



CITY OF SACRAMENTO

PHILLIP L. ISENBURG

Mayor

City Hall, Room 202

Sacramento, California 95814

(916) 449-5400

April 7, 1981

City Council
Sacramento, California

Honorable Members in Session:

Subject: KXPR/Public Radio Reception Difficulties

SUMMARY

KXPR is the FM Public Radio sponsored by Cal State University, Sacramento. As most of you undoubtedly know this is our tie in with Public Broadcasting System (PBS) and provides the only station of classical, jazz, and commentary in Sacramento (and Star Wars in serial form).

For those who live downtown (and some other parts of the community), reception can be difficult.

BACKGROUND

The attached memo from the station indicates a bit about the details of their long search for a location to build a broadcasting antenna.

FINANCIAL DATA

There is no financial impact to the City.

APPROVED
BY THE CITY COUNCIL

APR 14 1981

OFFICE OF THE
CITY CLERK

April 14, 1981
All Districts

RECOMMENDATION

It would be appreciated if the Council would adopt the following statement:

- (1) Express its support for the concept of KXPR constructing an appropriate transmitter improving the signal quality in the City of Sacramento and elsewhere throughout the community.
- (2) Direct the appropriate City staff persons (planning, engineering, etc.) to cooperate with KXPR and to attempt to identify the following:
 - a. An appropriate site or sites which might be made available for such a project;
 - b. Any presently unused or otherwise unallocated public lands which might be made available for this project (please note that this is not a request for sale or gift of such land);
- (3) The station location should be consistent with sound planning rules and take cognizance of possible interference with other stations.

Respectfully submitted,



Phillip L. Isenberg
Mayor

cc: Phil Corriveau, General Manager, KXPR
Walt Slipe, City Manager
Ron Parker, City Engineer
Marty Van Duyn, City Planning Director

Attachments



California State University, Sacramento
6000 J Street, Sacramento, CA 95819
Telephone (916) 454-6222

FM 89 TRANSMITTER RELOCATION PROJECT

Problem

- 1) Poor reception in Citrus Heights and Northern Sacramento
- 2) Interference in Downtown Area
- 3) Microwave fades causing degraded signal quality between studio and transmitter

Caused by

- 1) Distance and topography
- 2) In most receivers, strong signals from KAER and KCTC combine to cause interference to KXPR at 88.9 MHz
- 3) a. Distance and obstructed path from studio to Walnut Grove transmitter
b. Weather-related thermal inversions deflect the signal to the transmitter (usually occurs in Spring and Fall)

Solutions

- 1) Move transmitter closer to Sacramento
- 2) Change frequency
- 3) Raise antenna height, use more efficient antenna, shorten distance between studio and transmitter

Constraints

- 1) Potential interference to Channel 6 in some older television receivers near the KXPR transmitter site
2. The only frequency available to meet our coverage requirements is at 90.9 MHz. The FCC requires a minimum distance separation between any new radio tower and existing stations. At the new 90.9 frequency, we must protect the following stations:
 - KDVS Davis at 90.3 MHz
 - KBDG Turlock at 90.9 MHz
 - KUOP Stockton at 91.1 MHz
 - KYDS Sacramento at 91.5 MHz
 - KALX Berkeley at 90.7 MHz

Constraints (Continued)

- 3) The FAA requires a minimum distance of 5 miles between any airport and a new radio tower.
- 4) A new 650-foot radio tower and transmitter will cost \$230,000 and require 10 acres of land

*The attached map indicates FCC and FAA "protected" areas. We are searching for a 10-acre site in the non-shaded area.

