



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

Authorizing Official:

Official Mailing Address:

EDUCATIONAL MEDIA FOUNDATION
5700 WEST OAKS BOULEVARD
ROCKLIN CA 95765

Rodolfo F. Bonacci
Assistant Chief
Audio Division
Media Bureau

Facility ID: 164206

Grant Date: June 09, 2015

Call Sign: KLUU

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

Permit File Number: BMPED-20140328ACH

This permit modifies permit no.: BPED-20070525AHV

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: HI-WAHIAWA

Frequency (MHz): 103.5

Channel: 278

Class: C

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:21 deg23 min51 sec

West Longitude:158 deg06 min01 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	100	100
Height of radiation center above ground (Meters):	41	41
Height of radiation center above mean sea level (Meters):	742	742
Height of radiation center above average terrain (Meters):	597	597

Antenna structure registration number: 1031769

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.

Special operating conditions or restrictions:

- 2 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.
- 3 BEFORE PROGRAM TESTS ARE AUTHORIZED, permittee must submit a certification executed by a licensed surveyor showing that the FM directional antenna system has been oriented at the azimuth(s) specified in the directional antenna proof of performance. This certification must include a description of the method used by the surveyor to determine the azimuth(s) of the installed directional antenna system and the accuracy of that determination.
- 4 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.
- 5 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee must submit an exhibit demonstrating that the measured directional antenna pattern complies with the appropriate community coverage provisions of 47 C.F.R. Sections 73.315 or 73.515 (See 47 C.F.R. Section 73.316(c) (2) (ix) (B)).
- 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:

100 kilowatts.

Principal minima and their associated field strength limits:

220 to 320 degrees True: 4 kilowatts

- 7 THE AUTOMATIC PROGRAM TEST PROVISIONS OF 47 C.F.R. SECTION 73.1620 DO NOT APPLY IN THIS CASE. A FORMAL REQUEST FOR PROGRAM TEST AUTHORITY MUST BE FILED IN CONJUNCTION WITH FCC FORM 302-FM, APPLICATION FOR LICENSE, BEFORE PROGRAM TESTS WILL BE AUTHORIZED. This request must contain documentation which demonstrates compliance with the following special operating condition(s):

Special operating conditions or restrictions:

- 8 The permittee/licensee shall, upon completion of construction and during the equipment test period, make proper radiofrequency electromagnetic (RF) field strength measurements throughout the transmitter site area to determine if there are any areas that exceed the FCC guidelines for human exposure to RF fields. If necessary, a fence must be erected at such distances and in such a manner as to prevent the exposure of humans to RF fields in excess of the FCC Guidelines (OET Bulletin No. 65, Edition 97-01, August 1997). The fence must be a type which will preclude casual or inadvertent access, and must include warning signs at appropriate intervals which describe the nature of the hazard. Any areas within the fence found to exceed the recommended guidelines must be clearly marked with appropriate visual warning signs.
- 9 Documentation demonstrating compliance with the preceding special operating condition shall be submitted at the time of filing of FCC Form 302-FM.
- 10 Waiver of 47 C.F.R. Section 73.1125 was previously granted to allow operation of this facility as a satellite operation of the following station:

KLVR(FM), Facility Id# 21689, Thousand Oaks, CA, Educational Media Foundation
- 11 The authority granted herein is subject to the condition that the field strength produced by the permitted/licensed facility shall not exceed 27 mV/m as measured at the Federal Communications Commission's Waipahu, Hawaii. In the event that this limitation is exceeded or if interference occurs to the monitoring, direction finding, or related operations of the Federal Communications Commission's Waipahu, Hawaii monitoring station, the permittee/licensee shall take such immediate corrective action as is necessary to eliminate the interference. This shall include responsibility for furnishing, installing and adjusting transmitter filter circuits, shielding, or other corrective devices. If these measures fail to eliminate interference to FCC operations caused by the presence of the permittee/licensee's signal, or if the field intensity exceeds 27 mV/m, the permittee/licensee shall immediately reduce power to the extent necessary to eliminate the interference and/or comply with field strength limit. After determining this lower power level, the permittee/licensee shall immediately apply for a Special Temporary Authority (STA) and shall file an application to the Commission for the altered parameters.

*** END OF AUTHORIZATION ***