

FEDERAL COMMUNICATIONS COMMISSION

FM BROADCAST STATION LICENSE



Official Mailing Address:

FREDERICKSBURG BROADCASTING CORP.  
1914 MIMOSA  
FREDERICKSBURG, VA 22401

Authorizing Official:

*Dennis Williams*

Penelope A. Dade  
Supr Applications Examiner, FM Branch  
Audio Services Division  
Mass Media Bureau

Grant Date: February 29, 1988

This license expires 3:00 am.  
local time: October 01, 1988

Call sign: WBQB

License File No.: BLH-871030KB

This license covers Permit No.: 860801IC

This authorization re-issued to reflect a call sign change from  
WFVA-FM to WBQB effective 8/07/89.

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.

Name of Licensee:

FREDERICKSBURG BROADCASTING CORP.

Station Location:

VA-FREDERICKSBURG

Frequency (MHz): 101.5

Channel: 268

Class: B

Hours of Operation: Unlimited

Main Studio Address:

VA-1914 MIMOSA AVENUE, FREDERICKSBURG

Transmitter location (address or description):

0.3 MILES NORTHWEST OF STONES CORNER, THE INTERSECTION OF STATE ROUTES 605 AND 678. 4.5 MILES NORTHEAST OF FREDERICKSBURG, VA.

Remote control point address:

VA-1914 MIMOSA AVENUE, FREDERICKSBURG

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

Transmitter output power (kW): 9.1

Antenna type: (directional or non-directional): Directional

Desc: ELY LABS 6810-4R-DA FOUR SECTIONS DIRECTIONALIZED CIRCULARLY POLARIZED SIDE-MOUNTED ON A ROHN 83PH GUYED TOWER.

Antenna coordinates: North Latitude: 38 19 57.0  
 West Longitude: 77 23 41.0

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the horizontal plane (kW) . . . . . :	30.0	29.0
Height of radiation center above ground (meters) . . . . . :	91.0	91.0

Height of radiation center above		
mean sea level (meters) . . . . .	: 155.0	155.0

Height of radiation center above		
average terrain (meters) . . . . .	: 118.0	118.0

Overall height of antenna structure above ground (including obstruction		
lighting, if any) . . . . .	: 108.0 meters	

Obstruction marking and lighting specifications for antenna structure:

It is to be expressly understood that the issuance of these specifications is in no way to be considered as precluding additional or modified marking or lighting as may hereafter be required under the provisions of Section 303(q) of the Communications Act of 1934, as amended.

Paragraph 1.0, FCC Form 715 (March 1978):

Antenna structures shall be painted throughout their height with alternate bands of aviation surface orange and white, terminating with aviation surface orange bands at both top and bottom. The width of the bands shall be equal and approximately one-seventh the height of the structure, provided however, that the bands shall not be more than 100 feet nor less than 1 and 1/2 feet in width. All towers shall be cleaned and repainted as often as necessary to maintain good visibility.

Paragraph 3.0, FCC Form 715 (March 1978):

There shall be installed at the top of the structure one 300 m/m electric code beacon equipped with two 620- or 700-watt lamps (PS-40, Code Beacon type), both lamps to burn simultaneously, and equipped with aviation red color filters. Where a rod or other construction of not more than 20 feet in height and incapable of supporting this beacon is mounted on top of the structure and it is determined that this additional construction does not permit unobstructed visibility of the code beacon from aircraft at any normal angle of approach, there shall be installed two such beacons positioned so as to insure unobstructed visibility of at least one of the beacons from aircraft at any normal angle of approach. The beacons shall be equipped with a flashing mechanism producing not more than 40 flashes per minute nor less than 12 flashes per minute with a period of darkness equal to approximately one-half of the luminous period.

## Paragraph 4.0, FCC Form 715 (March 1978):

At approximately one-half of the overall height of the tower one similar flashing 300 m/m electric code beacon shall be installed in such position within the tower proper that the structural members will not impair the visibility of this beacon from aircraft at any normal angle of approach. In the event this beacon cannot be installed in a manner to insure unobstructed visibility of it from aircraft at any normal angle of approach, there shall be installed two such beacons. Each beacon shall be mounted on the outside of the tower at the prescribed height.

