

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

Authorizing Official:

Official Mailing Address:

VIRGINIA TECH FOUNDATION, INC. 3520 KINGSBURY LANE ROANOKE VA 24014

Senior Engineer Audio Division Media Bureau

Arthur E. Doak

Facility ID: 63547

Call Sign: WVTW

Permit File Number: BPED-20061106AAP

Grant Date: January 19, 2007

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: VIRGINIA TECH FOUNDATION, INC. Station Location: VA-CHARLOTTESVILLE Frequency (MHz): 88.5 Channel: 203 Class: B1

Hours of Operation: Unlimited

Callsign: WVTW Permit No.: BPED-20061106AAP 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 dea 58 min 55 sec West Longitude: 78 deq 29 min 03 sec Horizontally Vertically Polarized Polarized Antenna Antenna 1.00 Effective radiated power in the Horizontal Plane (kW): 46 Height of radiation center above ground (Meters): 485 Height of radiation center above mean sea level (Meters): Height of radiation center above average terrain (Meters): 317 Antenna structure registration number: Not Required Overall height of antenna structure above ground: 55 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.

None Required

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.
- Virginia Tech Foundation, Inc. was granted a waiver of 47 C.F.R § 73.1125 to operate Station WVTW(FM) as a "satellite" of co-owned noncommercial educational FM Station WVTF(FM), Roanoke, Virginia (Facility ID No.: 70338). See Construction Permit BMPED-19970506IA and Letter to Mr. Lawrence Roberts, Esquire, reference 1800B3-JWR (Chief, Audio Services Division, Mass Media Bureau, December 12, 1996). Virginia Tech Foundation, Inc. shall abide by each representation proffered in the waiver request.

Special operating conditions or restrictions:

- BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee shall submit the 3 results of a complete proof-of-performance to establish the horizontal plane radiation pattern for the vertically polarized radiation component. 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.
- 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 the measured vertically polarized radiation component shall not exceed at any azimuth the value indicated on the radiation pattern authorized by this construction permit.

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

1.0 kilowatt

Principal minima and their associated field strength limits:

30 degrees True: 0.462 kilowatt
60 degrees True: 0.360 kilowatt
230 degrees True: 0.160 kilowatt

*** END OF AUTHORIZATION ***