

Airport Land Use Commission



AIRPORT ENVIRONS LAND USE PLAN for FULLERTON MUNICIPAL AIRPORT

Amended: February 21, 2019

AIRPORT ENVIRONS LAND USE PLAN

February 21, 2019

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AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY

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SECTION 1.0 – INTRODUCTION

1.1 Background

In 1967 the first Airport Land Use Commission (ALUC) statute was adopted by the California legislature, according to the California Airport Land Use Planning Handbook. The legislation has been amended many times in the ensuing years. Particularly significant amendments occurred in 1982, 1984, 1994 and 2000. The 1982 amendments more clearly articulated the purpose of ALUCs, eliminated the reference to “achieve by zoning”, required consistency between local general plans and zoning and ALUC compatibility plans, required that local agencies make findings of fact before overriding an ALUC decision and changed the vote required for an override from four-fifths to two-thirds. In 1984, amendments to compatibility plans were limited to once per year and immunity was extended to airports if an ALUC action is overridden by a local agency not owning the airport. In 1994 the California Environmental Quality Act (CEQA) statutes as applied to the preparation of environmental documents in the vicinity of airports was amended. In 2000, Section 21670(f) was added to clarify that special districts are among the local agencies to which airport land use planning laws are intended to apply. The 2018 update reflects amendments to the California Department of Transportation Division of Aeronautics Caltrans. As noted in the handbook, several PUC sections identify the Handbook as a resource for airport land use compatibility planning, including Sections 21674.5 and 21674.7. Lead agencies are required to use the Airport Land Use Planning Handbook as a technical resource when assessing the airport-related noise and safety impacts of airport vicinity projects.

The purpose of ALUCs has remained essentially unchanged since the early years of the statutes. The Public Utilities Code Section 21674 authorizes ALUC’s to:

- Assist local planning jurisdictions with ensuring that land use development in the vicinity of airports is compatible with airport operations, to the extent that such land is not already devoted to incompatible uses;
- Coordinate planning at the state, regional, and local levels in order to provide for the orderly development of air transportation while simultaneously protecting the public health, safety and welfare;
- Adopt rules and regulations consistent with the provisions of the State Aeronautics Act.

To fulfill these obligations ALUCs have two specific duties according to the Handbook.

- Prepare and adopt an airport land use plan for each of the airports within its jurisdiction (Section 21674 (c) and 21675(a)).
- Review the plans, regulations, and other actions of local agencies and airport operators pursuant to Section 21676 (Section 21674(d)).

The key limitations are 1) that they have no authority over existing land uses regardless of whether such uses are incompatible with airport activities and 2) the “powers of the commission shall in no way be construed to give the commission jurisdiction over the operation of any airport.”

The Airport Land Use Commission for Orange County was established in late 1969. Between 1970 and the actual adoption of the first Airport Land Use Compatibility Plan (ALUCP), the Commission made advisory comments on projects. The first ALUCP elements were adopted by the Commission between April 17 and August 7, 1975 and were called Airport Environs Land Use Plans (AELUPs)

1.2 Purpose and Scope

The ALUC serves all airports in Orange County which include John Wayne Airport (JWA), Fullerton Municipal Airport (FMA) and Joint Forces Training Base (JFTB), Los Alamitos. Figure 1 depicts the Airport Planning Areas for each airport. This AELUP for FMA is one of several AELUPs prepared for each of these airports in Orange County. Additionally, there is an AELUP for Heliports.

This land use compatibility plan, or AELUP, intends, for the twenty year planning future for Fullerton Municipal Airport to safeguard the general welfare of the inhabitants within the vicinity of the airport and to ensure the continued operation of the airport. Specifically, the plan seeks to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities adversely affect navigable airspace. The implementation of this plan will forestall additional urban encroachment on the airport and will allow for its continued operation. This compatibility plan for Fullerton Municipal Airport affects the cities of Anaheim, Buena Park and Fullerton., Furthermore, per Federal Aviation Regulation Part 77, Section 77.9, notice to the Federal Aviation Administration (FAA) is required for any proposed structure more than 200 feet Above Ground Level (AGL) of its site. Notices to the FAA provide a basis for evaluating project impacts on operational procedures and air navigation. To coincide with the FAA regulations, the ALUC also requires notification of all such proposals which may result in referral to ALUC.

