

**FORM 349  
APPLICATION FOR AUTHORITY TO CONSTRUCT  
OR MAKE CHANGES IN AN  
FM TRANSLATOR OR FM BOOSTER STATION**

FOR  
FCC  
USE  
ONLY

FOR COMMISSION USE ONLY

FILE NO.

**SECTION 1 - GENERAL INFORMATION**

1. APPLICANT NAME (Last, First, Middle Initial) <b>EDUCATIONAL MEDIA FOUNDATION</b>			
MAILING ADDRESS (Line 1) (if required) (Maximum 35 characters) <b>1425 NORTH MARKET BOULEVARD SUITE #9</b>			
MAILING ADDRESS (Line 2) (if required) (Maximum 35 characters)			
CITY <b>SACRAMENTO</b>	STATE OR COUNTRY (if foreign address) <b>CA</b>	ZIP CODE <b>95834</b>	
TELEPHONE NUMBER (include area code) <b>916-282-1400</b>	CALL LETTERS OR OTHER FCC IDENTIFIER (IF APPLICABLE) <b>K210CL</b>		
FOR MAILING THIS APPLICATION, SEE GENERAL INSTRUCTION D.			
2. A. Is a fee submitted with this application? <span style="float:right"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>			
B. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1112).			
<input type="checkbox"/> Governmental Entity <input checked="" type="checkbox"/> Noncommercial educational licensee <input type="checkbox"/> Other (Please explain)			
C. If Yes, provide the following information:			
Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter in Column (C) the result obtained from multiplying the value of the Fee Type Code in Column (A) by the number listed in Column (B).			
(A)	(B)	(C)	
FEE TYPE CODE	FEE MULTIPLE (if required)	FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
NA	0 0 0 1	\$ NA	

3. This application is for: (check one box)

FM Translator

FM Booster

A. Channel No.
210

B. Community of license:	
City	State
LEMON GROVE	CA

Section I (Page 2)

C. Check one of the following boxes:

NEW Station

MODIFICATION of Construction Permit (CP)  
(Check this box only if a license for this particular CP has not been granted)

File No. of Construction Permit: \_\_\_\_\_

MAJOR CHANGE in licensed facilities; call sign: \_\_\_\_\_

MINOR CHANGE in licensed facilities; call sign: \_\_\_\_\_

**K210CL**

AMENDMENT of Pending application

Application Reference No. \_\_\_\_\_

For amendments to a previously filed application, submit complete Form 349.

D. NATURE OF PROPOSED MODIFICATION, CHANGE OR AMENDMENT

Change Frequency

Relocate Station

Change Antenna System

Change Equipment

Change Power

Other (specify in an Exhibit)

Exhibit No. <b>NA</b>
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4. (a) To the applicant's knowledge, is this application mutually exclusive with a renewal application?  Yes  No

(b) To the applicant's knowledge, is this application mutually exclusive with another application?  Yes  No

If the answer to question 4(a) or 4(b) is Yes, state the following information:

Call letters or File No.	Community of License	
	City	State
(a) NA	NA	NA
(b) NA	NA	NA

**SECTION II - ENGINEERING DATA AND ANTENNA AND SITE INFORMATION**

1. Facilities requested:

(a)	Output Channel No.	Frequency	Proposed Community(ies) To Be Served	
	210	89.9 MHz	City LEMON GROVE	State CA

Primary station (station to be rebroadcast)

(b)	Call Sign	City	State	Output Channel No.	Frequency
	KLVJ	JULIAN	CA	261	100.1 MHz

Intermediate translator station - if station is to operate via another translator station

(c)	Call Sign	City	State
	NA	NA	NA

**KLVJ IS LICENSED AS A NONCOMMERCIAL STATION OPERATING ON A COMMERCIAL CHANNEL**

Alternative Signal Delivery

- (d)  Satellite Feed       Microwave       Other       Not Applicable

2. Proposed transmitting antenna location:

City NEAR HOMELANDS	State CA	County SAN DIEGO				
Address or other description of location: ATOP SAN MIGUEL MOUNTAIN		Geographical coordinates of transmitting antenna to nearest second (See Instructions)				
		<table style="width:100%; border:none;"> <tr> <td style="text-align:center;">North Latitude</td> <td style="text-align:center;">West Longitude</td> </tr> <tr> <td style="text-align:center;">32 ° 41 ' 46 "</td> <td style="text-align:center;">116 ° 56 ' 08 "</td> </tr> </table>	North Latitude	West Longitude	32 ° 41 ' 46 "	116 ° 56 ' 08 "
North Latitude	West Longitude					
32 ° 41 ' 46 "	116 ° 56 ' 08 "					

Attach as an Exhibit a map or maps (such as the Geological Survey topographic quadrangle map) of the area of the proposed transmitting antenna location, showing thereon the following data:

Exhibit No. E
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- a. Scale in kilometers  
b. Proposed transmitting antenna location accurately plotted.

For applicants proposing changes that will result in change of coverage, include in this Exhibit the location of the proposed and existing transmitting antenna sites and the proposed and existing coverage contours. See 47 C.F.R. Section 74.1233(a).

3. Transmitter:	Make CROWN	Type No. FM-30T		Output Power P 0.000491 kilowatts
4. Transmission line	CABLEWAVE	FLC12-50J	Length 42 Meters	Rated efficiency E for length given (decimal fraction) .819

Section II (Page 2)

5. Transmitting antenna  Directional "Off-the-shelf" (Submit Manufacturer's patterns & tabulations)  Directional Composite (Multiple Antennas) (Submit Manufacturer's patterns & tabulations)  Non-directional

Manufacturer <b>SCALA</b>	Model <b>CA5-150C</b>	Description <sup>1/</sup> <b>YAGI</b>	
Overall structure height above ground <sup>2/</sup> <b>40</b> meters	Elevation of Site <sup>3/</sup> <b>777</b> meters	Power Gain <sup>4/</sup>	
		H <b>3.98</b>	V <b>3.98</b>

Effective radiated power (ERP)

(ERP= P<sub>x</sub> E<sub>x</sub> G) .0016 Kilowatts (H)  
.0016 Kilowatts (V)

Height of antenna radiation center

above ground level 20 meters (H)  
20 meters (V)  
above mean sea level 797 meters (H)  
797 meters (V)

1/ Give basic type using general descriptive terms such as half-wave dipole, "bow-tie" with screen, corner reflector, 10 element Yagi, 4 element in-phase array, two stacked 5 element Yagis, etc.

2/ Show height to topmost portion of structure in meters, including highest top mounted antenna and beacon, if any.

3/ Show the ground elevation above mean sea level in meters at the base of the transmitting antenna supporting structure.

4/ Use the multiplier in lobe of maximum radiation relative to a halfwave dipole. Give the actual power gain toward the radio horizon.

6. Attach as an Exhibit a vertical plane sketch for the proposed total structure(s), including supporting structure(s), giving height of center of radiation above ground, overall height of structure above ground, including lighting beacon (if any) and height above mean sea level in meters for all significant features for BOTH RECEIVING AND TRANSMITTING ANTENNAS. Also indicate any horizontal separation between receiving and transmitting antennas.

Exhibit No.  
**C**

7. Will the proposed antenna supporting structure be shared with an AM radio station?

Yes  No

If yes, list the call sign(s) and class of such station(s).

8. Is a directional antenna proposed?

Yes  No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Sections 73.316 (c)(1)-(c)(3), including plot(s) and tabulations of the relative field. See instructions for Section II - Engineering Data, paragraph (A).

