



Hunter Broadcast Group, Inc.

840 North Highway 25 By Pass
Greenville, SC 29617
(864) 834-3193 FAX (864) 834-3551

2/6/2020

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

Re: Radio Station WPCI
Facility I.D. No. 51487
FCC Form 302-AM - Application for License

Dear Ms. Dortch:

Transmitted herewith in triplicate, on FCC Form 302-AM, is a license application for Station WPCI, Greenville, South Carolina (Facility I.D. No. 51487).

In connection with this filing, there is a filing fee.

Application for License (Fee Code: MMR) \$725.00

Attached is a check in the amount of \$725.00 payable to the Federal Communications Commission.

Please date-stamp and return the enclosed additional copy of this application in the provided envelope. Should you have any questions, please do not hesitate to contact the undersigned.

Sincerely yours,

Randy Mathena
Owner, Station WPCI

Enclosures

WPCI 1490 am STEREO
"Definitive Rhythm & Blues"

Received & Inspected

FEB 14 2020

FCC Mailroom

RANDY MATHENA
840 N. HWY 25 BYPASS 864-303-6601
GREENVILLE, SC 29617

1212

67-737/532
4

DATE 2-6-20

CHECK ARMOR

PAY
TO THE
ORDER OF

FCC

\$ *725.00*

Seven hundred twenty five & 00/100

DOLLARS

Photo
Safe
Deposit
Details on back

Bank of
TRAVELERS REST

THE
Prestige
ACCOUNT

FOR

License Renewal Fee

Randy Mathena

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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)

Paper Cutters Inc.

MAILING ADDRESS (Line 1) (Maximum 35 characters)

840 North Highway 25 Bypass

MAILING ADDRESS (Line 2) (Maximum 35 characters)

CITY

Greenville

STATE OR COUNTRY (if foreign address)

South Carolina

ZIP CODE

29617

TELEPHONE NUMBER (include area code)

(864)834-3193

CALL LETTERS

WPCI

OTHER FCC IDENTIFIER (if applicable)

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 |
|-------------------------|---------------------|--|------------------|
| M M R | 0 0 0 1 | \$ 725.00 | |

To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

| (A) | (B) | (C) | FOR FCC USE ONLY |
|-----|---------|-----|------------------|
| | 0 0 0 1 | \$ | |

ADD ALL AMOUNTS SHOWN IN COLUMN C,
AND ENTER THE TOTAL HERE.
THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED
REMITTANCE.

| TOTAL AMOUNT REMITTED WITH THIS APPLICATION | FOR FCC USE ONLY |
|---|------------------|
| \$ | |

| | | |
|---|--------------------------------|--------------------------|
| SECTION II - APPLICANT INFORMATION | | |
| 1. NAME OF APPLICANT Paper Cutters Inc. | | |
| MAILING ADDRESS 840 North Highway 25 Bypass | | |
| CITY Greenville | STATE South Carolina | ZIP CODE 29617 |

2. This application is for:
- Commercial Noncommercial
- AM Directional AM Non-Directional

| | | | | |
|-----------------------------|---|---|--|--|
| Call letters WPCI | Community of License Greenville | Construction Permit File No. BP-20180807ACF | Modification of Construction Permit File No(s). | Expiration Date of Last Construction Permit 12/11/2021 |
|-----------------------------|---|---|--|--|

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

If No, explain in an Exhibit.

Does not apply

Exhibit No.

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

Yes No

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

Exhibit No.

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

Yes No

If Yes, provide particulars as an Exhibit.

Exhibit No.

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

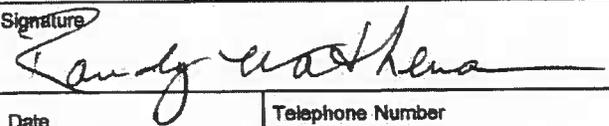
The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

CERTIFICATION

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

Yes No

2. I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

| | | |
|-----------------------|---|-----------------------------------|
| Name Randy Mathena | Signature  | |
| Title Owner | Date 2/04/2020 | Telephone Number (864)834-3193 |

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 (3080-0627), 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.



**ENGINEERING EXHIBIT
IN SUPPORT OF AN APPLICATION FOR
FOR STATION LICENSE
STATION WPCI - GREENVILLE, SOUTH CAROLINA
1490 kHz – 1 kW-D, 1 kW-N, U, ND
FACILITY ID: 51487**

Applicant: Paper Cutters Inc.