1.3 Authority

Public Utilities Code (PUC) Section 21675(a) states that each commission shall formulate an airport land use compatibility plan that will provide for the orderly growth of each airport and that area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general.

The ALUC is charged by PUC Section 21674 “to coordinate planning at the state, regional, and local levels, so as to provide for the orderly development of air transportation while, at the same time protecting the public health, safety and welfare.” The preparation and

dissemination of the AELUP are important long-term steps in fulfilling this duty. The AELUP and subsequent updates are sent to state, regional and local agencies for review and comment, and the commission regularly coordinates with these agencies on specific project submittals.

Public Utilities Code (PUC) 21676(a) requires each local agency whose General Plan includes areas covered by an airport land use commission plan to submit a copy of its general plan or specific plans (each reference to specific plan also includes conventional zoning and planned community zoning) to the airport land use commission.

If the plan or plans are inconsistent with the commission's plan, the local agency shall be notified and that local agency shall have another hearing to reconsider its plans. The local agency may overrule the commission after such hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes stated in Section 21670.

Section 21676(b) of the Public Utilities Code requires that prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission pursuant to Section 21675, the local agency shall first refer the proposed action to the commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The local agency may, after a public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes stated in Section 21670.

Section 21676(c) requires that each public agency owning any airport within the boundaries of an airport land use commission plan shall, prior to modification of its airport master plan, refer each proposed change to the airport land use commission. If the commission determines that the proposed action is inconsistent with the commission's plan, the referring agency shall be notified. The public agency may, after a public hearing, overrule the commission by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes stated in Section 21670.

Section 21676(d) requires that each commission determination pursuant to subdivision (b) or (c) shall be made within 60 days from the date of referral of the proposed action. If a commission fails to make the determination within that period, the proposed action shall be deemed consistent with the commission's plan.

Section 21676.5(a) and (b) provides that:

- (a) If the commission finds that a local agency has not revised its general plan or specific plan or overruled the commission by a two-thirds vote of its governing body after making specific findings that the proposed action is consistent with the purposes as stated in Section 21670, the commission may require that the local agency submit all subsequent actions, regulations, and permits to the commission for review until its general plan or specific plan is revised or the specific findings

are made. If, in the determination of the commission, an action, regulation, or permit of the local agency is inconsistent with the commission plan, the local agency shall be notified and that local agency shall hold a hearing to reconsider its plan. The local agency may overrule the commission after the hearing by a two-thirds vote of its governing body if it makes specific findings that the proposed action is consistent with the purposes stated in Section 21670.

- (b) Whenever the local agency has revised its general plan or specific plan or has overruled the commission pursuant to subdivision (a), the proposed action of the local agency shall not be subject to further commission review, unless the commission and the local agency agree that individual projects shall be reviewed by the commission.

1.4 Requirements

Section 21675 of the California Public Utilities Code specifies that:

"(a) Each commission shall formulate a comprehensive land use plan that will provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The commission plan shall include and shall be based on a long-range master plan or an airport layout plan, as determined by the Division of Aeronautics of the Department of Transportation, that reflects the anticipated growth of the airport during at least the next 20 years. In formulating a land use plan, the commission may develop height restrictions on buildings, specify use of land, and determine building standards, including soundproofing adjacent to airports, within the planning area. The comprehensive land use plan shall be reviewed as often as necessary in order to accomplish its purposes, but shall not be amended more than once in any calendar year. (See Appendix A for web address to state law.)

(b) The commission may include, within its plan formulated pursuant to sub-division (a), the area within the jurisdiction of the commission surrounding any federal military airport for all of the purposes specified in subdivision (a) . . ."

The Commission is prohibited from exercising any authority over the operations of any airport.

1.5 Concept of the Planning Document

This document has been designed to reflect a uniform approach to planning for Fullerton Municipal Airport. Noise and safety impacts have been identified for each airport in Orange County by using similar standards and criteria except where the size of an airport or type of aircraft operations dictated otherwise. All building height restrictions will have as their ultimate limits the imaginary surfaces as applicable and as defined in Part 77 of the Federal Aviation Regulations. When a project is proposed by an agency, which exceeds the height limits established by FAR Part 77, a determination will be made by the

commission on a case by case basis.

Land use policies have been established on the basis of noise and safety impacts on the welfare of the public, and on the building height and activity impacts upon the continued operation of the airport. The concepts and processes presented below illustrate the commission's efforts to ensure that land use policies were determined only by the most incontrovertible methods.

