance could not be located. Therefore, the distances and field strengths for each of the measurement locations contained in this document were obtained from the March 1988 Partial Proof of Performance. The measured nighttime inverse distance field strengths were obtained from the Commission Staff.

Field strength measurements contained herein were made by Mr. Jeffrey Trunzo, Director of Engineering for Forever Media, parent company of the licensee; Mr. Michael Helm; Mr. Troy Barnhart and Mr. Dustin Getz under the direction of the undersigned. The last three individuals are staff engineers employed by the licensee. Each individual is experienced in or has been trained in performing field strength measurements on directional antenna systems. A total of two field strength meters were employed to make all of the measurements contained in this document. The performance of the field intensity meters was verified in the field by comparing measured field strength values. The measured values agreed within the manufacturer's stated accuracy. Pertinent information for each of the meters employed follows:

Manufacturer / Model	Serial No.	Calibration Date
Potomac Instruments / FIM-21	645	May, 2008
Potomac Instruments / FIM-41	2185	August, 2019

The 2020 measured field strengths and the corresponding data from the 1941 Proof for the nighttime directional antenna pattern are tabulated in Figure 2. For each measurement location, the 2020 field strength was compared to the field strength measured at the location in the 1941 Proof. An arithmetic and logarithmic ratio was calculated for each location and the average ratio calculated for each radial bearing. The antilogarithm of the averages were multiplied by the nighttime directional inverse distance fields contained in the 1941 Proof to yield the 2020 nighttime directional inverse distance field values.

A comparative summary of the 2020 nighttime measured field strength data and the modified standard pattern radiation for the four measured radials is contained herein as Figure 1. In no case does the 2020 inverse distance field strength exceed the modified standard pattern value.

Monitor Point Values

Analysis of the nighttime partial proof field strength measurements indicates that the field strength associated with the 93.5, 218.5, and 245 degree monitor points should be increased to the values shown in Figure 3. No change in the maximum field strength

value of the 298 degree nighttime monitor point is warranted. Data pertinent to the determination of the maximum field strength value at each nighttime monitor point location is contained in Figure 3.

Other Antennas Mounted on the Towers

In addition to the new FM Translator antenna and isocoupler located on tower number 1, there are two STL dish antennas located on the tower along with the associated isocouplers.

Non-Directional Tower Number 2

The base impedance of tower number 2 was measured by the undersigned using a Delta Electronics, Model OIB-3, operating impedance bridge and found to be Z= 90 +j 67.2 Ohms. The corresponding antenna base current for the antenna input power of 4,900 Watts is 7.38 amperes.

Summary

It is submitted that the nighttime directional pattern of Station WUZZ is in proper adjustment and compliant with the station's authorization. Further, it is requested that a superseding license be issued to reflect the changes in the nighttime monitoring point data referenced herein.

This engineering statement, FCC Form 302-AM, Section III, and the associated figures were prepared by me or under my direct supervision and the information therein is believed to be true and correct.

Dated: November 12, 2020

James D. Sadler

Figure 1

SUMMARY OF NIGHTTIME MEASURED FIELD STRENGTH DATA
STATION WUZZ - NEW CASTLE, PENNSYLVANIA
1280 kHz, 4.9 kW-D, 1 kW-N, DA-N

Monitored Radial (deg. T.)	1941 DA-N Inverse Distance Field Strength (mV/m at 1 km)	DA-N / DA-N Antilog of Average Ratio	DA-N Measured Inverse Distance Field Strength (mV/m at 1 km)	Nighttime Modified Standard Pattern Radiation (mV/m at 1 km)
93.5	81.27	0.3572	29.03	111.04
218.5	148.06	0.3227	47.78	205.24
245	79.66	0.7054	56.19	109.64
298	49.89	0.2828	14.1	57.9

TABULATION OF FIELD STRENGTH MEASUREMENT DATA
STATION WUZZ - NEW CASTLE, PENNSYLVANIA
1280 kHz, 4.9 kW-D, 1 kW-N, U, DA-N

