Approved by OMB
3060-0029
Expires 5-31-84

Section I

United States of America
Federal Communications Commission

APPLICATION FOR NEW BROADCAST STATION LICENSE

(For Commission Use Only)
File No. BL-830630AA

Name and post office address of applicant (Include ZIP Code)
(See Instruction D)

BIG RIVER BROADCASTING CORP.
WXOR
624 So. Chestnut St.
PO BOX 932
Florence, AL 35631

REC'D MASS MED BUR
JUN 30 1983
JUL 7 1983
RADIO SERVICES
AM BRANCH

Notices and communications with respect to this application are to be addressed to the following - named persons at the address indicated (Include ZIP Code)

Paul E. Kelley
624 So. Chestnut St.
Florence, AL 35631

INSTRUCTIONS

A. This form is to be used in all cases when applying for a Broadcast Station License. It consists of this part, Section I, and the following sections:

Section II - A, License Application Engineering Data Standard Broadcast

Section II - B, License Application Engineering Data FM Broadcast

Section II - C, License Application Engineering Data Television Broadcast

B. Prepare and file three copies of this form and all exhibits with Federal Communications Commission, Washington, D.C. 20554.
C. Number exhibits serially in the space provided in the body of the form and list each exhibit in the space provided on page 2 of this Section. Date each exhibit and each antenna pattern.
D. The name of the applicant must be stated exactly as it appears on the construction permit which is being covered.
E. Information called for by this application which is already on file with the Commission need not be refiled in this application provided (1) the information is now on file in another application or FCC form filed by or on behalf of this applicant; (2) the information is identified fully by reference to the file number (if any), the FCC form number, and the filing date of the application or other form containing the information and the page or paragraph referred to, and (3) after making the reference, the applicant states; "No change since date of filing." Any such reference will be considered to incorporate into this application all information, confidential or otherwise, contained in the application or other form referred to. The incorporated application or other form will thereafter, in its entirety, be open to the public.
F. This application shall be personally signed by the applicant, if the applicant is an individual; by one of the partners, if the applicant is a partnership; by an officer, if the applicant is a corporation; by a member who is an officer, if the applicant is an unincorporated association; by such duly elected or appointed officials as may be competent to do so under the laws of the applicable jurisdiction, if the applicant is an eligible government entity; or by the applicant's attorney in case of the applicant's physical disability or of his absence from the United States. The attorney shall, in the event he signs for the applicant, separately set forth the reason why the application is not signed by the applicant. In addition, if any matter is stated on the basis of the attorney's belief only (rather than his knowledge), he shall separately set forth his reasons for believing that such statements are true.
G. BE SURE ALL NECESSARY INFORMATION IS FURNISHED AND ALL PARAGRAPHS ARE FULLY ANSWERED. IF ANY PORTIONS OF THE APPLICATION ARE NOT APPLICABLE, SPECIFICALLY SO STATE. DEFECTIVE OR INCOMPLETE APPLICATIONS MAY BE RETURNED WITHOUT CONSIDERATION.
H. See back of last page for Privacy Act Notice.

1. Facilities authorized by construction permit

Frequency	Channel No.	Power in kilowatts Night	Day
1340 KHZ		.25	1

Hours of operation	Call letters
24	WXOR

2. Construction permit covered by this application On Air

File number	Date

Construction begun	Construction completed

Is the station now in satisfactory operating condition and ready for regular operation? Yes [X] No [ ]
If not, explain

PROGRAM DATA

3. Has applicant any contract, arrangement, or understanding, expressed or implied, with a network organization for the broadcasting of network programs? Yes [X] No [ ] on file

Does applicant, in the event this application is granted, propose to broadcast network programs? Yes [X] No [ ]
If network programs are to be broadcast, state as Exhibit No. on file arrangements under which they are to be obtained and attach copies of any contractual arrangement which may have been made. If the arrangement is based on an oral understanding, a written statement of the arrangement should be submitted.