1.6 Applicability

Section 21670(a)(2) of the Public Utilities Code indicates that a commission's authority is applicable only within areas around public airports to the extent that these areas are not already devoted to incompatible uses.

- 1.6.1 Section 21674.7 provides that an airport land use commission that formulates, adopts or amends a comprehensive airport land use plan shall be guided by information prepared and updated pursuant to Section 21674.5 and referred to as the California Airport Land Use Planning Handbook ("Handbook") published by the Division of Aeronautics of the California Department of Transportation.

The Handbook advises that while existing development which is incompatible becomes a nonconforming use with respect to ALUC criteria, any redevelopment of those areas would be subject to ALUC policies.

- 1.6.2 "Existing Land Use" is defined by the Commission as a property already "devoted to" a certain use or a use that has been vested by virtue of the fact that a property developer has:

- Obtained a valid building permit (as distinguished from merely a foundation or other specific permit); *and*
- Performed substantial work; *and*
- Incurred substantial liabilities in good faith reliance upon the permit.

or

- Entered into a Development Agreement

or

- Obtained a Vesting Tentative Map

- 1.6.3 The Commission believes that the limitation on its authority over existing land uses applies only to the extent that the use remains constant. If new or increased compatibility conflicts would result and to the extent that such land use changes

require discretionary approval on the part of a county or city, the Commission policy is to review expansion, conversion, or redevelopment of existing uses.

- 1.6.4 Infill development is development proposed in a location where some development already exists. These are commonly residual vacant areas within already established areas. These existing areas may represent either compatible or incompatible land uses within the Commission's planning area for an airport.

The Commission recognizes that while a particular non-conforming infill use would likely be inconsistent with its compatibility plan, the introduction of a use which is compatible into a developed area may raise broader community planning issues. The Commission, therefore, will weigh both the severity of the incompatibility and the integrity of the already developed area.

Infill projects are those submitted to the Commission pursuant to applicable law which seek to develop residual vacant areas within established neighborhoods. Such existing neighborhoods may represent either compatible or incompatible land uses within an airport's planning areas. An infill project must comply with all applicable Specific Policies (and their associated mitigation measures, such as sound attenuation, height limitation, occupancy limits, etc.) in order to be found consistent with this AELUP. The Commission will not find an infill project to be Consistent with this AELUP, if the project would result in an increase of incompatible land use within the airport's planning areas. Examples of potentially incompatible infill projects include, but are not limited to, the development of: dwelling units within the 65 CNEL Contour, high-occupancy buildings within an APZ, and excessively tall structures deleterious to the navigable airspace.

- 1.6.5 The Commission will utilize the following additional criteria in determining consistency/inconsistency of an infill action/project within the applicable planning area(s):

- The portions of the planning area within which infill is to be permitted (infill within the runway protection zone would be prohibited, for example);
- The maximum size of a parcel or parcels on which infill is to be allowed;
- The extent to which the site must be bounded by similar uses (and not extend the perimeter of incompatible uses);
- The density and/or intensity of development allowed relative to that of the surrounding uses and the otherwise applicable compatibility criteria; and
- Other applicable development conditions (such as easement dedications or special structural noise level attenuation requirements) which must be met.

- 1.6.6 Conditions such as acoustical treatment of structures, recorded deed notices, aviation easement dedication (if offered by a local agency or project proponent),

buyer awareness measures, real estate disclosure statements, and building occupancy limits may be considered and applied by the Commission to find an infill project/action consistent.

1.7 Glossary/Definitions

ACCIDENT POTENTIAL ZONES (APZ)	- Zones established around airports based on accident histories and operational characteristics. The three types of Accident Potential Zones are Runway Protection Zone, APZ I and APZ II.
ADD	- Average Daily Departure.
AELUP	- Airport Environs Land Use Plan. (A land use compatibility plan referred to in Public Utilities Code Section 21675.)
AERONAUTICAL STUDY	- The technical analysis performed by the Federal Aviation Administration (FAA) pursuant to the filing of Form 7460-1 “Notice of Proposed Construction or Alteration” by a project proponent.
AIRPORT	- Any public or military airport, airstation, or air facility within Orange County, California.
AIRPORT PLANNING AREA	- The area in which current or future airport-related noise, overflight, safety, and/or airspace protection factors may significantly affect land uses or necessitate restrictions on those uses. In most instances, the airport planning area is designated by the ALUC as its airport influence area boundary for the airport and the two terms can be considered synonymous. See Figure 1 and Exhibit D1 of Appendix D.
AIRSPACE ANALYSIS	- The technical analysis performed by the FAA pursuant to the filing of Form 7460-1 “Notice of Proposed Construction or Alteration,” or Form 7480-1 “Notice of Landing Area Proposal” by a project proponent.
ALUC	- Airport Land Use Commission for Orange County
AVIGATION EASEMENT	- Avigation easement is generally defined by the Caltrans Aeronautics Division as: “A type of easement which typically conveys the following rights: a right-of-way for free and unobstructed passage of aircraft through the airspace over the property at any altitude above a surface specified in the easement...a right to subject the property to noise, vibrations, fumes, dust, and fuel particle emissions associated with normal

