

7136 S Yale Ave Suite 501 Tulsa, OK 74133 o 918.664.4581 f 918.664.3066 www.iHeartMedia.com www.iHeartRadio.com #iheartradio

September 6, 2022

VIA EMAIL

Ms. Marlene H. Dortch, Secretary Federal Communications Commission 45 L Street NE Washington, DC 20554

## RE: IHM LICENSES, LLC (FRN No. 0014042816) Application for New License on FCC Form 302-AM WOR (AM), 710 kHz, New York, NY; Facility ID No. 7710

Dear Ms. Dortch:

On behalf of IHM LICENSES, LLC, the licensee of the above-referenced station, enclosed is copy of an application for New License submitted on FCC Form 302-AM.

Also enclosed is Form 159, Remittance Advice, with credit card payment of the \$1505.00 filing fee.

Please contact the undersigned with any communications concerning this application.

Respectfully submitted, IHM LICENSES, LLC

By: J-y Ju

Troy Langham VP, Technical Regulatory Affairs

cc: Public Inspection File

READ INSTRUCTIONS CAREFULLY BEFORE PROCEEDING

# FEDERAL COMMUNICATIONS COMMISSION REMITTANCE ADVICE

Approved by OMB 3060-0589 Page No<u>1</u> of <u>1</u>

(1) LOCK BOX #			5	SPECIAL U	JSE ONLY
979089					
				FCC USE (	ONLY
		PAYER INFORMATI			
(2) PAYER NAME (if paying by credit card enter n	ame exactly as it appears on th	e card)	< <i>/</i>	JNT PAID (	U.S. Dollars and cents)
iHM Licenses, LLC			1,505.00		
(4) STREET ADDRESS LINE NO.1					
7136 S. Yale Avenue (5) STREET ADDRESS LINE NO. 2					
Suite 501					
(6) CITY <b>Tulsa</b>			(7) STATE <b>OK</b>	(8) ZIP (	CODE <b>74136</b>
(9) DAYTIME TELEPHONE NUMBER (include a	area code)	(10) COUNTRY	CODE (if not in U.S.	A.)	
9186644581		US			
	FCC REGISTRATIO	N NUMBER (FRN) RE	-		
(11) PAYER (FRN)		(12) FCC USE (	ONLY		
0014042816					
	E THAN ONE APPLICANT, LOW FOR EACH SERVICE				ATION SHEET
(13) APPLICANT NAME					
iHM Licenses, LLC					
(14) STREET ADDRESS LINE NO.1 7136 S. Yale Avenue					
(15) STREET ADDRESS LINE NO. 2					
Suite 501					
(16) CITY Tulsa			(17) STATE <b>OK</b>	(18) ZIP	CODE 74136
(19) DAYTIME TELEPHONE NUMBER (include	area code)	(20) COUNTRY	CODE (if not in U.S	A )	, 1200
9186644581		US		11.7	
	FCC REGISTRATIO	N NUMBER (FRN) RE	-		
(21) APPLICANT(FRN) 0014042816		(22) FCC USE	ONLY		
COMPLETE SECTION	C FOR EACH SERVICE, IF	MORE BOXES ARE N	NEEDED, USE CON	TINUATI	ON SHEET
(23A) CALL SIGN/OTHER ID	(24A) PAYMENT TYPE CO	DE	(25A) QU	JANTITY	
WOR	MMR		1		
(26A) FEE DUE FOR (PTC)	(27A) TOTAL FEE		FCC US	E ONLY	
700.00		700.00			
(28A) FCC CODE I 7710		(29A) FCC CODE 2 302PAPERAP	P		
-					
(23B) CALL SIGN/OTHER ID WOR	(24B) PAYMENT TYPE CO MOR	DE	(25B) QU 1	JANIII Y	
(26B) FEE DUE FOR (PTC)	(27B) TOTAL FEE		FCC US	SE ONLY	
805.00		805.00			
(28B)FCC CODE I		(29B) FCC CODE 2			
7710		302PAPERAP	P		
	SECTION	D – CERTIFICATION			
CERTIFICATION STATEMENT					
<ol> <li>i,, ce the best of my knowledge, information and belief.</li> </ol>	ertify under penalty of perjury the	hat the foregoing and sup	porting information i	is true and c	correct to
SIGNATURE			DATE		
SIGNATURE					
MAS	SECTION E - CREDIT ON STERCARD VISA				
ACCOUNT NUMBER			_ DISCOVER		
I hereby authorize the FCC to charge my credit card					
SIGNATURE	. ,		DATE		
	SEE PUBLIC BURDEN ON R		FCC FORM 1		FEBRUARY 2003(REVISED)