FINANCIAL DATA on file

4. Give actual costs of making installation for which construction was authorized

Transmitter proper including tubes	Antenna system, including antenna-ground system, coupling equipment, transmission line	Frequency and modulation monitors	Studio technical equipment, microphones, transcription equipment, etc.
$	$	$	$
Acquiring land	**Acquiring or constructing buildings**	**Other items, state nature**	**Total**
$	$	$	$

All previous edition of this form are canceled.

FCC Form 302
June 1981

FINANCIAL DATA (Continued) DNA

5. (a) Attach a detailed balance sheet, as at the completion date of the authorized construction, showing applicant's financial position as Exhibit No. (b) If the actual cost of construction materially exceeds the original estimated cost of construction, attach as Exhibit No. a detailed statement showing the plan used to finance such construction. (If applicant is licensee of a broadcast station having on file with the Commission an Annual Financial Report (FCC Form 324) showing its financial position within the past 12 months and the request in this application is for a change in existing facilities, these exhibits need not be supplied provided that no substantial reduction in financial position has occurred.)

6. State changes, if any, in capitalization, and report any contracts affecting ownership not shown in the application for construction permit. (If none, so state)

DNA

7. Apart from the apparatus constructed, have all the terms, conditions, and obligations set forth in the above-described application for construction permit been fully met? Yes ☐ No ☐
If "No", state exceptions.

8. Is a request for authority to conduct program tests a part of this application? DNA Yes ☐ No ☐

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

THE APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

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 if set out in full in the application.

CERTIFICATION

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.

Signed and dated this 24th day of June, 1983

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT. U. S. CODE, TITLE 18, SECTION 1001.

BIG RIVER BROADCASTING CORP.
(NAME OF APPLICANT)

By Paul E. Kelley
(SIGNATURE)

Title CHIEF ENGINEER & VICE PRESIDENT

EXHIBITS furnished as required by this form:

Exhibit No.	Section and Para. No. of Form	Name of officer or employee (1) by whom or (2) under whose direction exhibit was prepared (show which)	Official title
1	Antenna Resistance Report	Paul E. Kelley - CE	V.P. & CHIEF ENGINEER

Broadcast Application | FEDERAL COMMUNICATIONS COMMISSION | Section II-A

LICENSE APPLICATION ENGINEERING DATA STANDARD BROADCAST

Name of applicant

Purpose of authorization applied for: (Check one)

	Answer paragraphs
☐ Station license	1-13
☒ Direct measurement of power	2,6,7,8,9,14

1. Facilities authorized in construction permit

Call Sign	File No. of construction permit	Frequency	Hours of operation	Power in kilowatts Night	Power in kilowatts Day

2. Station location

State	City or town
Alabama	Florence

3. Transmitter location

State	County
Alabama	Lauderdale
City or Town	Street Address (or other identification)
Florence	624 S. Chestnut St.

4. Main studio location Same

State	County
City or Town	Street and number

5. Remote control point location (only if authorized) DNA

State	City or town
Street Address (or other identification)	

6. Transmitter installed

Make	Type No.	Rated Power
Harris	SX-1	1-.25 KW

Last radio stage

	Total unmodulated plate current	Plate voltage
Solid State		
Night	6.5	53
Day	12.5	96

Manufacturer's recommended operating efficiency for the last radio frequency amplifier stage in percent. 1100 Watts 88%

Is inverse feedback utilized? Yes ☐ No ☒

If "Yes", to what value of feedback power is transmitter adjusted (in db)

Efficiency of the last radio frequency amplifier stage as now adjusted

(use formula $\frac{I_o^2 \quad R_o \ (100)\%}{E_p \quad I_p}$)

.25 KW 72.5%
1 KW 83.3%

7. Operating constants: (If directional system, give current at point of resistance measurement.)

RF common point or antenna current without modulation for night power in amperes	RF common point or antenna current without modulation for day power in amperes
2.24	4.48
Actual measured antenna or common point resistance (in ohms) at operating frequency Night 49.8 Day 49.8	Actual measured antenna or common point reactance (in ohms) at operating frequency Night +J109.2 Day +J109.2

Currents, and phases for directional operation

	Phase reading in degrees Night	Phase reading in degrees Day	Antenna base current Night	Antenna base current Day	Remote indication of antenna current Night	Remote indication of antenna current Day
DNA Tower						

Manufacturer and type of antenna monitor:

Simpson - 1337 - 0-5 AMPS

Describe equipment used for remote indication of antenna currents (antenna monitor or other method)

Gates Diode Unit CAL. Meter

8. Description of antenna system

(If directional antenna is used, the information requested below should be given for each element of the array. Use separate sheets if necessary. Height figures should not include obstruction lighting.)