airport activity; a right to prohibit the erection or growth of any structure, tree, or other object that would enter the acquired airspace; a right-of-entry onto the property with proper advance notice for the purpose of removing, marking, or lighting any structure or other object that enters the acquired airspace; a right to prohibit electrical interference, glare, misleading lights, visual impairments, and other hazards to aircraft flight from being created on the property.” (Caltrans Division of Aeronautics *California Airport Land Use Planning Handbook* dated October 2011 Appendix H, Exhibit H) The sample avigation is included in Appendix K of this AELUP.

- CNEL - Community Noise Equivalent Level [CNEL is the energy average noise level measured in A-level for a 24-hour period, with different weighting factors for the hourly noise levels occurring during the daytime (0700 to 1900, 0 dB weighting), evening (1900 to 2200, 5 dB weighting), and nighttime (2200 to 0700, 10 dB weighting) periods.]
- COMMISSION - The Airport Land Use Commission for Orange County
- dB(A) - A-Weighted sound pressure level or A-level is the sound pressure level which has been filtered or weighted to quantitatively reduce the effect of the low frequency noise. It was designed to approximate the response of the human ear to sound. A-level is measured in units of decibels.
- FAA - Federal Aviation Administration.
- FAR - Federal Aviation Regulations.
- FREE-STANDING BUILDING - A building which does not share a common wall with another building.
- HABITABLE ROOM - Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms and similar spaces.
- HELIPORT - An identifiable area on land or water, including any building or facilities thereon, used or intended to be used for the landing and takeoff of helicopters. Does not include temporary landing and takeoff sites, as defined in the California Aeronautics Act. Refueling and overnight maintenance are permitted. Please note

that AELUP policies related to heliports apply equally to helistops.

- HELISTOP - An identifiable area on land or water, including any building or facilities thereon, used or intended to be used for the landing and takeoff of helicopters. Does not include temporary landing and takeoff sites. Refueling and overnight maintenance are not permitted.
- INFILL - Development which takes place on vacant property largely surrounded by existing development, especially development which is similar in character.
- LOCAL AGENCY - The County of Orange, or any city or special district within Orange County.
- NEW AIRPORT - Any new public airport that is proposed to be constructed and operated by a local agency such as county(ies), city(ies), or special district(s) or authorities.
- NOISE DISCLOSURE - Appropriate written notification, usually in the form of avigation easement, deed notice, or real estate disclosure statement, or final tract or parcel map, which informs the future resident of aircraft noise. Noise disclosure methodology is presented in AELUP Section 3.3.
- NOTICE OF AIRPORT IN VICINITY - Notice disclosure defined by Section 11010 of the Business and Professions Code.
- NOTIFICATION AREA - The ALUC adopted the FAA FAR Part 77 Notification Area as the Airport Planning Area for FMA. FAR Part 77 defines the notification area as a 10,000 foot radius from the nearest point of the nearest runway with its runway being 3,121 feet in actual length, excluding heliports. See Exhibit D1 of Appendix D.
- OBSTRUCTION - Any object of natural growth, terrain or permanent or temporary construction or alteration, including equipment or materials used therein, the height of which exceeds the standards established in Subpart C of Federal Aviation Regulations Part 77, *Objects Affecting Navigable Airspace*.
- OPERATION - Any single landing or approach performed by an aircraft. Also any single take-off or departure constitutes an operation.

