



CITY OF SACRAMENTO

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CITY MANAGER'S OFFICE
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AUG 19 1981

CITY PLANNING DEPARTMENT

725 "J" STREET

SACRAMENTO, CALIF. 95814

TELEPHONE (916) 449-5604

MARTY VAN DUYN
PLANNING DIRECTOR

August 19, 1981

FILED
By the City Council
Office of the City Clerk

AUG 25 1981

City Council
Sacramento, California

Honorable Members in Session:

SUBJECT: Executive Airport Quarterly Noise Report for
April-June, 1981

SUMMARY

When the County Department of Airports submitted their most recent quarterly noise report for Executive Airport on July 28, staff was asked to report back to the Council on certain questions relating to the number and location of noise monitoring sites. While one measurement site has been discontinued, the County Department of Airports is actively looking for another (better) monitoring site.

BACKGROUND INFORMATION

When the Executive Airport Master Plan was adopted in April, 1979, by both the City and the County, it contained the following provision:

Master Plan Recommendation 66: Install noise monitoring equipment as soon as possible in the vicinity of Romack Circle and 47th Avenue and at other strategic points around the airport as necessary to verify the computer-generated noise contour. Report quarterly to the City Council and the County Board of Supervisors on noise levels.

In the months following the plan's adoption, the County Department of Airports instituted a noise monitoring program which initially involved two measurement sites: one each at the north and south end of the airport. In early 1981, it added a third site along the westerly perimeter, near Freeport Boulevard. As stated in the quarterly noise reports, the purpose in the noise monitoring program has continued to be the verification of the computer-generated noise contours contained in the Master Plan, which were forecasted as falling within the airport's boundaries in all locations except possibly the Romack Circle/47th Avenue area.

The northerly and southerly monitoring sites have been valuable sources of data and have reflected the effectiveness of the measures which the County of Airports has undertaken to control noise and limit it to 64 CNEL at the airport boundaries.

The westerly monitoring site has encountered technical difficulties, however. Along the westerly boundary, there are two major sources of noise: the airport and vehicular traffic along Freeport Boulevard. The County Department of Health did special acoustic studies along Freeport and concluded that it is not possible, without very complicated and costly sampling/measurement/analysis procedures, to ascertain which noise source (the airport or the road) is noisier or, more to the point, what noise level is being generated only by the airport when Runway 12/30 is in operation. In short, it appears that obtaining an accurate picture through in-field noise monitoring of airport-generated noise within close proximity to Freeport Boulevard is not technically feasible. However, through a computer-generated estimate, based on operational data and noise measurement from other sites, it should be possible to hypothesize airport-generated noise levels at some point in the future (possibly associated with production of the City's Noise Element). Doing so on a quarterly basis is not practicable without an on-line computer analyzer.

Because of the inconclusiveness of the westerly boundary measurements, the County Department of Airports announced its intent to discontinue measurements of this location in its April, 1981, quarterly report (approved by the Board of Supervisors on April 28).

Since that time, the County Department of Airports has been investigating alternative measurement sites, specifically the Romack Circle area, which would specifically conform with the Master Plan. The Department is currently seeking a location in that region where both the noise analyzer and the microphone will be relatively secure, with a minimal potential for theft and/or vandalism (two problems which have repetitively plagued the other sites).

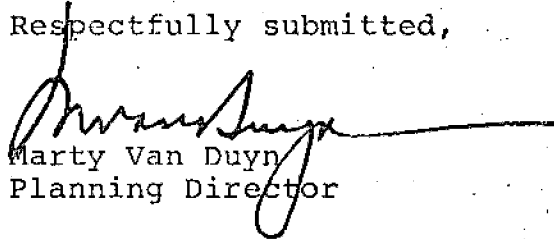
The addition of this new third site is expected to be a significant improvement over the Freeport Boulevard site in terms of the quality and conclusiveness of noise data and the degree of insight obtained into the overall noise generation picture at Executive Airport.

A staff member from the County Department of Airports will be available at the Council meeting to provide further detail, should the Council so desire.

RECOMMENDATION

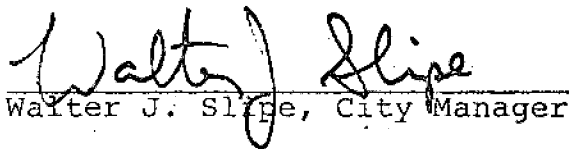
This report is provided as Council information only. Staff recommends, however, that the Council accept this report and actions recommended by the County Department of Airports.

