NOISE .... AND THE OXNARD AIR FORCE BASE

Wyle Laboratories, commissioned by the Ventura County Board of Supervisors to conduct an environmental impact study on Oxnard Air Force Base*, based the following on results of a survey of Camarillo residents -

"The results give a qualitative indication of a genuine concern over noise, not only with respect to aircraft but with respect to noisy motor vehicles operating in residential areas as well. The only conclusion we have been able to draw from the survey is the qualitative observation that it is correct to set conservative aircraft noise/land use guidelines for application in the City of Camarillo, and this is what we have done."

The Board of Supervisors, concurring with the report, adopted Wyle Laboratories' recommendations and have gone on record many times since in support of stringent control of Oxnard Air Force Base utilization in order to protect the interests of the surrounding environment.

The State of California dictates that a residential area shall not be subjected to an average aircraft sound level of more than 65 CNEL (Community Noise Equivalent Level). Although this standard is the most stringent of any state in the union, the County proposes to go even further, and establish a maximum average noise level of 60 CNEL. This is feasible, according to Wyle Labs which identified expected noise level curves in communities close to the base, in light of projected demand for airport use.

What does a limitation of 60 CNEL mean to the area resident? First of all, the daily community noise equivalent level (CNEL) represents the average daytime noise level during a 24-hour day, adjusted to account for the lower tolerance of people to noise level during evening and night-time periods. CNEL levels are based not only on loudness of aircraft, but also on duration of the fly-overs and number of fly-overs in a day.

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*Adrian Wilson & Associates - Environmental Impact Study, Oct. 8, 1970

Using CNEL levels, Wyle Labs projected community noise exposure resulting from the most likely mix of aircraft using the base (includes 14 daily small commercial jet flights, i.e. DC-9 or 737). The finding was that no residences would be exposed to a noise level of 65 CNEL (which would have been acceptable under the State standards), a few dozen residences would be exposed to the conservative level of 60 CNEL, and 5 or 6 square blocks of residences would be exposed to noise at the 55 CNEL level. All other Camarillo/Oxnard residences would be subjected to levels less than 55 CNEL. Aircraft/airport generated noise less than 55 CNEL isn't really noticeable because the ambient or background noise level in Camarillo alone averages 45-50 CNEL. These average noise levels and the very minor environmental effect they have is highlighted by the fact that when the airport operated as a fighter base, thousands of homes were subjected to a minimum of 60 CNEL! (See attachment)

It is the County's position that average noise levels will not present a problem. However, besides the average number of occurrences, their duration and their loudness, the loudness of a single event bears further consideration. For example, a single jet fly-over may rattle windows of hundreds of homes; yet, if other aircraft produce minimal noise, the average noise level (CNEL) may fall within acceptable limits. This means that there must also be limits on the noise any single event (aircraft fly-over) can cause. With this realization, the County proposes to limit noise caused by any single event to 75 dB(A) in residential areas. dB(A) or "A-weighted decibels" is a measurement of sound pressure which pretty well approximates loudness of sound as perceived by the human ear. If 75 dB(A) is the maximum allowable noise from a landing or taking-off aircraft as perceived by a resident at his home, what does this really mean? If a home owner was standing out in front of his house and experienced 75 dB(A) of aircraft noise, it would seem about as loud to him as an automobile driving down his street coming within 50 feet of him, and traveling at a speed of 35 mph (70 dB(A)). The aircraft noise would seem less loud (almost half as loud) than a motorcycle

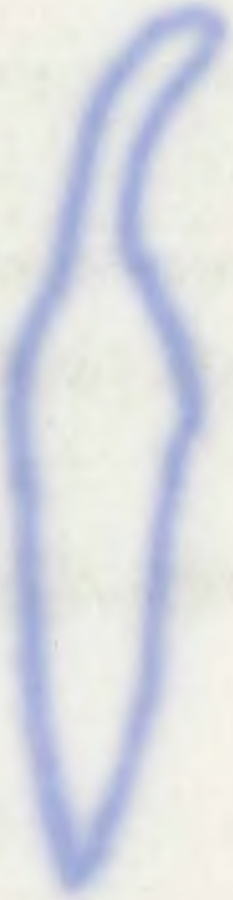
traveling down his street at the same speed and distance from him (80-90 dB(A)). Conversational speech at 2 to 4 feet registers about 70-75 dB(A) of loudness - equivalent to the maximum allowable aircraft single event noise. What would 75 dB(A) outside mean to someone inside the home? Southern California residences screen out from a minimum of 20 dB(A) (with some windows open) to pretty much a maximum of 35 dB(A). Assuming the minimum, a home would screen out 20 of the 75 dB(A) leaving 55 dB(A) of sound to be heard inside by the resident. This is roughly equivalent to the loudness of that same car driving by (as heard from inside the house) or of conversational-mode speech at a distance of 10 feet.