OUTDOOR LIVING AREAS	- Spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas, and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings.
OVERRIDE	- See “Overrule” below.
OVERRULE	- The formal procedure set forth in PUC Sections 21675.1, 21676, 21676.5, and 21677 whereby a local agency’s governing body may overrule an ALUC determination of inconsistency.
PLANNING AREA	- Public Utilities Code Section 21675(c) requires that area surrounding any airport which affects, or is affected by, aircraft operations be embraced by the boundaries of its compatibility plan. The planning area sets limits of the area within which proposed land use projects are to be referred to the ALUC for review. With certain exceptions, planning area boundaries are determined by the location and configuration of the airport included in the plan, and the extent of the noise and safety impacts associated with that airport. The overall planning area is the furthest extent of the 60 CNEL Contour, the FAR Part 77 Notification Surface and the runway safety zones associated with the airport.
PUC	- Public Utilities Code of the California Codes
RE- DEVELOPMENT	- The expansion or conversion of an existing land use, whether compatible or incompatible within an airport environs, which would result in an intensified use, or in a new use which may or may not be compatible.
RUNWAY PROTECTION	- A trapezoidal area off each end of a runway used to enhance the protection of people and property on the ground. Also referred to as the clear zone.

SINGLE EVENT - NOISE EXPOSURE LEVEL (SENEL)	In decibels, shall mean the sound exposure level of a single event, such as an aircraft fly-by, measured over time interval between the initial and final times
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SECTION 2.0 - PLANNING GUIDELINES

Guidelines for airport land use planning have been set down in a variety of cohesive approaches and systematic forms. Civilian and military authorities have established regulations or statutes which specify numerous methodologies for mitigating the incompatibilities between an airport and its environs, and such incompatibilities have been adequately defined.

Public Utilities Code Section 21670 et. seq. provides general planning and procedural guidance while directing a land use commission to provide "for the orderly growth of each public airport and the area surrounding the airport," and to "safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general." Toward these ends, Sections 21675 and 21674 further enable the Commission to "develop height restrictions on buildings", to specify the "use of land", to determine "building standards, including sound-proofing"; and to "assist local agencies in ensuring compatible land uses in the vicinity of all new airports and in the vicinity of existing airports to the extent that the land in the vicinity of those airports is not already devoted to incompatible uses." The Commission is also empowered to "coordinate planning at the state, regional and local levels so as to provide for the orderly development of air transportation, while at the same time protecting the public health, safety, and welfare."

The California Department of Transportation's *California Airport Land Use Planning Handbook*, provides further guidelines, which the Commission is bound by law to utilize in the preparation of this AELUP. Similarly, legislation passed in 1994 requires that, when preparing an environmental impact report for any project situated within an airport influence area as defined in an ALUC compatibility plan (or, if a compatibility plan has not been adopted, within two nautical miles of a public-use airport), lead agencies shall utilize the *Handbook* as a technical resource with respect to airport noise and safety compatibility issues. (Public Resources Code, Section 21096)

In the formulation and amendment of this plan, the Commission has made every effort to study and to evaluate all available viewpoints regarding airport land use planning. Historically, the Commission has held formal public hearings to gather input in addition to its key reliance on the Caltrans *Handbook*

2.1 Standards and Criteria

The following sections describe the standards and criteria adopted by the Airport Land Use Commission for Orange County for establishing planning boundaries and the reasoning of the Commission in choosing them.

2.1.1 Aircraft Noise

In adopting the Community Noise Equivalent Level Methodology, Resolution No. 75-1 executed January 9, 1975 of the Airport Land Use Commission for Orange County states that:

" . . . aircraft noise emanating from airports may be incompatible with the general welfare of the inhabitants within the vicinity of an airport and in order to measure the impact of aircraft noise on inhabitants within the

vicinity of an airport, the Airport Land Use Commission for Orange County adopts the Community Noise Equivalent Level Methodology as specified in the Noise Standards for California Airports (Title 21, California Code of Regulations)."

Historically, the Commission investigated other aircraft noise description systems including Composite Noise Rating, Noise Exposure Forecast, Noise and Number Index, and Aircraft Sound Description System. The Commission discussed at length the variability of aircraft noise due to atmospheric conditions and aircraft operations and the inability of any sound measurement system to provide a completely accurate noise description at all times.

The Community Noise Equivalent Level (CNEL) system was adopted by the Commission for the following reasons:

- (1) the system is set forth in the State Code of Regulations (Title 21, California Code of Regulations) and therefore is imbued with legal authority; and
- (2) the Noise Insulation Standards in the State Housing Law (Title 25, California Code of Regulations) specify the use of the CNEL system to describe intrusive noise levels and prescribe soundproofing; and
- (3) the CNEL system most accurately describes those noise levels prescribed in the Noise Element of the Orange County General Plan.