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 F	FEE INFORMATION			
1. PAYOR NAME (Last, First,	Middle Initial)			
iHM Licenses, LLC				
MAILING ADDRESS (Line 1)	(Maximum 35 characters)			
7136 S Yale Ave				
MAILING ADDRESS (Line 2) ( Suite 501	(Maximum 35 characters)			
CITY Tulsa		STATE OR COUNTRY (if fo	oreign address)	ZIP CODE 74136
TELEPHONE NUMBER (inclu 918-664-4581	de area code)	CALL LETTERS	OTHER FCC IDE 7710	ENTIFIER (If applicable)
2. A. Is a fee submitted with th	nis application?	•	•	✓ Yes No
B If No indicate reason for	fee exemption (see 47 C.F.R. Section	1		
F 1	· · ·	<b>r</b>		
Governmental Entity	Noncommercial edu	cational licensee	other (Please explain	n):
C. If Yes, provide the follow	ing information:			
Enter in Column (A) the corre	ct Fee Type Code for the service you	are applying for Fee Type C	odes may be found	in the "Mass Media Services
	) lists the Fee Multiple applicable for th			
(A)	(B)	(C)		
FEE TYPE	FEE MULTIPLE	FEE DUE FOR FE TYPE CODE IN COLUMN (A)	E	FOR FCC USE ONLY
M M R	0 0 0 1	\$ 700.00		
To be used only when you are	requesting concurrent actions which re	esult in a requirement to list mo	ore than one Fee Ty	pe Code.
(A)	(B)	(C)		
MOR	0 0 0 1	\$ 805.00		FOR FCC USE ONLY
ADD ALL AMOUNTS SHOWN		TOTAL AMOUNT REMITTED WITH TH APPLICATION		FOR FCC USE ONLY
AND ENTER THE TOTAL HE THIS AMOUNT SHOULD EQU		\$ 1505.00		
REMITTANCE.		L		

SECTION II - APPLICAN	T INFORMATION					
1. NAME OF APPLICANT iHM Licenses, LLC						
MAILING ADDRESS 7136 S Yale Ave, Suite 501						
CITY Tulsa			STATE OK		ZIP CODE 74136	
2. This application is for:	Commercial	ctional	Noncomn	nercial Ion-Directional	•	
Call letters	Community of License	Construc	tion Permit File No.	Modification of Construction	Expiration Date of Las	t
WOR	New York, NY			Permit File No(s).	Construction Permit	
<ol> <li>Is the station n accordance with 47 C.F</li> <li>If No, explain in an Exhi</li> </ol>		to auto	matic program	test authority in	✓ Yes N Exhibit No.	lo
-) -						
4. Have all the term construction permit bee	s, conditions, and oblig n fully met?	ations s	et forth in the	above described	Yes N	10
If No, state exceptions i	n an Exhibit.				Exhibit No. N/A	
the grant of the under	ges already reported, ha lying construction permi	t which v	would result in	any statement or	Yes N	lo
If Yes, explain in an Ex	d in the construction per hibit.	тарра	cation to be now	Incorrect?	Exhibit No. N/A	
6. Has the permittee filed its Ownership Report (FCC Form 323) or ownership						10
certification in accordan	ce with 47 C.F.R. Sectio	n 73.361	5(D)?		Does not app	oly
If No, explain in an Exhibit.						
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?						
involved, including an id (by dates and file num information has been	attach as an Exhibit a for dentification of the court obers), and the disposition earlier disclosed in co Section 1.65(c), the applie	or admin on of the nnection	istrative body ar e litigation. Wh with another a	nd the proceeding nere the requisite application or as	Exhibit No.	

was filed, and the date of filing; and (ii) the disposition of the previously reported matter.