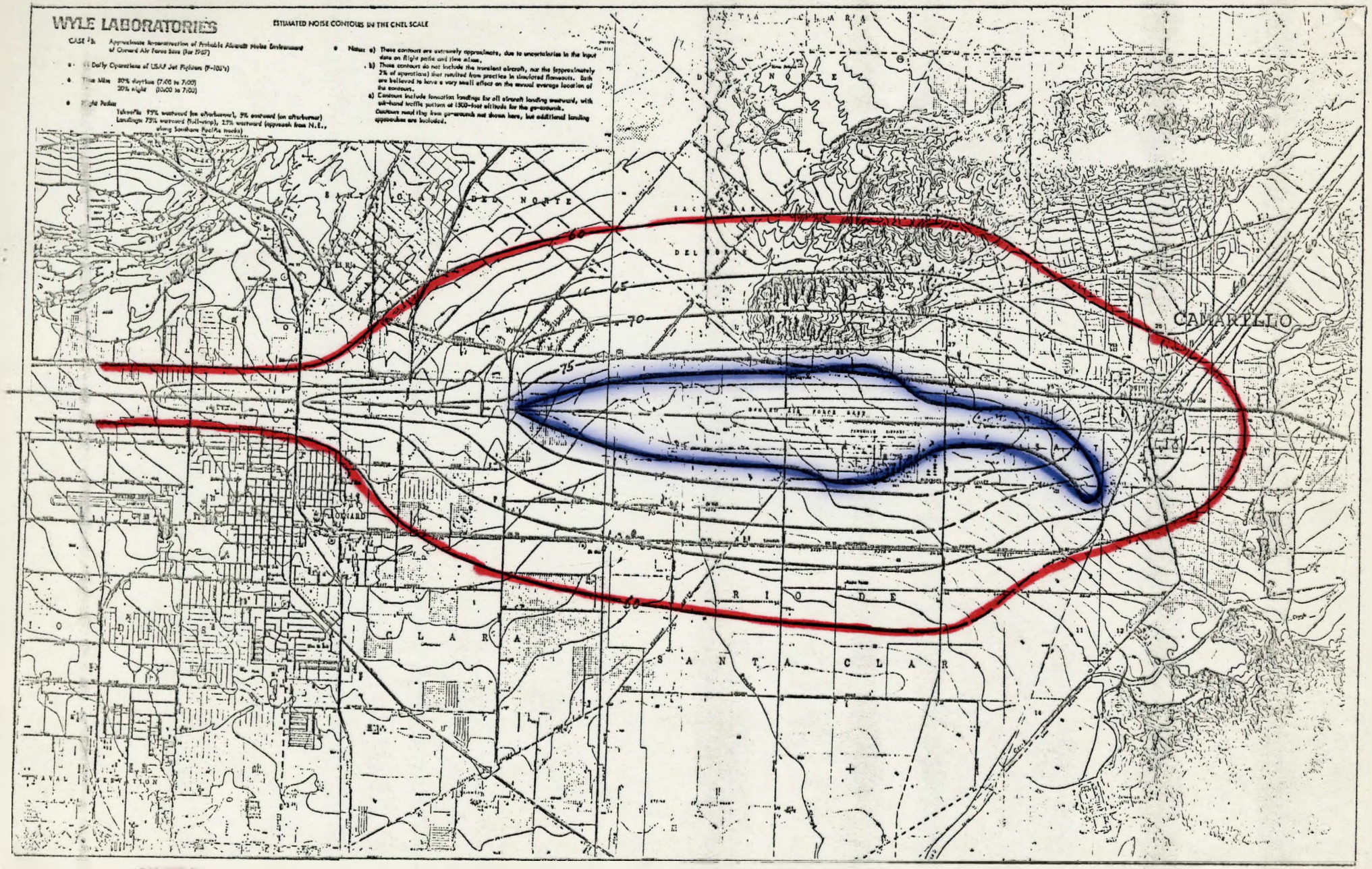
According to the Wyle Labs study, the DC-9s and 737s are the only aircraft to be landing at the base which would cause sound anywhere near the 75 dB(A) level, and according to aircraft demand mix data for 1975, these aircraft would be making no more than 14 daily flights into the base. Also, Wyle projected that very few residences would be subjected to even the 75 dB(A) level (the 75 dB(A) level doesn't even cross Highway 101). To recap, for those few residences exposed to the 75 dB(A) level, they would experience (in noise level) an equivalent to fourteen or so automobiles passing their home at 35 mph during the course of the day.

Although these levels should be easy to live with, what controls will exist to ensure that single-event and average noise levels are not exceeded? The County intends to do the following to ensure compliance with its standards:

1) prohibit jet operations from 10 p.m. to 7 a.m.
2) limit useable runway length to 6000 feet, which automatically precludes any of the larger, noisier aircraft from using the base (e.g. 707, DC-8, 727, 747)
3) coordinating land use with cities in the area to ensure that residential development doesn't occur within areas closely situated to the airport
4) continuous monitoring of single event and average noise levels within the community to ensure compliance with the 60 CNEL and 75 dB(A) sound level requirements

In addition, the County expects to be able to issue more and more stringent standards over the years as a result of development of quieter engines, noise abatement technology, and Federal and State environmental protection legislation.





60 CNEL U.S. AIRFORCE - F-106 - 1969 (22 DAILY TAKE OFFS)

60 CNEL MAX. COUNTY - DC-9 (14 DAILY TAKEOFFS)