Exhibit No.  
**F**

9. Are there any terrain features between the proposed transmitting site and the community to be served which would interfere with line-of-site transmission to any part of the principal community?

Yes  No

If the answer is Yes, attach as an Exhibit a description of the extent of the area affected.

Exhibit No.  
**NA**

**Section II (Page 3)**

10. Supply terrain and coverage data (to be calculated in accordance with 47 C.F.R. Section 73.313).

Source of terrain data; (check only one box below)

Linearly interpolated 30-second database (Source N.G.D.C. 30 SECOND )

7.5 minute topographic map

Other (briefly summarize)

Radial bearing (degrees True) 1/		Average Elevation of Radial in meters (3 to 16 km) AMSL	Height of Radiation Center above average elevation of radial from 3 to 16 km (meters)	Predicted distance to the protected contours (0.5, 0.7 or 1.0 mV/m) 2/ (kilometers)
Booster	Translator			
0	0	174.4	622.6	1.5
45	30	255.1	541.9	1.2
90	60	446.2	350.8	1.6
135	90	417.6	379.4	1.2
180	120	334.8	462.2	1.5
225	150	431.5	365.5	1.4
270	180	162.8	634.2	1.6
315	210	147.4	649.6	5.6
	240	96.9	700.1	7.4
	270	91.5	705.5	5.7
	300	149.3	647.7	1.6
	330	217.9	579.1	1.4

1/ Additional radial(s) and related information should be provided when necessary to show interference protection.

2/ Protected contours vary depending on the class of station involved. Commercial Class B FM stations - protected contour 0.5 mV/m; Commercial Class B1 FM stations - protected contour 0.7 mV/m; all other classes of FM stations - protected contour 1 mV/m.

Based on the figures obtained from the above table, calculate the appropriate coverage contours of the translator station (see 47 C.F.R. Section 73.333) and answer questions 11 and 12.

11. Attach as an Exhibit a map (Sectional Aeronautical Chart or equivalent) that shows clearly, legibly and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. <b>B</b>
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(a) The proposed coverage contour; and

(b) the protected contour of the licensed primary station to be rebroadcast. (If the primary station is authorized with facilities in excess of those specified by 47 C.F.R. Section 73.211, see Note to 47 C.F.R. Section 74.123 1(h)).

12. Based on the above, is the area to be served by the translator or booster station entirely within the primary station's protected contour?

Yes  No

13. Is the applicant specifying a channel that is 53 or 54 channels removed from the channel of any FM radio broadcast station in the area of operations?

Yes  No

If Yes, attach an Exhibit showing compliance with 47 C.F.R. Section 73.207.

Exhibit No. <b>NA</b>
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(Translators will be treated as Class A stations provided, however, that translators operating with less than 100 watts ERP will be treated as Class D stations and will not be subject to I.F. frequency separation requirements (See 47 C.F.R. Section 74.1204(g).)

14. Does the applicant have any interest in an application or an authorization for an FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator station? See 47 C.F.R. Section 74.1232 (b).

Yes  No

If Yes, submit an Exhibit, showing the technical need for the additional translator.

Exhibit No. NA
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15. For non-commercial educational applicants intending to operate on reserved channels 201-220, will the proposed operation be within the threshold distance of a TV Channel 6 station as set forth by 47 C.F.R. Section 74.1205 (a)?

Yes  No

If Yes, submit an exhibit showing compliance with paragraph (b), (c), or (d) of 47 C.F.R. Section 74.1205.

Exhibit No. NA
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If applicant's compliance is based on 47 C.F.R. Section 74.1205 (b), the applicant certifies that it has coordinated its antenna with the affected TV Channel 6 station.

Yes  No

16. Has the FAA been notified of proposed construction?

Yes  No

If Yes, give date and office where notice was filed: NA

17. Environmental Statement (see 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant to this application come within 47 C.F.R. Section 1.1307, such that it may have a significant environmental impact, including exposure to workers or the general public, to harmful nonionizing radiation levels?

Yes  No

If yes, submit as an Exhibit an Environmental Assessment as required by 47 C.F.R. Section 1.1311. If No, explain briefly why not.

Exhibit No. D
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18. Unattended operation:

Is unattended operation proposed?

(a) If yes, and this application is for authority to construct a new station or to make changes in the facilities of an authorized station which proposes unattended operation for the first time, the applicant certifies that it will comply with the requirements of 47 C.F.R. Section 74.1234 concerning unattended operation.

Yes  No

(b) In the space below state the name, address and telephone number of a person or persons who may be contacted in an emergency to suspend operation of the translator should such action be deemed necessary by the Commission.

Yes  No

Name <b>SAM WALLINGTON</b>		
Address (street or other description)  <b>1425 NORTH MARKET BOULEVARD #9</b>		
City <b>SACRAMENTO</b>	State <b>CA</b>	Telephone No. (include area code) <b>916-282-1400</b>

Section II (Page 5)

19. Has the applicant proposed to use equipment that is type accepted or notified in accordance with the provisions of 47.C.F.R. Parts 73 and 74?

If No, and the equipment is to be notified or type accepted under 47.C.F.R. Section 74.1250(c), include the date the equipment was submitted to the FCC Laboratory for approval or the date the manufacturer commenced the notification process.

Yes  No

CERTIFICATION

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Signature	Typed or Printed Name <b>SAM WALLINGTON</b>
Date	Telephone No. (include area code) <b>916-282-1400</b>

- Technical Director       Registered Professional Engineer       Consulting Engineer
- Chief Operator       Other (specify) System Designer

**SECTION III - LEGAL QUALIFICATIONS**

**NOTE: Applicants for new stations only:**

1. Applicant is (check one of the following):

- Individual             General Partnership             Corporation  
 Other             Limited Partnership             Unincorporated Association

If the applicant is a legal entity other than an individual, partnership, corporation or unincorporated association, describe in an Exhibit the nature of the applicant.

Exhibit No.  
**NA**

2. (a) Is the applicant for an FM translator station the licensee or permittee of the commercial primary station being rebroadcast or does the applicant or any parties to the application have any interest or connection with the commercial primary station being rebroadcast? See 47 C.F.R. Section 74.1232(d).

Yes  No

(b) If Yes, will the coverage contour of the translator station extend beyond the protected contour of the commercial primary station being rebroadcast? If YES, this application cannot be granted. See 47. C.F.R. Section 74.1232(d).

Yes  No

NOTE: Applicants who answer Yes to question (b) (and No to question (a)) are prohibited from receiving any support, before or after construction, either directly or indirectly from the commercial primary station being rebroadcast or from any person or entity having any interest whatsoever, or any connection with the primary FM station. Interested and connected parties include group owners, corporate parents, shareholders, officers, directors, employees, general and limited partners, family members and business associates. See 47 C.F.R. Section 74.1232 (e).

3. (a) Is the applicant in compliance with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments?

Yes  No

(b) Will any funds, credit, or other financial assistance for the construction, purchase or operation of the station(s) be provided by aliens, foreign entities, domestic entities controlled by aliens, or their agents?

Yes  No

If Yes, provide particulars as an Exhibit.

Exhibit No.  
**NA**

4. Has an adverse finding been made or an adverse final action taken by any court or administrative body with respect to the applicant or parties to this application in a civil or criminal proceeding, brought under the provisions of any law related to the following: any felony; mass media related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination?