February, 2020



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SECTION III OF FCC FORM 302-AM

ENGINEERING STATEMENT OF JAMES D. SADLER

FIGURE

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| Diplex Filter and Coupling System Schematic Diagram..... | 1 |
| Measured Spurious and Harmonic Emissions | 2 |
| Diplex Agreement, Maintenance and Repair | 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-section, guyed, base insulated | Overall height in meters of radiator above base insulator, or above base, if grounded. 91.4 | Overall height in meters above ground (without obstruction lighting) 92.4 | Overall height in meters above ground (include obstruction lighting) 93.3 | If antenna is either top loaded or sectionalized, describe fully in an Exhibit. <div style="border: 1px solid black; padding: 2px; display: inline-block;">Exhibit No. N/A</div> |
|--|--|--|--|---|

Excitation Series Shunt

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

| | | | | | | | |
|----------------|------|------|------|----------------|------|------|------|
| North Latitude | 34 ° | 54 ' | 30 " | West Longitude | 82 ° | 20 ' | 41 " |
|----------------|------|------|------|----------------|------|------|------|

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

Exhibit No.
N/A

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

Exhibit No.
On File

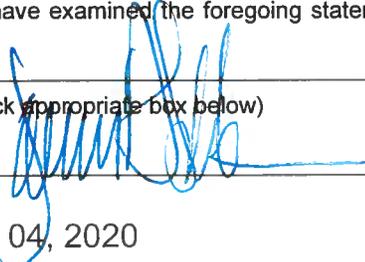
10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

None

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.

| | |
|---|---|
| Name (Please Print or Type) James D. Sadler | Signature (check appropriate box below)  |
| Address (include ZIP Code) Carl T. Jones Corporation 7901 Yarnwood Court Springfield, VA 22153 | Date February 04, 2020 |
| | Telephone No. (Include Area Code) (703) 569-7704 |

Technical Director

Registered Professional Engineer

Chief Operator

Technical Consultant

Other (specify)



**STATEMENT OF JAMES D. SADLER
IN SUPPORT OF AN APPLICATION
FOR STATION LICENSE
STATION WPCI - GREENVILLE, SOUTH CAROLINA
1490 kHz – 1 kW-D, 1 kW-N, U, ND
FACILITY ID: 51487**

Applicant: Paper Cutters Inc.

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.

General

This office has been authorized by Paper Cutters Inc., licensee of AM Broadcast Station WPCI, Greenville, South Carolina, to prepare this engineering statement, FCC Form 302-AM, Section III, and the associated figures in support of an Application for License to cover outstanding Construction Permit, BP-20180807ACF ("the Construction Permit"). The Construction Permit authorizes the relocation of the WPCI transmission facilities to the transmitter site of Station WPJF, Greenville, South Carolina.

Station WPCI proposes to operate non-directionally on a frequency of 1490 kHz with a daytime and nighttime power of 1 kW. Station WPJF is licensed to operate non-directionally on a frequency of 1260 kHz with a daytime power of 5 kW and a nighttime power of 0.15 kW.



Implementation of the WPCI Construction Permit included the installation of filter and impedance matching circuits at the base of the tower to isolate the two transmission paths in order to minimize interaction between the stations and to provide proper impedance matching for optimal system performance. A schematic diagram of the complete impedance matching and filtering system for the diplexed operation is contained in Figure 1.

Impedance and Current Measurements

The WPCI operating power was established at the output to the Antenna Tuning Unit ("ATU") in the following manner. After completion of the installation of the new diplexing and impedance matching equipment and the adjustment of the system for optimal performance, the WPCI ATU output impedance was measured by the undersigned using a Delta Electronics, Model OIB-3, operating impedance bridge. The measured ATU output impedance at the WPCI operating frequency of 1490 kHz was found to be $Z = 30.7 - j 13.3$ Ohms. The location of the impedance measurement is immediately adjacent to the removable thermocouple ammeter. Based on the measured ATU output resistance, the transmitter was adjusted for a current reading on the ATU output current meter of 5.71 Amperes, corresponding to the authorized power of 1 kW.

Compliance with FCC Radiofrequency Energy Guidelines

The WPCI/WPJF tower base is enclosed by a wooden slat fence with a locked gate. Access to the site is further restricted by an eight foot chain link fence. The gate to the tower fence is locked at all times except during times when maintenance is being performed by station personnel. Appropriate warning signs are posted on the tower access fence. The closest distance between the tower and the fence is 4.6 meters.