Respectfully submitted,



Marty Van Duyn
Planning Director

FOR CITY COUNCIL INFORMATION:



Walter J. Slupe, City Manager

MVD:AAP:jm

August 25, 1981
District Nos. 7 & 4

COUNTY OF SACRAMENTO
DEPARTMENT OF AIRPORTS
6968 AIRPORT BOULEVARD
SACRAMENTO, CALIFORNIA 95837
(916) 929-5411

23 ✓



DIRECTOR OF AIRPORTS
George W. McLaughlin

July 21, 1981

Sacramento City Council
City Hall
915 I Street
Sacramento, CA 95814

MEMBERS IN SESSION:

This report summarizes the Executive Airport Noise Monitoring Program during the second quarter of 1981. Noise monitors are currently located at the north and south perimeters of Executive Airport to record and evaluate noise in the vicinity of Runway 2-20 and Runway 12-30.

The attached Exhibits A, B and C, identify the Community Noise Equivalent Level (CNEL) for each 24-hour period during the months of April, May and June 1981, as recorded near the north and south boundaries of Executive Airport. The 65-CNEL noise standard as set forth in the California Noise Regulations is also illustrated on these exhibits.

Table I summarizes the noise monitoring results at Executive Airport during the second quarter of 1981. The 65-CNEL was exceeded on four occasions at Location #1 (south boundary) and four occasions at Location #2 (north boundary). On six of the eight occasions wherein the 65-CNEL was exceeded, the recorded noise level was 66-CNEL or less.

On April 28, 1981, the Board of Supervisors authorized the Department of Airports to suspend noise monitoring and evaluation at the Executive Airport western property boundary because of noise interference from automobile traffic on Freeport Boulevard. During the second quarter 1981, the Department of Airports has been evaluating placement and security parameters associated with initiating noise monitoring at the Executive Airport eastern property boundary.

7-25-81

Respectfully submitted,

George W. McLaughlin
George W. McLaughlin
Director of Airports

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By the City Clerk
Office of the City Clerk

