



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

Arthur E. Doak  
Senior Engineer  
Audio Division  
Media Bureau

Facility ID: 2316

Call Sign: KLXB

Permit File Number: BPH-20150622AFT

Grant Date: April 28, 2016

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: CA-BERMUDA DUNES

Frequency (MHz): 105.1

Channel: 286

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: 33 deg 51 min 59 sec

West Longitude: 116 deg 25 min 59 sec

	Horizontally Polarized Antenna	Vertically Polarized Antenna
Effective radiated power in the Horizontal Plane (kW):	1.50	1.50
Height of radiation center above ground (Meters):	27	27
Height of radiation center above mean sea level (Meters):	504	504
Height of radiation center above average terrain (Meters):	198	198

Antenna structure registration number: Not Required

Overall height of antenna structure above ground: 30 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 \*\*\*\*\* This is a Section 73.215 contour protection grant \*\*\*\*\*  
\*\*\*\*\* as requested by this applicant \*\*\*\*\*
- 2 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.
- 3 Upon commencement of program tests in accordance with 47 C.F.R. § 73.1620, the licensee must cease use of the auxiliary facility authorized by BXLH-20150604ABQ due to a violation of 47 C.F.R. § 73.1675(a)(1). Alternatively, the licensee may seek modification of the auxiliary facility in accordance with § 73.1675(c)(1) to bring it into compliance with § 73.1675(a)(1). Documentation demonstrating compliance with this condition must be submitted with the FCC Form 302-FM, application for license.

## Special operating conditions or restrictions:

- 4 The permittee has specified the use of a four (4) sectioned, 0.5 wavelength spaced 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.
- 5 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee 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 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.
- 7 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee 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.
- 8 BEFORE PROGRAM TESTS ARE AUTHORIZED, the permittee 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)).
- 9 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.

Special operating conditions or restrictions:

- 10 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:

1.5 kilowatts

Principal minima and their associated field strength limits:

220 to 250 degrees True (clockwise): 0.752 kilowatt

270 to 280 degrees True (clockwise): 0.377 kilowatt

- 11 Pursuant to the grant of this construction permit and the authority found in Sections 4(i), 5(c)(1), 303 and 307(b) of the Communications Act of 1934, as amended, and Sections 0.61, 0.204(b), 0.283, 1.420, 73.203(b), and 73.3573 of the Commission's Rules, the FM assignment IS MODIFIED as follows:

Community	Channel No.
Bermuda Dunes, CA	Add 286A
North Shore, CA	Delete 286A

Pursuant to Section 316(a) of the Communication Act of 1934, as amended, License BLH-20150522AGE IS MODIFIED to specify operation on Channel 286A in Bermuda Dunes, California in lieu of Channel 286A in North Shore, California.

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