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

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?

If Yes, provide particulars as an Exhibit.

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).

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 Troy G Langham	Troy Langha	Digitally signed by Troy Langham DN: cn=Troy Langham, o, ou, email=Troylangham@iheartmedia.com, c=US Date: 2022.09.06 15:49:31 -05'00'
Title	Date	Telephone Number
VP, Technical Regulatory Affairs	9/2/2022	918-664-4581

#### 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.

Yes	<ul> <li>Image: A set of the set of the</li></ul>	No

$\checkmark$	Yes		No
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## ENGINEERING EXHIBIT IN SUPPORT OF AN APPLICATION FOR DIRECT MEASUREMENT OF POWER STATION WOR – NEW YORK, NEW YORK 710 kHz – 50 kW, U, DA-1 FACILITY ID: 7710

Applicant: IHM Licenses, LLC

August, 2022

7901 Yarnwood Court Springfield, VA 22153-2899 tel: (703) 569-7704 fax: (703) 569-6417

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

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## SECTION III OF FCC FORM 302-AM

## ENGINEERING STATEMENT OF JAMES D. SADLER

## **FIGURE**

Summary of Nighttime Measured Field Strength Data	1
Tabulation of Nighttime Measured Field Strength Data	2
Monitoring Point Descriptions and Photographs	3
Summary of Data Pertinent to Monitoring Point Maxima	4



SECTION III - L Name of Applica		LICATION ENGI	NEERING DATA					
IHM Licer		6 1						
PURPOSE OF A	UTHORIZATIC	N APPLIED FOR	: (check one)					
Station License   Direct Measurement of Power								
1. Facilities auth				1		- ·		
Call Sign	File No. of Co (if applicable)	nstruction Permit	Frequency (kHz)	Hours of Oper		the second se	kilowatts	
WOR	N/A		710	Unlimited		Night 50	Day 50	
2. Station location	on							
State				City or Town				
New York	<			New Yor	rk			
3. Transmitter lo	cation			1				
State	County			City or Town		Street address (or other identific	ation)	
NJ	Bergen			Rutherfo	ord	1.3 km S of Rt		
4. Main studio lo	cation							
State	State County			City or Town		Street address (or other identification)		
NY	NY New York		New Yor	k	32 Avenue of Americas			
5. Remote contr	ol point location	n (specify only if a	uthorized direction	nal antenna)				
State	County			City or Town		Street address (or other identific	ation)	
NY	NY New York		New York	(	32 Avenue of Americas			
6. Has type-app	roved stereo ge	enerating equipme	nt been installed?			L Y	′es 🖌 No	
7. Does the sam	pling system m	eet the requireme	nts of 47 C.F.R. S	Section 73.68?		✓ Y	es No	
						r		
							Not Applicable	
Attach as an E	xhibit a detailed	d description of the	sampling system	n as installed.			ibit No.	
						Eng S	tmt	
8. Operating cor	nstants:							
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         32.45       32.45								
		point resistance (ir	n ohms) at			point reactance	(in ohms) at	
operating frequencyoperating frequencyNightDayNightDay								
50		<sup>50</sup> 50		+j0		-j0		
Antenna indicatio	ons for direction	al operation		<b>/</b>				
		Antenna Phase reading			onitor sample	Antenna b	ase currents	
Towe	ers	Night	Dav	Night	t ratio(s) Dav	Night	Dav	

	Night	Day	Night	Day	Night	Day
1(NE) ASR 1237848	0.0	0.0	1.000	1.000		
2(S) ASR 1237849	50.4	50.4	0.815	0.815		
3(NW) ASR 1237850	159.9	159.9	1.044	1.044		
Manufacturer and type of antenr	a monitor:					
vanuacturer and type of anteni	Pc	otomac Instrume	ents, Model 1901	-3		

#### **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-	Overall height in meters of radiator above base insulator, or above base, if groupded	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.
section, guyed, tower	grounded. 200.6	202.9	203.8	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 40	0	47	Ĩ	50	n	West Longitude 74	0	05	3	24	н
--	-------------------	---	----	---	----	---	-------------------	---	----	---	----	---

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

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.

