



**United States of America**  
**FEDERAL COMMUNICATIONS COMMISSION**  
**AM BROADCAST STATION LICENSE**

Authorizing Official:

Official Mailing Address:

BROADCAST EDUCATIONAL COMMUNICATIONS, INC.  
P.O. BOX 990  
GREENSBURG PA 15601

Son Nguyen  
Son Nguyen  
Supervisory Engineer  
Audio Division  
Media Bureau

Grant Date: **NOV 23 2018**  
This license expires 3:00 a.m.  
local time, August 01, 2022.

Facility Id: 8445

Call Sign: KQV

License File Number: BML-20180926ACC

This license authorizes change from commercial to non-commercial status.

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this license, the licensee is hereby authorized to use and operate the radio transmitting apparatus herein described.

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 the 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.

Hours of Operation: Unlimited

Average hours of sunrise and sunset:  
Local Standard Time (Non-Advanced)

Jan.	7:45 AM	5:15 PM	Jul.	5:00 AM	7:45 PM
Feb.	7:15 AM	6:00 PM	Aug.	5:30 AM	7:15 PM
Mar.	6:30 AM	6:30 PM	Sep.	6:00 AM	6:30 PM
Apr.	5:45 AM	7:00 PM	Oct.	6:30 AM	5:45 PM
May	5:00 AM	7:30 PM	Nov.	7:00 AM	5:00 PM
Jun.	4:45 AM	7:45 PM	Dec.	7:30 AM	5:00 PM

Callsign: KQV

License No.: BML-20180926ACC

Name of Licensee: BROADCAST EDUCATIONAL COMMUNICATIONS, INC.

Station Location: PITTSBURGH, PA

Frequency (kHz): 1410

Station Class: B

Antenna Coordinates:

Day

Latitude: N 40 Deg 31 Min 24 Sec

Longitude: W 80 Deg 00 Min 40 Sec

Night

Latitude: N 40 Deg 31 Min 24 Sec

Longitude: W 80 Deg 00 Min 40 Sec

Transmitter(s): Type Accepted. See Sections 73.1660, 73.1665 and 73.1670 of the Commission's Rules.

Nominal Power (kW): Day: 5.0 Night: 5.0

Antenna Input Power (kW): Day: 5.4 Night: 5.4

Antenna Mode: Day: DA Night: DA

(DA=Directional Antenna, ND=Non-directional Antenna; CH=Critical Hours)

Current (amperes): Day: 10.4 Night: 10.4

Resistance (ohms): Day: 50 Night: 50

Antenna Registration Number(s):

Day:

Tower No.	ASRN	Overall Height (m)
1	1027249	
2	1027250	
3	1027251	

Night:

Tower No.	ASRN	Overall Height (m)
1	1027247	
2	1027248	
3	1027249	
4	1027250	
5	1027251	

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Day: 901.23      Night: 901.23  
 Standard RMS (mV/m/km):                      Night: 948.87  
 Augmented RMS (mV/m/km):    Day: 947.89  
 Q Factor:    Day: 27.3                      Night: 66.56

Theoretical Parameters:

Day Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.4700	0.000	0.0000	0.000	0	180.6
2	1.1730	113.400	90.0000	330.000	0	180.6
3	0.4700	255.000	90.0000	330.000	1	180.6

\* Tower Reference Switch

0 = Spacing and orientation from reference tower  
 1 = Spacing and orientation from previous tower

Augmentation Parameters:

Aug No.	Central Azimuth (Deg. T)	Span (Deg.)	Radiation at Central Azimuth (mV/m @ 1 km)
1	216.0	10.0	990.31
2	258.5	10.0	370.15
3	295.5	10.0	353.11
4	358.0	56.0	381.41

Theoretical Parameters:

Night Directional Antenna:

Tower No.	Field Ratio	Phasing (Deg.)	Spacing (Deg.)	Orientation (Deg.)	Tower Ref Switch *	Height (Deg.)
1	0.3030	88.000	0.0000	0.000	0	180.6
2	1.3200	-113.700	90.0000	330.000	0	180.6
3	2.3700	46.000	90.0000	330.000	1	180.6
4	2.2620	204.800	90.0000	330.000	1	180.6
5	1.0000	0.000	90.0000	330.000	1	180.6

\* Tower Reference Switch

0 = Spacing and orientation from reference tower  
 1 = Spacing and orientation from previous tower

Day Directional Operation:

Twr. No.	Phase (Deg.)	Antenna Monitor Sample Current Ratio
3	149	0.608
4	0	1

Day Directional Operation:

Twr. Phase No. (Deg.)	Antenna Monitor Sample Current Ratio
5 -127	0.51

Night Directional Operation:

Twr. Phase No. (Deg.)	Antenna Monitor Sample Current Ratio
1 -47	0.363
2 167.1	0.984
3 0	1
4 -170	0.464
5 15	0.12

Antenna Monitor: POTOMAC INSTRUMENTS AM-19D (210)

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

Day Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
76	3.54	176
216	4.02	134
258.5	4.83	47
295.5	2.33	103

Night Operation:

Radial (Deg. T)	Distance From Transmitter (kM)	Maximum Field Strength (mV/m)
76	3.54	39.5
216	4.02	63.5
258.5	4.83	20.5
295.5	2.33	38

Special operating conditions or restrictions:

- 1 The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.
- 2 Licensee shall be responsible for satisfying all reasonable complaints of blanketing interference within the 1 V/m contour as required by Section 73.88 of the Commission's rules.

