

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)

IGLESIA EPISCOPAL PUERTORRIQUEÑA, INC.

MAILING ADDRESS (Line 1) (Maximum 35 characters)

PO BOX 902

MAILING ADDRESS (Line 2) (Maximum 35 characters)

CITY

SAINT JUST

STATE OR COUNTRY (if foreign address)

PUERTO RICO

ZIP CODE

00978

TELEPHONE NUMBER (include area code)

787-761-9800

CALL LETTERS

WLEO

OTHER FCC IDENTIFIER (If applicable)

52943

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: DIRECT MEASUREMENT

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
	0 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)	(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
\$	

<b>SECTION II - APPLICANT INFORMATION</b>		
1. NAME OF APPLICANT IGLESIA EPISCOPAL PUERTORRIQUEÑA, INC.		
MAILING ADDRESS P.O. BOX 902		
CITY SAINT JUST	STATE PR	ZIP CODE 00978

2. This application is for:

- Commercial
  Noncommercial  
 AM Directional
  AM Non-Directional

Call letters WLEO	Community of License PONCE PR	Construction Permit File No.	Modification of Construction Permit File No(s).	Expiration Date of Last Construction Permit
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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).

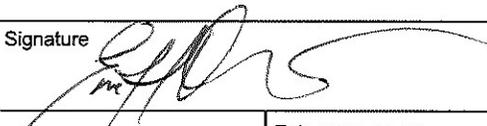
The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

**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 Eric J. Toro Ocasio	Signature 	
Title Operations Manager	Date 10/27/2021	Telephone Number 787-761-9800

**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.



**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 twr	Overall height in meters of radiator above base insulator, or above base, if grounded. <b>97.2</b>	Overall height in meters above ground (without obstruction lighting) <b>98.1</b>	Overall height in meters above ground (include obstruction lighting) <b>99.1</b>	If antenna is either top loaded or sectionalized, describe fully in an Exhibit.  Exhibit No. N/A
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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 <b>17</b> ° <b>58</b> ' <b>52</b> "	West Longitude <b>66</b> ° <b>36</b> ' <b>49</b> "
--	--

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.  
A

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

Exhibit No.

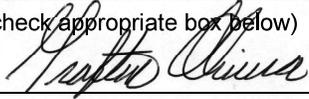
10. In what respect, if any, does the apparatus constructed differ from that described in the application for construction permit or in the permit?

None

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

In the WLEO tower, AM station WPRP and FM translator W238DH(FX) were recently installed.

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) <b>GRAFTON OLIVERA, P.E.</b>	Signature (check appropriate box below) 
Address (include ZIP Code) <b>5119 60TH DRIVE E</b> <b>BRADENTON, FL 34203</b>	Date <b>02/13/2022</b>
	Telephone No. (Include Area Code) <b>941-323-0381</b>

Technical Director

Registered Professional Engineer

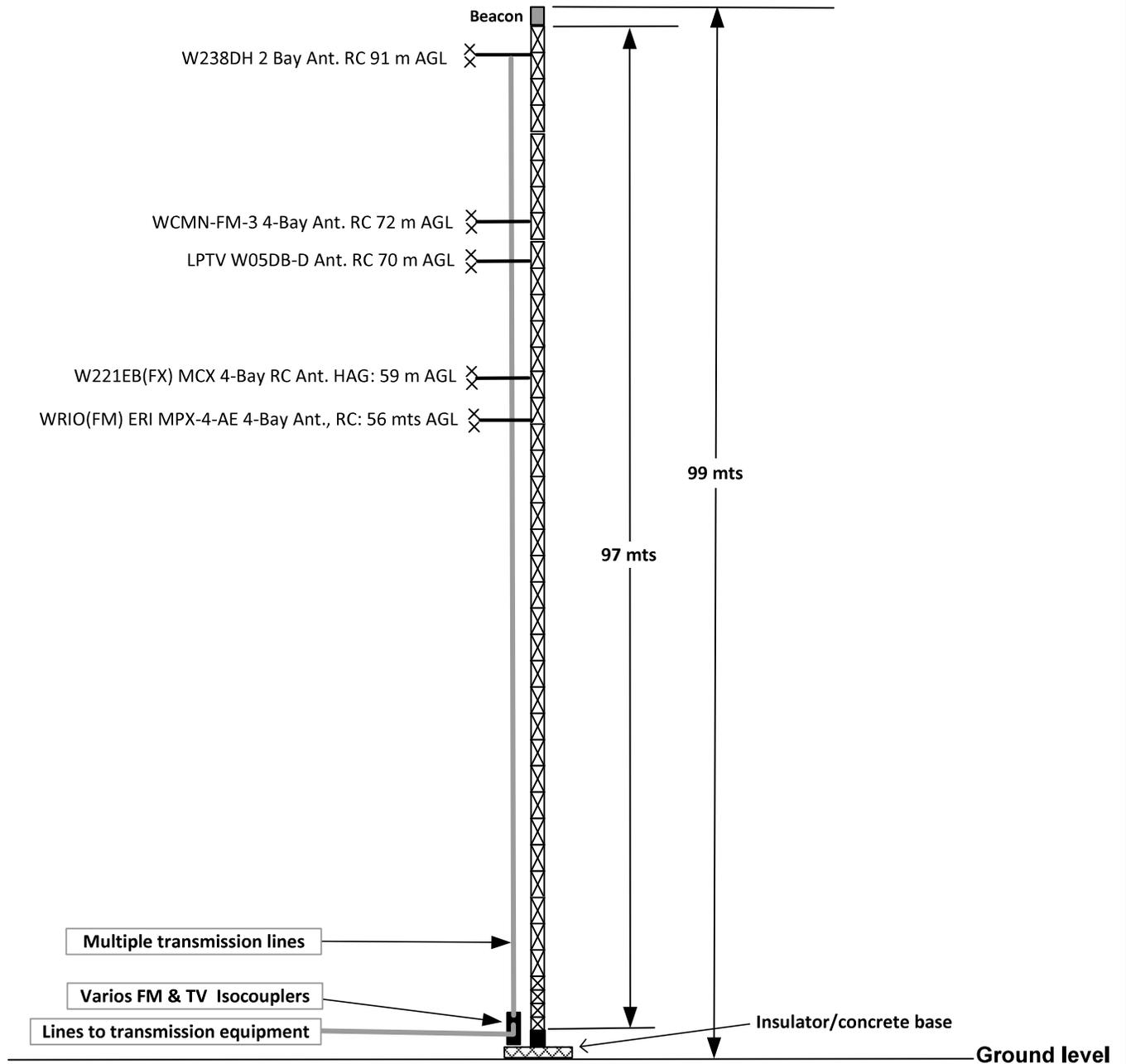
Chief Operator

Technical Consultant

Other (specify)

# Exhibit A

Site Location: 17-58-52 N / 66-36-49 W (NAD27)



