

#### **United States of America**

# FEDERAL COMMUNICATIONS COMMISSION AM BROADCAST STATION LICENSE

Authorizing Official:

Official Mailing Address:

Major Keystone LLC 435 N. Main Street Allentown PA 18104

Son Nguyen
Supervisory Engineer
Audio Division

Media Bureau

Facility Id: 27510

Call Sign: WTKZ

Grant Date: March 16, 2000

This license expires 3:00 a.m. local time, August 01, 2006.

License File Number: BL-19991201AAQ

This supersedes authorization of same date to correc the phase of tower  $\#1. \quad 4/23/2020$ 

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

Name of Licensee: Major Keystone LLC

Station Location: ALLENTOWN, PA

Frequency (kHz): 1320

Station Class: B

#### Antenna Coordinates:

Day

Latitude: N 40 Deg 35 Min 33 Sec Longitude: W 75 Deg 28 Min 42 Sec

Night

Latitude: N 40 Deg 35 Min 33 Sec Longitude: W 75 Deg 28 Min 42 Sec

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

Nominal Power (kW): Day: 0.75 Night: 0.195

Antenna Input Power (kW): Day: 0.75 Night: 0.21

Antenna Mode: Day: ND Night: DA

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

Current (amperes): Day: 3.3 Night: 2.05

Resistance (ohms): Day: 69 Night: 50

Non-Directional Antenna: Day

Radiator Height: 61 meters; 96.5 deg
Theoretical Efficiency: 309.4 mV/m/kw at 1km

## Antenna Registration Number(s):

Day:

Tower No. ASRN Overall Height (m)

1 1016360

Night:

Tower No. ASRN Overall Height (m)

1 1016361
 2 1016360

Callsign: WTKZ License No.: BL-19991201AAQ

DESCRIPTION OF DIRECTIONAL ANTENNA SYSTEM

Theoretical RMS (mV/m/km): Night: 142.5

Standard RMS (mV/m/km): Night: 149.99

Augmented RMS (mV/m/km):

Q Factor: Night: 10

Theoretical Parameters:

Night Directional Antenna:

Tower	Field	Phasing	Spacing	Orientation	Tower Ref	Height
No.	Ratio	(Deg.)	(Deg.)	(Deg.)	Switch *	(Deg.)
1	1.0000	0.000	0.0000	0.000	0	96.5
2	0.9400	-171.400	49.7000	170.000	0	96.5

\* Tower Reference Switch

0 = Spacing and orientation from reference tower

1 = Spacing and orientation from previous tower

### Night Directional Operation:

Twr. Phase Antenna Monitor
No. (Deg.) Sample Current Ratio

1 -164 0.83

2 0 1

Antenna Monitor: Potomac Instruments AM-19(204)

Sampling System Approved Under Section 73.68 of the Rules.

Monitoring Points:

## Night Operation:

Radial (Deg. T)	Distance From Transmitter Maximum $(kM)$	Field Strength (mV/m)
70	6.18	2.39
170	3.6	31.13
270	11.21	0.37
350	5.72	8.84

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