Yes  No

If the answer is Yes, attach as an Exhibit a full disclosure of the persons and matters involved, including an identification of the court or administrative body and the proceeding (by dates and file numbers), and the disposition of the litigation. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 U.S.C. Section 1.65(c), the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) a description of the previously reported matter.

Exhibit No.  
**NA**



5. Has the applicant or any other party to this application had any interest in:

- (a) a broadcast application which has been dismissed with prejudice by the Commission?  Yes  No
- (b) a broadcast application which has been denied by the Commission?  Yes  No
- (c) a broadcast station, the license for which has been revoked?  Yes  No
- (d) a broadcast application in any Commission proceeding which left unresolved character issues against the applicant?  Yes  No

If the answer to any of the questions in 5 is Yes, state in an Exhibit the following:

- (i) Name of party having interest;
- (ii) Nature of interest or connection, giving dates;
- (iii) Call letters of stations or file number of application or docket number;
- (iv) Location.

Exhibit No. BELOW
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### Dismissed Applications

The Commission has dismissed in the past several of EMF's applications for new FM translators on technical grounds. The dismissal of these applications did not involve any character issues or other similar matters relating to EMF's legal qualifications.

**SECTION IV - CERTIFICATIONS**

**Note:** If this application is for a change in an operating facility, you DO NOT need to respond to Questions 1 and 2.

1. The applicant certifies that sufficient net liquid assets are on hand or are available from committed sources to construct and operate the requested facilities for three months without revenue.  Yes  No
  
2. The applicant certifies that: (a) it has a reasonable assurance of a present firm intention for each agreement to furnish capital or purchase capital stock by parties to this application, each loan by banks, financial institutions or others and each purchase of equipment on credit; (b) it can and will meet all contractual requirements as to the collateral, guarantees, and capital investment; and (c) it has determined that a reasonable assurance exists that all identified financial sources (excluding banks, financial institutions and equipment manufacturers) have sufficient net liquid assets to meet these commitments.  Yes  No
  
3. The applicant, if for a commercial FM translator station with a coverage contour extending beyond the protected contour of the commercial primary station being rebroadcast, certifies that it has not received any support, before or after constructing, directly or indirectly, from the licensee/permittee of the primary station or any person with an interest or connection with the licensee or permittee of the primary station, except for technical assistance as provided for under 47 C.F.R. Section 74.1232(e).  Yes  No  
NA  
NA
  
4. For applicants proposing translator rebroadcasts who are not the licensee of the primary station, the applicant certifies that written authority has been obtained from the licensee of the station whose programs are to be retransmitted. If No, this application is unacceptable for filing.  Yes  No

Primary station proposed to be rebroadcast:

Call Sign	City	State	Channel No.
<b>KLVJ</b>	<b>JULIAN</b>	<b>CA</b>	<b>261</b>

5. The applicant certifies that it has contacted an authorized spokesperson for the owner of the rights to the proposed transmitter site, and has obtained reasonable assurance that the site will be available for its use if this application is granted.  Yes  No

That person can be contacted at the following address and telephone number:

Name		Mailing Address or Identification	
<b>VIVIAN FORNECK / MOTOROLA</b>		<b>1309 ALGONQUIN ROAD</b>	
City	State	ZIP Code	Telephone No. (include area code)
<b>SCHAUMBURG</b>	<b>IL</b>	<b>60916</b>	<b>847-538-3379</b>

6. For new station and major change applications only, the applicant certifies that it has or will comply with the public notice requirements of 47 C.F.R. Section 73.3580.  Yes  No
  
7. By checking yes, the applicant certifies that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b).  Yes  No

CH# 210D - 89.9 MHz

## EXHIBIT A - CHANNEL SELECTION

INTERFERENCE CHECKS WITH CALEM, LEMON GROVE, CA at N. LAT. 32 41 46 W. LNG. 116 56 08

PWR = .0016 kW H.A.A.T. = 553.2 M C.O.R. = 797 M AMSL

Protected F(50-50) 60 dBu = 7.06 km

F(50-10) 40 dBu = 29.43 54 dBu = 11.42 80 dBu = .89 100 dBu = .09

CH#	CALL	TYPE	* IN *	* OUT *	BEARING	DISTANCE	LAT.	PWR (kW)	INT (km)	PRO (km)
CITY	STATE	LICENSEE			<---		LNG.	HAAT (M)	COR (M)	FILE #
208B	KPBSFM	CP CN	6.6	-19.2	298.5	33.64 km	32 50 24	26.00	19.97	51.95
San Diego	CA	San Diego State University			118.5	20.90 Mi	117 15 06	206.0	276	BPED970211IA
FCC Comment > Proposed as Class B to Mexico 970623-Objection by Mexico 970731-Petition for Recon of Grant by TV 6 Station XETV, Tijuana, Mexico 970825										
208B	KPBSFM	LI CN	-23.3	-50.1	39.7	0.04 km	32 41 47	1.75	16.32	49.23
San Diego	CA	San Diego State University			219.7	0.02 Mi	116 56 07	580.0	807	BLEDE841121LZ
209A	AL209	AL	54.0 R	51.6 M	160.0	105.65 km	31 48 10	3.00	36.63	24.00
Ensenada	BN				340.0	65.65 Mi	116 33 09	100.0	0	
FCC Comment > Accepted by Commission 940216										
210D	K210CL	LI DCN	-53.1	-42.1	0.0	0.00 km	32 41 46	0.01	46.00	12.68
Lemon Grove	CA	Educational Media Foundati			180.0	0.00 Mi	116 56 08	513.0	797	BLFT990222TK
FCC Comment > Translator for KLVJ, Julian, CA Proposed to Mexico as LPPM 980804 Accepted by Mexico on 981127										
210B	KCRW	LI CN	87.7	132.1	319.9	207.96 km	34 07 08	6.80	113.24	46.44
Santa Monica	CA	Santa Monica Community Col			139.9	129.22 Mi	118 23 30	298.0	497	BLEDE940824KA
210B	AL210	AL	158.0 R	-22.2 M	91.1	135.84 km	32 39 52	50.00	137.71	65.00
Mexicali	BN				271.1	84.41 Mi	115 29 04	150.0	0	
210B	XHSOLF	OP HN	158.0 R	-22.2 M	91.1	135.84 km	32 39 52	9.39	82.66	28.73
Mexicali	BN				271.1	84.41 Mi	115 29 04	42.0	0	
210D	AP210	AP DCN	45.2	29.7	337.9	62.15 km	33 12 53	0.01	9.90	3.07
Vista	CA	Stockton Christian Life Co			157.9	38.62 Mi	117 11 15	0.0	552	BPFT960422TE
FCC Comment > Translator for KCJH, Stockton, CA. Proposed as LPPM to Mexico 961029										
210B	KCRW	LI CN	81.8	129.4	319.9	207.96 km	34 07 08	6.90	119.11	49.13
Santa Monica	CA	Santa Monica Community Col			139.9	129.22 Mi	118 23 30	338.0	537	BLEDE810325AF
211B	KLRD.A	AP DCN	65.9	87.1	1.1	150.65 km	34 03 15	1.20	77.71	52.10
Yucaipa	CA	Shepherd Communications, I			181.1	93.61 Mi	116 54 11	770.0	2384	BPED981211IB
FCC Comment > Needs referral to Mexico for higher class										
212C	XHITZF	OP HN	88.0 R	-63.0 M	212.9	25.01 km	32 30 26	93.10	6.72	56.31
Tijuana	BN				32.9	15.54 Mi	117 04 50	139.0	0	

CH#	CALL	TYPE	* IN *	* OUT *	BEARING	DISTANCE	LAT.	PWR (kW)	INT (km)	PRO (km)
CITY		STATE	LICENSEE		<---		LNG.	HAAT (M)	COR (M)	FILE #
212C	AL212	AL	88.0 R	-63.0 M	212.9	25.01 km	32 30 26	100.00	13.70	92.00
Tijuana		BN			32.9	15.54 Mi	117 04 50	600.0	0	

## I.F. RELATIONSHIPS:

264B	KFMBFM	LI CN	11.8 R	21.5 M	298.4	33.31 km	32 50 17	30.00	19.81	64.45
San Diego		CA	Midwest Television, Inc.		118.4	20.70 Mi	117 14 56	189.0	269	BMLH830406AF

Nearest CH 6 Grade B =XETV at-83.83 km, Distance= 23.75 Azimuth = 204.3 Deg. T.