**Not To Scale**

**SKETCH OF WLEO & WPRP ANT. TOWER ASRN 1242494**

## **W238DH TPO Calculation & CP Special Conditions Compliance**

### **TPO Calculation:**

**ERP = 250 Watts**

**Antenna Gain = 8.9 X**

**Antenna Input Power = 28 Watts**

**Line Loss, 375 ft, 7/8" foam Heliac @ 95.5 MHz, Effic: 73.6 %**

**Power Input to transmission Line: = 38 Watts**

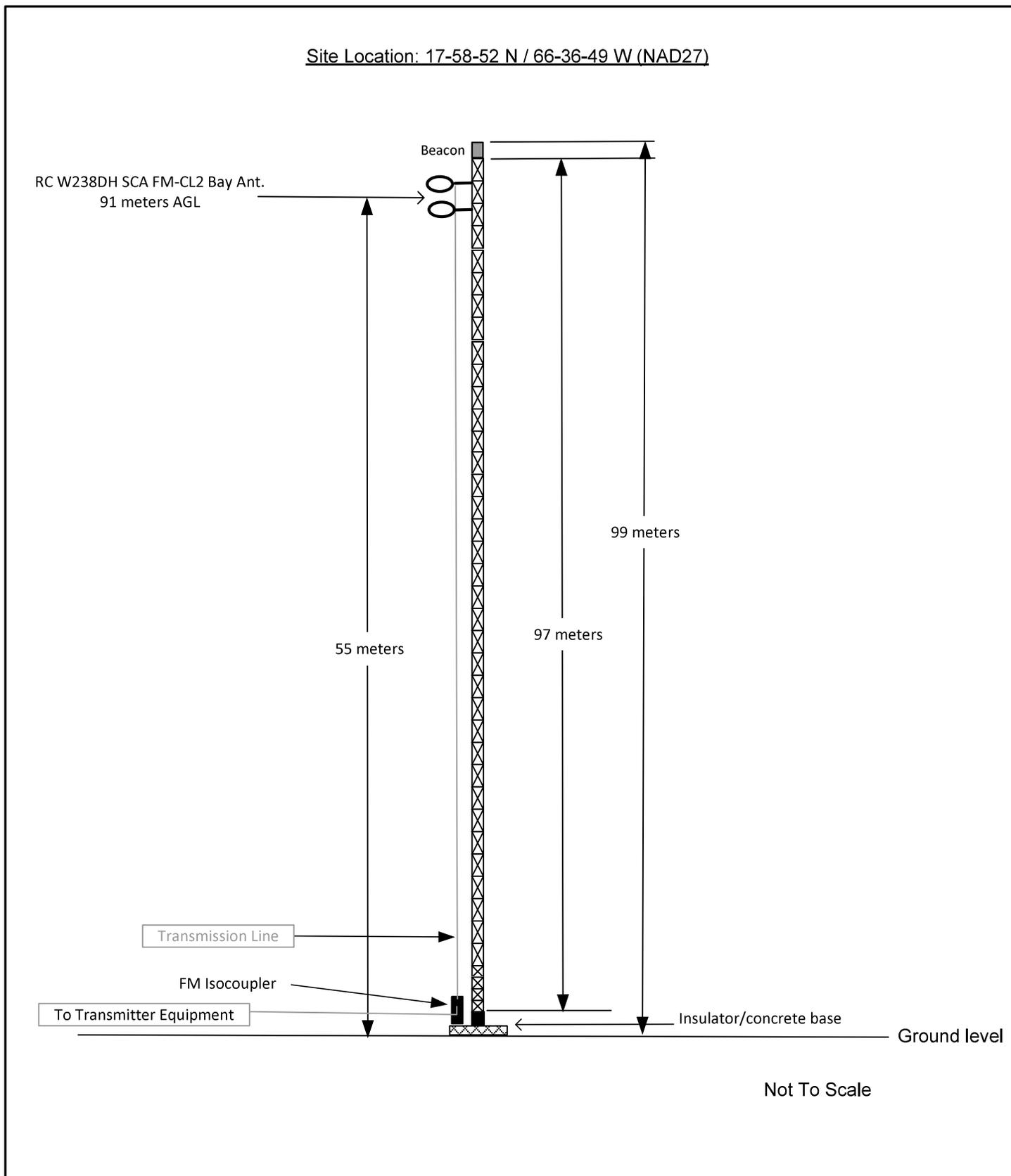
**Isocoupler Loss: 0.2 dB, Effic.: 95.5% = 0.955 X**

**TPO = 40 Watts**

### **W238DH CP Special Conditions Compliance:**

The permittee confirms that as a condition of the W238DH CP it is submitting an amended application for license, FCC 302-AM to cover the resistance change above 2% and change in operating antenna current of station WLEO (AM), Ponce, PR, Facility ID No. 52943, to return to direct power measurement. Included in this exhibit is a tower sketch, Figure 1, of the installation of the W238DH antenna system.

Figure 1



**SKETCH OF WLEO & W238DH ANTENNA INSTALLATION**

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**FCC 302-AM**  
**APPLICATION FOR AM**  
**BROADCAST STATION LICENSE**

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FILE NO.

SECTION I - APPLICANT FEE INFORMATION

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

**ARSO RADIO CORP.**

MAILING ADDRESS (Line 1) (Maximum 35 characters)

**PO BOX 363222**

MAILING ADDRESS (Line 2) (Maximum 35 characters)

CITY

**SAN JUAN**

STATE OR COUNTRY (if foreign address)

**PUERTO RICO**

ZIP CODE

**00936**

TELEPHONE NUMBER (include area code)

**7874740630**

CALL LETTERS

**WPRP**

OTHER FCC IDENTIFIER (If applicable)

**54475**

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: **DIRECT MEASUREMENT**

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
	0 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)	(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 ARSO RADIO CORP		
MAILING ADDRESS PO BOX 363222		
CITY SAN JUAN	STATE PR	ZIP CODE 00936

2. This application is for:

- Commercial
  Noncommercial  
 AM Directional
  AM Non-Directional

Call letters WPRP	Community of License PONCE PR	Construction Permit File No. BP-20200108AAD	Modification of Construction Permit File No(s).	Expiration Date of Last Construction Permit
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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.

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.

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.

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).

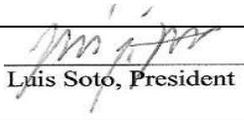
The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations and that all the exhibits are a material part hereof and are incorporated herein as set out in full in

**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 <b>LUIS A. SOTO</b>	Signature  <b>Luis Soto, President</b>	
Title <b>PRESIDENT</b>	Date <b>03/06/2022</b>	Telephone Number <b>787-474-0630</b>

**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**

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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.

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**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  <i>Uniform cross-section, guyed twr</i>	Overall height in meters of radiator above base insulator, or above base, if grounded. <b>97.2</b>	Overall height in meters above ground (without obstruction lighting) <b>98.1</b>	Overall height in meters above ground (include obstruction lighting) <b>99.1</b>	If antenna is either top loaded or sectionalized, describe fully in an Exhibit. <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">Exhibit No.</div>
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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 <b>17</b> ° <b>58</b> ' <b>52</b> "	West Longitude <b>66</b> ° <b>36</b> ' <b>49</b> "
--	--

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.  
**A**

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

Exhibit No.

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

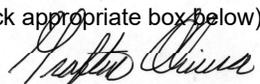
None; see Exhibit B, Compliance with Special Conditions

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

This LTC App is for a CP at a new site, WPRP duplexed with station WLEO;

Other facilities on the tower (Exhibit A) may also affect the ant. resistance.

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) <b>Grafton Olivera</b>	Signature (check appropriate box below) 
Address (include ZIP Code) <b>5119 60th Drive E</b> <b>Bradenton, FL 34203</b>	Date <b>03/06/2022</b>
	Telephone No. (Include Area Code) <b>941-323-0381</b>

- |   |   |
|---|---|
| <input type="checkbox"/> Technical Director | <input type="checkbox"/> Registered Professional Engineer |
| <input type="checkbox"/> Chief Operator     | <input checked="" type="checkbox"/> Technical Consultant  |
| <input type="checkbox"/> Other (specify)    |   |

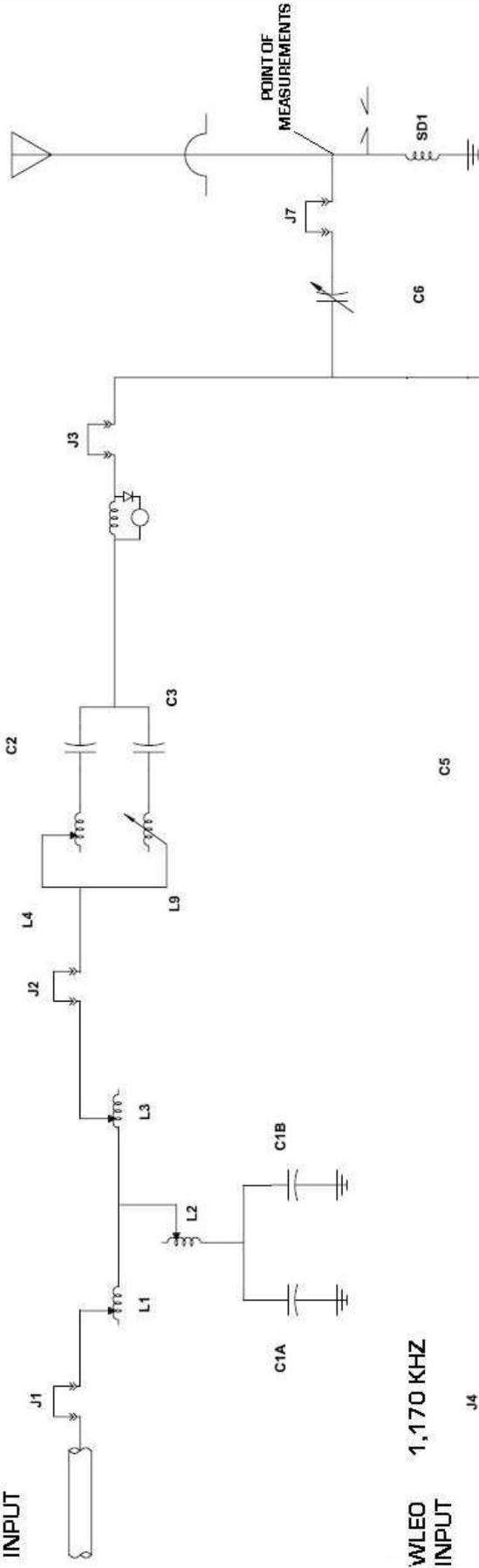
## **WPRP License Application - Compliance CP Special Conditions**

