

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

File No.: **BZ-9501**

MODIFIED

Call Sign: **WBCU**

STANDARD BROADCAST STATION LICENSE

Fac ID: **7088**

MAIN AND AUXILIARY TRANSMITTERS

Subject to the provisions of the Communications Act of 1934, subsequent Acts, and Treaties, and Commission Rules made thereunder, and further subject to conditions set forth in this license, ^{1/}the LICENSEE

BROADCASTING COMPANY OF UNION, INC.

is hereby authorized to use and operate the radio transmitting apparatus hereinafter described for the purpose of broadcasting for the term ending 3 a.m. Local Time **December 1, 1978**

The licensee shall use and operate said apparatus only in accordance with the following terms:

- On a frequency of **1460** kHz.
- With nominal power of **1 kilo** watts nighttime and **1 kilo** watts daytime, with antenna input power of **1.08 kilowatts** - directional

common point
common point
antenna
antenna

current	4.58	amperes
resistance	51.5	ohms
current	2.92	amperes
resistance	117	ohms

and antenna input power of **1 kilo** watts **non** directional

antenna
antenna

- Hours of operation: **Unlimited!**
Average hours of sunrise and sunset:
Jan. 7:30am to 5:45pm; Feb. 7:15am to 6:15pm;
Mar. 6:45am to 6:30pm; Apr. 6:00am to 7:00pm;
May 5:30am to 7:15pm; June 5:15am to 7:45pm;
July 5:30am to 7:45pm; Aug. 5:45am to 7:15pm;
Sep. 6:15am to 6:30pm; Oct. 6:30am to 6:00pm;
Nov. 7:00am to 5:15pm; Dec. 7:30am to 5:15pm;
Eastern Standard Time (non-advanced)

- With the station located at: **Union, South Carolina**
- With the main studio located at: **210 East Main Street, Union, South Carolina**

- Remote control point: **210 East Main Street, Union, South Carolina,**
while using DA-W only.

- Transmitter location: **Buffalo Road**
Union, South Carolina
North Latitude:

34	43	10
81 °	39'	44"
°	"	"

West Longitude:

- Obstruction marking specifications in accordance with the following paragraphs of FCC Form 715: **none required!**

- Transmitter(s): **RCA BTA-1R2(Main) RCA BTA-1L(Auxiliary)**
- Conditions:

The Commission reserves the right during said license period of terminating this license or making effective any changes or modification of this license which may be necessary to comply with any decision of the Commission rendered as a result of any hearing held under the rules of the Commission prior to the commencement of this license period or any decision rendered as a result of any such hearing which has been designated but not held, prior to the commencement of this license period.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such broadcasting service as will serve public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequency designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This license is subject to the right of use or control by the Government of the United States conferred by Section 606 of the Communications Act of 1934.

^{1/}This license consists of this page and pages **2 & 3.**

Dated: **September 30, 1977**

FEDERAL
COMMUNICATIONS
COMMISSION



File No.: BZ-9501

Call Sign: WBCU

Date: 9-30-77

1. DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

DA-N

No. and Type of Elements: Three uniform cross section, guyed, series excited vertical radiators. All towers top loaded by connecting portion of top set of guy wires {3 guys} to tower. Center tower loading wires 34' long. End tower loading wires 57' long.

	<u>East Tower{2}</u>	<u>Center Tower{1}</u>	<u>West Tower{3}</u>
Height above Insulators:	130'	170' {108.97° w/top loading}	130' {99.89° w/top loading}
Overall Height:	133'	173'	133'
Spacing and Orientation:	112.3' {60°} between adjacent towers. Line of towers bears 100° true.		

Non-Directional Antenna: Center Tower.

Ground System consists of 120 equally spaced buried copper radials plus 32' square copper ground screen about each tower. Radials 170' long or to point of intersection, radials bonded to copper bus at point of intersection.

