

ENGINEERING EXHIBIT

PETITION TO DENY
THE APPLICATION OF
EDUCATIONAL MEDIA FOUNDATION
FOR A NEW FM TRANSLATOR STATION
TO SERVE
MONTECITO, CALIFORNIA
CHANNEL 206, 89.1 MHz

FCC FILE NO. BPFT-990709TA (93814)

PREPARED FOR:

SANTA MONICA COMMUNITY COLLEGE DISTRICT
1900 PICO BOULEVARD
SANTA MONICA, CALIFORNIA 91405

AUGUST 24, 1999

PREPARED BY:

JOHN J. DAVIS
CONSULTING ENGINEER
POST OFFICE BOX 128
SIERRA MADRE, CALIFORNIA 91025-0128
(626) 355-6909
FAX: (626) 355-4890
e-mail: jjdavis@compuserve.com

1.0 INTRODUCTION:

This Engineering Exhibit was prepared for SANTA MONICA COMMUNITY COLLEGE DISTRICT ("SMCCD"), licensee of Non-Commercial Educational FM Station (NCE-FM) KCRU in Oxnard, California, to support its petition to deny the application of the Educational Media Foundation ("EMF") for construction permit for a new FM translator station to serve Montecito, California on Channel 206 (89.1 MHz) [FCC File No. BPFT-990709TA (93814)].

It will be shown that the proposed translator will cause interference to the signal of KCRU, which operates co-channel to the proposed translator, which is regularly received in Montecito and Santa Barbara. A co-channel translator will be the most damaging to KCRU since there is no way that the offending FM translator station can be filtered to eliminate the interference.

2.0 ERRORS IN EMF'S APPLICATION

There are several errors in EMF's application which makes it difficult to determine what exactly EMF is proposing. The application states that a Scala Model CA2-CP, a circularly polarized directional antenna, orientated at 180°, will be used but the coverage data contained in Section II, Paragraph 10, of FCC Form 349 and the 60 dBu coverage contour (EMF's Exhibit B) have no relationship to the CA2-CP antenna data. In fact, the coverage contour (EMF's Exhibit B) is for a non-directional antenna. If EMF is proposing to use a non-directional antenna, then there will be prohibited contour overlap with KCRU. Figure 1 shows the overlap of the proposed translator's 40 dBu interference contour with the 60 dBu protected

contour of KCRU. The contour overlap is quite significant. If EMF is actually proposing to use the Scala CA2-CP antenna then this contour overlap will be eliminated but not the interference to KCRU listeners in the Santa Barbara and Montecito areas.

Since it is impossible to know exactly what EMF is proposing, the interference analysis of this exhibit will be based upon the use of the Scala CA2-CP antenna, orientated at 180°, with an ERP of 10 watts and with an antenna height of 652 meters AMSL. The 60 dBu coverage contour, based upon the use of the Scala CA2-CP antenna, is shown in Figure 2.

2.0 INTERFERENCE CONSIDERATIONS:

Even if EMF is actually proposing the use of a Scala CA2-CP antenna, orientated at 180°, there will be interference to all of KCRU's listeners within the proposed translator's 60 dBu contour (Figure 2). Section 74.1204(f) of the Commission's Rules states:

"An application for an FM translator station will not be accepted for filing even though the proposed operation would not involve overlap of field strength contours with any other station, as set forth in paragraph (a) of this section, if the predicted 1 mV/m field strength contour of the FM translator station will overlap a populated area already receiving a regularly used, off-the-air signal of any authorized co-channel, first, second or third adjacent channel broadcast station, including Class D (secondary) noncommercial educational FM stations and grant of the authorization will result in interference to the reception of such signal." (Emphasis added.)