## Special operating conditions or restrictions:

## 3 Ground System:

Ground system consist of 120-53.0 meter equally spaced buried copper radials plus a 7.3 meter square copper ground screen at the base of each tower. Intersecting radials shortened and bonded to transverse copper strap midway between towers.

## 4 Description of Monitoring Points:

Direction of 76 degrees true north. From transmitter site proceed along Oak Glen Road to Babcock Blvd. Turn right on Babcock Blvd. and proceed north approximately 0.7 mile to Seibert Rd. Turn right on Seibert Rd. and proceed east approximately 1.6 miles to Thompson Run Rd. Turn right on Thompson Run Rd. and proceed south approximately 0.1 mile to Vilsack Rd. Turn left on Vilsack Rd. and proceed east approximately 0.15 mile to Anderson Rd. Turn right on Anderson Rd. and proceed 0.4 mile to Weible Rd. Turn left on Weible Rd. and proceed approximately 0.1 mile to McElheney Rd. Proceed one mile along McElheney Rd. to Shaler Drive. Turn right on Shaler Drive 0.1 mile to intersection of Shaler Drive and Vollmer Drive. Point is located on left side of Vollmer Drive on grassy plot opposite 1845 Vollmer Drive.

Direction of 216 degrees true north. From transmitter site proceed along Oak Glen Rd. to Babcock Blvd. Turn left on Babcock Blvd. and proceed 0.8 mile to McKnight Rd. interchange. Proceed through interchange turning south on McKnight Rd. for a distance of 0.4 mile to Ivory Rd. interchange. Take Ivory Rd. interchange to Ivory Rd. turning right on Ivory Rd. 0.6 mile to Ivory Rd. and Rt. 19 intersection. Proceed on Rt. 19 left 0.4 mile to Bascom St. Proceed right on Bascom St., 1.1 mile to Dew Drop Inn. Point is located about 50 ft. from Bascom St. near north edge of parking area.

Direction of 258.5 degrees true north. From transmitter site proceed along Oak Glen Rd. to Babcock Blvd. Turn left on Babcock Blvd. 0.1 mile to intersection of Rochester Rd. Turn right on Rochester Rd. and proceed 1.3 miles to intersection of Rt. 19. Turn left on Rt. 19 and proceed 0.3 mile to the intersection of Highland Ave. Turn right on Highland Ave 0.75 mile to intersection of Gass Rd. Proceed left on Gass Rd. to Courtney Mill Rd. about 0.25 mile on the right. Bear to right and proceed along Courtney Mill Rd. 0.7 mile to Shanopin Golf Course where point is located. Point is on right hand edge of road on a rise of ground about 100 ft. north of gas line markers and facing oil derrick.

Direction of 295.5 degrees true north. To reach this location, proceed as described for the direction of 216 degrees, until the intersection of Rochester Rd. and Perry Hwy is reached. Turn right on Perry Hwy. and proceed north approximately 0.4 mile to the north drive into the Highland Presbyterian Church and cemetery. Turn left into this drive approximately 50 ft. to the edge of the cemetery. The monitoring point is at the northeast corner of the Dellenback cemetery plot approximately 100 ft. from Perry Hwy.

Special operating conditions or restrictions:

5 Antenna System Description:

Day registration tower #1, #2 and #3 correspond to physical tower #3(C), #4(SEC) and #5(SE). Night tower registration #1, #2, #3, #4 and #5 correspond to physical tower #1(NW), #2(NW-C), #3(C), #4(SE-C) and #5(SE). Day theoretical tower #1, #2 and #3 correspond to physical tower #5(SE), #4(SEC) and #3(C). Night theoretical tower #1, #2, #3, #4 and #5 correspond to physical tower #5(SE), #4(SEC), #3(C), #2(NWC) and #1(NW). Operating specifications tower numbers refer to the physical tower numbers. Day directional operation towers #3, #4, and #5 correspond to physical tower #3(C), #4(SE-C) and #5(SE). Night directional operation towers #1, #2, #3, #4 and #5 correspond to physical tower #1(NW), #2(NW-C), #3(C), #4(SE-C) and #5(SE).

\*\*\* END OF AUTHORIZATION \*\*\*