



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

Authorizing Official:

Official Mailing Address:

UNIVERSITY OF MASSACHUSETTS, LOWELL
ONE UNIVERSITY AVE
SOUTHWICK 250
LOWELL MA 01854

Mary Houser
Supr Applications Examiner
Audio Division
Media Bureau

Facility ID: 69410

Grant Date: March 05, 1992

Call Sign: WUML

This permit expires 3:00 a.m.
local time, September 05, 1993.

Permit File Number: BPED-19890202MH

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: UNIVERSITY OF MASSACHUSETTS, LOWELL

Station Location: MA-LOWELL

Frequency (MHz): 91.5

Channel: 218

Class: A

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: 42 deg 39 min 07 sec

West Longitude: 71 deg 19 min 15 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	1.40	1.40
Height of radiation center above ground (Meters):	88	88
Height of radiation center above mean sea level (Meters):	114	114
Height of radiation center above average terrain (Meters):	63	63

Antenna structure registration number: Not Required

Overall height of antenna structure above ground: 93 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 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.
- 2 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.

Special operating conditions or restrictions:

- 3 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.

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

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1.40 Kilowatts
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Principal azimuths and their associated field strength limits:

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29 degrees T: 0.47 kilowatts
91 degrees T: 0.045 kilowatts
155 degrees T: 0.081 kilowatts
180 degrees T: 0.25 kilowatts
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In addition, warning signs which describe the radiofrequency hazard must be posted at appropriate locations. Access to the roof area must be restricted to prevent the exposure of humans to radiation in excess of the American National Standards Institute guidelines (OST Bulletin No. 65, October 1985). In addition, the transmitter power must be reduced or shut off to protect persons authorized access to the roof, tower, or antenna from excessive radiofrequency radiation. The permittee shall submit a statement with FCC Form 302 (application for license) documenting compliance with the conditions in this paragraph.

*** END OF AUTHORIZATION ***