



United States of America  
**FEDERAL COMMUNICATIONS COMMISSION**  
**FM BROADCAST STATION CONSTRUCTION PERMIT**

Authorizing Official:

Official Mailing Address:

EDUCATIONAL MEDIA FOUNDATION  
5700 WEST OAKS BLVD.  
ROCKLIN CA 95765

Rodolfo F. Bonacci  
Supervisory Engineer  
Audio Division  
Media Bureau

Facility ID: 54872

Call Sign: WLFV

Permit File Number: BPH-20030903AAM

Grant Date: May 17, 2004

This permit expires 3:00 a.m.  
local time, 36 months after the  
grant date specified above.

Subject to the provisions of the Communications Act of 1934, as amended, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions set forth in this permit, the permittee is hereby authorized to construct the radio transmitting apparatus herein described. Installation and adjustment of equipment not specifically set forth herein shall be in accordance with representations contained in the permittee's application for construction permit except for such modifications as are presently permitted, without application, by the Commission's Rules.

Commission rules which became effective on February 16, 1999, have a bearing on this construction permit. See Report & Order, Streamlining of Mass Media Applications, MM Docket No. 98-43, 13 FCC RCD 23056, Para. 77-90 (November 25, 1998); 63 Fed. Reg. 70039 (December 18, 1998). Pursuant to these rules, this construction permit will be subject to automatic forfeiture unless construction is complete and an application for license to cover is filed prior to expiration. See Section 73.3598.

Equipment and program tests shall be conducted only pursuant to Sections 73.1610 and 73.1620 of the Commission's Rules.

Name of Permittee: EDUCATIONAL MEDIA FOUNDATION

Station Location: VA-MIDLOTHIAN

Frequency (MHz): 98.9

Channel: 255

Class: B1

Hours of Operation: Unlimited

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

Transmitter output power: As required to achieve authorized ERP.

Antenna type: Directional

Antenna Coordinates: North Latitude: 37 deg 36 min 52 sec  
West Longitude: 77 deg 30 min 56 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	7.3	7.3
Height of radiation center above ground (Meters):	163	163
Height of radiation center above mean sea level (Meters):	241	241
Height of radiation center above average terrain (Meters):	183	183
Antenna structure registration number: 1026628		

Overall height of antenna structure above ground (including obstruction lighting if any) see the registration for this antenna structure.

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 PROGRAM TESTS FOR WCUL(Facility ID #54872) WILL NOT COMMENCE ON CHANNEL 255B1 UNTIL PROGRAM TESTS FOR WSKS-FM(Facility ID #50234) COMMENCE ON CHANNEL 270A AND A LICENSE WILL NOT BE GRANTED FOR WCUL ON CHANNEL 255B1 UNTIL A LICENSE IS GRANTED FOR WSKS-FM ON CHANNEL 270A.
- 3 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 procedures, including scale factor, measurements frequency, and equipment calibration.

## Special operating conditions or restrictions:

- 4 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.
- 5 BEFORE PROGRAM TESTS ARE AUTHORIZED, permittee/licensee shall submit an affidavit that the installation of the directional antenna system was overseen by a qualified engineer. This affidavit shall include a certification by the engineer that the antenna was installed pursuant to the manufacturer's instructions and list the qualifications of the certifying engineer.
- 6 The relative field strength of neither the measured horizontally nor vertically polarized radiation component shall exceed at any azimuth the value indicated on the composite radiation pattern authorized by this construction permit.

A relative field strength of 1.0 on the composite radiation pattern herein authorized corresponds to the following effective radiated power:

7.3 kilowatts.

Principal minima and their associated field strength limits:

100 degrees True: 2.05 kilowatts

- 7 Prior to construction of the tower authorized herein, permittee shall notify AM Station(s) listed below so that, if necessary, the AM station(s) may determine operating power by the indirect method and request temporary authority from the Commission in Washington, D.C. to operate with parameters at variance in order to maintain monitoring point field strengths within authorized limits. Permittee shall be responsible for the installation and continued maintenance of detuning apparatus necessary to prevent adverse effects upon the radiation pattern of the AM station(s). Both prior to construction of the tower and subsequent to the installation of all appurtenances thereon, a partial proof of performance, as defined by Section 73.154(a) of the Commission's Rules, shall be conducted to establish that the AM array has not been adversely affected and, prior to or simultaneous with the filing of the application for license to cover this permit, the results submitted to the Commission.  
(Revised March 14, 1983)

WRNL(AM), Richmond, VA

- 8 \*\*\*NOTE TO PERMITTEE\*\*\*  
Notwithstanding the grant of this construction permit or the expiration date specified herein, your station's license will automatically expire as a matter of law on April 29, 2005 if the station has not resumed broadcasting before that time. See Pub. Law No. 104-104, 110 Stat. 56, Section 403(1) (1996) and Order, Silent Station Authorizations, FCC 96-218 (released May 17, 1996). See also Public Notice, Expedited Processing of Applications Filed By Silent Stations, DA 96-818 (May 22, 1996).

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