KCRU has a sizeable listenership and subscriber base within this contour, which includes almost all of Santa Barbara and Montecito. Listed below are the zip codes represented within the proposed translator's 60 dBu contour. Also, shown is the number of KCRU subscribers residing within those zip codes:

<u>ZIP CODE</u>	<u>COMMUNITY</u>	<u>PORTION OF ZIP CODE CONTAINED WITHIN 60 dBu CONTOUR</u>	<u>KCRU SUBSCRIBERS</u>
93101	Santa Barbara	100%	66
93103	Santa Barbara	100%	64
93105	Santa Barbara	62%	46
93108	Montecito	45%	29
93109	Santa Barbara	100%	51

The total of the above KCRU subscribers is 256 households all of which reside within the proposed translator's 60 dBu contour. It is reasonable to assume that more than one person within each household listens to KCRU so the number of actual listeners will be higher. It is well known within the NCE-FM station community that only about 10% of a station's audience actually supports the station with their contributions so it can be assumed that there are over 2,500 households that listen to KCRU within the proposed translator's 60 dBu contour.

SMCCD did a survey of the KCRU subscribers within the above zip codes to determine if these subscribers actually listened to the station in their homes and/or offices. The results of this survey showed that almost all of the subscribers listen to KCRU in their homes. Many work out of their homes so listen to the station throughout the day. Exhibit A of this report contains a sampling of the KCRU subscribers' responses to the SMCCD survey. All of the subscribers' responses will be made available to the Commission upon request.

3.0 SUMMARY:

The Commission does not have the resources to deal with interference after the fact. If the Commission should grant this application with the stipulation that any interference caused must be corrected, this would result in irreparable harm to KCRU when the only solution would be for the translator to cease operation. There is nothing that EMF could do, such as a reduction of translator power output and/or antenna height, that would eliminate this co-channel interference. The Commission must always decide in cases such as this in favor of full service stations over any secondary service. EMF's proposed FM translator will cause interference to the regularly received signal of co-channel channel station KCRU and, therefore, must be denied.

PETITION TO DENY
APPLICATION FOR A NEW FM TRANSLATOR TO SERVE MONTECITO, CA
FILED BY EDUCATIONAL MEDIA FOUNDATION

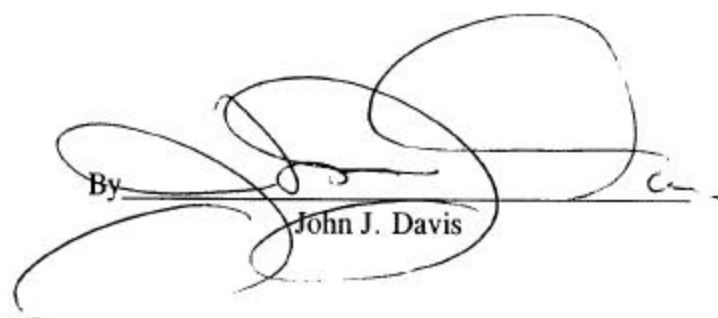
PREPARED FOR
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1900 PICO BOULEVARD
SANTA MONICA, CALIFORNIA