2. THEORETICAL SPECIFICATIONS

	<u>East Tower{2}</u>	<u>Center Tower{1}</u>	<u>West Tower{3}</u>
Phasing:	-165°	4°	165°
Field Ratio:	1.0	1.835	1.0

3. OPERATING SPECIFICATIONS

Phase Indication*:	-161°	0°	165°
Antenna Base Current Ratio:	0.896	1.00	0.896

Antenna Monitor
Sample Current Ratio:

0.84	1.00	0.84
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*As indicated by Potomac Instruments AM-19{204} antenna monitor.

"Section 73.114(a)(8) of the rules and any requirement for weekly monitoring point readings ARE WAIVED during proper operation of approved sampling system: Provided, monitoring point readings are made at least once every thirty days."

Field measuring equipment shall be available at all times, and field intensity at each of the monitoring points shall be measured at least once every seven days and an appropriate record kept of all measurements so made.

DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Point #1, direction of 20° true North. From transmitter drive entrance on Lukesville Road go north 50 feet to Sect. 44-40 Road; turn right and go 0.3 mile to US Rt. #176. Proceed east on Rt. 716 for 1.1 mile, then turn sharp left on Section 44-19 Road, go north 1.05 miles (to about 100 feet beyond paved side road on right) to monitoring point on southwest side of road, opposite poplar tree. The field intensity at night should not exceed 14.5 mV/m.

Point #2, direction of 32° true North. From the transmitter drive entrance on Lukesville Road, go north 50 feet to Sect. 44-40 Road; turn right and go 0.3 mile to US Rt. #176. Proceed east on Rt. 176 for 1.65 miles to intersection S.C. Rt. 11. Turn left on Rt. 11, and go 1.9 miles to Section 44-4 Road (near Drive-In Theatre). Turn slant right across railroad and go northeast 0.2 mile to dirt road on left. Turn left and go 0.65 mile to monitoring point on road, near large stump on southeast side. The field intensity at night should not exceed 5.8 mV/m.

Point #3, direction of 180° true North. From transmitter drive entrance on Lukesville Road, go south 0.4 mile to dirt road on left. Incline left on this dirt road and go 1.2 mile south to S.C. Rt. 96. Turn right on Rt. 96, and proceed 0.55 mile; turn left on blacktop road and go south 0.1 mile to monitoring point in road, opposite maple tree. The field intensity at night should not exceed 15.5 mV/m.

Point #4, direction of 231.5° true North. From transmitter drive entrance on Lukesville Road, go north 0.2 mile to U.S. Rt. #176. Turn left on Rt. 176, and proceed 0.6 mile (through Buffalo) to blacktop road on left. Turn left and go 1.70 miles to monitoring point in road (opposite cedar tree). The field intensity measured at this point should not exceed 10.0 mV/m.

Point #5, direction of 280° true North. From transmitter drive entrance on Lukesville Road, go north 0.2 mile to U. S. Rt. #176. Turn left on Rt. 176, and proceed 0.6 mile (through Buffalo) to blacktop road on left. Turn left and go 0.2 mile. Monitoring point is in open field 50 feet east of road, and 50 feet south of fenced grave. The field intensity at night should not exceed 55 mV/m.

Point #6, direction of 309° true North. From transmitter drive entrance on Lukesville Road, go north 0.2 mile to U.S. Rt. #176. Turn left and proceed 0.75 mile (to near Buffalo Mill) to road on right. Turn right on road, and go 0.15 mile to Y. Keep right at "Y", and continue north to a distance of 0.45 mile from U. S. Rt. #176, to monitoring point on west side of road in front of white bungalow. The field intensity at night should not exceed 48 mV/m.

Point #7, direction of 328.5° true North. From transmitter drive entrance on Lukesville Road, go north 0.2 mile to U.S Rt. #176. Turn left and proceed 0.75 mile (to near Buffalo Mill) to road on right. Turn right on road, and go 0.15 mile to Y. Keep right at "Y", and continue north and east to a distance of 0.95 mile from U.S. Rt. #176. Monitoring point is in front yard of white bungalow (P.F. yard) on north side of road. The field intensity at night should not exceed 25 mV/m.