**Compliance with 47 CFR 74.1204**

47 CFR 74.1204(a) prohibits the overlap of predicted field strength contours between a proposed translator station and any other authorized station. The interfering F(50,10) contour of the proposed translator station cannot cross the protected (F50,50) contour of any other authorized station.

However, 47 CFR 74.1204(d) removes this prohibition under cases where the prohibited overlap would lie entirely over water or other area with a lack of population, or where it can be demonstrated that the intervening terrain would prevent any actual interference.

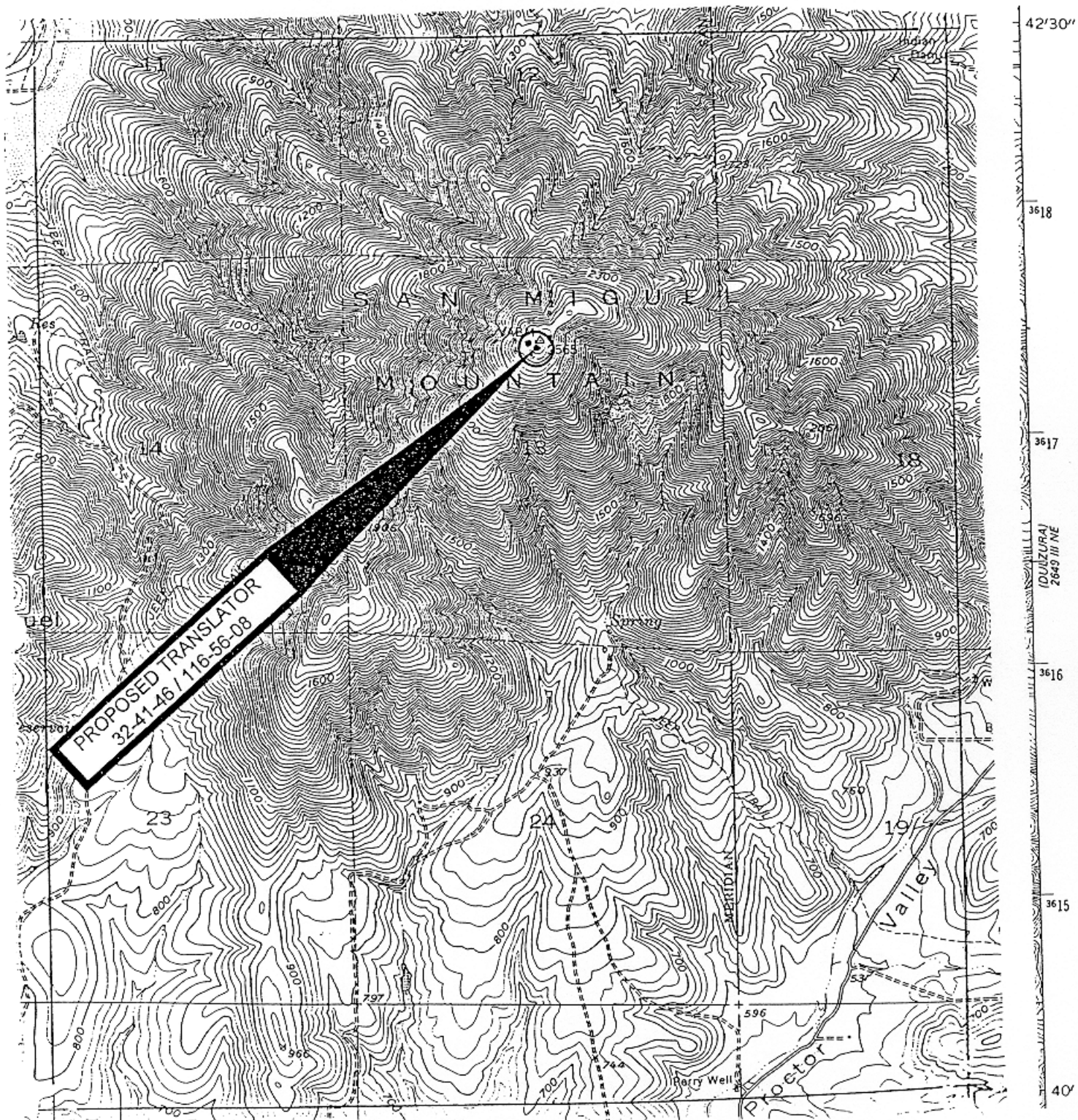
The proposed application fully meets the requirements of 47 CFR 74.1204, even though its interfering F(50,10) contour is contained within the protected F(50,50) contour of KPBS (License and Construction Permit BPED-970211IA), channel 208B, and XHTZF, channel 212C, due to a complete absence of population within the area of predicted field strength contour overlap.

Two factors have been investigated to determine this absence of population:

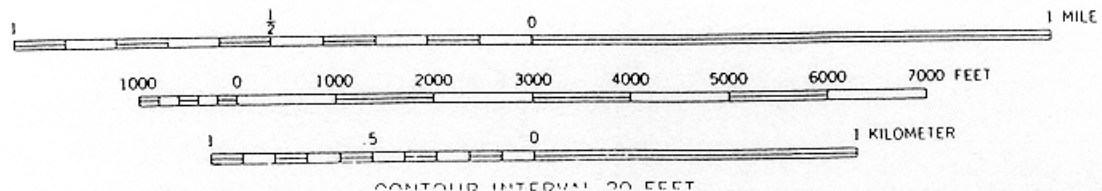
- 1) Computer software which uses the centroid method of determining population centers, based on the 1990 census data, has determined that there are no persons within the area of overlap.
- 2) Examination of the USGS topographic map reveals no residential structures within the area of overlap (See Exhibit E).