LEK:sam

Cont 40
8-25-81

JUL 28 1981

EXHIBIT A
April, 1981

Location 1 ●—●—●—
Location 2 ●- -●- -●- -

24 HOUR COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)

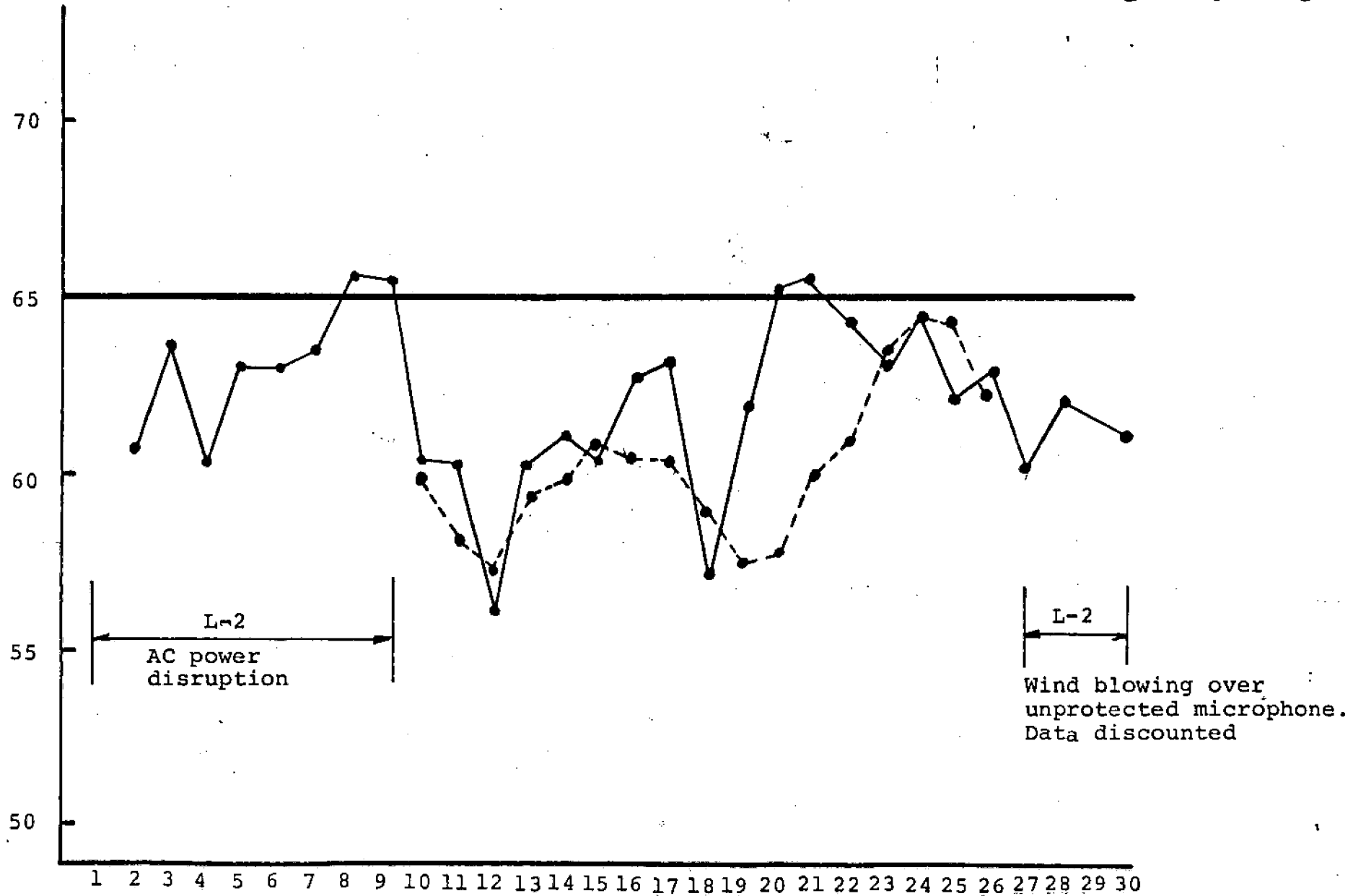
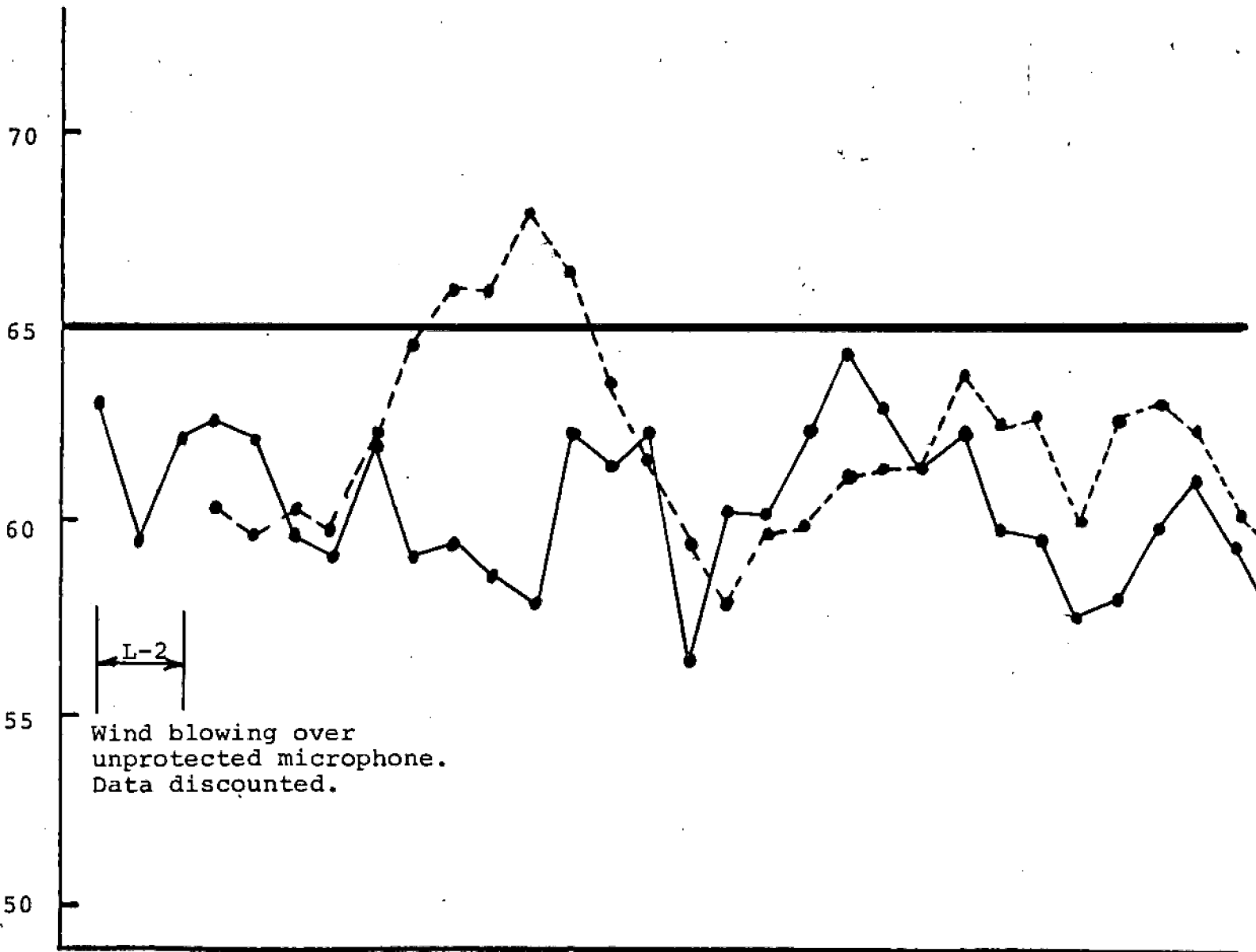