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		
	 	*****
L	 	

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

N/A	

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.  $\Lambda$ 

Name (Please Print or Type) James D. Sadler	Signature (chack appropriate box below)
Address (include ZIP Code) Carl T. Jones Corporation	Date Date August 22, 2022
7901 Yarnwood Court	Telephone No. (Include Area Code)
Springfield, VA 22153	(703) 569-7704

-			

**Technical Director** 

**Registered Professional Engineer** 

Chief Operator

**Technical Consultant** 

Other (specify)

FCC 302-AM (Page 5) August 1995



## STATEMENT OF JAMES D. SADLER IN SUPPORT OF AN APPLICATION FOR DIRECT MEASUREMENT OF POWER STATION WOR – NEW YORK, NEW YORK 710 kHz – 50 kW, U, DA-1 FACILITY ID: 7710

Applicant: IHM 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

Radio Station WOR, New York, New York, is licensed to operate on a frequency of 710 kHz, on an unlimited time basis, with a daytime and nighttime power of 50 kW. The station utilizes the same directional antenna pattern for its daytime and nighttime operations (DA-1).

Audacy License, LLC (herein "Audacy"), licensee of Station WXBK(FM), Newark, New Jersey, holds a construction permit (FCC File No. BPH-20190213ABC) to relocate its transmitter site to the WOR transmitter site and mount its antenna on WOR tower No. 3, one of the three towers employed in the WOR directional antenna array. The construction permit contains a condition regarding the mounting of the antenna on a

1

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## STATEMENT OF JAMES D. SADLER STATION WOR – NEW YORK, NEW YORK PAGE 2 OF 6

directional tower of AM Station WOR. In accordance with the condition on the construction permit, Audacy coordinated with IHM Licenses, LLC (herein "IHM"), licensee of Station WOR, to conduct a partial proof of performance before and after construction. Following the installation of the FM antenna, transmission line and associated isocoupler, the partial proof of performance measurements performed on the non-directional and directional patterns showed that the directional pattern had been adversely impacted by the Audacy FM equipment installation. Specifically, the inverse distance fields on two of the monitored radial bearings were increased to levels above the modified standard pattern value. Based on this finding, IHM authorized this office to: perform minor adjustment of the directional pattern; perform non-directional and directional pattern 302-AM and the associated figures in support of an Application for Direct Measurement of Power.

# Non-directional and Directional Partial Proof of Performance Field Strength Measurements

The post construction field strength measurements on the 176.5 and 289 degree monitored radials indicated that the inverse distance fields on these radials were above the modified standard pattern values. Minor adjustment of the directional pattern was performed, by the undersigned, to bring the radiated values into compliance and final non-directional and directional partial proof field strength measurements were performed on the three monitored radials.

## STATEMENT OF JAMES D. SADLER STATION WOR – NEW YORK, NEW YORK PAGE 3 OF 6

Prior to performing the non-directional partial proof field strength measurements, the non-directional antenna impedance of Tower #1 (northeast) was measured, by the undersigned, using a Delta Electronics, Model OIB-3, operating impedance bridge. The measurement was performed at the J-Plug located in the output branch of the tower #1 ATU network with Towers #2 and #3 detuned. This location corresponds to the input to the filtering and detuning equipment at the base of the tower. The measured non-directional base impedance of Tower #1 was determined to be,  $Z_{ND#1} = 200 -j 35.5$  Ohms. For the duration of the non-directional proof of performance measurements, the transmitter was adjusted for a non-directional base current of 7.91 Amperes corresponding to a non-directional antenna input power of approximately 12,500 Watts.

The ATU networks were adjusted for proper impedance transformation and the directional common point impedance was adjusted for  $Z_{cp} = 50.0 + j 0.0$  Ohms. The transmitter was adjusted for a common point current of 32.45 Amperes which was maintained throughout the performance of the directional proof of performance measurements.