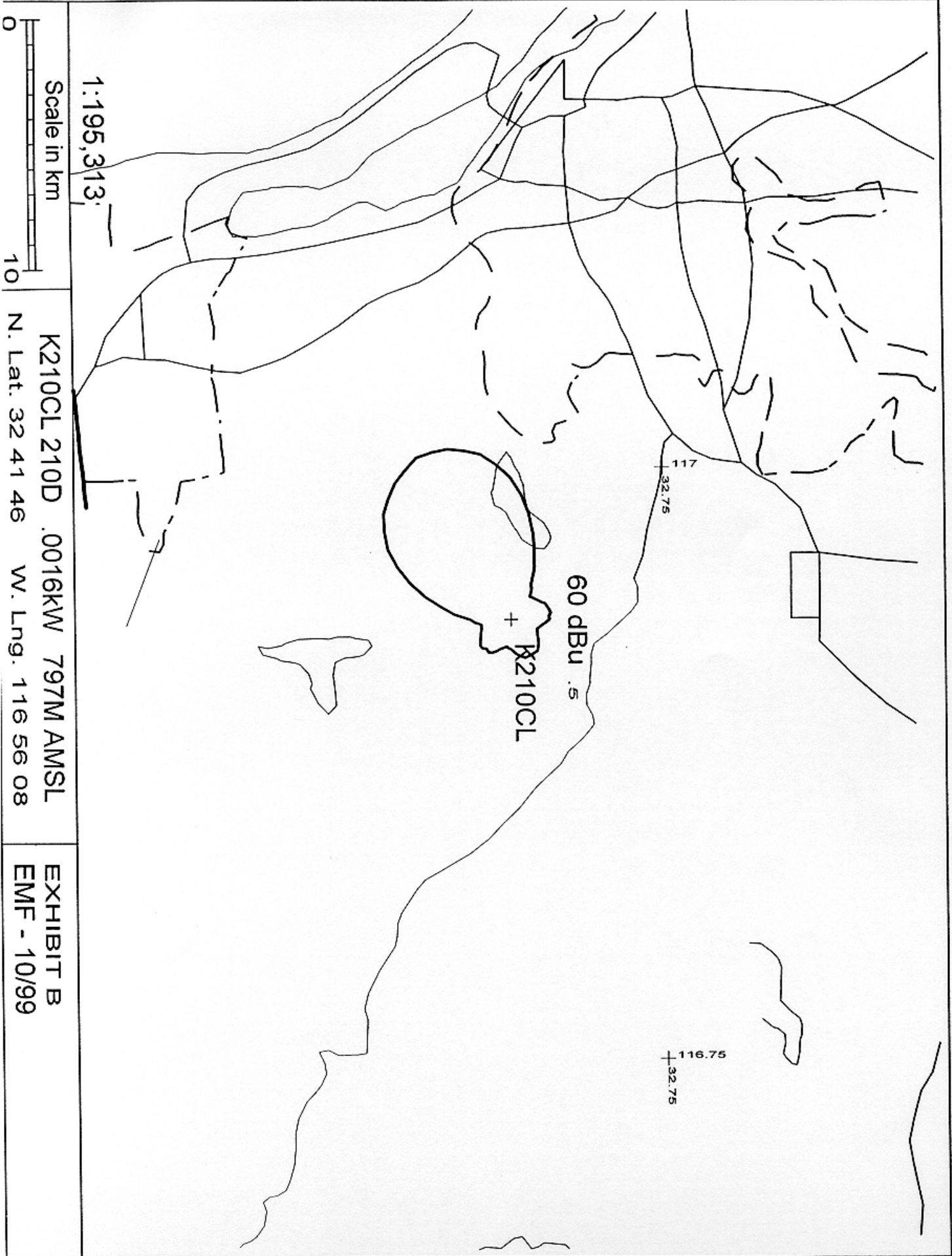
Exhibit E

JAMUL MOUNTAINS QUADRANGLE  
CALIFORNIA—SAN DIEGO CO.  
7.5 MINUTE SERIES (TOPOGRAPHIC)



57°30' 1905 R. 1 W. (OTAY MESA) 2649 III SW SAVAGE DAM 1.6 Mi. 55' 50" 32°37' 116°52'30"





60 dBU

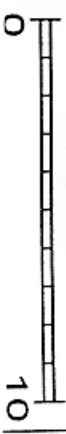
+ K210CL

117  
32.75

116.75  
32.75

1:195,313

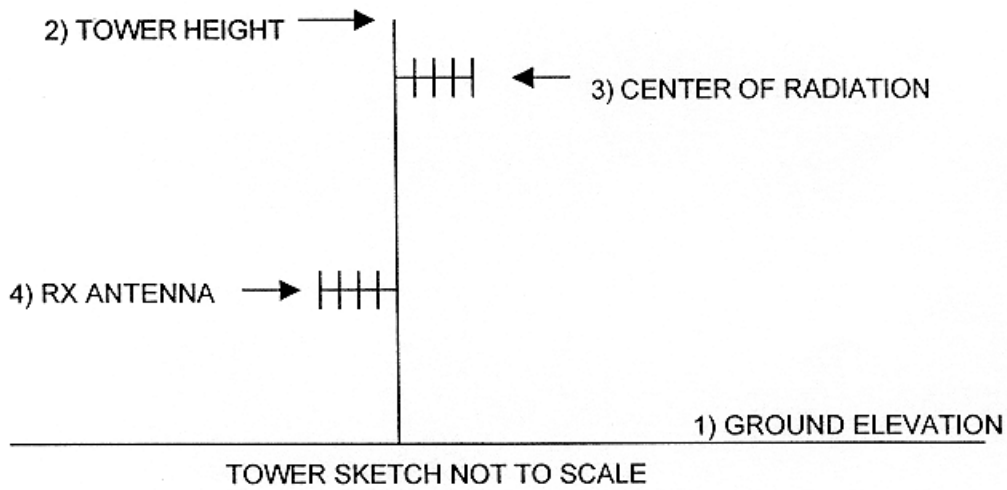
Scale in km



K210CL 210D .0016KW 797M AMSL  
N. Lat. 32 41 46 W. Lng. 116 56 08

EXHIBIT B  
EMF - 10/99

Vertical Plan Sketch



1) Ground elevation:	777 mtrs AMSL
2) Tower height:	40 mtrs AGL / 817 mtrs AMSL
3) Center of radiation:	20 mtrs AGL / 797 mtrs AMSL
4) Satellite dish:	2 mtrs AGL
5) Distance between rx antenna and tx antenna	18 mtrs



## Environmental Impact

The proposed facility will be located at an existing communication facility.

Pursuant to OET Bulletin No. 65, August 1997, entitled "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields," when work is to be performed on the tower, the transmitter power must be reduced or completely eliminated. Additionally, the applicant must coordinate with other site users to lower power or cease operations as necessary to assure worker safety with respect to radiofrequency radiation when construction or maintenance is being performed at the site.

Accordingly, the applicant, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency radiation in excess of FCC guidelines.

This application meets the requirements of OET Bulletin No. 65 and is categorically excluded from environmental processing pursuant to Section 1.1306 of the Commission's rules because it does not:

- \* involve a site location described in Section 1.1307(a)(1)-(7):
- \* involve high intensity lighting under Section 1.1307 (a)(8): or
- \* result in human exposure to radiofrequency radiation in excess of the applicable standard specified in Section 1.1307(b) of the Commission's rules.