Type radiator	Height in feet of complete radiator above base insulator, or above base if grounded.
Vertical Cross Section Guyed Tower	180 Ft.
Overall height in feet above ground. (without obstruction lighting) 180 Ft.	If antenna is either top loaded or sectionalized, describe fully as EXHIBIT ____. DNA

Excitation Unipole Series ☒ Shunt. ☐

Geographic coordinates to nearest second.

For directional antenna give coordinates of center of array. For single vertical radiator give tower location.

North latitude	West longitude
34 47 50	87 39 54

If not fully describe above, give further details and dimensions including any other antennas mounted on tower and associated isolation circuits as EXHIBIT 1. Drawing

Details and dimensions of ground system: (Attach sketch as EXHIBIT ____ if necessary for complete description).

120 Equally spaced, buried copper radials 150 to 183 feet in length.

9. Antenna resistance measurement

Attach as Exhibit No. 1 the following:

a. Qualifications of persons taking measurements.

b. Schematic diagram showing clearly all components of coupling circuits, point of resistance measurement, location of antenna ammeter, connection to and characteristics of all tower lighting isolation circuits, static drains, and any other fixtures, lines etc. connected to or supported by the antenna, including other antennas and associated circuits.

c. Full description of method used to make measurements.

d. Manufacturer's name of each calibrated instrument used and manufacturer's rated accuracy.

e. Date, accuracy, and by whom each instrument was last calibrated.

f. Table of complete data taken.

g. The graph drawn of 10 to 12 readings in a band 50 to 60 kilohertz wide with the operating frequency near the center.

10. Modulation monitor DNA

Make	Type No.

11. Frequency measurements DNA

Give the following data on the checks of the frequency

Date and Time	Frequency measured by such agency or method
1.	
2.	
3.	

Name of checking agency or method used

12. Give method of varying power to compensate for variation of line voltage.

Solid State Voltage Control

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

NONE

14. Give reason for the change in antenna or common point resistance.

Tower Lighting System removed from tower - See EXHIBIT #2
Unipole resistance shunt moved - to near 50 ohm

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.

Date June 24, 1983

Signature Paul E Kelley V.P.
(check appropriate box below)

- [X] Technical Director
- [ ] Registered Professional Engineer
- [ ] Consultant
- [ ] Chief Operator

Telephone (205) 764-8121
(Include Area Code)

western union **Telegram**

BMA206(1715)(1-025957A179010)PD 06/28/82 1700

ICS IPMWBWB WSH 36

03087 NL COLLECT R WASHINGTON DC 06-28 0427P EDT

PMS JOL RADIO INC Paul Kelly

RADIO STATION WXOR (AM) PHONE AND MAIL

524 S CHESTNUT ST

FLORENCE AL 35631

RECEIVED JUN 30 1982

REF. 8910-HS. RELET PHILLIPS 6/21/82. PURSUANT TO YOUR REQUEST IN WHICH FAA CONCURS THE OBSTRUCTION LIGHTING REQUIREMENTS FOR YOUR ANTENNA ARE HEREBY DELETED. THIS CORRECTION WILL APPEAR ON YOUR NEXT AUTHORIZATION.

