

APPENDIX A

History of the Performance-Based Noise Ordinance

BACKGROUND:

On January 1, 1988, the Hayward City Council enacted an aircraft noise ordinance. The ordinance set noise decibel limits for aircraft which relied upon measured decibel levels contained in the Federal Aviation Administration (FAA) Advisory Circular (AC) AC-26-3F. This Advisory Circular is a published list of certified maximum decibel levels for specified aircraft on takeoff. The 1988 ordinance was an interim measure taken by the City Council until a performance-based noise ordinance could be implemented.

In November 1988, a permanent noise monitoring system consisting of four noise monitoring terminals was installed in the community. Data collected from these monitors during the 19-month test period, as well as analysis of information in AC-36-3F, provided the basis for the maximum aircraft noise limits contained in the Performance-based Noise Ordinance. The ordinance was implemented on February 1, 1992.

In order for aircraft to operate at the airport within the parameters established under the Performance-Based Noise Ordinance, they must not exceed certain maximum noise decibel levels contained within the ordinance. The noise levels generated by aircraft are monitored and recorded 24 hours a day. Specialized equipment records the sound levels at which aircraft are actually being operated. Aircraft must not exceed the maximum noise limits established for any of the four individual noise monitors stationed in the community.

Section 2-6.120 of the Performance-Based Noise Ordinance sets forth aircraft noise limits for each noise monitor in the system, taking into consideration the runway in use and the time of day.

In summary, the Performance-Based Noise Ordinance states that no aircraft may take off, land, or otherwise operate at the airport between the hours of 7:00 a.m. and 11:00 p.m. if it generates a Single Event Noise Exposure Level (SENEL) exceeding the following values measured at any one of the four Noise Monitoring Terminals (NMT). They are:

<u>Noise Monitoring Terminal</u>	<u>Runways 28L/28R</u>	<u>Runways 10R/10L</u>
NMT #1	98	98
NMT #2	98	98
NMT #3	98	100
NMT #4	98	99

Additionally, no aircraft may take off, land or otherwise operate at the airport between the hours of 11:01 p.m. and 6:59 a.m. if it generates a SENEL which exceeds the following values as measured at any one of the four Noise Monitoring Terminals (NMT):

<u>Noise Monitoring Terminal</u>	<u>Runways 28L/28R</u>	<u>Runways 10R/10L</u>
NMT #1	95	95
NMT #2	95	95
NMT #3	95	97
NMT #4	95	96

For the location of each Noise Monitoring Terminal, see Appendix A, page 3.

OBJECTIVES OF NOISE ORDINANCE:

The ordinance was designed to accomplish the following objectives as set forth by the City Council:

1. To reduce the number of aircraft operations at the airport which generate excessive noise decibel levels resulting in consistent complaints, subject to regulations which may be imposed by state or federal laws; and
2. To reduce aircraft noise decibel levels in response to the environmental concerns of the community without impairing the ability of the airport to serve the general aviation needs of the community and the national air transportation system; and
3. To adopt reasonable rules that would be legally defensible; and
4. To implement noise enforcement standards allowing operators of aircraft which exceed established noise levels the flexibility to modify their aircraft or otherwise bring their performance standards into compliance with the noise ordinance.