### **Special Conditions Compliance:**

The permittee confirms that as Condition No. 6 of the WPRP CP requires, it is submitting a detailed report of the comprehensive field observations and tests done to determine that no impermissible spurious emissions and/or intermodulation products are generated by the common usage of the same antenna system by AM stations WPRP and WLEO; see the attached Exhibit B and Schematic Diagram of Diplexer Equipment. Exhibit A is a diagram of the various antenna systems and facilities installed in the shared tower of stations WPRP and WLEO.

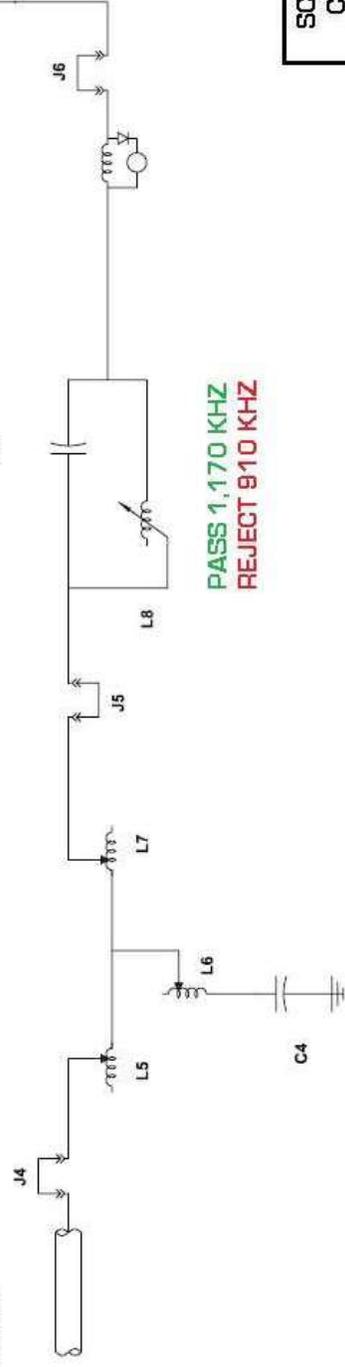
WPRP 910 KHZ  
INPUT

PASS 910 KHZ  
REJECT 1,170 KHZ



WLEO 1,170 KHZ  
INPUT

PASS 1,170 KHZ  
REJECT 910 KHZ

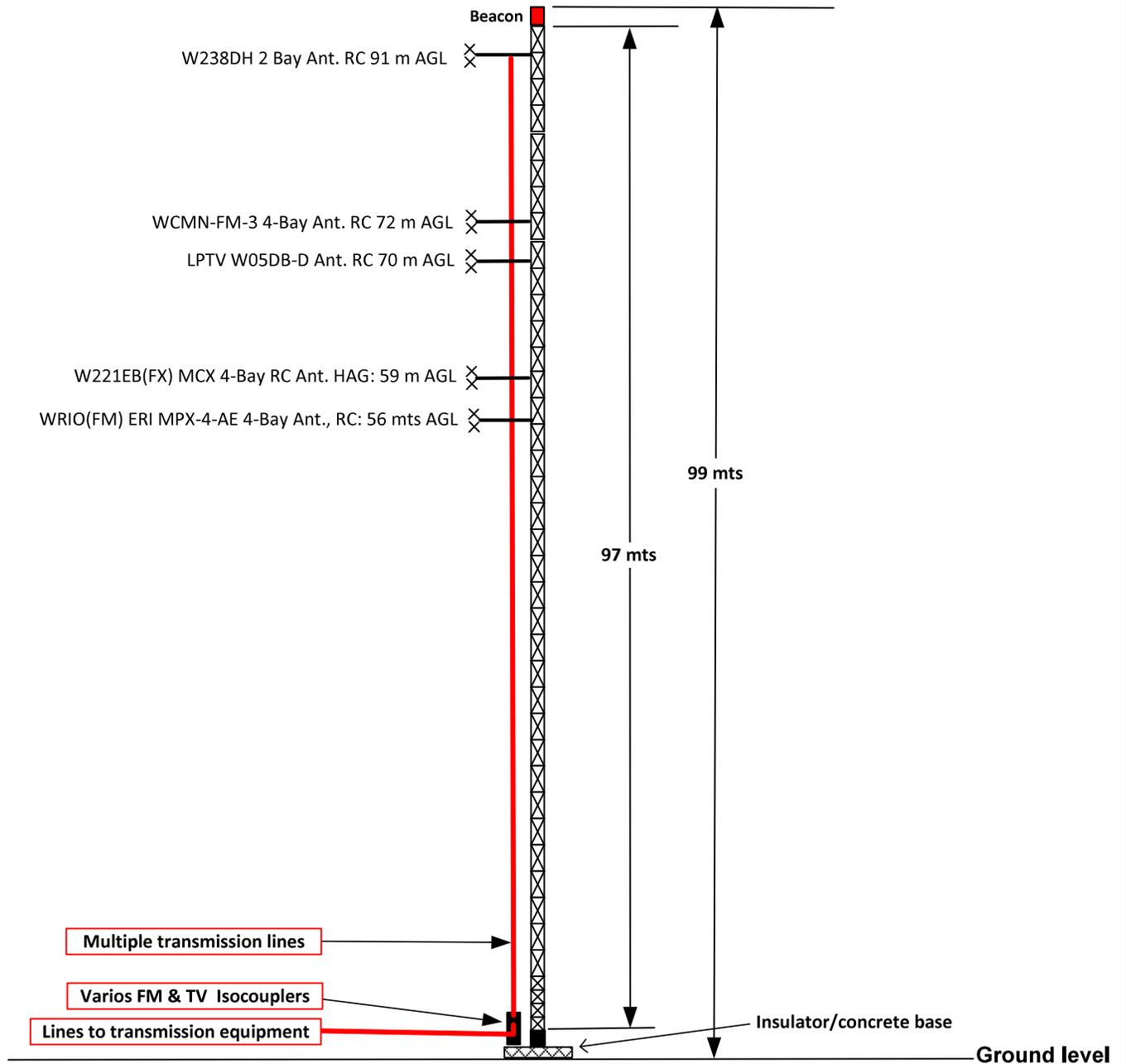


SCHEMATIC DIAGRAM OF ANTENNA  
COUPLING AND FILTER CIRCUITS  
RADIO STATION WPRP AND WLEO

IVAN A. FELIU

# Exhibit A

Site Location: 17-58-52 N / 66-36-49 W (NAD27)



Not To Scale

SKETCH OF WLEO & WPRP ANT. TOWER ASRN 1242494

**EXHIBIT B**

**ENGINEERING REPORT**

**EQUIPMENT PERFORMANCE  
MEASUREMENTS**

**WPRP(AM)**

**PONCE, PR**

**FEBRUARY 2022**

**IVAN A. FELIU**

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## Certification

## Engineering Statement

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Figure 4. S. A. D. picture, 10 kHz/division, 300 Hz resolution (WPRP)

Figure 5. S. A. D. picture, 20 kHz/division 3 kHz resolution (WPRP)

Figure 6. Station Technical Data (WLEO)

Figure 7. Data Obtained, Spurious Readings (WLEO)

Figure 7-A Intermodulation Report (WLEO)

Figure 8. S. A. D. picture, 5 kHz/division, 300 Hz resolution (WLEO)

Figure 9. S. A. D. picture, 10 kHz/division, 300 Hz resolution (WLEO)

Figure 10. S. A. D. picture, 20 kHz/division 3 kHz resolution (WLEO)

Figure 11. Block diagram of the Equipment Set Up.