JOHN MORGAN CHIEF HENRY STRAUBE ENGR

BROADCAST BUREAU FCC

No. 764812 Donnie - Paul Kelly

1982 mailed

W.U. 1201-SF (R5-69)

COLLECT TELEGRAM FROM WASH. D.C. - 6/29/82

REFERENCE 8910-HS

RELET PHILLIPS 6/21/82

PURSUANT TO YOUR REQUEST IN WHICH FAA CONCURS OBSTRUCTION LIGHTING REQUIREMENTS FOR YOUR ANTENNA ARE HEREBY DELETED...THIS CORRECTION WILL APPEAR ON YOUR NEXT AUTHORIZATION....

SIGNED: JOHN MORGAN - CHIEF
BROADCAST....FCC

EXHIBIT #2

ANTENNA IMPEDANCE MEASUREMENTS
WXOR, FLORENCE, ALA. 1340 KHZ.
1 KW Day .25 KW NIGHT
Data Taken Dec. 5, 1982, by
Paul E. Kelley, Sheffield, Alabama

Data herein is in support of an application for direct measurement of power for standard broadcast station WXOR, Florence, Alabama, 1340 Khz, 1 KW Day .25 Night. Complete information requested in Form 302, Section II-A, Paragraph 9 (Antenna Resistance Measurement) is given herein, together with letter of reference:

a. Measurements included in this report were made by Paul E. Kelley, who has some 33 years experience in radio engineering and who holds FCC 1st Class license No. PL-6-35781, which expires September 24, 1986.

b. A schematic diagram of coupling system components is included, identified as Figure 1.

c. The standard RF bridge method was used, with a General Radio Model 916A bridge connected as indicated.

d and e. The calibrated instruments were:

1. A General Radio Model 916A bridge (Serial No. 1353) calibrated by supplier in June, 1975, and checked with secondary reference standard precision resistors and capacitors during this use and assuring an accuracy within 1%.

2. A B & K Model E 200D generator (Serial No. 27-000573) broad band amplifier (battery powered) for 5-12 volt line output at broadcast band frequency. Frequency calibration verified by zero beating to available carriers and interpolating for remaining points.

3. A receiver especially constructed for bridge work, frequency calibrated, and equipped with beat oscillator, manual gain control and coaxial line input was used. The receiver was not used to determine exact frequency. The receiver used was a Stewart Warner R390A/Urr (Serial No. 25).

Note: Connections between driver bridge and detector were coaxial cable.

f and g. A table of data and a graph of the resistance measurements are included herein.

ANTENNA IMPEDANCE MEASUREMENTS
WXOR, FLORENCE, ALA. 1340 KHZ.
1 KW DAY .25 KW NIGHT
Data Taken Dec. 5, 1982, by
Paul E. Kelley, Sheffield, Alabama

	FREQUENCY KHZ	OHMS RESISTANCE	OHMS REACTANCE
	1275	72.1	94.1
	1285	67.8	96.0
	1295	63.6	98.1
	1305	60.3	100.4
	1315	56.9	102.7
	1325	53.5	105.3
	1335	50.9	108.0
*	1340	49.8	109.2
	1345	48.0	110.4
	1355	47.5	112.9
	1365	46.0	115.8
	1375	44.6	118.5
	1385	43.4	121.3
	1395	42.5	124.0
	1405	41.5	127.4