Non-directional and directional partial proof field strength measurements were then performed on all three monitored radials. The non-directional measurements were all performed on August 2, and the directional measurements were performed on August 2 and 3, 2022. A minimum of eight field strength measurements were performed on each radial bearing at the same locations that were measured in the 2006 full proof-of-performance, including the monitor point locations, at distances generally between 3 kilometers and 15 kilometers from the transmitter site. All measurements

#### STATEMENT OF JAMES D. SADLER STATION WOR – NEW YORK, NEW YORK PAGE 4 OF 6

were made during the period between two hours following local sunrise and two hours prior to local sunset to minimize the potential for skywave interference.

All of the field strength measurements were performed by Mr. James McGivern and Mr. Joseph Stack, engineers employed by Audacy, and the undersigned. Each of these individuals is experienced in performing field strength measurements on AM directional patterns.

A total of three field intensity meters were used to make the measurements. Pertinent information on each field intensity meter is contained in the following Table.

Manufacturer/Model	<u>Serial Number</u>	Calibration Date
Potomac Instruments/FIM-41	989	March, 2012
Potomac Instruments/FIM-41	2244	May, 2005
Potomac Instruments/PI-4100	318	August, 2019

The performance of the field intensity meters was verified by comparing measured field strength values at several different full scale settings and verifying that the field strength values, as measured on each meter, agreed within the manufactures stated accuracy.

The measured 2022 non-directional and directional field strengths are tabulated in Figure 2. For each measurement location, the 2022 directional field strength was compared to the 2022 non-directional field strength. 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 measured non-

#### STATEMENT OF JAMES D. SADLER STATION WOR – NEW YORK, NEW YORK PAGE 5 OF 6

directional inverse distance fields contained in the 2006 Proof to yield the 2022 directional inverse distance field values.

A comparative summary of the 2022 measured field strength data and the modified standard pattern radiation for the three measured radials is contained herein as Figure 1. In no case does the 2022 inverse distance field exceed the authorized modified standard pattern value.

## Monitor Point Values and Locations

It was determined that the photographs and descriptions for the 176.5 degree and 289 degree monitoring points contained in the original proof of performance document describe the incorrect locations based on the distances and measured values. The photographs and descriptions have been updated herein to reflect the correct locations and are contained herein as Figure 3.

Analysis of the partial proof field strength measurements indicates that a change of the maximum field strength at the 176.5 degree radial and 344 degree radial monitoring points is warranted. No change in the maximum field strength values of the 289 degree radial monitor point is warranted. Data pertinent to the monitor points is contained in Figure 4.

## Antenna Sampling System

Following the minor adjustments to the directional antenna system, the existing 3/8-inch coaxial cable sampling lines were replaced with equal lengths of RFS, Type

## STATEMENT OF JAMES D. SADLER STATION WOR – NEW YORK, NEW YORK PAGE 6 OF 6

ICF12-50J, <sup>1</sup>/<sub>2</sub>-inch, phase stabilized, foam dielectric, coaxial cable and short equal lengths of Andrew, Type FSJ1-50A, <sup>1</sup>/<sub>4</sub>-inch superflexible, foam dielectric, coaxial cable between each Type ICF12-50J cable and the antenna monitor located in the transmitter building. The sample lines were verified to be equal in length by measuring the opencircuit series resonate frequency closest to the carrier frequency. Therefore the sampling system continues to meet the requirements for an approved sampling system under Section 73.68(a).

#### <u>Summary</u>

It is submitted that the directional pattern of Station WOR 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 operating parameters and monitoring point descriptions and maximum values.

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: August 22, 2022

James D. Sadler

## Figure 1

# SUMMARY OF MEASURED FIELD STRENGTH DATA STATION WOR - NEW YORK, NEW YORK 710 kHz, 50 kW, U, DA-1

			DA-1 Measured	
	2006 ND Inverse		Inverse	Modified
Monitored	Distance	DA-1 / ND	Distance	Standard Pattern
Radial	Field Strength	Antilog of	Field Strength	Radiation
<u>(deg. T.)</u>	<u>(mV/m at 1 km)</u>	Average Ratio	<u>(mV/m at 1 km)</u>	<u>(mV/m at 1 km)</u>
176.5	1300	1.4888	1935.4	2017.0
289	1280	0.5601	717	918
344	1300	0.3720	483.5	544.2
•••				•••