Figure 12. Map showing the site where the measurements were made.

Figure 13. NRSC-2. AM Broadcast RF Emissions Limits (Chart)

S. A. D. = Spectrum Analyzer Display

**IVAN A. FELIU  
MAYAGUEZ, PUERTO RICO**

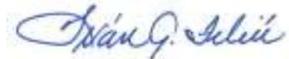
**CERTIFICATION**

**I, Ivan A. Feliu declare and certify that:**

- 1. I am a graduate Electronic Technician and Broadcast Technical Consultant in the Commonwealth of Puerto Rico, with office in Mayaguez, Puerto Rico.**
- 2. My qualifications are a matter of record with the Federal Communications Commission.**
- 3. I was retained by ARSO RADIO CORP., licensee of station WPRP(AM) Ponce, PR to prepare an engineer report in support of an application FCC Form 302-AM to request authorization for Station License.**
- 4. I personally made these measurements on February 27, 2022.**
- 5. I prepared or caused to be prepared under my immediate supervision the engineering report and related exhibits.**
- 6. The foregoing statement and accompanying exhibits are true and correct to the best of my knowledge, except as to such statements as are here stated to be based on information and belief, and such statements I believe them to be true.**

**MAYAGUEZ, PR**

**FEBRUARY, 28 2022**



**IVAN A. FELIU**

# **EQUIPMENT PERFORMANCE MEASUREMENTS**

**W P R P (AM)**

**PONCE, PUERTO RICO**

**FEBRUARY 2022**

## **ENGINEERING STATEMENT**

This report was prepared to reflect the intermodulation and spurious emissions limitations measurements for radio stations WPRP and WLEO. The attached data is the result of the Equipment Performance Measurements taken by Ivan A. Feliu, on February 27, 2022 on the transmitting equipment of radio station WPRP(AM), operating on its frequency of 910 kHz with a power of 4,300 Watts Day and Night and WLEO(AM), operating frequency of 1,170 kHz with a power of 200 Watts Day and Night. These measurements are required by the Special Operating Conditions or Restrictions (Num. 6) of the CP (BP-20200108AAD) and is part of the Section 73.1590 (A) (6) of the Federal Communications Commission Rules and Regulations.

The measurements were taken under the following conditions:

1. The specifications and procedures in section 73.44 of the FCC Rules and Regulation were followed where possible and when the noise floor level within the frequency band was less than the emission suppression level. Beyond that frequency, a frequency sweep within the broadcast band was made with a Potomac Model FIM-41 Field Intensity Meter. In no case were spurious and harmonics emissions out of the allowed level detected.

2. The measurements were taken under all conditions of modulation expected to be encountered by AM radio stations WPRP and WLEO.

3. A Swept-Frequency RF Spectrum Analyzer with a peak and hold of ten minutes, no video filtering, and 300 Hz resolution bandwidth (RBW) below 11.5 kHz and 3 kHz resolution above 11.5 kHz. was employed.

4. To measure the harmonics beyond 1,600 kHz a Potomac Model FIM- 41 Field Intensity Meter was employed. The desired signal was received and compared with a signal of known level from Stations WPRP(AM) and WLEO(AM), unmodulated carrier, and for the desired signal levels, a ratio in db was computed.

5. An observation from .55 to 5 MHz was made with a Potomac Model FIM-41 Field Intensity Meter.

6. The Station's modulation levels were monitored during all the measurements with an Oscilloscope connected to the IF output of the Icom Communications Receiver.

7. The Spectrum Analyzer was left receiving with the pick and hold function for 10 minutes in each measurement.

8. The measurements were made at ground level at approximately 1 kilometer from the antenna, as indicated in the Map included herein as Figure 12.

**9. The instruments employed were the following:**

- a. KEYSIGHT Model: N9340 Spectrum Analyzer.**
- b. Potomac model FIM-41 / SN: 2146 Field Intensity Meter.**
- c. Hitachi model V-509 Oscilloscope /SN 6032539.**
- d. Icom Model IC-7300 Communications Receiver.**
- e. Motorola Model R-2660B calibrated RF Signal Generator.**
- f. Standard H Field Loop Antenna model: LP-3.**
- g. Belar LP-1 Loop Antenna.**

**11. The test equipment was connected as shown in Figure 11.**

**12. The Main Transmitter's, Broadcast Electronics, AM-6A, for WPRP(AM) and Broadcast Electronics, AM-500A, for WLEO(AM) were on the air during the measurements.**

**13. All equipment was operated according to the manufacturer recommended procedures.**

**The data obtained during the measurements is included herein in Figures 1 to 5 for WPRP(AM) and Figures 6 to 10 for WLEO(AM)**

**CONCLUSION:**

**Taking in considerations the results of the measurements, it can be concluded that the transmitting systems of radio stations WPRP(AM) and WLEO(AM) meet the requirements of the section 73.44 of the Federal Communications Commission Rules and Regulations.**

**§73.44 Emission limitations.**

(a) The emissions of stations in the AM service shall be attenuated in accordance with the requirements specified in paragraph (b) of this section. Emissions shall be measured using properly operated and suitable swept-frequency RF spectrum analyzer using a peak hold duration of 10 minutes, no video filtering, and a 300 Hz resolution bandwidth, except that a wider resolution bandwidth may be employed above 11.5 kHz to detect transient emissions. Alternatively, other specialized receivers or monitors with appropriate characteristics may be used to determine compliance with the provisions of this section, provided that any disputes over measurement accuracy are resolved in favor of measurements obtained by using a calibrated spectrum analyzer adjusted as set forth above.

(b) Emissions 10.2 kHz to 20 kHz removed from the carrier must be attenuated at least 25 dB below the unmodulated carrier level, emissions 20 kHz to 30 kHz removed from the carrier must be attenuated at least 35 dB below the unmodulated carrier level, emissions 30 kHz to 60 kHz removed from the carrier must be attenuated at least  $[5 + 1 \text{ dB/kHz}]$  below the unmodulated carrier level, and emissions between 60 kHz and 75 kHz of the carrier frequency must be attenuated at least 65 dB below the unmodulated carrier level. Emissions removed by more than 75 kHz must be attenuated at least  $43 + 10 \text{ Log (Power in watts)}$  or 80 dB below the unmodulated carrier level, whichever is the lesser attenuation, except for transmitters having power less than 158 watts, where the attenuation must be at least 65 dB below carrier level.

(c) Should harmful interference be caused to the reception of other broadcast or nonbroadcast stations by out of band emissions, the licensee may be directed to achieve a greater degree of attenuation than specified in paragraphs (a) and (b) of this section.

(d) Measurements to determine compliance with this section for transmitter type acceptance are to be made using signals sampled at the output terminals of the transmitter when operating into an artificial antenna of substantially zero reactance. Measurements made of the emissions of an operating station are to be made at ground level approximately 1 kilometer from the center of the antenna system. When a directional antenna is used, the carrier frequency reference field strength to be used in order of preference shall be:

- (1) The measured nondirectional field strength.
- (2) The RMS field strength determined from the measured directional radiation pattern.
- (3) The calculated expected field strength that would be radiated by a nondirectional antenna at the station authorized power.