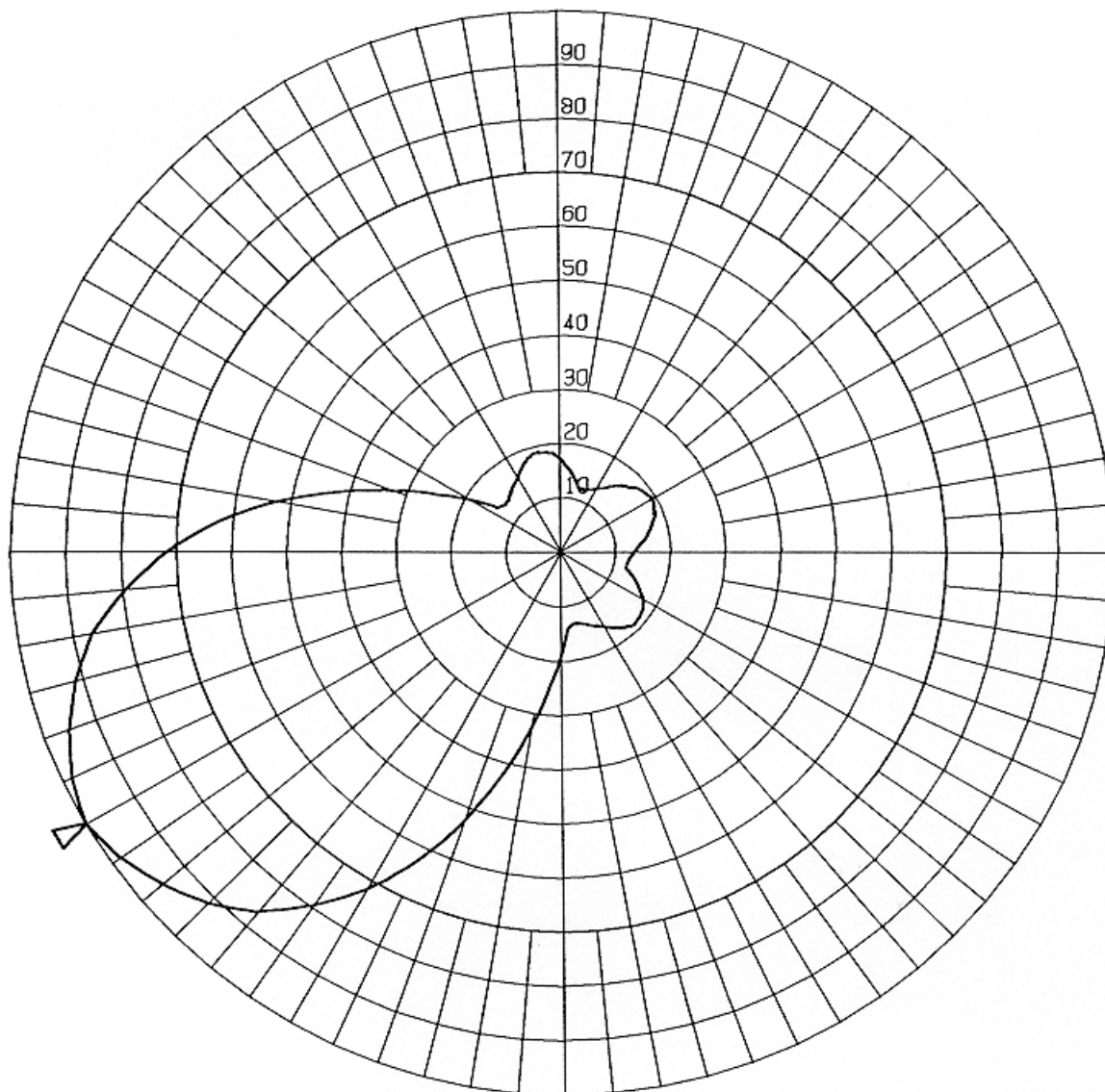
EXHIBIT F - POLAR DIAGRAM AND TABULATION

PROPOSED TRANSLATOR - LEMON GROVE, CA  
 1 SCALA CA5-150C ORIENTED AT 240 DEGREES  
 MAXIMUM GAIN 3.98 dB  
 POWER GAIN MULTIPLIER - 3.98

Azimuth	Relative Voltage	dBK	ERP
0	0.171	-43.3	0.05w
10	0.140	-45.0	0.03w
20	0.123	-46.2	0.02w
30	0.135	-45.4	0.03w
40	0.160	-43.9	0.04w
50	0.182	-42.8	0.05w
60	0.193	-42.2	0.06w
70	0.182	-42.8	0.05w
80	0.160	-43.9	0.04w
90	0.135	-45.4	0.03w
100	0.123	-46.2	0.02w
110	0.140	-45.0	0.03w
120	0.171	-43.3	0.05w
130	0.187	-42.5	0.06w
140	0.181	-42.8	0.05w
150	0.157	-44.0	0.04w
160	0.142	-44.9	0.03w
170	0.134	-45.4	0.03w
180	0.190	-42.4	0.06w
190	0.329	-37.6	0.17w
200	0.528	-33.5	0.45w
210	0.718	-30.8	0.82w
220	0.866	-29.2	1.20w
230	0.952	-28.4	1.45w
240	1.000	-28.0	1.60w
250	0.952	-28.4	1.45w
260	0.866	-29.2	1.20w
270	0.718	-30.8	0.82w
280	0.528	-33.5	0.45w
290	0.329	-37.6	0.17w
300	0.190	-42.4	0.06w
310	0.134	-45.4	0.03w
320	0.142	-44.9	0.03w
330	0.157	-44.0	0.04w
340	0.181	-42.8	0.05w
350	0.187	-42.5	0.06w

CIRCULAR POLARIZATION

RELATIVE VOLTAGE



10/29/99

EXHIBIT F - POLAR DIAGRAM AND TABULATION

PROPOSED TRANSLATOR - LEMON GROVE, CA  
1 SCALA CA5-150C ORIENTED AT 240 DEGREES  
MAXIMUM GAIN 3.98 dB  
POWER GAIN MULTIPLIER - 3.98

**Compliance with Mexican Treaty**

Section 2 of the "Agreement Between the Government of the United States of America and the Government of the United Mexican States Relating to the FM Broadcast Service in the Band 88-108 MHz" ("the Agreement") covers Low Power FM (LPFM) Stations.

Paragraph 2.1.2 of the Agreement requires LPFM stations to operate with an ERP not to exceed 50 watts in the direction of the other country. The proposed translator will operate with a maximum ERP of 2.5 watts.

Paragraph 2.1.2 also requires that LPFM stations produce an interfering contour that does not exceed 32 kilometers in the direction of the other country. In the broadest definition, Mexico is located between 89° and 225° true relative to the proposed location. The proposed translator does not produce an interfering contour that exceeds 32 kilometers on any radial between 89° and 225° true, inclusive (see Exhibit G-1).

Paragraph 2.1.3 of the agreement requires that LPFM stations produce a protected contour (60 dBu) that does not exceed 8.7 kilometers in the direction of the other country. The proposed translator does not produce a protected contour that exceeds 8.7 kilometers on any radial between 89° and 225° true, inclusive (see Exhibit G-2).

Paragraph 2.1.4 requires that LPFM stations located within 125 kilometers of the common border be notified in accordance with the notification procedures in Article 8 of the Agreement. This application requires notification.

Per 2.1.6 of the Agreement, should any interference be caused by Educational Media Foundation's operation, EMF will immediately correct the interference or cease operation.

