

UNITED STATES OF AMERICA  
FEDERAL COMMUNICATIONS COMMISSION

BR-334  
File No.: BZ-9772

STANDARD BROADCAST STATION LICENSE  
RENEWAL AND MODIFICATION

Call Sign: W S A N  
FAC ID# 18233

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, <sup>1</sup>the LICENSEE

WSAN, 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 August 1, 1981

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

1. On a frequency of 1470 KHz.
2. With nominal power of 5 kilo watts nighttime and 5 kilo watts daytime,  
with antenna input power of 5400 watts - directional ☐ Common Point  
antenna nighttime ..... ☐ Common Point  
antenna input power of 5000 watts non directional ☐ Antenna  
antenna daytime ..... ☐ Antenna  
current 8.90 amperes  
resistance 68.0 ohms,  
current 8.84 amperes  
resistance 64.0 ohms

3. Hours of operation: Unlimited.

Average hours of sunrise and sunset:

Jan. 7:30am to 5:00pm; Feb. 7:00am to 5:30pm;  
Mar. 6:15am to 6:15pm; Apr. 5:30am to 6:45pm;  
May 4:45am to 7:15pm; June 4:30am to 7:30pm;  
July 4:45am to 7:30pm; Aug. 5:15am to 7:00pm;  
Sep. 5:45am to 6:15pm; Oct. 6:15am to 5:30pm;  
Nov. 6:45am to 4:45pm; Dec. 7:15am to 4:30pm;

4. With the station located at: (Non-Advanced).  
Allentown, Pennsylvania

5. With the main studio located at: Near Junction of Rt. 329 and West Catasaugua Rd.  
Allentown, Pennsylvania

6. Remote control point: -

7. Transmitter location:  
Near Junction of Route 329  
and West Catasaugua Road  
Allentown, Pennsylvania  
North Latitude: 40 ° 38 ' 10 "  
West Longitude: 75 ° 29 ' 06 "

8. Obstruction marking specifications in accordance with the following paragraphs of FCC Form 715: 1, 3, 12 & 21
9. Transmitter(s): TYPE ACCEPTED
10. Conditions: See Page 1(a)

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 1(a), 2 & 3

Dated: December 11, 1980

FEDERAL  
COMMUNICATIONS  
COMMISSION



BR-334  
BZ-97772

W S A N

12-11-80

This grant is subject to the following condition:

The (assignment of license) for Stations WSAW, Allentown, Pennsylvania and KADQ(FM) Rexburg, Idaho (BAL800915FK and BALH800822EF) shall be consummated within sixty (60) days of the date of the grant of BAL800915FK and BALH800822EF and the Commission shall be notified of such consummation within one day thereafter; failure to meet this condition will render the grant of the renewal of license applications WSAW and KADQ(FM) null and void and will cause the renewal applications to revert to pending status.

BR-334  
File No.: BZ-9772-

Call Sign: W S A N Date: 12-11-80

1. DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM  
No. and Type of Elements: Three self-supporting, tapered, series  
excited vertical radiators.

Height above Insulators: 190' (102.2°)

Overall Height: 193'

Spacing and Orientation: 167.5' (90°) between adjacent elements.  
Line of towers bears 135° true.

Non-Directional Antenna: Center  
Ground System consists of 120-50' and 120-340' buried copper radials  
equally spaced about each tower. DAY ND ANTENNA EFFICIENCY: 195 mV/m/kW  
(theoretical).

## 2. THEORETICAL SPECIFICATIONS

	Tower	NW (#1)	C (#2)	SE (#3)
Phasing:	Night	-32.4°	174.18°	32.4°
Field Ratio:	Night	1.00	1.427	1.0

## 3. OPERATING SPECIFICATIONS

	Phase Indication*: Night	142.8°	0°	-163.6°
--	--------------------------	--------	----	---------

Antenna Base	Night	0.845	1.00	0.761
Current Ratio:				

Antenna Monitor	Night	0.753	1.00	0.658
Sample	Current Ratio:			

\* As indicated by Potomac Instruments AM-19D (210) antenna monitor.

DESCRIPTION OF AND FIELD INTENSITY AT MONITORING POINTS:

Direction of 53° true North. Leave transmitter site, headed south on 7th Street for 0.7 mile to US Rt. 22 underpass. Proceed east on US Rt. 22 for 3.0 miles to State Rt. 987 overpass. Proceed north on State Rt. 987 for 3.0 miles to Hecktown Road. Proceed east on Hecktown Road for 0.8 mile to a dirt farm road on left. Proceed up the farm road to a point 100 yards north of barn at iron fence post. The field intensity measured at this point should not exceed 5.0 mV/m.