The electrical height of the tower at the WPCI frequency is 0.45 wavelengths; at the WPJF frequency the electrical tower height is 0.38 wavelengths. Figures 2, and 3 of Supplement A (Edition 97-01) to OET Bulletin 65 (Edition 97-01) provide conservative electric and magnetic field magnitudes as a function of distance from the tower for tower heights of 0.25 wavelengths, and 0.5 wavelengths, respectively. The electric and magnetic field magnitudes on these figures are based on an input power of 1 kilowatt. Using these figures, it is possible to predict the electric and magnetic equivalent power density that is present at the tower perimeter fence from each station. Because neither of the two tower heights is identical to the tower heights used in the three figures, it is necessary to interpolate the field magnitude using the two figures that are based on tower heights immediately above and below the actual tower height under study. Once the field magnitudes are determined through interpolation they must be multiplied by the square root of the power in kilowatts. For each station, the percentage of the general public electric and magnetic Maximum Permissible Exposure ("MPE") limit can then be calculated and the sum of these percentages can be compared to the MPE to determine compliance.

Using the procedure described above, the predicted electric field equivalent power density and percentage of the general public MPE from WPCI, and WPJF at the closest fence location are 0.67 mW/cm^2 (0.8% of general public MPE) and 1.95 mW/cm^2 (2.0% of general public MPE), respectively. The total electric field percentage of the general public MPE is therefore 2.8% at the fence location that is closest to the tower.

Similarly the predicted magnetic field equivalent power density and percentage of the general public MPE from WPCI, and WPJF at the closest fence location are 0.18 mW/cm^2 (0.2% of general public MPE), and 2.75 mW/cm^2 (4.6% of general public MPE), respectively. The total magnetic field percentage of the general public MPE is therefore 4.8% at the fence location that is closest to the tower.

Because the total electric and magnetic field equivalent power densities are less than the general public MPE at the closest fence distance to the tower, the facility is fully compliant with RF energy exposure guidelines with respect to the general public and contractors working outside of the fenced restricted access area surrounding the tower. Should access to the tower or to the equipment located within the restricted access area be required, there shall be a joint plan in place to ensure the safety of station personnel or contractors entering the restricted access area. The plan shall, at a minimum, include training to ensure awareness of the potential for RF exposure and how to limit that exposure as well as a procedure to reduce power or cease operation to ensure the safety of workers working around or on the tower.

In light of the above, the proposed facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

Construction Permit Special Conditions

The WPCI Construction Permit contains several special requirements with respect to collocation at the site, which must be satisfied before program tests are authorized. These special requirements are described in Special Condition 5 of the Construction Permit and are paraphrased here as follows: 5(a) sufficient data shall be submitted to show that adequate filters, traps, and other equipment has been installed and adjusted to prevent interaction, intermodulation, and/or generation of spurious radiation products which may be caused by common usage of the same antenna system; 5(b) there shall be filed with the license application copies of a firm agreement entered into by the two stations involved, clearly fixing the responsibility of each with regard to the installation and maintenance of such equipment; 5(c) field observations shall be made to determine whether spurious emissions exist and any objectionable problems resulting therefrom shall be eliminated; and 5(d) WPCI and WPJF shall each measure antenna or common point resistance and submit FCC Form 302 as application notifying the return to direct measurement of power.

To satisfy the requirements identified in special condition 5, multistage pass/reject type filters have been installed in each of the two transmission paths in order to isolate the transmission paths and minimize interaction between the two signals. The filter networks are shown in the schematic diagram of Figure 1. A firm agreement fixing the responsibility for the installation and maintenance of the diplexing filters and impedance matching circuitry has been developed and agreed to by each licensee and a copy of that agreement is contained herein as Figure 3.

Relative field strength observations and measurements were performed by the undersigned with WPCI operating at the Construction Permit authorized daytime power level and WPJF operating at its licensed authorized daytime power level. The measurements verified that all harmonic, intermodulation product, and spurious emissions from the common use of the same tower by the two stations are attenuated to a level that fully complies with the requirements of Section 73.44(b) of the FCC's Rules and Regulations. A tabulation of the measured harmonic, intermodulation product, and spurious emissions is contained in Figure 2. In no case does the measured emission level exceed the corresponding emission limit. In those cases where the reference transmitter generating the emission was indeterminate, attenuation levels were calculated for both reference signals and the highest level was included in the table of Figure 2.