(e) Licensees of stations complying with the ANSI/EIA-549-1988, NRSC-1 AM Preemphasis/Deemphasis and Broadcast Transmissions Bandwidth Specifications (NRSC-1), prior to June 30, 1990, or from the original commencement of operation will, until June 30, 1994, be considered to comply with paragraphs (a) and (b) of this section, absent any reason for the Commission to believe otherwise. Such stations are waived from having to make the periodic measurements required in §73.1590(a)(6) until June 30, 1994. However, licensees must make measurements to determine compliance with paragraphs (a) and (b) of this section upon receipt of an Official Notice of Violation or a Notice of Apparent Liability alleging noncompliance with those provisions, or upon specific request by the Commission.

## STATION TECHNICAL DATA

- |                                 |                              |
|---------------------------------|------------------------------|
| 1. Licensee:                    | ARSO RADIO CORPORATION       |
| 2. Call Letters:                | WPRP                         |
| 3. City of License:             | Ponce, PR                    |
| 4. Frequency:                   | 910 kHz                      |
| 5. Operating Power:             | 4,300 watts day and night    |
| 6. Transmitter:                 | Broadcast Electronics AM-6A  |
| 7. Audio processor:             | Orban model: Optimod 9200    |
| 8. NRSC Filter / Preemphasis:   | Parts of the Audio processor |
| 9. Measurements taken on:       | February 27, 2022            |
| 10. Field intensity at one KM.: | 600 mV/m                     |
| 11. Operation mode:             | Monaural                     |

<b>FIGURE NO. 1</b>
<b>WPRP(AM) PONCE, PR 220227</b>
<b>IVAN A. FELIU</b>

# EQUIPMENT PERFORMANCE MEASUREMENTS

## W P R P

OBTAINED DATA  
 ( MAIN TRANSMITTER )  
 EMISSIONS REMOVED FROM THE CARRIER

FREQUENCY BAND kHz	MEASURED LEVEL BELOW THE UNMODULATED CARRIER LEVEL/DB	REQUIRED LEVEL BELOW THE UNMODULATED CARRIER LEVEL / DB
10.2 to 20	- 65	- 25
20 to 30	- 75	- 35
30 to 60		A
30	- 75	- 35
35	- 76	- 40
40	- 76	- 45
45	- 77	- 50
50	- 77	- 55
55	- 78	- 60
60 to 75	- 78	- 65
By more than 75 (B)	C	- 79.3

A.  $5 + 1 \text{ db / kHz}$

B.  $43 + 10 \log ( 4,300^* ) = - 79.3 \text{ db}$     \* operating power in watts

C. 2nd harmonic level less than - 80.0 db. No other spurious and harmonic signals were detected.

<b>FIGURE NO. 2</b>
WPRP(AM) PONCE, PR 220227
IVAN A. FELIU

**INTERMODULATION REPORT**  
**PREPARE FOR: WPRP & WLEO-AM**  
**FREQUENCY NO. 1 910 KHZ**  
**FREQUENCY NO. 2 1,170 KHZ**

#	Mult	x	Freq.	Sum/Dif	Mult	x	Freq.	=	Product	MEASURED LEVEL (dB) BELOW THE UNMODULATED CARRIER
1	1	x	1170	+	1	x	910	=	2080	-85.2
2	1	x	910	+	1	x	1170	=	2080	-85.2
3	1	x	1170	+	2	x	910	=	2990	NOISE
4	2	x	1170	=				=	2340	70.6
5	2	x	1170	-	1	x	910	=	1430	NOISE
6	2	x	910	=				=	1820	-80
7	2	x	910	+	1	x	1170	=	2990	NOISE
8	2	x	910	-	1	x	1170	=	650	NOISE
9	3	x	1170	-	1	x	910	=	2600	NOISE
10	3	x	910	=				=	2730	NOISE
11	3	x	910	-	1	x	1170	=	1560	NOISE
12	3	x	1170	-	2	x	910	=	1690	NOISE
13	3	x	1170	-	3	x	910	=	780	NOISE

NO MORE FREQUENCY PRODUCTS WITHIN DESIRED RANGE

FIGURE NO. 2-A
WPRP-AM PONCE, PR 220227
IVAN A. FELIU



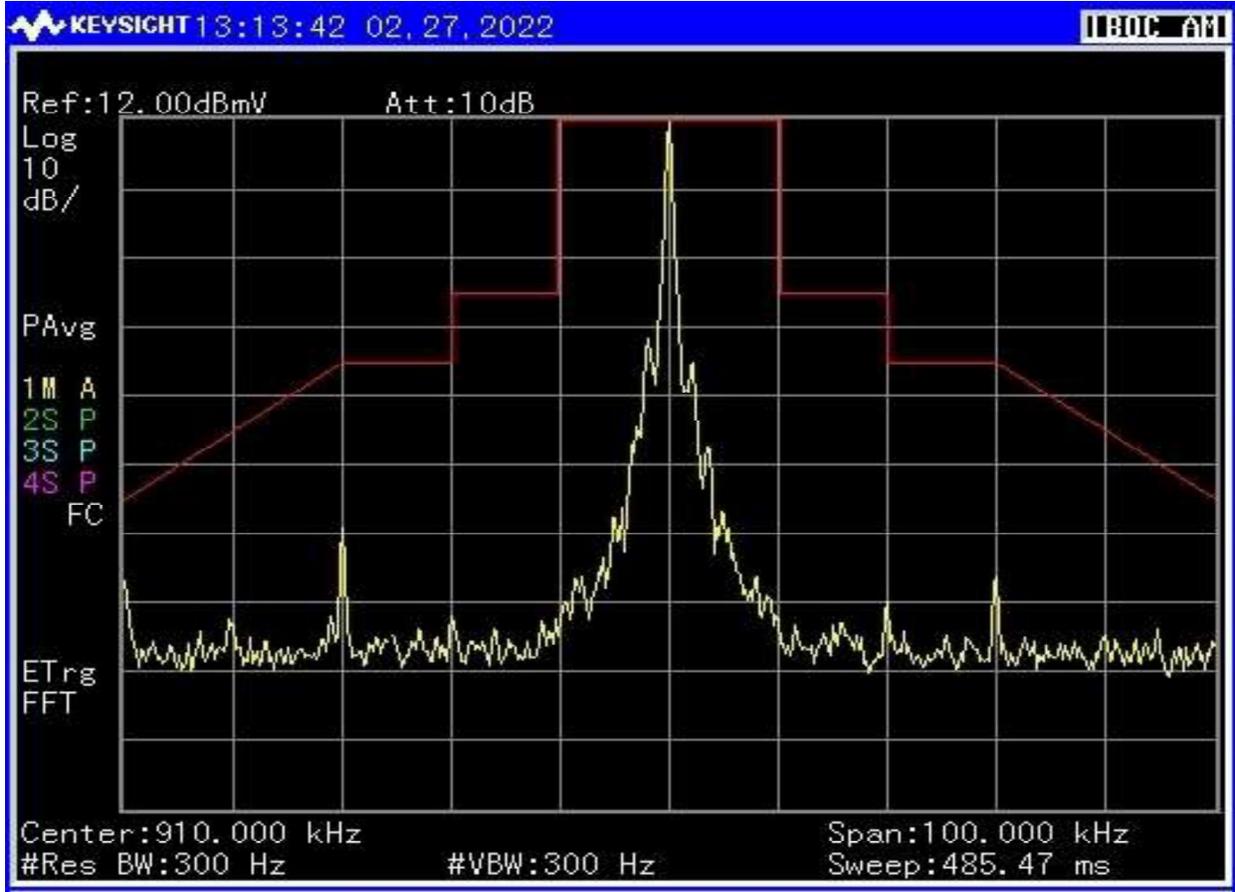
### SPECTRUM ANALYZER DISPLAY PICTURE

RADIO STATION	WPRP(AM)
FREQUENCY	910 kHz
REFERENCE LEVEL	12.0 dBmV
HORIZONTAL SCALE	5.0 kHz / DIVISION
VERTICAL SCALE	10 dBmV / DIVISION
RESOLUTION	300 Hz