EXHIBIT B
May, 1981

Location 1 ●—●—●
Location 2 ●- -●- -●

24 HOUR COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)



L-2
Wind blowing over
unprotected microphone.
Data discounted.

EXHIBIT C
June, 1981

Location 1 ———●———●———●
Location 2 - - - - ● - - - - ● - - - - ●

24 HOUR COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)

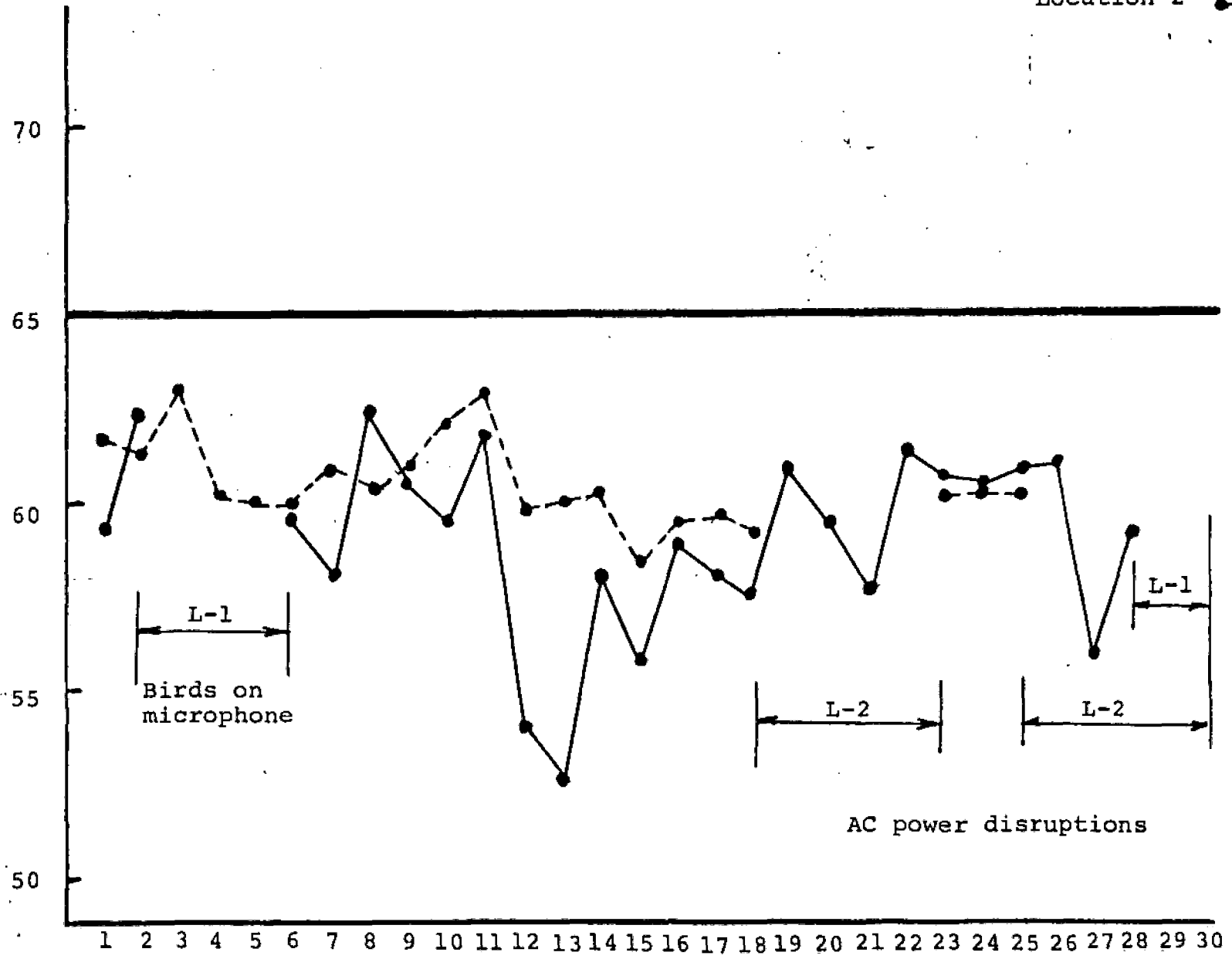


TABLE 1

CNEL SUMMARY

SECOND QUARTER 1981

AVERAGE CNEL

	<u>APRIL</u>	<u>MAY</u>	<u>JUNE</u>	<u>2ND QTR</u>
Location 1	63.0	60.9	60.4	61.6
Location 2	60.6	62.8	61.0	60.1