93.5 Degrees True Radial

1941 Proof Point Number	Distance (miles)	Distance (kilometers)	1941 DA-N Measured Field Strength (mV/m)	1 kW, DA-NIGHT Date	Time (local)	Field Strength (mV/m)	Ratio (DA-N/DA-N)	Log Ratio (DA-N/DA-N)
3	0.79	1.27	59.0	11/9/2020	938	56	0.9492	-0.0227
4	1.34	2.16	32.2	11/9/2020	945	14	0.4348	-0.3617
5 MP	1.45	2.33	26.2	11/9/2020	948	13.6	0.5191	-0.2848
6	1.70	2.74	25.2	11/9/2020	953	8.6	0.3413	-0.4669
8	1.90	3.06	16.5	11/9/2020	957	5.6	0.3394	-0.4693
9	2.56	4.12	9.81	11/9/2020	1007	2.08	0.2120	-0.6736
10	3.40	5.47	4.60	11/9/2020	1015	1.11	0.2413	-0.6174
11	4.25	6.84	5.09	11/9/2020	1022	1.38	0.2711	-0.5668
12	4.62	7.44	3.73	11/9/2020	1029	1.36	0.3646	-0.4382
13	5.50	8.85	2.28	11/9/2020	1037	1.24	0.5439	-0.2645
14	5.95	9.58	2.47	11/9/2020	1041	0.71	0.2874	-0.5414
15	6.35	10.22	2.71	11/9/2020	1043	0.6	0.2214	-0.6548
16	7.00	11.27	1.84	11/9/2020	1047	0.61	0.3315	-0.4795
18	8.35	13.44	1.23	11/9/2020	1059	0.47	0.3821	-0.4178
						Average Ratio	0.3885	-0.4471
						Antilog of Average		0.3572

TABULATION OF FIELD STRENGTH MEASUREMENT DATA
STATION WUZZ - NEW CASTLE, PENNSYLVANIA
1280 kHz, 4.9 kW-D, 1 kW-N, U, DA-N

218.5 Degrees True Radial

1941 Proof Point Number	Distance (miles)	Distance (kilometers)	1941 DA-N Measured Field Strength (mV/m)	1 kW, DA-NIGHT Date	Time (local)	Field Strength (mV/m)	Ratio (DA-N/DA-N)	Log Ratio (DA-N/DA-N)
10	9.90	15.93	0.938	11/9/2020	1319	0.26	0.2772	-0.5572
11	9.33	15.02	1.17	11/9/2020	1327	0.37	0.3162	-0.5000
12	8.82	14.19	1.46	11/9/2020	1332	0.26	0.1781	-0.7494
13	7.94	12.78	2.30	11/9/2020	1342	0.6	0.2609	-0.5836
14	7.38	11.88	2.00	11/9/2020	1347	0.64	0.3200	-0.4949
15	6.03	9.70	3.71	11/9/2020	1400	1.05	0.2830	-0.5482
16	5.54	8.92	4.45	11/9/2020	1408	1.05	0.2360	-0.6272
17	4.73	7.61	5.50	11/9/2020	1413	1.1	0.2000	-0.6990
18	4.08	6.57	6.83	11/9/2020	1420	1.9	0.2782	-0.5557
19	3.19	5.13	7.80	11/9/2020	1435	2.8	0.3590	-0.4449
20	3.48	5.60	6.83	11/9/2020	1442	2.7	0.3953	-0.4031
22	1.89	3.04	22.4	11/9/2020	1456	7	0.3125	-0.5051
23 MP	1.50	2.41	27.4	11/9/2020	1455	21	0.7664	-0.1155
24	0.87	1.40	95.7	11/9/2020	1444	43	0.4493	-0.3474
25	0.66	1.06	124.0	11/9/2020	1439	72	0.5806	-0.2361
						Average Ratio	0.3475	-0.4911
						Antilog of Average		0.3227

TABULATION OF FIELD STRENGTH MEASUREMENT DATA
STATION WUZZ - NEW CASTLE, PENNSYLVANIA
1280 kHz, 4.9 kW-D, 1 kW-N, U, DA-N