**FIGURE NO. 3**

WPRP(AM)  
PONCE, PR  
220227

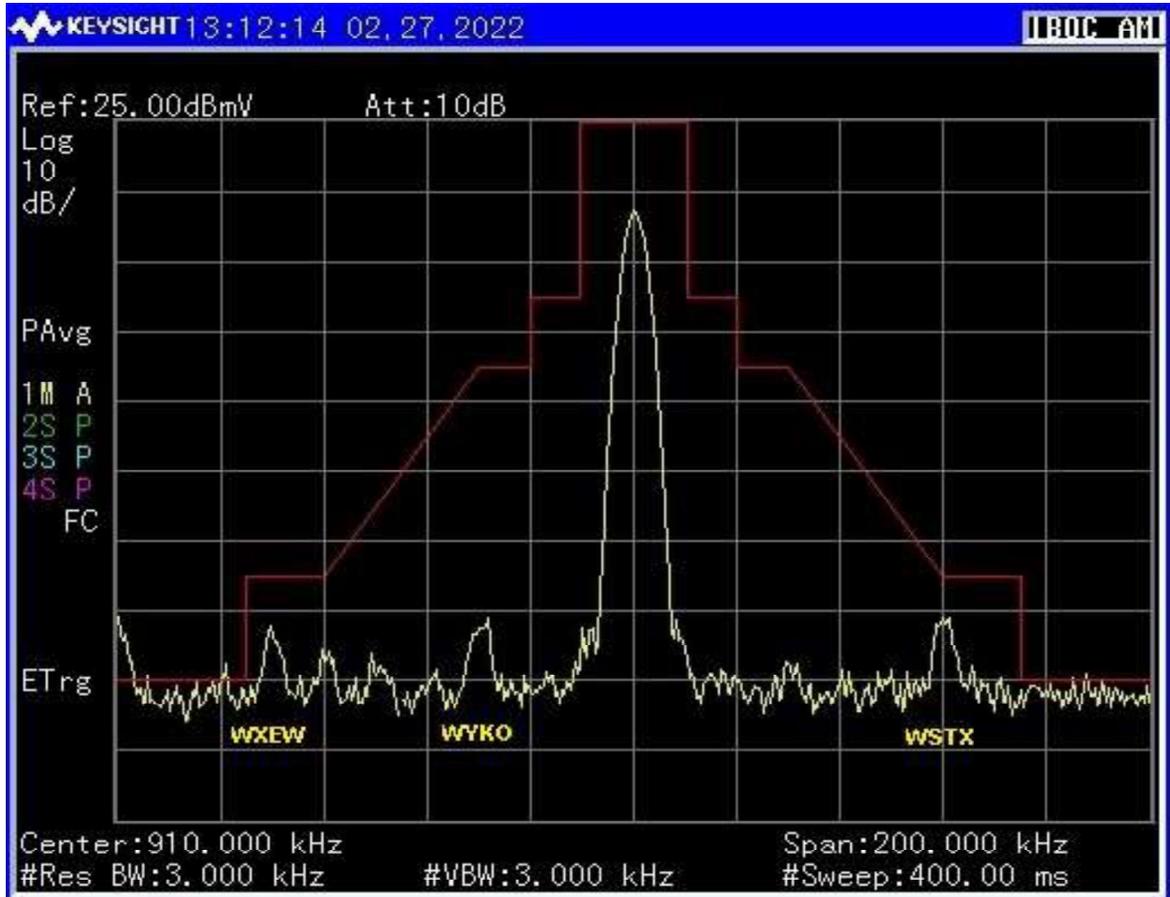
IVAN A. FELIU



**SPECTRUM ANALYZER DISPLAY PICTURE**

<b>RADIO STATION</b>	<b>WPRP-AM</b>
<b>FREQUENCY</b>	<b>910 kHz</b>
<b>REFERENCE LEVEL</b>	<b>12.0 dBmV</b>
<b>HORIZONTAL SCALE</b>	<b>10 kHz / DIVISION</b>
<b>VERTICAL SCALE</b>	<b>10 dBmv / DIVISION</b>
<b>RESOLUTION</b>	<b>300 Hz</b>

<b>FIGURE NO.4</b>
<b>WPRP(AM)</b>
<b>PONCE, PR</b>
<b>220227</b>
<b>IVAN A. FELIU</b>



**SPECTRUM ANALYZER DISPLAY PICTURE**

<b>RADIO STATION</b>	<b>WPRP(AM)</b>
<b>FREQUENCY</b>	<b>910 kHz</b>
<b>REFERENCE LEVEL</b>	<b>25.0 dBmV</b>
<b>HORIZONTAL SCALE</b>	<b>20 kHz / DIVISION</b>
<b>VERTICAL SCALE</b>	<b>10 dBmV / DIVISION</b>
<b>RESOLUTION</b>	<b>3.0 kHz</b>

<b>FIGURE NO. 5</b>
<b>WPRP(AM)</b> <b>PONCE, PR</b> <b>220227</b>
<b>IVAN A. FELIU</b>

## STATION TECHNICAL DATA

- |                                 |  |
|---------------------------------|--|
| 1. Licensee:                    | IGLESIA EPISCOPAL PUERTORRIQUEÑA, INC. |
| 2. Call Letters:                | WLEO                                   |
| 3. City of License:             | Ponce, PR                              |
| 4. Frequency:                   | 1,170 kHz                              |
| 5. Operating Power:             | 200 watts day and night                |
| 6. Transmitter:                 | Broadcast Electronics AM-500A          |
| 7. Audio processor:             | Orban model: Optimod 9100-B            |
| 8. NRSC Filter / Preemphasis:   | Parts of the Audio processor           |
| 9. Measurements taken on:       | February 27, 2022                      |
| 10. Field intensity at one KM.: | 130 mV/m                               |
| 11. Operation mode:             | Monaural                               |

<b>FIGURE NO. 6</b>
<b>WLEO(AM) PONCE, PR 220227</b>
<b>IVAN A. FELIU</b>

# EQUIPMENT PERFORMANCE MEASUREMENTS

## W L E O

OBTAINED DATA  
 ( MAIN TRANSMITTER )  
 EMISSIONS REMOVED FROM THE CARRIER

FREQUENCY BAND kHz	MEASURED LEVEL BELOW THE UNMODULATED CARRIER LEVEL/DB	REQUIRED LEVEL BELOW THE UNMODULATED CARRIER LEVEL / DB
10.2 to 20	- 52	- 25
20 to 30	- 62	- 35
30 to 60		A
30	- 65	- 35
35	- 66	- 40
40	- 65	- 45
45	- 65	- 50
50	- 66	- 55
55	- 65	- 60
60 to 75	- 65	- 65
By more than 75 (B)	C	- 66

