Federal Communications Commission Washington, D. C. 20554

٤

1 5 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) Susan A Buckwalter, Administrator	copy notices and communications to: Miller and Neely Pc				
MAILING ADDRESS (Line 1) (Maximum 35 characters)	3750 University Blvd. West #203				
6801 Spring Creek Road - Suite 2D	Kensington, MD 20895				
MAILING ADDRESS (Line 2) (Maximum 35 characters)					
CITY Rockford	STATE OR COUNTRY (if foreign address)ZIP CODEIL61114				
TELEPHONE NUMBER (include area code)	CALL LETTERS WLUV OTHER FCC IDENTIFIER (If applicable)				
2. A. Is a fee submitted with this application?	FACID 2255 Yes XX No				
B. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.11	112).				
Governmental Entity Noncommercial educ	cational licensee XX Other (Please explain):				
C. If Yes, provide the following information:	nonfeeable direct measure	e			
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) (B)	(C)				
FEE TYPE CODE FEE MULTIPLE	FEE DUE FOR FEE TYPE CODE IN COLUMN (A) FOR FCC USE ONLY				
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) (B) (C) (C) (C) (C) (C) (C) (C) (C	(C) FOR FCC USE ONLY				
ADD ALL AMOUNTS SHOWN IN COLUMN C,	TOTAL AMOUNT REMITTED WITH THIS APPLICATION				
THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.	\$				

SECTION II - APPLICANT INFORMATION						
1. NAME OF APPLICANT FRN. 0029194090						
Susan S Buckwalter, Administrator						
MAILING ADDRESS 6801 Spring Creek Road - #2D						
CITY STATE ZIP CODE 61114						
2. This application is for:						
XX Commercial Noncommercial						
AM Directional AM Non-Directional						
Call letters Community of License Construction Reveals File No. 144-117 - 144-117						
WLUV FAC 2255 Loves Park, IL N/A Permit File No(s).	Construction Permit					
3 Is the station, now operating purpose to extra the						
with 47 C.F.R. Section 73.1620?	res No					
N/A Direct Measure	Exhibit No.					
if No, explain in an Exhibit.						
4. Have all the terms, conditions, and obligations set forth in the above described	Yes No					
N/A	Exhibit No.					
If No, state exceptions in an Exhibit.						
5. Apart from the changes already reported, has any cause or circumstance arisen since the grant of the underlying construction which would result in any statement or representation contained in the construction permit application to be now incorrect?						
If Yes, explain in an Exhibit. 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)?						
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?						
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.						

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 the application.

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 O O O	Signature
dison Durkingter	Kusan Hickwalter
Title /	Date / Telephone Number
A dministrator	6/9/2020 8/5-262-5262

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

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.

FCC 302-AM (Page 3) August 1995



Exhibit No.

SECTION III - LICENSE APPLICATION ENGINEERING DATA							
Name of Applicant							
Sue S Buc	kwalter, Administrator						
PURPOSE OF A	UTHORIZATION APPLIED FOR	: (check one)					
	Station License						
1. Facilities auth	1. Facilities authorized in construction permit						
Call Sign	File No. of Construction Permit	Frequency	Hours of Operation	kilowatts			
WLUV	(if applicable) Not Applicable	(kHz) 1520	Unlimited	Night 0.012	Day 0.500		
2. Station location	n						
State			City or Town				
Illinois			Loves Park				
3. Transmitter lo	cation						
State	County		City or Town	Street address	ation)		
IL	Winnebago		Rockford	2272 Elmwood I	Road		
4. Main studio lo	cation		<u> </u>	1			
State	County		City or Town	Street address (or other identification) 2272 Elmwood Road			
IL	Winnebago		Rockford				
5. Remote contro	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?							
7. Does the sam	7. Does the sampling system meet the requirements of 47 C.F.R. Section 73.68?						
Not Applicable							
Attach as an Exhibit a detailed description of the compling system as installed							
Does Not Apply							
8. Operating constants:							
RF common point or antenna current (in amperes) without RF common point or antenna current (in amperes) without					s) without		
0.40 Amperes 2.53 Amperes							
Measured antenr	na or common point resistance (ir	n ohms) at	Measured antenna or commo	n point reactance ((in ohms) at		
Night	lcy Dav		operating frequency	Dav			
61	61		-j1	-j1			

Antenna monitor sample current ratio(s)

Day

Night

Manufacturer and type of antenna monitor:

Antenna indications for directional operation

Towers

Not Applicable

Not Applicable

Day

Antenna monitor Phase reading(s) in degrees

Night

Day

Antenna base currents

Night

SECTION III - Page 2

permit?

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.		
See Text	89.3 meters	90.2 meters	91.1 meters	Exhibit No. Does Not Apply		
Excitation	Series	Shunt	ASRN 19/95	526		

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

North Latitude 42	0	19	' 48	п	West Longitude 089	0	04	и	58	11
If not fully described above, attach as an Exhibit further details and dimensions including any other Exhibit No.]				