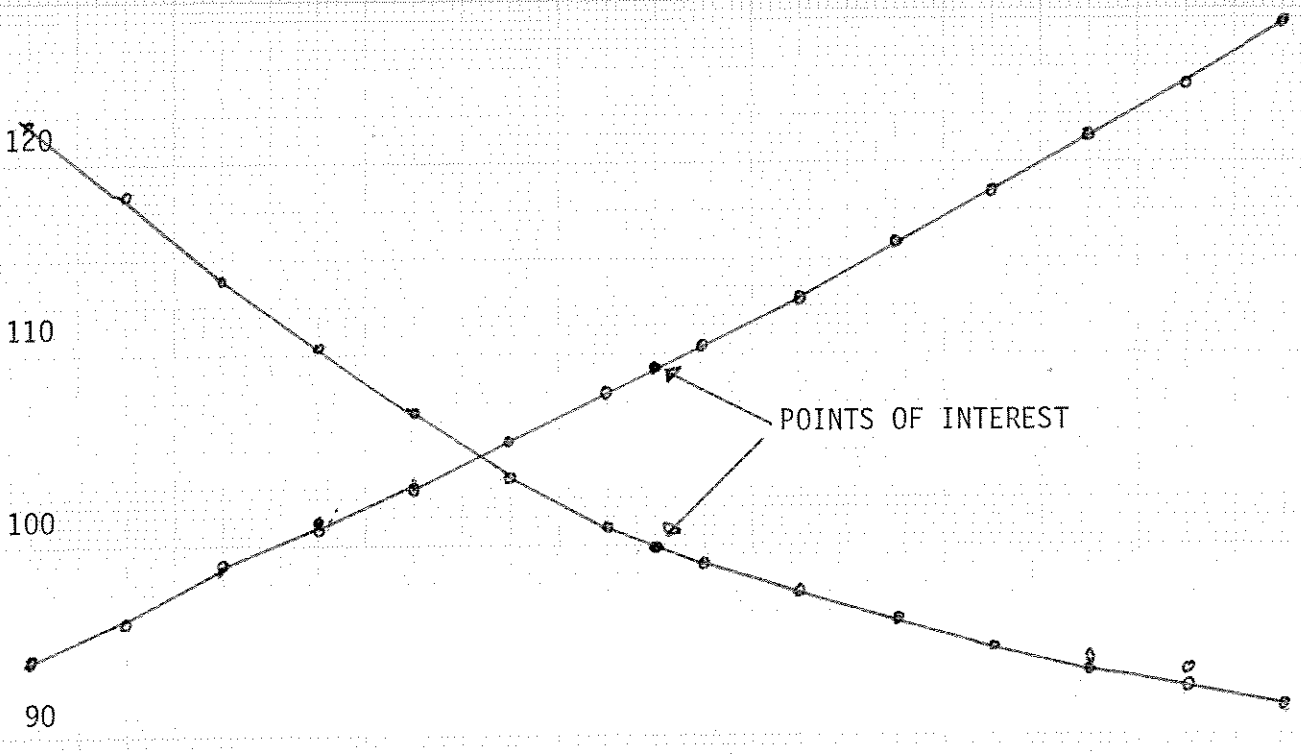
* OPERATING FREQUENCY

NOTE 1: By reference to Figure 2, the resistance at the operating carrier frequency is determined to be 49.8 ohms and the antenna current for 1 KW Day is calculated to be 4.48 amps and for .25 Night is calculated to be 2.24 amps.

NOTE 2: The antenna is inductive at the operating frequency, having a reactance of +J 109.2 ohms.

FIGURE 2

ANTENNA RESISTANCE MEASUREMENT GRAPH
WXOR, FLORENCE, ALABAMA 1340 KHZ
1 KW Day .25 KW NIGHT
PREPARED 5-11-83 by
PAUL E. KELLEY, SHEFFIELD, ALABAMA



100 150
90 140
80 130
70 120
60 110
50 100
40 90
30 80
20 70
10 60
0 50

FREQUENCY IN MHZ.