A.  $5 + 1 \text{ db / kHz}$

B.  $43 + 10 \log ( 200^* ) = - 66.0 \text{ db}$  \* operating power in watts

C. 2nd harmonic level less than  $- 70.6 \text{ db}$ . No other spurious and harmonic signals were detected.

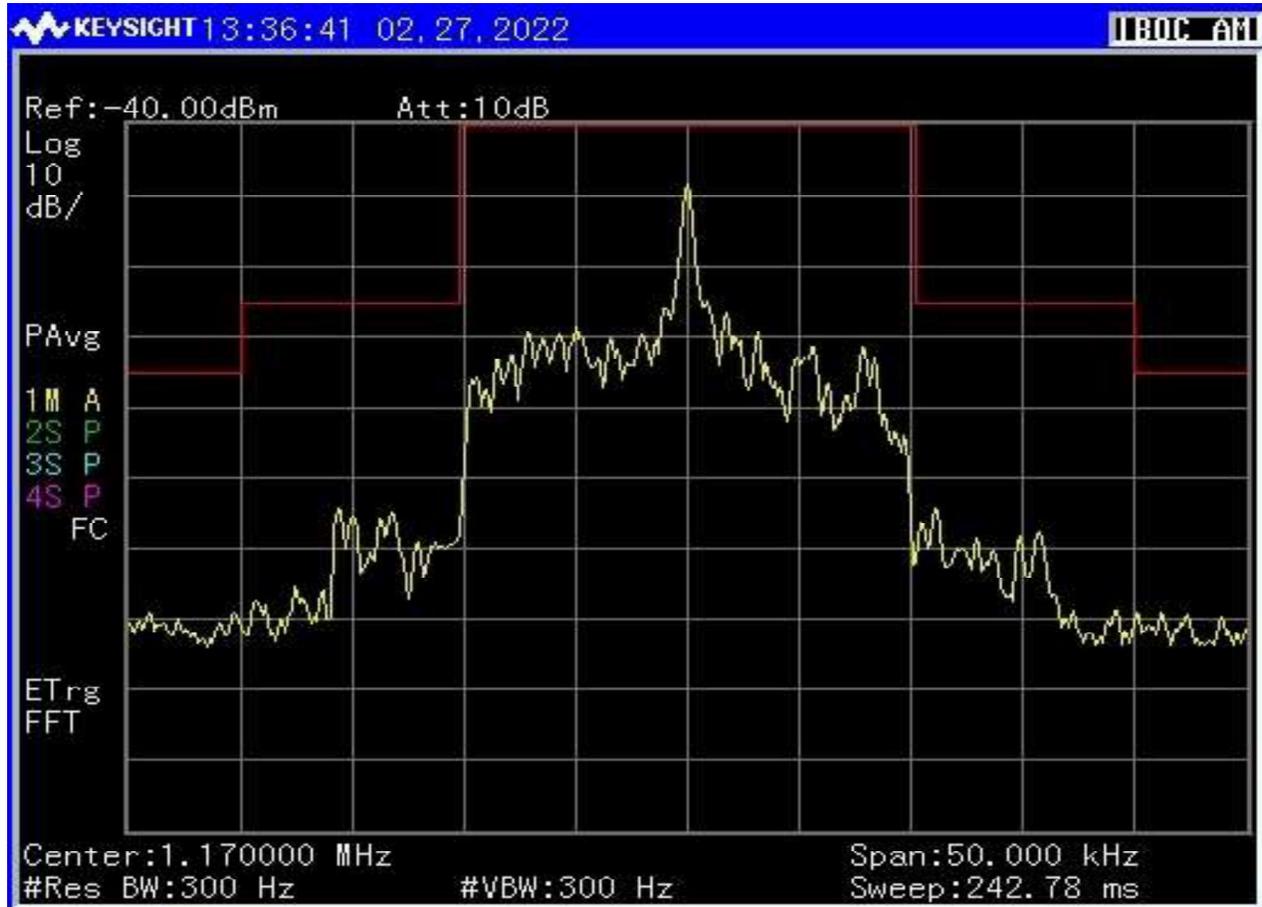
<b>FIGURE NO. 7</b>
WLEO(AM) PONCE, PR 220227
IVAN A. FELIU

**INTERMODULATION REPORT**  
**PREPARE FOR: WPRP & WLEO-AM**  
**FREQUENCY NO. 1 910 KHZ**  
**FREQUENCY NO. 2 1,170 KHZ**

#	Mult	x	Freq.	Sum/Dif	Mult	x	Freq.	=	Product	MEASURED LEVEL (dB) BELOW THE UNMODULATED CARRIER
1	1	x	1170	+	1	x	910	=	2080	-85.2
2	1	x	910	+	1	x	1170	=	2080	-85.2
3	1	x	1170	+	2	x	910	=	2990	NOISE
4	2	x	1170	=				=	2340	70.6
5	2	x	1170	-	1	x	910	=	1430	NOISE
6	2	x	910	=				=	1820	-80
7	2	x	910	+	1	x	1170	=	2990	NOISE
8	2	x	910	-	1	x	1170	=	650	NOISE
9	3	x	1170	-	1	x	910	=	2600	NOISE
10	3	x	910	=				=	2730	NOISE
11	3	x	910	-	1	x	1170	=	1560	NOISE
12	3	x	1170	-	2	x	910	=	1690	NOISE
13	3	x	1170	-	3	x	910	=	780	NOISE

NO MORE FREQUENCY PRODUCTS WITHIN DESIRED RANGE

FIGURE NO. 7-A
WLEO-AM PONCE, PR 220227
IVAN A. FELIU



### SPECTRUM ANALYZER DISPLAY PICTURE

RADIO STATION	WLEO-AM
FREQUENCY	1,170 kHz
REFERENCE LEVEL	-40.0 dBm
HORIZONTAL SCALE	5.0 kHz / DIVISION
VERTICAL SCALE	10 dBm / DIVISION
RESOLUTION	300 Hz

FIGURE NO. 8

WLEO(AM)  
PONCE, PR  
220227

IVAN A. FELIU



**SPECTRUM ANALYZER DISPLAY PICTURE**

<b>RADIO STATION</b>	<b>WLEO(AM)</b>
<b>FREQUENCY</b>	<b>1,170 kHz</b>
<b>REFERENCE LEVEL</b>	<b>-25.0 dBm</b>
<b>HORIZONTAL SCALE</b>	<b>10.0 kHz / DIVISION</b>
<b>VERTICAL SCALE</b>	<b>10 dBm / DIVISION</b>
<b>RESOLUTION</b>	<b>300 Hz</b>

<b>FIGURE NO. 9</b>
<b>WLEO(AM)</b> <b>PONCE, PR</b> <b>220227</b>
<b>IVAN A. FELIU</b>



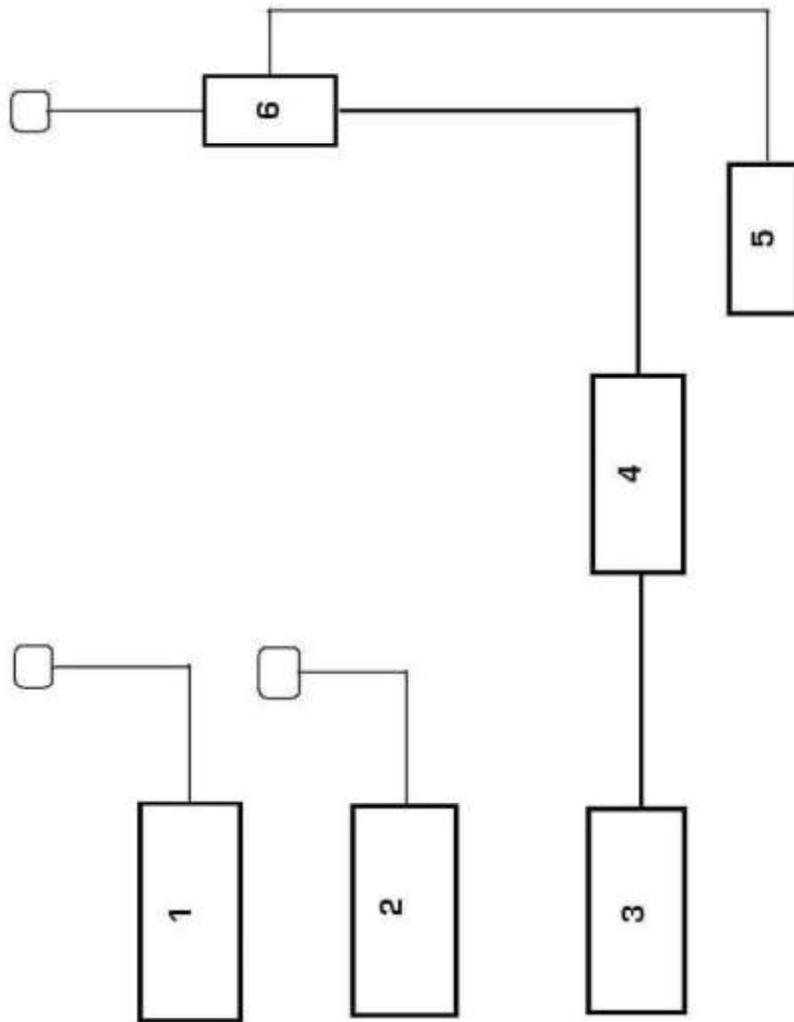
### SPECTRUM ANALYZER DISPLAY PICTURE

RADIO STATION	WLEO(AM)
FREQUENCY	1,170 kHz
REFERENCE LEVEL	-30.0 dBm
HORIZONTAL SCALE	20.0 kHz / DIVISION
VERTICAL SCALE	10 dBm / DIVISION
RESOLUTION	3.0 kHz

