



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

Authorizing Official:

Official Mailing Address:

RADIO COMMUNICATIONS BOARD, GEORGIA INSTITU
350 FERST DRIVE NW
SUITE 2224
ATLANTA GA 30332

Arthur E. Doak
Senior Engineer
Audio Division
Media Bureau

Facility ID: 54536

Grant Date: June 09, 2011

Call Sign: WREK

The authority granted herein has no effect on the expiration date of the underlying construction permit.

Permit File Number: BMPED-20110211AFI

This permit modifies Permit No.: BPED-20070907AFB

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: RADIO COMMUNICATIONS BOARD, GEORGIA INSTITUTE OF TECHNOLOGY

Station Location: GA-ATLANTA

Frequency (MHz): 91.1

Channel: 216

Class: C1

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: 33 deg 46 min 41 sec

West Longitude: 84 deg 24 min 22 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	100	100
Height of radiation center above ground (Meters):	83	83
Height of radiation center above mean sea level (Meters):	384	384
Height of radiation center above average terrain (Meters):	102	102

Antenna structure registration number: 1028279

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 the FCC guidelines.

- 2 The permittee has specified the use of an ERI/Jampro rototiller (EPA Type 3), 8 section antenna to demonstrate compliance with the FCC radiofrequency electromagnetic field exposure guidelines. If any other type or size of antenna is to be used with the facilities authorized herein, THE AUTOMATIC PROGRAM TEST PROVISIONS OF 47 C.F.R. SECTION 73.1620 WILL NOT APPLY. In this case, a FORMAL REQUEST FOR PROGRAM TEST AUTHORITY must be filed with the FCC Form 302-FM, application for license, BEFORE program tests will be authorized. This request must include a revised RF field showing to demonstrate continued compliance with the FCC guidelines.

Special operating conditions or restrictions:

- 3 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee/licensee must submit an affidavit that the installation of the directional antenna system was overseen by a qualified engineer. This affidavit must 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.
- 4 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee/licensee must 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, the permittee/licensee must 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 must 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.
- 6 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee/licensee must submit an exhibit demonstrating that the measured directional antenna pattern complies with the appropriate community coverage requirements of 47 C.F.R. Sections 73.315 or 73.515 (See 47 C.F.R. § 73.316(c)(2)(ix)(B)).
- 7 The RMS of the composite measured relative field horizontal plane directional antenna pattern must encompass at least 85% of the RMS of the composite relative field horizontal plane directional antenna pattern authorized by this construction permit.
- 8 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:

100 kilowatts

Principal minima and their associated field strength limits:

50 degrees True: 46.24 kilowatts
143 degrees True: 47.61 kilowatts

*** END OF AUTHORIZATION ***