Direction of 217° true North. Starting at transmitter turn southward on West Catasaugua Road for approximately 0.3 miles to intersection with Pennsylvania Hwy. 145. Turn left on Pennsylvania Hwy. 145 for 1.55 miles to intersection with US Hwy. 22. Turn right on US Hwy. 22 for 2.9 miles to intersection with Pennsylvania Hwy. 229. From intersection of US Hwy. 22 and Pennsylvania Hwy. 229, proceed south on Pennsylvania Hwy. 229, 0.65 mile. Turn right at white brick house, proceed 0.15 mile to entrance to park on right, by greenhouse. Turn right and proceed to "Y" in road, and turn right. Point is just at end of "Y". The field intensity measured at this point should not exceed 4.4 mV/m.

Direction of 274.5° true North. Starting at transmitter, turn southward on West Catasaugua Road for approximately 0.3 mile to intersection with Pennsylvania Hwy. 145. Turn right on Pennsylvania Hwy. 145 for 1.5 miles and turn left on paved road on the north side of Mickle's Hotel. Proceed for 1.85 miles to Minnichville, turn left on road to Meyersville. At Meyersville, turn left on road to Siegersville, proceed for 0.3 mile from Meyersville to northwest corner of red barn on right of road. Point is on road by white pump. The field intensity measured at this point should not exceed 11.1 mV/m.

Direction of 316° true North. Starting at transmitter turn southward for 0.3 mile on West Catasaugua Road to intersection with Pennsylvania Hwy. 145. Turn right on Pennsylvania Hwy. 145 for 2.2 miles to paved road to the left near large white silo. Turn left for 1.05 miles from Pennsylvania Hwy. 145 to lane turning left on west side of house. Point is on lane, 25 feet from entrance. The field intensity measured at this point should not exceed 28.0 mV/m.

File NO.: BZ-830218AC

Call Sign: WXXW

Date:

1. DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

DA- N

No. and Type of Elements: Three self-supporting, tapered, series excited vertical radiators. RMS: Theo 425 mv/m Standard 446.95<sub>1</sub> mV/m.

Height above Insulators: 190' (102.2°)

Overall Height: 193'

Spacing and Orientation: 167.5' (90°) between adjacent elements. Line of towers bears 135° true.

Non-Directional Antenna: Center

Ground System consists of 120-50' and 120-340' buried copper radials equally spaced about each tower. Radials are shortened and bonded to copper strap midway between elements.

2. THEORETICAL SPECIFICATIONS

Phasing:	Tower	NM(#1)	C(#2)	SE(#3)
	Night	-32.4°	174.18°	32.4°
Field Ratio:	Night	1.00	1.427	1.0

3. OPERATING SPECIFICATIONS

Phase Indication\*: Night 148.3° 0° -158°

Antenna Base	Night	0.970	1.00	0.636
Current Ratio:				

Antenna Monitor Sample				
Current Ratio:	Night	0.745	1.00	0.75

\*As indicated by Potomac Instruments AM-19D  
Retain Section 73.68(b) exemptions

Antenna Monitor,

BZ-830218AC

WXXW

Description of and Field Intensity at Monitoring Points:

Direction of 53 degrees true north. From the WXXW transmitter site, proceed on driveway to Mickleley Ave. Turn left and proceed 0.2 miles to MacArthur (Rt. 145). Turn left, proceed 0.2 miles to Grape Street. Turn left, proceed 0.74 miles to Fullerton Ave. Turn left, proceed 0.68 miles to Race Street. Turn right, proceed 1.9 miles to Fashion Drive. Turn left, proceed 50 yards. Monitor point is on northeast side of drive at second entrance to warehouse parking lot on storm drain cover. The field intensity measured at this point should not exceed 22 mV/m.

Direction of 217 degrees true north. From the WXXW transmitter site, proceed on driveway to Mickleley Ave. Turn left and proceed 0.2 miles to MacArthur (Rt. 145). Turn left, proceed 0.5 miles to Rt. 22. Turn right, proceed east 2.1 miles to Cedar Crest Blvd. exit. Turn left (south), proceed 1.5 miles to Parkway Blvd. Turn right, proceed past entrance to Trexler Memorial Park to first Street. Turn right, proceed 0.18 miles to rear entrance to Trexler Park. Turn right, proceed 100 yards. Monitor point is at fork in drive at "one way" sign. The field intensity measured at this point should not exceed 6.7 mV/m.

Direction of 274.5 degrees true north. From the WXXW transmitter site, proceed on driveway to Mickleley Ave. Turn left and proceed 0.2 miles to MacArthur (Rt. 145). Turn left, proceed 0.5 miles to Rt. 22. Turn right, proceed east 2.1 miles to Cedar Crest Blvd. exit. Turn right, proceed 2.22 miles on Cedar Crest Blvd. Monitor point is 50' east of road at old foundation of house. The field intensity measured at this point should not exceed 22.9 mV/m.

Direction of 316 degrees true north. From the WXXW transmitter site, proceed on driveway to Mickleley Ave. Turn left and proceed 0.2 miles to MacArthur (Rt. 145). Turn left, proceed 1.2 miles to driveway to Township High School. Turn left and proceed 100 yards. Turn right into the Whitehall Coplay School District Office parking lot. Point is at the northeast corner of parking lot. The field intensity measured at this point should not exceed 108 mV/m.