FIGURE NO. 10

WLEO(AM)  
PONCE, PR  
220227

IVAN A. FELIU



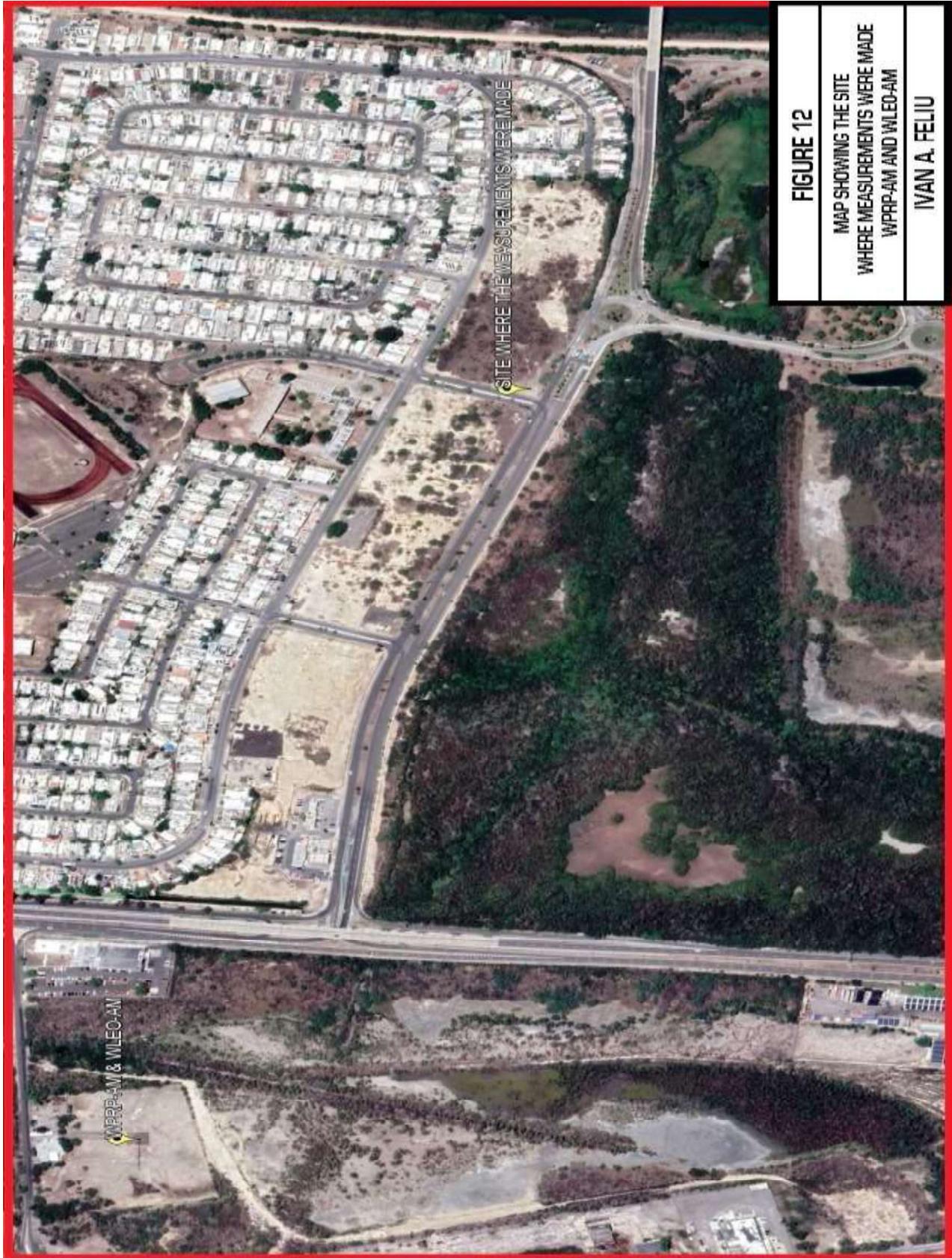
SPECTRUM ANALYZER  
 FIELD INTENSITY METER  
 OSCILLOSCOPE  
 COMMUNICATION RECEIVER  
 CALIBRATED RF GENERATOR  
 COAXIAL SWITCH

**FIGURE NO. 11**

BLOCK DIAGRAM OF THE EQUIPMENT SET UP

**WPRP-AM & WLEO-AM**

IVAN A. FELIU

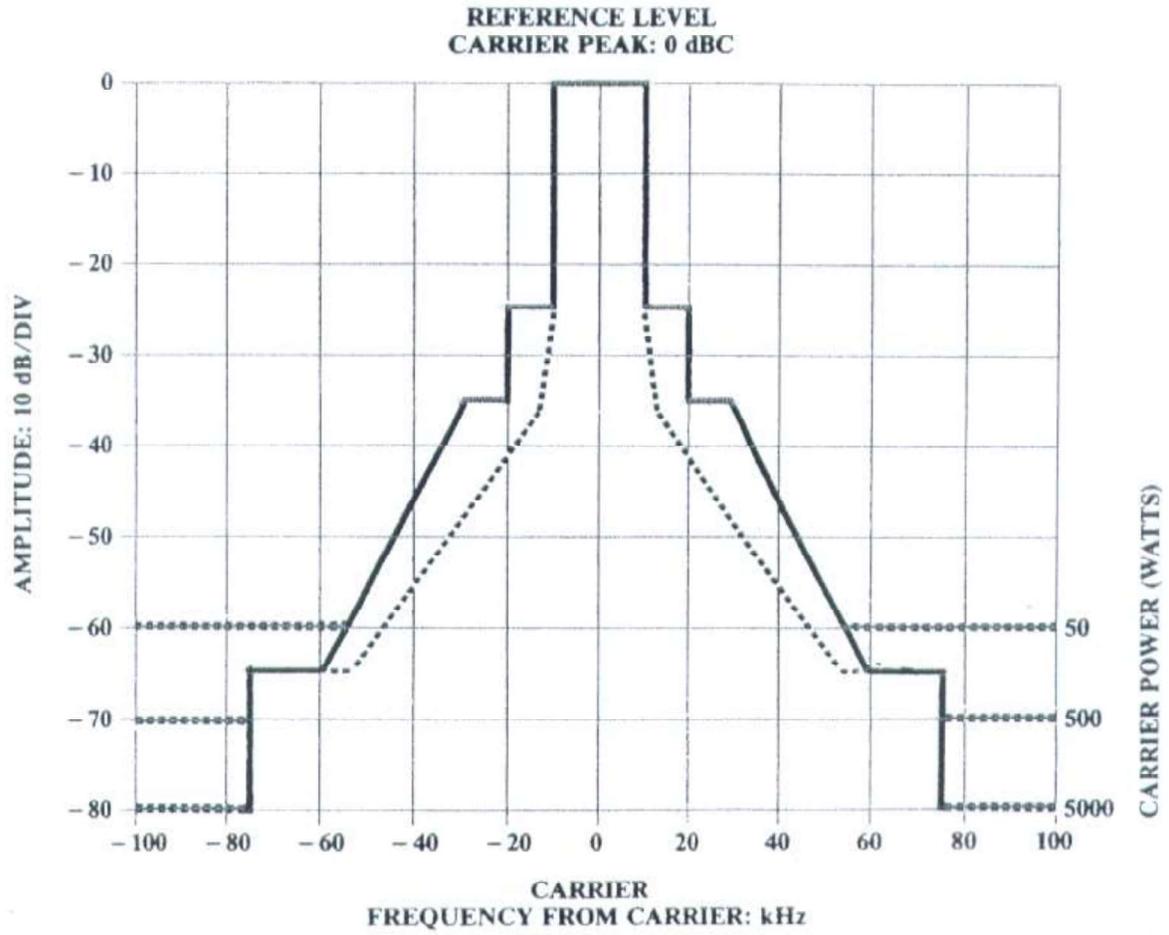


**FIGURE 12**

MAP SHOWING THE SITE  
WHERE MEASUREMENTS WERE MADE  
WPP-AM AND WLEC-AM

IVAN A. FELIU

# AM BROADCAST RF EMISSION LIMITS



— MAXIMUM LIMITS  
 ..... TEST LIMITS

<b>FIGURE 13</b>
<b>NRSC-2 AM BROADCAST RF EMISSIONS LIMITS (CHART)</b>
<b>IVAN A. FELIU</b>