1.270 80 90 1.300 10 20 30 1.340 50 60 70 80 90 1.400 1.410

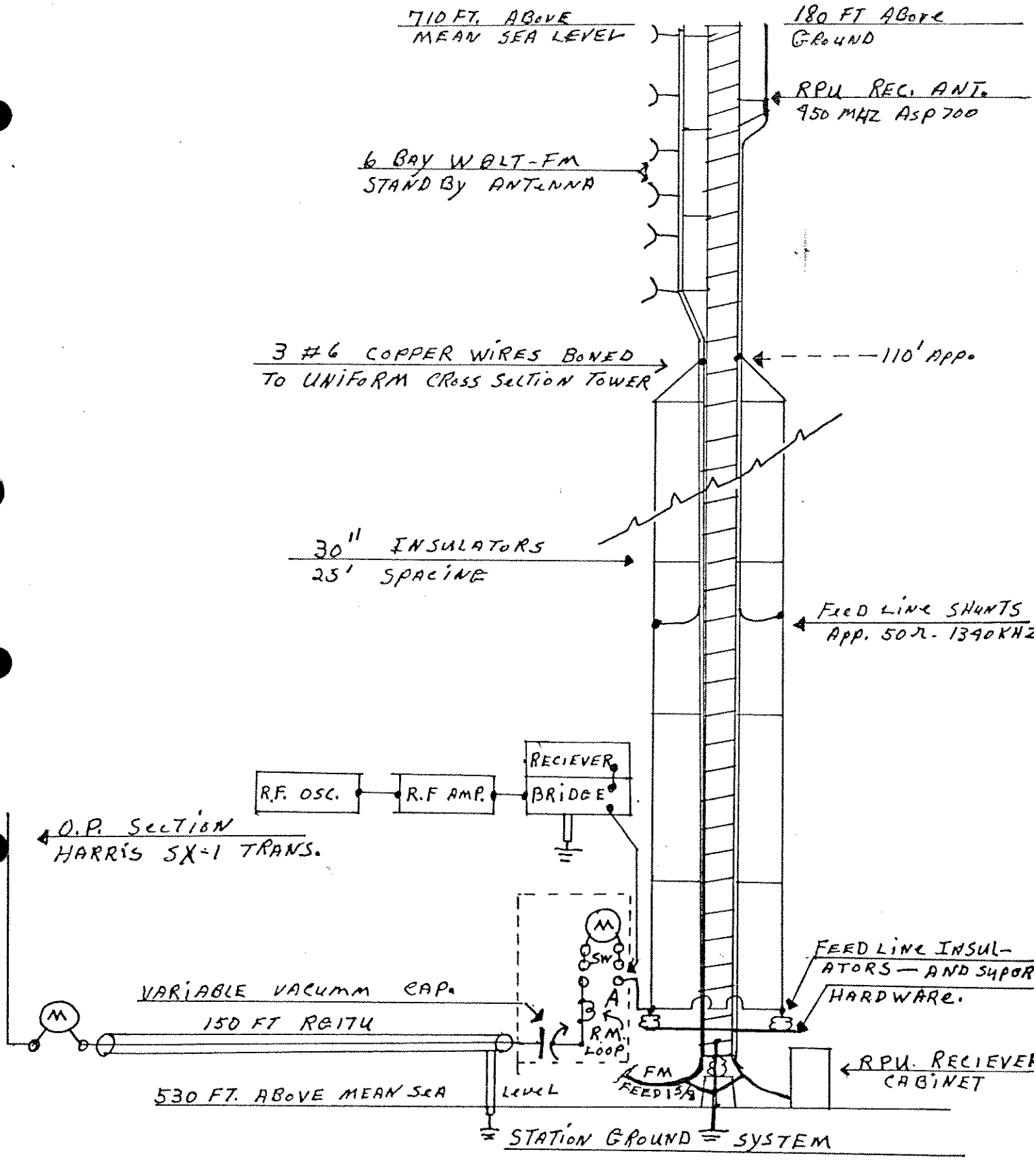


FIGURE 1
Point (A) coupling point for resistance measurement.
Circuit components and transmitter coupling.
Coaxial cable used forall connections.

WXOR, Florence, Ala. 1340 Khz., 1 Kw. day, .25 Kw night.
Prepared May 11, 1983.
Prepared By Paul E. Kelley, Chief Engineer

State of Alabama)
) 0 ss:
County of Colbert

Paul E. Kelley, being duly sworn upon oath, deposes, and states that he has been retained by Sam Phillips, owner of Radio Station WXOR as a consulting engineer;

That the data compiled in the attached report was prepared by him or under his personal supervision and direction;

That all of the facts and data relative to the antenna impedance and method of obtaining this data are correct of affiant's personal knowledge;

That statements relative to the physical installations and others stated to be on information and/or belief are believed to be true and correct as therein appearing.

Paul E Kelley
(Affiant)

Sworn to and subscribed before me, this the 27th day of June, A.D., 1983, in Sheffield, Alabama.

Sandra L. Grigsby
(Notary Public)

My commission expires 4/25/85.