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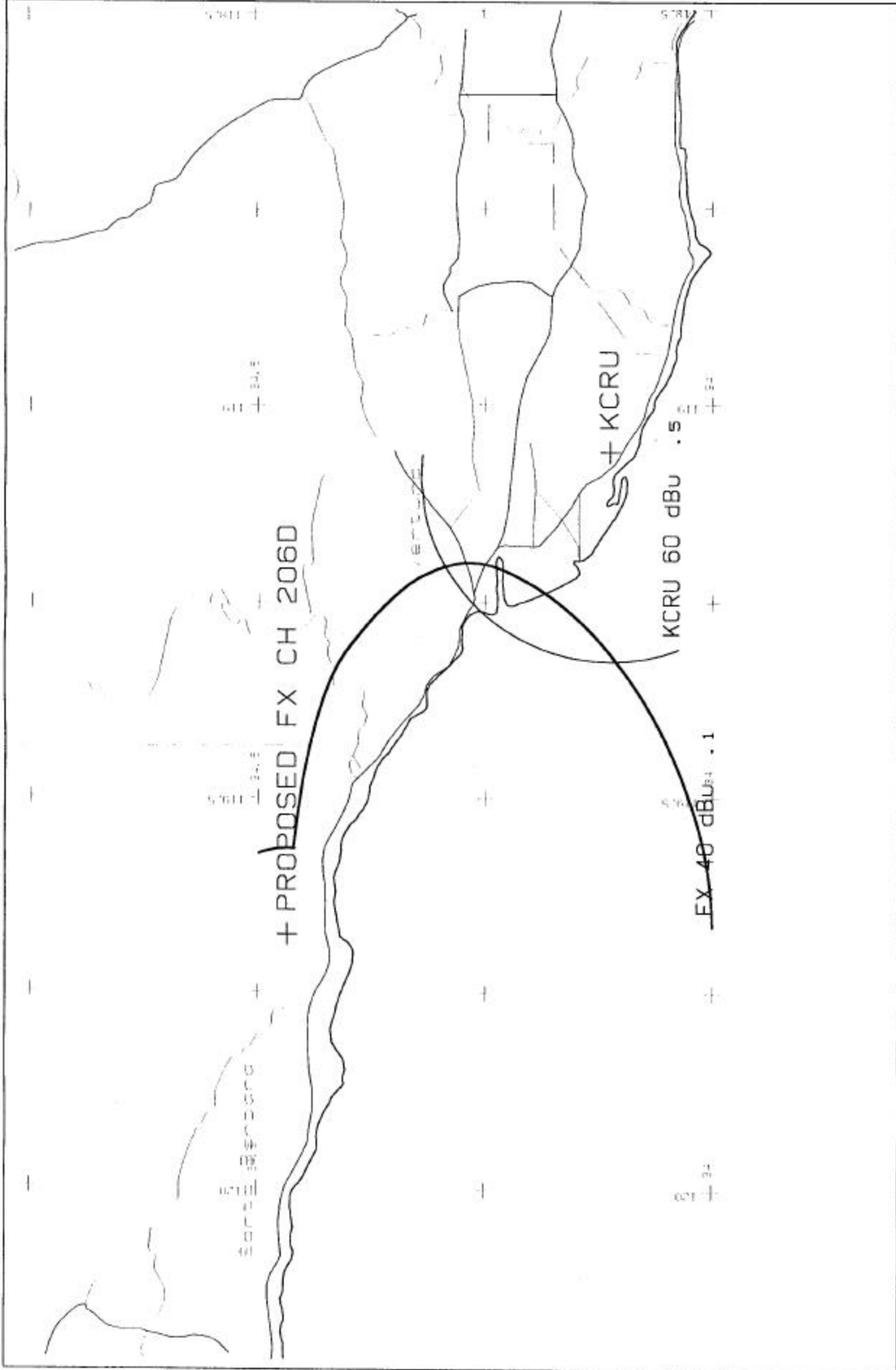
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STATE OF CALIFORNIA)
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COUNTY OF LOS ANGELES) ss:

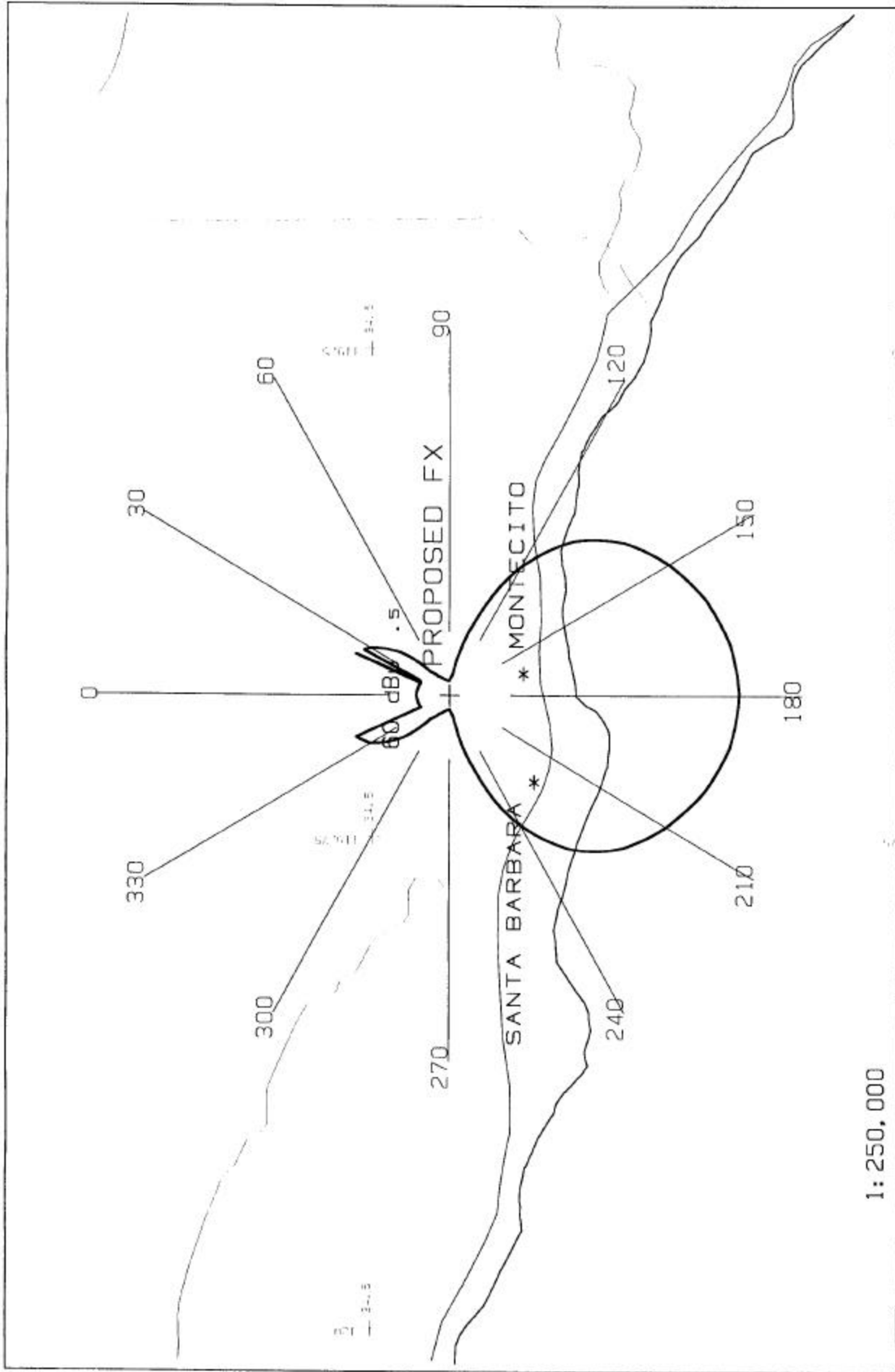
JOHN J. DAVIS, does hereby swear that he is a consulting electronics engineer with offices in Sierra Madre, California; that he is a Registered Professional Engineer in the State of California; that his qualifications as an expert in radio engineering are a matter of record with the Federal Communications Commission; that the foregoing engineering statement was prepared by him or under his direction; and that the statements contained therein are true of his own knowledge and belief, and as to those statements prepared under his direction, he verily believes them to be true and correct.

By  _____
 John J. Davis

August 24, 1999



<p>Scale in km</p> <p>0 10 20 30 40</p>	<p>KCRU BLED930225KA 206A .2kW PROPOSED FX 206D .01kW NON-DIRECTIONAL</p>	<p>SMCCD - KCRU FIGURE 1</p>
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1:250,000



PROPOSED FX 206D .01KW DA 652 AMSL

N. Lat. 34 27 58 W. Lng. 119 40 40

SMCCD - KCRU
FIGURE 2

EXHIBIT A

SMCCD SURVEY RESPONSE LETTERS FROM
KCRU SUBSCRIBER HOUSEHOLDS WITHIN THE
PROPOSED TRANSLATOR'S 60 dBu FIELD STRENGTH CONTOUR