DAYS EXCEEDING 65-CNEL

	<u>APRIL</u>	<u>MAY</u>	<u>JUNE</u>	<u>2ND QTR</u>
Location 1	4	0	0	4
Location 2	0	4	0	4

LOCATION 1

April 8, 1981 - 65.6 CNEL
April 9, 1981 - 65.6 CNEL
April 20, 1981 - 65.2 CNEL
April 21, 1981 - 65.8 CNEL

LOCATION 2

May 10, 1981 - 66.0 CNEL
May 11, 1981 - 66.0 CNEL
May 12, 1981 - 68.4 CNEL
May 13, 1981 - 66.7 CNEL

COUNTY OF SACRAMENTO
CALIFORNIA

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CITY CLERK'S OFFICE
CITY OF SACRAMENTO

APPROVED
BOARD OF SUPERVISORS

APR 30 12 40 PM '81

For Agenda of:

April 28, 1981

To: Board of Supervisors

APR 28 1981

From: Department of Airports

Betty J. Parker
Clerk of the Board

Subject: EXECUTIVE AIRPORT - DEVELOPMENT - FIRST QUARTER NOISE
MONITORING REPORT (JANUARY, FEBRUARY, AND MARCH 1981)

In accordance with Recommendation 66 of the Executive Airport Master Plan, the Department of Airports established a noise monitoring program at Sacramento Executive Airport. Noise monitors are currently located at the north, south and west perimeters of Executive Airport to record and evaluate noise in the vicinity of Runway 2-20 and Runway 12-30.

The attached Exhibits A, B and C identify the Community Noise Equivalent Level (CNEL) for each 24-hour period during the months of January, February and March 1981, as recorded near the north, south and west boundaries of Executive Airport. The 65-CNEL noise standard as set forth in the California Noise Regulations is also illustrated on these exhibits.

Table I summarizes the noise monitoring results at Executive Airport during the first quarter of 1981. The 65-CNEL was exceeded on 14 occasions at Location #1 (south boundary), not exceeded at Location #2 (north boundary) and 55 occasions at Location #3 (west boundary).

Five of the fourteen occasions wherein the 65-CNEL was exceeded at Location #1 are considered questionable because of excessive calibration tolerance parameters. The remaining occasions above the 65-CNEL represent a 10% occurrence level.

The ambient (background) noise level at Location #3 is significantly higher than those experienced at Locations 1 and 2. The County Department of Environmental Health was requested to perform a noise analysis of the Freeport Boulevard roadway system to gauge the degree of influence automobile traffic may have on the noise monitoring results at Location #3. The results of that analysis indicate that Freeport Boulevard automobile traffic generates a noise level of approximately 66-CNEL.

To further define specific contributions to the daily CNEL results at Location #3, the monitoring site was modified to enable sound recording (tape recorder). Exhibit D identifies events recorded at Location #3 during the period February 20, 1981 through March 31, 1981 and relates this information to the daily CNEL. Freeport Blvd. traffic characteristics were found to significantly influence the daily CNEL results.

Additional mathematical and graphical analysis has been conducted relative to data reduction at Location #3. Conclusions of this analysis indicates that excessive aircraft noise is contained within the airport property at the western boundary; however, precise determination of the relative noise impact from aviation sources cannot be made. As such, it is expected that further noise evaluation at Location #3 will continue to prove inconclusive due to the noise from traffic on Freeport Blvd.

Recommendations

1. The Department of Airports be authorized to suspend noise monitoring and evaluation at the Executive Airport western property boundary.
2. The Department of Airports be directed to report back on July 28, 1981, regarding noise levels for the second quarter of 1981 at Executive Airport.

Mike please schedule

Respectfully submitted,

George W. McLaughlin
George W. McLaughlin
Director of Airports

I CONCUR:

Brian H. Richter
Brian H. Richter
County Executive

- cc: *City Clerk*
 County Executive
 Asst. County Executive - Admin.
 County Counsel
 Department of Airports (2)
 Executive Airport Advisory Committee