The 60 dB CNEL contour line was chosen as a planning boundary by the Commission for the following reasons:

- (1) this level is prescribed in the California Noise Insulation Standards as the criterion for enforcing the use of sound insulation; and
- (2) the flexible nature of a CNEL contour requires that some leeway from the 65 dB level, prescribed in the Noise Standards for California Airports, be created in order to protect inhabitants of the airport environs from noise. The CNEL methodology has been adopted for, and generally applies to all airports in Orange County.

2.1.2 Safety

Accident Potential Zones (Civilian Airports)

In adopting criteria for Accident Potential Zones at civilian airports, Resolution No. 75-3 executed April 3, 1975 of the Airport Land Use Commission for Orange County states that:

" . . . the Airport Land Use Commission for Orange County shall designate accident potential zones around civil airports on the basis of study and evaluation of each airport's accident history and operational characteristics."

Instead of adopting one methodology to be applied to all civilian airports, the Commission decided to study each airport individually. In the past, the Commission has evaluated data from all airport accidents occurring within California and at each civilian airport in the County; and concluded that there was insufficient evidence to identify crash hazard zones which were applicable to all airports.

Periodic reviews of accident patterns will be undertaken by the Commission as new data and methodologies become available.

Justification for designating accident potential zones around civilian airports such as Fullerton Municipal Airport is detailed in Section 2.2.

2.1.3 Building Height Restrictions

In adopting criteria for building height restrictions in the vicinities of airports, the Commission considered only one standard and that was Federal Aviation Regulations Part 77 (FAR Part 77) entitled, "Objects Affecting Navigable Airspace." These regulations are the only definitive standard available and the standard most generally used. In order to ensure that buildings which might affect the continued operations of airports are not built in their vicinities, the Commission has incorporated the standards for determining obstructions and FAR Part 77 definitions of the "imaginary surfaces and notification surfaces" for airports, as the guidelines for height limits.

The "imaginary surfaces" are defined by means of elevations, heights and slopes in relation to individual airports, the spaces above which are reserved to air navigation. In addition to the "imaginary surfaces," the Commission will use all of the FAR Part 77.23 standards along with the results of FAA aeronautical studies, or other studies deemed necessary by the Commission, in order to determine if a structure is an "obstruction." Building or structural heights are limited to the distance between the ground elevation of the site and an elevation that has been determined will not adversely affect an airport or aeronautical operations, nor navigational-aid siting criteria, including interference with navigational-aids or published flight paths and procedures. The FAA uses the 50:1 notification surface to help identify projects that may interfere with airport operations. A project exceeding the 50:1 notification surface is not necessarily incompatible, but rather requires that the FAA be notified so they can conduct an aeronautical study. Projects that penetrate the 50:1 notification surface for FMA must file Form 7460-1 with the FAA. See Appendix D, Exhibit D1 to view the FAR Part 77 Notification Area for FMA.

In its aeronautical studies, the FAA determines if a project is considered an Obstruction and if a project is determined to be a Hazard to Air Navigation. A Determination of No Hazard to Air Navigation does not automatically equate to a Consistency determination by the ALUC. The FAA may also conclude in their

aeronautical study that a project is an Obstruction but not a Hazard to Air Navigation. The Commission may find a project Inconsistent based on an Obstruction determination. The Commission may utilize criteria for protecting aircraft traffic patterns at individual airports which may differ from those contained in FAR Part 77, should evidence of health, welfare, or air safety surface sufficient to justify such an action.

Commission review of individual cases will be guided by FAR Part 77, and by FAA Advisory Circular No. 150/5190-4A, as published on December 14, 1987 and entitled "A Model Zoning Ordinance to Limit Height of Objects Around Airports" (Appendix F). This document has been promulgated by the FAA expressly to guide local agencies in the preparation of specialized zoning regulations, and in the conduct of individual case reviews. The Advisory Circular complements FAR Part 77, and together they provide an overall means to protect the navigable airspace at local airports. In addition, per FAA Part 77, Section 77.13(a), notice to the FAA is required for any proposed structure more than 200 feet Above Ground Level (AGL) of its site. To coincide with this regulation, the ALUC also requires notification for such projects regardless of where within Orange County the project would be located. This may or may not result in referral of a project to ALUC.

