

COUNTY OF SACRAMENTO  
CALIFORNIA

19

For Agenda of:

April 28, 1981

To: Board of Supervisors  
From: Department of Airports  
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.


APR 28 1981

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.

Respectfully submitted,

  
George W. McLaughlin  
Director of Airports

I CONCUR:

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Brian H. Richter  
County Executive

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

EXHIBIT A  
January 1981

24 HOUR COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)

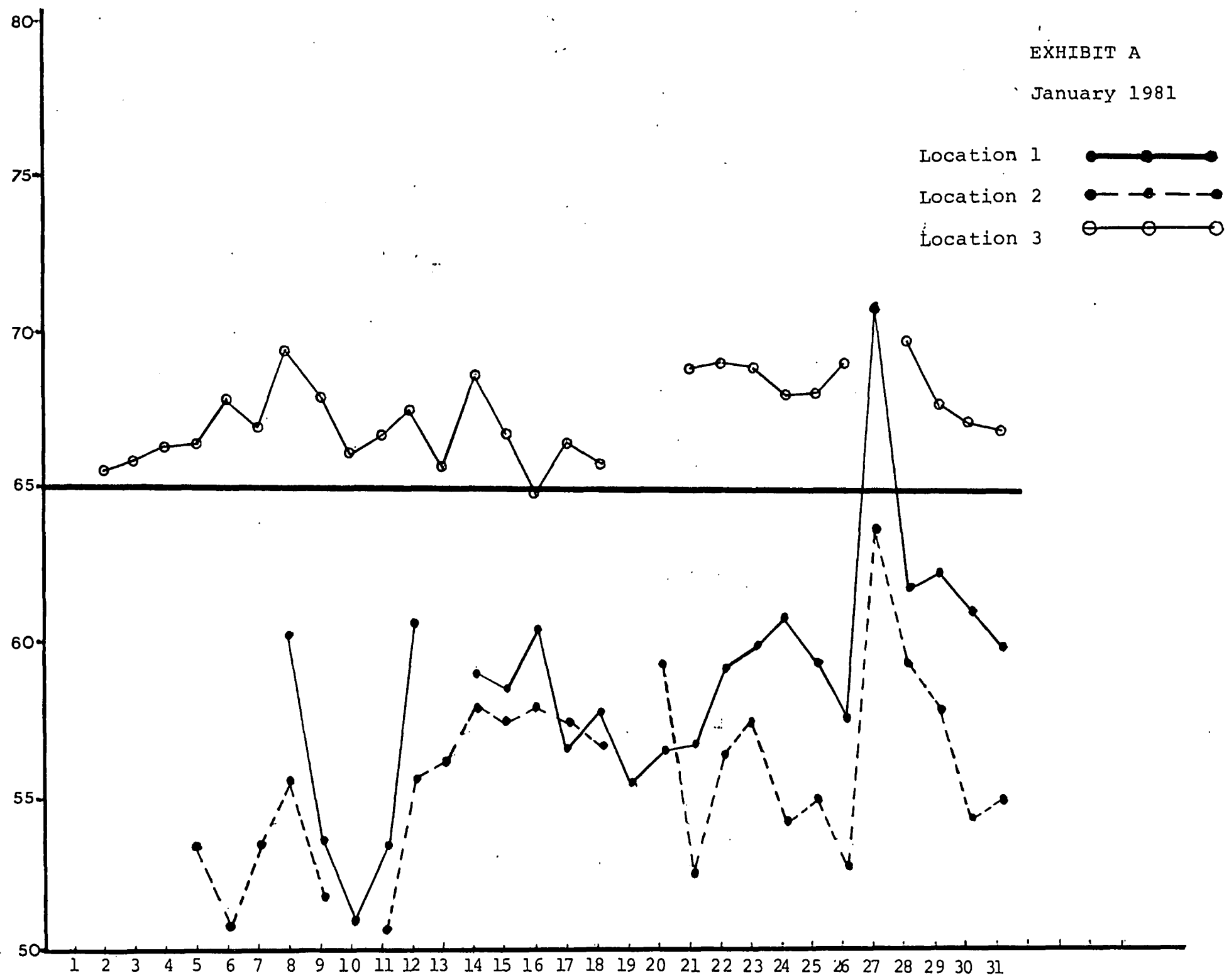


EXHIBIT B

February 1981

24 HOUR COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)

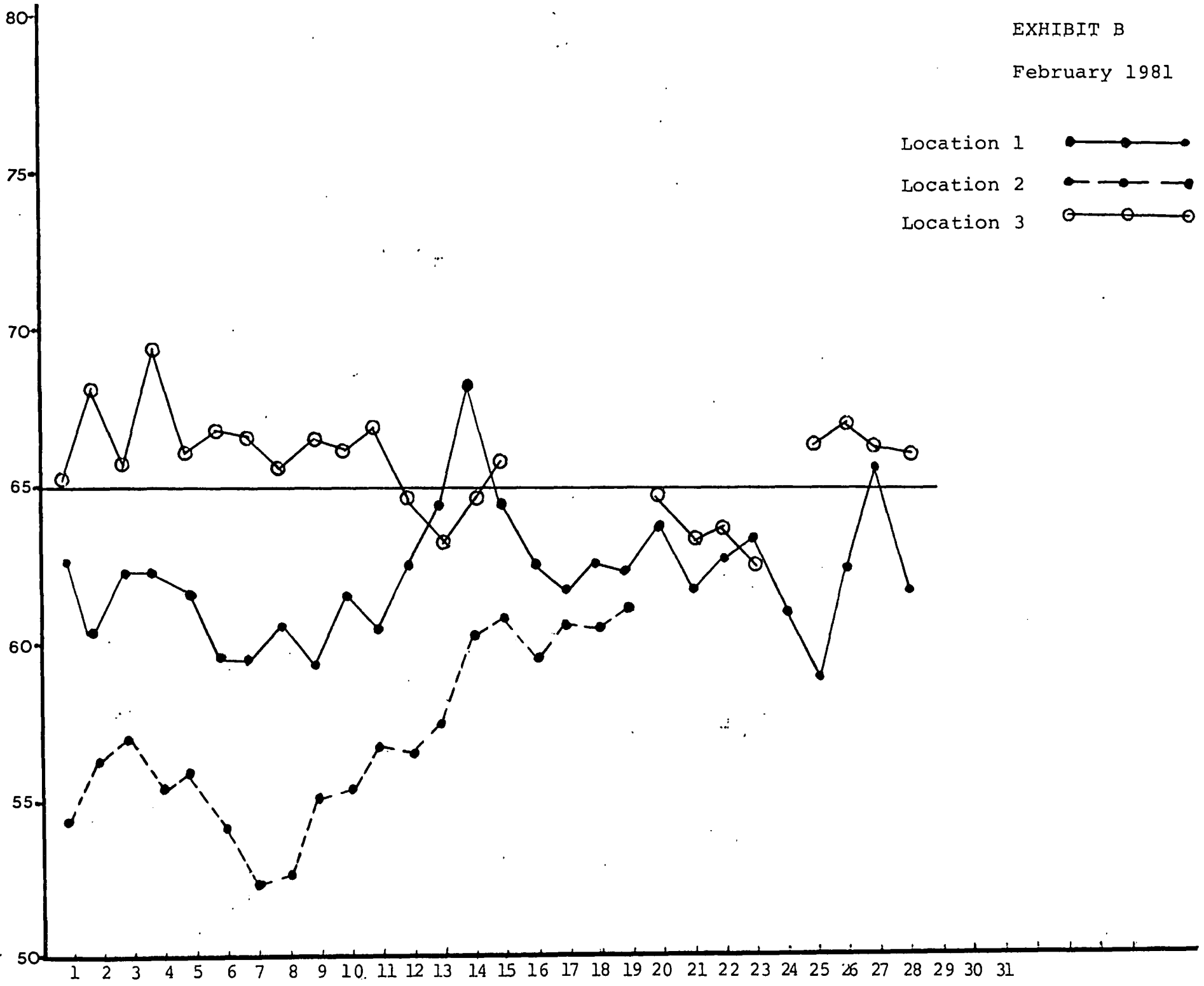


EXHIBIT C

March 1981

24 HOUR COMMUNITY NOISE EQUIVALENT LEVEL (CNEL)

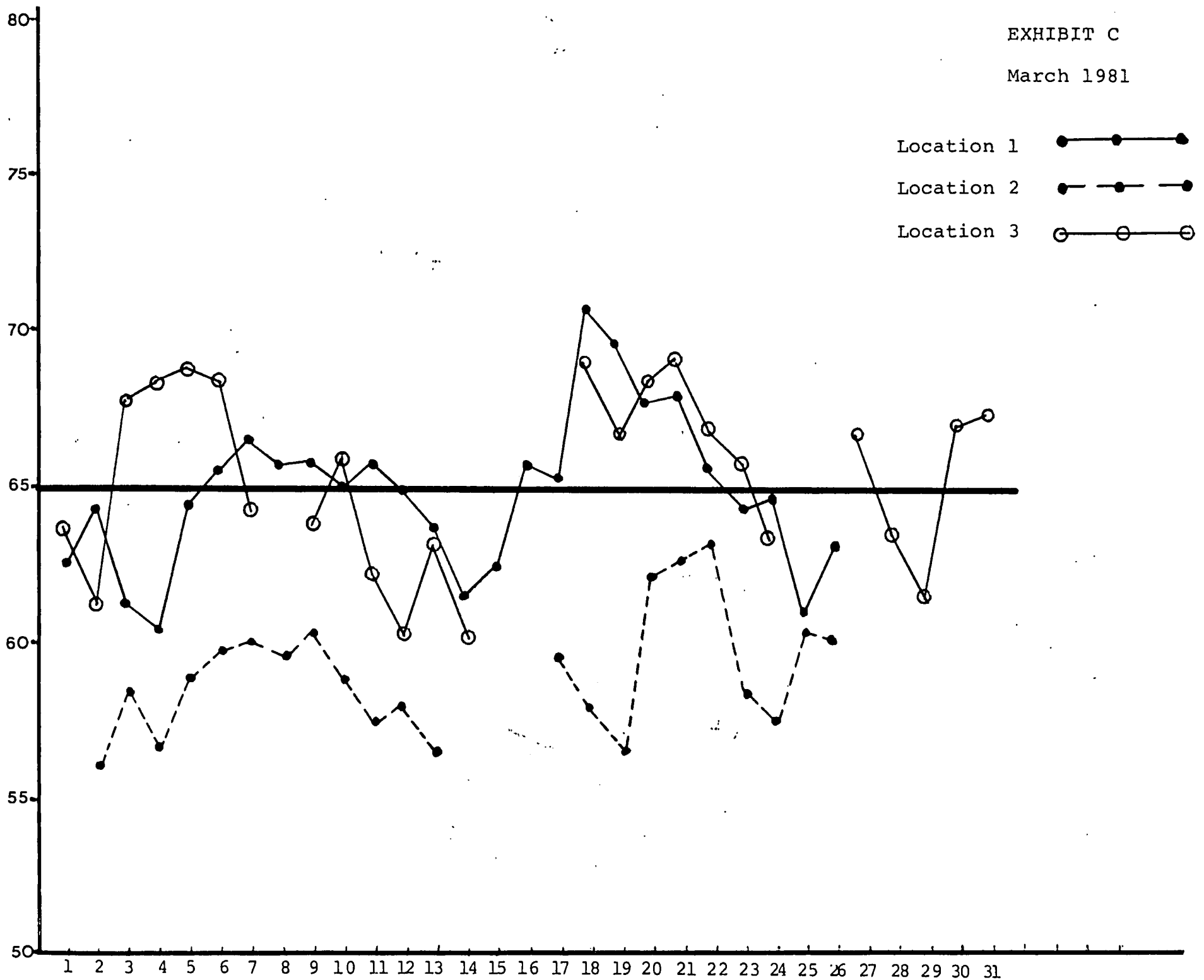


TABLE 1

CNEL SUMMARY

FIRST QUARTER 1981

AVERAGE CNEL