245 Degrees True Radial

1941 Proof Point Number	Distance (miles)	Distance (kilometers)	1941 DA-N Measured Field Strength (mV/m)	1 kW, DA-NIGHT Date	Time (local)	Field Strength (mV/m)	Ratio (DA-N/DA-N)	Log Ratio (DA-N/DA-N)
4 MP	1.07	1.72	43.0	11/9/2020	1003	29	0.6744	-0.1711
6	1.38	2.22	17.6	11/9/2020	1020	16.9	0.9602	-0.0176
7	1.80	2.90	16.4	11/9/2020	1030	16.2	0.9878	-0.0053
8	2.60	4.18	8.0	11/9/2020	1037	7	0.8750	-0.0580
9	2.85	4.59	5.25	11/9/2020	1043	6.4	1.2190	0.0860
10	3.83	6.16	4.56	11/9/2020	1052	3.8	0.8333	-0.0792
11	4.57	7.35	3.88	11/9/2020	1105	2.50	0.6443	-0.1909
12	4.95	7.97	2.65	11/9/2020	1116	1.1	0.4151	-0.3819
13	7.05	11.35	1.64	11/9/2020	1126	0.7	0.4268	-0.3697
14	7.60	12.23	2.15	11/9/2020	1130	1.11	0.5163	-0.2871
15	8.58	13.81	1.15	11/9/2020	1142	0.9	0.7826	-0.1065
16	9.20	14.81	1.06	11/9/2020	1226	0.95	0.8962	-0.0476
17	9.48	15.26	0.914	11/9/2020	1252	0.57	0.6236	-0.2051
18	10.10	16.25	1.01	11/9/2020	1255	0.52	0.5149	-0.2883
						Average Ratio	0.7407	-0.1516
						Antilog of Average		0.7054

TABULATION OF FIELD STRENGTH MEASUREMENT DATA
STATION WUZZ - NEW CASTLE, PENNSYLVANIA
1280 kHz, 4.9 kW-D, 1 kW-N, U, DA-N

298 Degrees True Radial

1941 Proof Point Number	Distance (miles)	Distance (kilometers)	1941 DA-N Measured Field Strength (mV/m)	1 kW, DA-NIGHT Date	Time (local)	Field Strength (mV/m)	Ratio (DA-N/DA-N)	Log Ratio (DA-N/DA-N)
4 MP	1.05	1.69	17.9	11/9/2020	1121	5.5	0.3073	-0.5125
5	1.34	2.16	11.8	11/9/2020	1155	8.8	0.7458	-0.1274
6	2.10	3.38	10.7	11/9/2020	1209	10.3	0.9626	-0.0165
7	2.70	4.35	4.29	11/9/2020	1215	2.7	0.6294	-0.2011
8	3.20	5.15	6.55	11/9/2020	1224	1.45	0.2214	-0.6549
9	5.15	8.29	2.57	11/9/2020	1236	0.255	0.0992	-1.0034
10	4.87	7.84	2.26	11/9/2020	1241	0.78	0.3451	-0.4620
11	5.60	9.01	1.51	11/9/2020	1245	0.31	0.2053	-0.6876
13	7.10	11.43	1.21	11/9/2020	1255	0.22	0.1818	-0.7404
14	7.98	12.84	0.965	11/9/2020	1303	0.122	0.1264	-0.8982
15	8.71	14.02	1.67	11/9/2020	1309	0.2	0.1198	-0.9217
16	9.50	15.29	0.463	11/9/2020	1321	0.185	0.3996	-0.3984
17	10.60	17.06	0.481	11/9/2020	1326	0.15	0.3119	-0.5061
						Average Ratio	0.3581	-0.5485
						Antilog of Average		0.2828

SUMMARY OF DATA PERTINENT TO NIGHTTIME MONITORING POINT MAXIMA
STATION WUZZ – NEW CASTLE, PENNSYLVANIA
1280 kHz – 4.9 kW-D, 1 kW-N, U, DA-N

Radial (deg.T)	Point Number	Distance[1] (kilometers)	Measured Field Strength (mV/m)	Measured IDF (mV/m)*	Authorized Standard Pattern Field (mV/m)*	Suggested Maximum Field Strength (mV/m)
93.5	5	2.22	2.22	29.03	111.04	27.2
218.5	23	2.45	3.9	47.78	205.24	42.0
245	4	1.72	3.6	56.19	109.64	56.6
298	4	1.77	5.5	14.10	57.9	18.5**

*mV/m at one kilometer
**Presently licensed value

[1] Distance referenced on the WUZZ License Authorization.

Figure 3