See Text, E-1

Exhibit No.

Does Not Apply

antenna mounted on tower and associated isolation circuits.

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

Application for direct measurement of power. No construction permit

was issued for the facility.

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

Change in antenna resistance is due to repairs to the folded unipole

feed scheme utilized by the tower.

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) Jeremy D. Ruck	Signature (check appropriate box below)
Address (include ZIP Code) Jeremy Ruck & Associates, Inc.	Date June 9, 2020
P.O. Box 415 Canton, IL 61520	Telephone No. (Include Area Code) 309.647.1200 (email: jeremy@jeremyruck.com)
Technical Director	Registered Professional Engineer
Chief Operator	Technical Consultant
Other (specify)	

APPLICATION FOR DIRECT MEASUREMENT OF POWER

AM BROADCAST STATION WLUV – LOVES PARK, ILLINOIS 1520 KHZ / 0.5 KW ND-D / 0.01 KW ND-N FACILITY ID: 2255

SUSAN S. BUCKWALTER, ADMINISTRATOR

JUNE, 2020



© 2020 JEREMY RUCK & ASSOCIATES, INC.

JEREMY RUCK & ASSOCIATES, INC.

P.O. Box 415 221 S. 1st Avenue Canton, IL 61520 Tel: 309.647.1200 Fax: 855.332.9537 jeremyruck.com

1

6.9.2020

APPLICATION FOR DIRECT MEASUREMENT OF POWER

The following engineering statement and attached exhibits have been prepared for **Susan S. Buckwalter** ("Buckwalter"), licensee of AM broadcast station WLUV at Loves Park, Illinois, and are in support of her application for direct measurement of power.¹ This application is being filed following repairs to the folded unipole feed system and an associated minor change in the antenna impedance.

WLUV is authorized to operate on a frequency of 1520 kHz with a daytime nominal power of 0.500 kW, and a nighttime nominal power of 12 Watts. The licensed radiator electrical height is 163 degrees. The efficiency of the antenna is nominally 360.7 mV/m/kW at one kilometer, but has been restricted by the Commission to 317.04 mV/m/kW at one kilometer. As a result, the antenna input power has been adjusted to 0.386 kW daytime, and 0.0097 kW nighttime. These values round to 0.39 and 0.01 kW respectively. It should be noted that the nominal power values assigned to WLUV of 0.5 kW daytime and 0.012 kW nighttime, have been entered into section 1 on page 4 of the attached engineering section of FCC Form 302-AM. The antenna current values entered into section 8, "operating constants", reflect the restricted power values.

WLUV operates with a folded unipole feed system. As such, this is considered a shunt feed. Instability in the operation was observed, leading to the discovery of damage to the skirt. The skirt connections and components were cleaned, and repaired, as necessary. The attachment point to the tower was adjusted slightly in order to bring the resistance component of the

JEREMY RUCK & ASSOCIATES, INC.

P.O. Box 415 221 S. 1st Avenue Canton, IL 61520 Tel: 309.647.1200 Fax: 855.332.9537 jeremyruck.com

¹ The Facility ID for WLUV at Loves Park, Illinois is 2255

impedance back as close as possible to the licensed resistance of 60 ohms. As the measured data indicate, the antenna resistance is set at 61 ohms.

Attached to this engineering, following exhibit E-1, is a sweep of the antenna impedance. This sweep was performed at the carrier frequency and at 5 kHz increments either side of the carrier out to 30 kHz from carrier. The impedance was measured using an Array Solutions Power AIM-120 network analyzer. The reactance values listed both on the form page and on the graph do not require correction.

Preceding the sweep of the antenna impedance is Exhibit E-1. This exhibit is a vertical sketch of the tower, including the skirt, as well as the antenna for co-located FM translator station W287BY at Rockford, Illinois.² The tower is grounded, thus the transmission line for W287BY is directly bonded to the tower. No additional isolation circuits are required. The tower comprising the antenna system for WLUV has been registered with the Commission, and is assigned 1019526 as its Antenna Structure Registration Number.

Buckwalter will continue to coordinate with all other users of the site to ensure that workers and other personnel having access to the tower are not exposed to levels of radiofrequency radiation in excess of the applicable safety standards. Coordination activities will include, but are not necessarily limited to, a reduction in transmitter power or cessation of operation.

² The Facility ID for W287BY at Rockford, Illinois is 151837.

JEREMY RUCK & ASSOCIATES, INC.

6.9.2020

P.O. Box 415 221 S. 1st Avenue Canton, IL 61520

Tel: 309.647.1200 Fax: 855.332.9537 jeremyruck.com

3



WLUV Measured Antenna Impedance