Finally, after all installations, modifications, and adjustments were completed, impedance measurements were performed by the undersigned at the output to the WPCI and WPJF ATU networks. It is planned to file with the FCC, a Direct Measurement of Power Application for WPJF notifying the return to direct measurement of power at approximately the same time as the filing of this application.

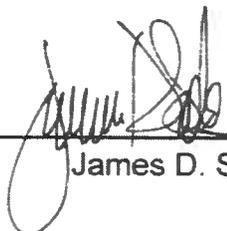
Based on the above discussion, the figures contained herein, and the agreement between parties contained elsewhere in this application, it is believed that with the filing of the instant License Application and the Direct Measurement of Power Application for WPJF, all of the requirements in special condition 5 have been satisfied.

Summary

It is submitted that the WPCI antenna system has been constructed in full compliance with the technical terms of Construction Permit BP-20180807ACF. Further, all of the Construction Permit Special Conditions are satisfied with the filing of this License Application and the near simultaneous filing of the WPJF Direct Measurement of Power Application.

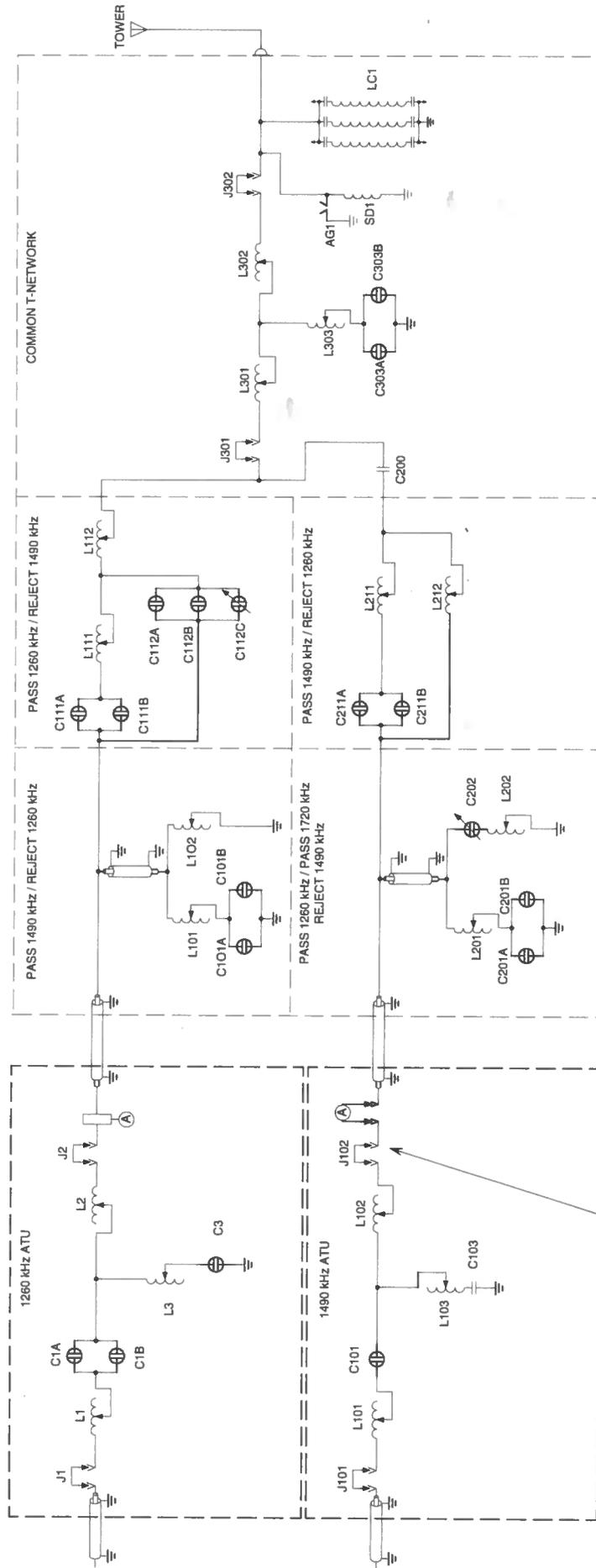
This engineering statement, FCC Form 302-AM, Section III, and the associated figures were prepared by the undersigned or under the undersigned's direct supervision and the information herein is believed to be true and correct.