# TABULATION OF FIELD STRENGTH MEASUREMENT DATA STATION WOR - NEW YORK, NEW YORK 710 kHz, 50 kW, U, DA-1

#### 176.5 Degrees True Radial

			12.5	5 kW, ND	)			50 kW,	DA-1	
2006 Proof					Field			Field		Log
Point	Distance	Distance		Time	Strength		Time	Strength	Ratio	Ratio
<u>Number</u>	<u>(miles)</u>	<u>(kilometers)</u>	Date	<u>(local)</u>	<u>(mV/m)</u>	Date	<u>(local)</u>	<u>(mV/m)</u>	<u>(DA-1/ND)</u>	<u>(DA-1/ND)</u>
3	3.94	6.34	8/2/2022	837	300	8/2/2022	1721	340	1.1333	0.0544
4	4.62	7.44	8/2/2022	851	189	8/2/2022	1730	253	1.3386	0.1267
6	5.31	8.54	8/2/2022	909	103	8/2/2022	1745	156	1.5146	0.1803
7 MP	5.48	8.82	8/2/2022	914	127	8/2/2022	1749	255	2.0079	0.3027
8	5.76	9.27	8/2/2022	918	107	8/2/2022	1754	173	1.6168	0.2087
9	6.07	9.77	8/2/2022	925	100	8/3/2022	800	139	1.3900	0.1430
11	6.71	10.80	8/2/2022	936	107	8/3/2022	813	155	1.4486	0.1609
12	7.71	12.40	8/2/2022	945	46	8/3/2022	820	75	1.6304	0.2123
13	8.51	13.70	8/2/2022	954	76	8/3/2022	833	113	1.4868	0.1723
14	11.00	17.70	8/2/2022	1022	35	8/3/2022	913	44	1.2717	0.1044
15	11.37	18.30	8/2/2022	1026	54	8/3/2022	917	92	1.7196	0.2354
							Ave	rage Ratio	1.5053	0.1728
							Antilog o	of Average		1.4888

# TABULATION OF FIELD STRENGTH MEASUREMENT DATA STATION WOR - NEW YORK, NEW YORK 710 kHz, 50 kW, U, DA-1

#### 289 Degrees True Radial

			12.5	5 kW, ND	1			50 kW,	DA-1	
2006 Proof					Field			Field		Log
Point	Distance	Distance		Time	Strength		Time	Strength	Ratio	Ratio
<u>Number</u>	<u>(miles)</u>	<u>(kilometers)</u>	Date	<u>(local)</u>	<u>(mV/m)</u>	Date	<u>(local)</u>	<u>(mV/m)</u>	<u>(DA-1/ND)</u>	<u>(DA-1/ND)</u>
2	2.49	4.00	8/2/2022	842	249	8/3/2022	850	132	0.5301	-0.2756
3	2.88	4.64	8/2/2022	848	291	8/3/2022	857	140	0.4811	-0.3178
4 MP	3.06	4.92	8/2/2022	853	261	8/3/2022	903	135	0.5172	-0.2863
5	4.28	6.89	8/2/2022	903	162	8/3/2022	915	73	0.4506	-0.3462
7	5.61	9.03	8/2/2022	921	155	8/3/2022	933	92	0.5935	-0.2265
8	6.46	10.40	8/2/2022	930	115	8/3/2022	942	56	0.4870	-0.3125
10	7.77	12.50	8/2/2022	954	67	8/3/2022	1005	42	0.6269	-0.2028
11	9.44	15.20	8/2/2022	1010	57.0	8/2/2022	1646	33.5	0.5877	-0.2308
12	11.12	17.90	8/2/2022	1021	35	8/2/2022	1704	21.5	0.6143	-0.2116
14	13.24	21.30	8/2/2022	1036	24.5	8/2/2022	1722	13.9	0.5673	-0.2462
15	14.17	22.80	8/2/2022	1045	15	8/2/2022	1729	8.6	0.5733	-0.2416
16	16.78	27.00	8/2/2022	1054	13.0	8/2/2022	1742	9.8	0.7538	-0.1227
							Ave	rage Ratio	0.5652	-0.2517
							Antilog c	of Average		0.5601