## Paragraph 13.0, FCC Form 715 (March 1978):

On levels at approximately three-fourths and one-fourth of the over-all height of the tower, at least one 116- or 125-watt lamp (A21/TS) enclosed in an aviation red obstruction light globe shall be installed on each outside corner of the structure.

## Paragraph 21.0, FCC Form 715 (March 1978):

All lighting shall burn continuously or shall be controlled by a light sensitive device adjusted so that the lights will be turned on at a north sky light intensity level of about 35 foot candles and turned off at a north sky light intensity level of about 58 foot candles.

## Special operating conditions or restrictions:

NEITHER THE HORIZONTALLY NOR VERTICALLY POLARIZED RADIATION COMPONENT SHALL EXCEED 30 KW AT ANY AZIMUTH AND EACH COMPONENT SHALL BE RESTRICTED TO THE FOLLOWING VALUES AT THE AZIMUTHS SPECIFIED:

0.95 KW AT 322 DEGREES T

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IN ADDITION, THE HORIZONTALLY POLARIZED RADIATION COMPONENT SHALL NOT INCREASE AT A RATE EXCEEDING 0.2 DB PER DEGREE FROM THE AZIMUTHS OF RESTRICTED RADIATION SPECIFIED ABOVE AND NEITHER COMPONENT SHALL EXCEED A MAXIMUM-TO-MINIMUM RATIO OF 15 DB. THE VERTICALLY POLARIZED RADIATION COMPONENT SHALL NOT EXCEED THE HORIZONTALLY POLARIZED RADIATION COMPONENT AT ANY AZIMUTH.

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THE HORIZONTAL AND VERTICAL RADIATION PATTERNS AS SUBMITTED WITH THE APPLICATION FOR CONSTRUCTION PERMIT ARE AUTHORIZED BY THIS CONSTRUCTION PERMIT. CHANGES MADE TO THESE PATTERNS WILL REQUIRE THE FILING OF FCC FORM 301 FOR COMMERCIAL STATIONS OR FCC FORM 340 FOR EDUCATIONAL STATIONS TO MODIFY THIS CONSTRUCTION PERMIT BEFORE PROGRAM TESTS ARE AUTHORIZED.

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BEFORE PROGRAM TESTS ARE AUTHORIZED, PERMITTEE SHALL SUBMIT THE RESULTS OF A COMPLETE PROOF-OF-PERFORMANCE TO ESTABLISH THE HORIZONTAL PLANE RADIATION PATTERNS FOR BOTH THE HORIZONTALLY AND VERTICALLY POLARIZED RADIATION COMPONENTS. THIS PROOF-OF-PERFORMANCE MAY BE ACCOMPLISHED USING THE COMPLETE FULL SIZE ANTENNA, OR INDIVIDUAL BAYS THEREFROM, MOUNTED ON A SUPPORTING STRUCTURE OF IDENTICAL DIMENSIONS AND CONFIGURATION AS THE PROPOSED STRUCTURE, INCLUDING ALL BRACES, LADDERS, CONDUITS, COAXIAL LINES AND OTHER APPURTENANCES; OR USING A CAREFULLY MANUFACTURED SCALE MODEL OF THE ENTIRE ANTENNA, OR INDIVIDUAL BAYS THEREFROM, MOUNTED ON AN EQUALLY SCALED MODEL OF THE PROPOSED SUPPORTING STRUCTURE, INCLUDING ALL APPURTENANCES. ENGINEERING EXHIBITS SHOULD INCLUDE A DESCRIPTION OF THE ANTENNA TESTING FACILITIES AND EQUIPMENT EMPLOYED, INCLUDING APPROPRIATE PHOTOGRAPHS OR SKETCHES AND A DESCRIPTION OF THE TESTING PROCEDURE, INCLUDING SCALE FACTOR, MEASUREMENTS FREQUENCY AND EQUIPMENT CALIBRATION.  
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BEFORE PROGRAM TESTS ARE AUTHORIZED, PERMITTEE SHALL SUBMIT AN AFFIDAVIT FROM A LICENSED SURVEYOR TO ESTABLISH THAT THE DIRECTIONAL ANTENNA HAS BEEN ORIENTED AT THE PROPER AZIMUTH. f