# Educational Media Foundation

Exhibit G1

1425 North Market Boulevard Suite 9 ♦ Sacramento California ♦ 95834

N. Lat. = 32 41 46 W. Lng. = 116 56 08  
HAAT and Distance to Contour - FCC Method - 30 Arc Sec.

Azi.	AV EL	HAAT	kW	Field	40 .1
089	422.0	375.0	.0000	.138	7.88
090	417.6	379.4	.0000	.135	7.81
091	412.9	384.1	.0000	.134	7.80
092	408.2	388.8	.0000	.133	7.78
093	402.0	395.0	.0000	.131	7.78
094	397.0	400.0	.0000	.130	7.76
095	392.2	404.8	.0000	.129	7.74
096	387.4	409.6	.0000	.128	7.72
097	378.7	418.3	.0000	.127	7.73
098	368.7	428.3	.0000	.125	7.74
099	358.5	438.5	.0000	.124	7.75
100	352.2	444.8	.0000	.123	7.73
101	347.3	449.7	.0000	.125	7.84
102	343.7	453.3	.0000	.126	7.94
103	340.5	456.5	.0000	.128	8.04
104	337.1	459.9	.0000	.130	8.14
105	334.1	462.9	.0000	.132	8.23
106	328.9	468.1	.0000	.133	8.34
107	323.7	473.3	.0000	.135	8.44
108	320.6	476.4	.0000	.137	8.53
109	318.2	478.8	.0000	.138	8.62
110	317.2	479.8	.0000	.140	8.70
111	316.7	480.3	.0000	.143	8.84
112	316.2	480.8	.0000	.146	8.97
113	317.4	479.6	.0000	.149	9.10
114	321.0	476.0	.0000	.152	9.21
115	326.2	470.8	.0000	.156	9.30
116	331.6	465.4	.0000	.159	9.40
117	335.7	461.3	.0000	.162	9.49
118	337.0	460.0	.0000	.165	9.60
119	336.4	460.6	.0000	.168	9.72
120	334.8	462.2	.0000	.171	9.85
121	332.7	464.3	.0000	.173	9.92
122	331.7	465.3	.0000	.174	9.98
123	333.0	464.0	.0000	.176	10.03
124	337.5	459.5	.0001	.177	10.06
125	345.8	451.2	.0001	.179	10.06
126	356.8	440.2	.0001	.181	10.02
127	369.6	427.4	.0001	.182	9.96
128	384.1	412.9	.0001	.184	9.87
129	401.8	395.2	.0001	.185	9.75
130	423.5	373.5	.0001	.187	9.58
131	447.4	349.6	.0001	.186	9.28
132	470.7	326.3	.0001	.186	8.96
133	489.8	307.2	.0001	.185	8.70
134	504.3	292.7	.0001	.185	8.49
135	514.8	282.2	.0001	.184	8.32
136	522.5	274.5	.0001	.183	8.18
137	527.1	269.9	.0001	.183	8.09
138	525.8	271.2	.0001	.182	8.10
139	515.9	281.1	.0001	.182	8.24

# Educational Media Foundation

Exhibit G1

1425 North Market Boulevard Suite 9 ♦ Sacramento California ♦ 95834

140	500.7	296.3	.0001	.181	8.44
141	486.4	310.6	.0001	.179	8.56
142	475.7	321.3	.0000	.176	8.63
143	469.1	327.9	.0000	.174	8.64
144	467.3	329.7	.0000	.171	8.59
145	469.1	327.9	.0000	.169	8.49
146	472.1	324.9	.0000	.167	8.39
147	469.9	327.1	.0000	.164	8.34
148	460.2	336.8	.0000	.162	8.37
149	446.2	350.8	.0000	.159	8.45
150	431.5	365.5	.0000	.157	8.52
151	415.5	381.5	.0000	.156	8.62
152	397.4	399.6	.0000	.154	8.72
153	379.9	417.1	.0000	.153	8.81
154	366.7	430.3	.0000	.151	8.86
155	357.7	439.3	.0000	.150	8.87
156	350.4	446.6	.0000	.148	8.86
157	342.1	454.9	.0000	.147	8.85
158	332.7	464.3	.0000	.145	8.84
159	319.6	477.4	.0000	.144	8.84
160	303.2	493.8	.0000	.142	8.85
161	285.1	511.9	.0000	.141	8.89
162	268.9	528.1	.0000	.140	8.93
163	256.1	540.9	.0000	.140	8.95
164	246.0	551.0	.0000	.139	8.97
165	241.3	555.7	.0000	.138	8.96
166	237.5	559.5	.0000	.137	8.94
167	232.3	564.7	.0000	.136	8.93
168	224.5	572.5	.0000	.136	8.93
169	215.1	581.9	.0000	.135	8.94
170	205.0	592.0	.0000	.134	8.95
171	195.2	601.8	.0000	.140	9.27
172	185.5	611.5	.0000	.145	9.59
173	178.1	618.9	.0000	.151	9.89
174	172.1	624.9	.0000	.156	10.19
175	168.4	628.6	.0000	.162	10.46
176	167.4	629.6	.0000	.168	10.73
177	166.5	630.5	.0000	.173	10.98
178	165.8	631.2	.0001	.179	11.23
179	164.6	632.4	.0001	.184	11.48
180	162.8	634.2	.0001	.190	11.74
181	160.8	636.2	.0001	.204	12.33
182	158.8	638.2	.0001	.218	12.91
183	156.7	640.3	.0001	.232	13.47
184	155.2	641.8	.0001	.246	14.02
185	154.6	642.4	.0001	.259	14.54
186	154.2	642.8	.0001	.273	15.35
187	153.6	643.4	.0001	.287	15.92
188	152.9	644.1	.0001	.301	16.46
189	152.7	644.3	.0002	.315	16.98
190	153.0	644.0	.0002	.329	17.46
191	153.2	643.8	.0002	.349	18.14
192	153.7	643.3	.0002	.369	18.77
193	154.3	642.7	.0002	.389	19.37
194	154.7	642.3	.0003	.409	19.95
195	155.4	641.6	.0003	.428	20.51
196	156.2	640.8	.0003	.448	21.04
197	156.9	640.1	.0004	.468	21.55
198	157.5	639.5	.0004	.488	22.05

# Educational Media Foundation

Exhibit G1

1425 North Market Boulevard Suite 9 ♦ Sacramento California ♦ 95834

199	158.3	638.7	.0004	.508	22.53
200	159.1	637.9	.0004	.528	22.99
201	159.6	637.4	.0005	.547	23.43
202	159.3	637.7	.0005	.566	23.87
203	158.2	638.8	.0005	.585	24.33
204	156.0	641.0	.0006	.604	24.80
205	153.2	643.8	.0006	.623	25.28
206	150.5	646.5	.0007	.642	25.75
207	148.9	648.1	.0007	.661	26.19
208	148.4	648.6	.0007	.680	26.60
209	148.2	648.8	.0008	.699	27.00
210	147.4	649.6	.0008	.718	27.41
211	146.0	651.0	.0009	.733	27.74
212	144.4	652.6	.0009	.748	28.08
213	142.8	654.2	.0009	.762	28.42
214	141.1	655.9	.0010	.777	28.76
215	139.4	657.6	.0010	.792	29.10
216	138.0	659.0	.0010	.807	29.43
217	137.3	659.7	.0011	.822	29.74
218	136.9	660.1	.0011	.836	30.05
219	136.2	660.8	.0012	.851	30.36
220	135.1	661.9	.0012	.866	30.68
221	134.1	662.9	.0012	.875	30.88
222	133.3	663.7	.0012	.883	31.07
223	132.5	664.5	.0013	.892	31.26
224	131.5	665.5	.0013	.900	31.46
225	130.1	666.9	.0013	.909	31.68

Ave El= 108.25 M HAAT= 195.06 M AMSL= 797 M

Area by numeric integration= 234.82 Sq km.