	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>1ST QTR.</u>
Location 1	60.5	62.4	65.2	63.1
Location 2	56.2	57.8	59.3	57.9
Location 3	67.0	65.6	65.6	66.1

DAYS EXCEEDING 65-CNEL

	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>1ST QTR.</u>
Location 1	1	2	11	14
Location 2	0	0	0	0
Location 3	26	15	14	55

EXECUTIVE AIRPORT NOISE MONITORING  
LOCATION 3 (WESTERN BOUNDARY)Sound Recording of Single Events  
Above 90 dB(A)

<u>Date</u>	<u>Events</u>	<u>Daily CNEL</u>
February 22, 1981	Six piston aircraft flyovers	63.1 CNEL
February 25, 1981	High ambient level No recorded events	66.0 CNEL
February 26, 1981	Three motorcycles One emergency vehicle siren	66.7 CNEL
February 27, 1981	Five piston aircraft flyovers One emergency vehicle siren	66.0 CNEL
February 28, 1981	One emergency vehicle siren	65.4 CNEL
March 3, 1981	Engine runup; North maint. area One piston aircraft flyover	67.5 CNEL
March 4, 1981	Four piston aircraft flyovers Two emergency vehicle sirens	68.0 CNEL
March 5, 1981	Twelve piston aircraft flyovers	68.4 CNEL
March 6, 1981	Engine runup; North maint. area One piston aircraft flyover	68.0 CNEL
March 10, 1981	Four piston aircraft flyovers One emergency vehicle siren	65.4 CNEL
March 13, 1981	Two piston aircraft flyovers One emergency vehicle siren	63.0 CNEL
March 18, 1981	No recorded events	68.8 CNEL

March 19, 1981	No recorded events	66.3 CNEL
March 20, 1981	One piston aircraft flyover	67.8 CNEL
March 21, 1981	No recorded events	68.6 CNEL
March 23, 1981	Two piston aircraft flyovers	65.6 CNEL
March 20, 1981	One piston aircraft flyover	67.8 CNEL
March 21, 1981	No recorded events	68.6 CNEL
March 23, 1981	Two piston aircraft flyovers	65.6 CNEL
March 26, 1981	Six piston aircraft flyovers One emergency vehicle siren	68.0 CNEL
March 27, 1981	Two emergency vehicle sirens One piston aircraft flyover	66.5 CNEL
March 29, 1981	One piston aircraft flyover	61.5 CNEL
March 30, 1981	Three piston aircraft flyovers One emergency vehicle siren Engine run up; North maintenance area Three unknown	66.5 CNEL
March 31, 1981	Two emergency vehicle sirens	66.7 CNEL



COUNTY OF SACRAMENTO  
DEPARTMENT OF AIRPORTS

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DIRECTOR OF AIRPORTS  
George W. McLaughlin

April 20, 1981

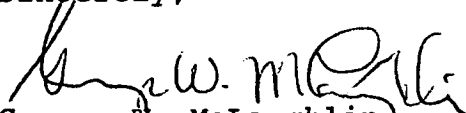
Sacramento City Council  
City Hall  
915 I Street  
Sacramento, CA 95814

Members in Session:

Please find attached the Department of Airports memorandum to the Board of Supervisors summarizing the Noise Monitoring Program at Executive Airport during the first quarter of 1981.

The Department of Airports requests that the second quarter 1981 Noise Monitoring Report for Executive Airport be placed on the agenda for July 28, 1981.

Sincerely,

  
George W. McLaughlin  
Director of Airports

LEK:sam