# TABULATION OF FIELD STRENGTH MEASUREMENT DATA STATION WOR - NEW YORK, NEW YORK 710 kHz, 50 kW, U, DA-1

#### 344 Degrees True Radial

			12.5	5 kW, ND	1			50 kW,	DA-1	
2006 Proof					Field			Field		Log
Point	Distance	Distance		Time	Strength		Time	Strength	Ratio	Ratio
<u>Number</u>	<u>(miles)</u>	<u>(kilometers)</u>	Date	<u>(local)</u>	<u>(mV/m)</u>	Date	<u>(local)</u>	<u>(mV/m)</u>	<u>(DA-1/ND)</u>	<u>(DA-1/ND)</u>
3	3.01	4.85	8/2/2022	1247	138.0	8/3/2022	946	57.6	0.4174	-0.3795
4 MP	3.42	5.50	8/2/2022	1252	227.0	8/3/2022	940	138	0.6079	-0.2161
5	4.03	6.48	8/2/2022	1259	165.0	8/3/2022	934	90	0.5455	-0.2632
6	4.51	7.26	8/2/2022	1307	174.0	8/3/2022	926	65	0.3736	-0.4276
7	5.19	8.35	8/2/2022	1314	118.0	8/3/2022	918	72	0.6102	-0.2145
9	7.83	12.60	8/2/2022	1334	76.80	8/2/2022	1646	41	0.5339	-0.2726
10	8.20	13.20	8/2/2022	1341	83.70	8/2/2022	1658	30.5	0.3644	-0.4384
11	8.76	14.10	8/2/2022	1400	62.90	8/2/2022	1708	16.5	0.2623	-0.5812
12	9.26	14.90	8/2/2022	1408	64.90	8/2/2022	1715	15.1	0.2327	-0.6333
13	10.81	17.40	8/2/2022	1417	61.40	8/2/2022	1728	11.1	0.1808	-0.7428
14	12.68	20.40	8/2/2022	1426	51.70	8/2/2022	1737	13.5	0.2611	-0.5832
15	13.48	21.70	8/2/2022	1434	29.00	8/3/2022	829	11.5	0.3966	-0.4017
							Ave	rage Ratio	0.3989	-0.4295
							Antilog c	of Average		0.3720



# 176.5 Degrees True Radial

The measurement point is located on the east corner of the intersection of West Side Avenue and Clendenny Avenue atop DOT access plate, #532 West Side Avenue, Jersey City New Jersey.

Point Number:	7
Distance from transmitter site:	8.82 km
Daytime measured field strength:	255 mV/m

MONITORING POINT DESCRIPTIONS AND PHOTOGRAPHS STATION WOR – NEW YORK, NEW YORK 710 kHz – 50 kW, U, DA-1 AUGUST, 2022





# 289 Degrees True Radial

The measurement point is located on the corner of the sidewalk and the driveway for the materials storage yard, opposite #180 Washington Avenue, Nutley, New Jersey (Viola Bros building Materials).

Point Number:	4
Distance from transmitter site:	4.92 km
Daytime measured field strength:	135 mV/m

MONITORING POINT DESCRIPTIONS AND PHOTOGRAPHS STATION WOR – NEW YORK, NEW YORK 710 kHz – 50 kW, U, DA-1 AUGUST, 2022



#### SUMMARY OF DATA PERTINENT TO NIGHTTIME MONITORING POINT MAXIMA STATION WOR – NEW YORK, NEW YORK 710 kHz – 50 kW, U, DA-1

					Authorized	
					Modified	Suggested
			Measured	Measured	Standard	Maximum
Radial	Point	Distance	Field Strength	IDF	Pattern Field	Field Strength
<u>(deg.T)</u>	<u>Number</u>	<u>(kilometers)</u>	<u>(mV/m)</u>	<u>(mV/m)*</u>	<u>(mV/m)*</u>	<u>(mV/m)</u>
176.5	7	8.82	255	1935.4	2017	265.8
289	4	4.92	135	717	918	187.2**
344	4	5.50	138	483.5	544.2	155.3

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