# Educational Media Foundation

Exhibit G2

1425 North Market Boulevard Suite 9 ♦ Sacramento California ♦ 95834

N. Lat. = 32 41 46    W. Lng. = 116 56 08  
HAAT and Distance to Contour - FCC Method - 30 Arc Sec.

Azi.	AV EL	HAAT	kW	Field	60 .5
089	422.0	375.0	.0000	.138	1.22
090	417.6	379.4	.0000	.135	1.20
091	412.9	384.1	.0000	.134	1.19
092	408.2	388.8	.0000	.133	1.18
093	402.0	395.0	.0000	.131	1.17
094	397.0	400.0	.0000	.130	1.16
095	392.2	404.8	.0000	.129	1.14
096	387.4	409.6	.0000	.128	1.13
097	378.7	418.3	.0000	.127	1.12
098	368.7	428.3	.0000	.125	1.11
099	358.5	438.5	.0000	.124	1.10
100	352.2	444.8	.0000	.123	1.09
101	347.3	449.7	.0000	.125	1.11
102	343.7	453.3	.0000	.126	1.12
103	340.5	456.5	.0000	.128	1.14
104	337.1	459.9	.0000	.130	1.15
105	334.1	462.9	.0000	.132	1.17
106	328.9	468.1	.0000	.133	1.18
107	323.7	473.3	.0000	.135	1.20
108	320.6	476.4	.0000	.137	1.21
109	318.2	478.8	.0000	.138	1.23
110	317.2	479.8	.0000	.140	1.24
111	316.7	480.3	.0000	.143	1.27
112	316.2	480.8	.0000	.146	1.30
113	317.4	479.6	.0000	.149	1.32
114	321.0	476.0	.0000	.152	1.35
115	326.2	470.8	.0000	.156	1.38
116	331.6	465.4	.0000	.159	1.41
117	335.7	461.3	.0000	.162	1.43
118	337.0	460.0	.0000	.165	1.46
119	336.4	460.6	.0000	.168	1.49
120	334.8	462.2	.0000	.171	1.52
121	332.7	464.3	.0000	.173	1.53
122	331.7	465.3	.0000	.174	1.55
123	333.0	464.0	.0000	.176	1.56
124	337.5	459.5	.0001	.177	1.57
125	345.8	451.2	.0001	.179	1.59
126	356.8	440.2	.0001	.181	1.60
127	369.6	427.4	.0001	.182	1.61
128	384.1	412.9	.0001	.184	1.61
129	401.8	395.2	.0001	.185	1.51
130	423.5	373.5	.0001	.187	1.52
131	447.4	349.6	.0001	.186	1.51
132	470.7	326.3	.0001	.186	1.61
133	489.8	307.2	.0001	.185	1.61
134	504.3	292.7	.0001	.185	1.61
135	514.8	282.2	.0001	.184	1.61
136	522.5	274.5	.0001	.183	1.61
137	527.1	269.9	.0001	.183	1.61
138	525.8	271.2	.0001	.182	1.61
139	515.9	281.1	.0001	.182	1.61



# Educational Media Foundation

Exhibit G2

1425 North Market Boulevard Suite 9 ♦ Sacramento California ♦ 95834

140	500.7	296.3	.0001	.181	1.61
141	486.4	310.6	.0001	.179	1.58
142	475.7	321.3	.0000	.176	1.56
143	469.1	327.9	.0000	.174	1.54
144	467.3	329.7	.0000	.171	1.52
145	469.1	327.9	.0000	.169	1.50
146	472.1	324.9	.0000	.167	1.48
147	469.9	327.1	.0000	.164	1.46
148	460.2	336.8	.0000	.162	1.44
149	446.2	350.8	.0000	.159	1.41
150	431.5	365.5	.0000	.157	1.39
151	415.5	381.5	.0000	.156	1.38
152	397.4	399.6	.0000	.154	1.37
153	379.9	417.1	.0000	.153	1.35
154	366.7	430.3	.0000	.151	1.34
155	357.7	439.3	.0000	.150	1.33
156	350.4	446.6	.0000	.148	1.31
157	342.1	454.9	.0000	.147	1.30
158	332.7	464.3	.0000	.145	1.29
159	319.6	477.4	.0000	.144	1.27
160	303.2	493.8	.0000	.142	1.26
161	285.1	511.9	.0000	.141	1.25
162	268.9	528.1	.0000	.140	1.25
163	256.1	540.9	.0000	.140	1.24
164	246.0	551.0	.0000	.139	1.23
165	241.3	555.7	.0000	.138	1.22
166	237.5	559.5	.0000	.137	1.22
167	232.3	564.7	.0000	.136	1.21
168	224.5	572.5	.0000	.136	1.20
169	215.1	581.9	.0000	.135	1.20
170	205.0	592.0	.0000	.134	1.19
171	195.2	601.8	.0000	.140	1.24
172	185.5	611.5	.0000	.145	1.29
173	178.1	618.9	.0000	.151	1.34
174	172.1	624.9	.0000	.156	1.39
175	168.4	628.6	.0000	.162	1.44
176	167.4	629.6	.0000	.168	1.49
177	166.5	630.5	.0000	.173	1.54
178	165.8	631.2	.0001	.179	1.51
179	164.6	632.4	.0001	.184	1.57
180	162.8	634.2	.0001	.190	1.62
181	160.8	636.2	.0001	.204	1.76
182	158.8	638.2	.0001	.218	1.88
183	156.7	640.3	.0001	.232	2.00
184	155.2	641.8	.0001	.246	2.12
185	154.6	642.4	.0001	.259	2.24
186	154.2	642.8	.0001	.273	2.34
187	153.6	643.4	.0001	.287	2.45
188	152.9	644.1	.0001	.301	2.55
189	152.7	644.3	.0002	.315	2.66
190	153.0	644.0	.0002	.329	2.77
191	153.2	643.8	.0002	.349	2.91
192	153.7	643.3	.0002	.369	3.06
193	154.3	642.7	.0002	.389	3.22
194	154.7	642.3	.0003	.409	3.37
195	155.4	641.6	.0003	.428	3.51
196	156.2	640.8	.0003	.448	3.67
197	156.9	640.1	.0004	.468	3.82
198	157.5	639.5	.0004	.488	3.96

# Educational Media Foundation

Exhibit G2

1425 North Market Boulevard Suite 9 ♦ Sacramento California ♦ 95834

199	158.3	638.7	.0004	.508	4.10
200	159.1	637.9	.0004	.528	4.25
201	159.6	637.4	.0005	.547	4.38
202	159.3	637.7	.0005	.566	4.52
203	158.2	638.8	.0005	.585	4.66
204	156.0	641.0	.0006	.604	4.80
205	153.2	643.8	.0006	.623	4.94
206	150.5	646.5	.0007	.642	5.08
207	148.9	648.1	.0007	.661	5.21
208	148.4	648.6	.0007	.680	5.34
209	148.2	648.8	.0008	.699	5.46
210	147.4	649.6	.0008	.718	5.59
211	146.0	651.0	.0009	.733	5.69
212	144.4	652.6	.0009	.748	5.78
213	142.8	654.2	.0009	.762	5.88
214	141.1	655.9	.0010	.777	5.97
215	139.4	657.6	.0010	.792	6.06
216	138.0	659.0	.0010	.807	6.16
217	137.3	659.7	.0011	.822	6.25
218	136.9	660.1	.0011	.836	6.34
219	136.2	660.8	.0012	.851	6.43
220	135.1	661.9	.0012	.866	6.52
221	134.1	662.9	.0012	.875	6.58
222	133.3	663.7	.0012	.883	6.63
223	132.5	664.5	.0013	.892	6.68
224	131.5	665.5	.0013	.900	6.74
225	130.1	666.9	.0013	.909	6.79

Ave El= 108.25 M HAAT= 195.06 M AMSL= 797 M  
Area by numeric integration= 9.07 Sq km.