Dated: February 4, 2020



James D. Sadler

Figure 1



WPCI Impedance Measurement Location

DIPLEX FILTER AND COUPLING SYSTEM SCHEMATIC DIAGRAM

STATION WPCI - GREENVILLE, SOUTH CAROLINA
1490 kHz - 1 kW, U, ND

STATION WPFJ - GREENVILLE, SOUTH CAROLINA
1260 kHz - 5 kW-D, 0.15 kW-N, U, ND

FEBRUARY, 2020



MEASURED SPURIOUS AND HARMONIC EMISSIONS
STATION WPCI - GREENVILLE, SOUTH CAROLINA
 1490 kHz - 1 kW, ND, U
 FEBRUARY, 2020

Measured Attenuation

| <u>Emission</u> | <u>Frequency</u> (kHz) | <u>Field</u> <u>Strength</u> (mV/m) | <u>Reference</u> <u>Carrier</u> | <u>Below</u> <u>Carrier</u> (dBc) | <u>FCC</u> <u>Limit</u> (dBc) |
|-----------------|---------------------------|---|------------------------------------|---|-------------------------------------|
| F1 | 1260 | 735 | ---- | ---- | ---- |
| F2 | 1490 | 293 | ---- | ---- | ---- |
| 2F1-F2 | 1030 | (Note 1) | F1 | ---- | -80 |
| 2F2-F1 | 1720 | 0.062 | F2 | -73.5 | -73 |
| 2F1 | 2520 | 0.023 | F1 | -90.1 | -80 |
| F1+F2 | 2750 | 0.025 | F2 | -81.4 | -73 |
| 2F2 | 2980 | 0.011 | F2 | -88.5 | -73 |
| 3F1 | 3780 | <.01 | F1 | <-97.3 | -80 |
| 2F1+F2 | 4010 | <.01 | F1 | <-97.3 | -80 |
| 2F2+F1 | 4240 | <.01 | F2 | <-89.3 | -73 |
| 3F2 | 4470 | <.01 | F2 | <-89.3 | -73 |

Note 1 - Signal from another station off axis, no audio from diplexed stations observed

Diplex Agreement, Maintenance and Repair

This agreement is entered into November 14, 2019 between IGLESIA VIDA Y ESPERANZA DE GREENVILLE, SOUTH CAROLINA, owners of radio station WPJF (AM) 1260 kHz, Greenville, SC, FCC ID No. 73297 ("WPJF") and PAPER CUTTERS, INC., owners of radio station WPCI (AM) 1490 kHz, Greenville, SC, FCC ID No. 51487, ("WPCI").

WPJF and WPCI diplex their broadcast radio signals into a common tower located at North Latitude 34-54-30.4 West Longitude 82-20-40.4, approximately 3/10's of a mile west of the intersection of Donkle and Rutherford Roads in Greenville, SC, registered with the FCC as Antenna Structure Registration 1045625.

WPCI will, at its own risk and expense, maintain and repair, including replacement if necessary (collectively referred to as "Maintenance") to a standard reasonably required by the FCC rules and regulations, good engineering practices, the provisions of this agreement, the facilities and any items or things placed on the property by WPCI pursuant to this agreement. All maintenance shall be performed in a manner suitable to WPJF so as not to conflict with the use of the property by WPJF. All maintenance shall be provided by qualified technicians authorized to enter the property.

Upon expiration or termination of this agreement, WPCI shall have and is hereby granted the right to, and upon termination of this agreement WPJF shall have the right to direct WPCI to, dismantle, disconnect and remove, at WPCI's sole expense, any and all equipment owned by WPCI which may be installed in or connected to the tower, the leased space, or WPJF's property; provided, however, that WPCI shall take no such action that will disrupt or otherwise affect the signal of WPJF; and provided

further that WPCI shall be responsible for all costs and expense necessary to restore the signal of WPJF to its strength and coverage prior to commencement of removal of WPCI's equipment. If upon termination of this agreement, WPCI shall not have commenced removal of WPCI's equipment within thirty (20) days from and after receipt of a direction from WPJF to do so, such equipment and property shall be considered abandoned. WPCI shall pay all expenses incurred by WPJF in effecting any removal of such equipment and all expenses incurred in restoring the signal WPJF to its strength and coverage prior to commencement of removal of WPCI's equipment. Payment shall be made within thirty (30) days of receipt of a detailed invoice therefor.

IN WITNESS WHEREOF, WPJF and WPCI have signed and sealed this agreement as of the day and year first above written.

WPJF

By: 

Name: Pedro B. Mateo

Title: General Manager

WPCI

By: 

Name: RANDY MATHews

Title: Owner/General Manager