As noted within the Airport Land Use Planning Handbook, when determining the height of structures, it is important to consider all of their components, including elevator shafts, flag poles, and antennas that would extend above the roof level. Furthermore, proposed objects do not need to be permanent to require submittal of a notification to the FAA. Notice also must be provided for temporary objects such as construction cranes. Such objects are critically important to airspace protection in that they are often taller than the ultimate height of the structure.

The results of an aeronautical study conducted by the FAA pursuant to FAR Part 77.13 will be utilized to help determine if a structure will have an adverse effect on the airport or on aeronautical operations. If the proposed object is concluded to be a potential hazard to air navigation, the FAA may object to its construction, examine possible revision of the proposal to eliminate the problem, require that the object be appropriately marked and lighted as an airspace obstruction, and/or initiate changes to the aircraft flight procedures for the airport so as to account for the object. The ALUC considers projects that are a hazard to air navigation to be Inconsistent with the *AELUP for FMA*.

The Commission considers and recognizes the FAA as the single "Authority" for analyzing project impacts on airport or aeronautical operations, or navigational-aid siting, including interference with navigational-aids or published flight paths and procedures. The Commission also considers the FAA as the "Authority" for reporting the results of such studies and project analyses. The Commission will not consider the findings of reports or studies conducted by parties other than the FAA unless the FAA certifies and adopts such findings as true and correct.

The FAA aeronautical study is just one of many factors ALUC considers when

reviewing projects for compatibility with an airport. These studies only address airspace issues. As stated in the Caltrans Planning Handbook, simply because the FAA has issued a Determination of No Hazard indicating that it has no objection to a proposed construction does not mean that the proposal is compatible with the airport. Compatibility with regard to noise, the density or intensity of the land use, and other factors also must be considered. Height of the structure and its effect on airspace is only one part of the puzzle.

In those portions of the height restriction planning areas that lie outside of the Accident Potential Zones and 60 dB CNEL Contours, or other areas of special concern as delineated by the FAA and adopted by the Commission, local agencies are required to submit only those matters which contemplate structures that would penetrate the imaginary surfaces as defined in FAR Part 77.19, 77.21, or 77.25 which have been designated for each individual airport for height restriction referral, or are 200' above ground level.

Wildlife Hazards

A variety of land uses, facilities, and structures on and near airport can create wildlife hazard attractants that pose a threat to aircraft operations, such as bird strikes. It is important to assess potential wildlife hazard attractants on and near airports and to avoid the establishment of non-compatible land uses.

The Commission recommends the evaluation and promotion of project designs that reduce/eliminate wildlife attractants within two nautical miles Fullerton Municipal Airport (FMA) and within the approach/departure corridors. The Commission will require that projects referred to ALUC, with the potential to create wildlife hazard attractants, notify FMA to discuss project design options. Proposed projects within an airport's planning area should be reviewed on a case-by-case basis to determine their potential for attracting hazardous wildlife.

The FAA provides guidance on separation criteria for potential wildlife hazard attractants (non-compatible land uses and facilities) within FAA Advisory Circular 150/5200-33B, "Wildlife Hazard Attractants on and near Airports." The advisory circular is included in this AELUP as Appendix I.

2.1.4 Overflight

An overflight means any distinctly visible and audible passage of an aircraft, but not necessarily one which is directly overhead. Many people are sensitive to the frequent presence of aircraft overhead even at low noise levels. These reactions can mostly be expressed in the form of annoyance.

The purpose of overflight compatibility policies is to help notify people about the presence of overflights near airports so that they can make informed decisions regarding acquisition or lease of property in the affected areas.

Overflight compatibility is particularly important with regard to residential land uses. As recommended in the California Airport Land Use Planning Handbook, the primary method to convey information related to property overflights is the buyer awareness measure, which, rather than applying direct restrictions on the types of land uses, seeks to inform the public of potential annoyances associated with overflight. State of California disclosure requirements address properties located within airport influence areas.

State Law Requirements Regarding Real Estate Transfer Disclosure:

Effective January 1, 2004, California state statutes (Business and Professional Code Section 11010 and Civil Code Sections 1102.6, 1103.4 and 1353) require that, as part of residential real estate transactions, information be disclosed regarding whether the property is situated within an airport influence area, referred to in this AELUP as an airport planning area:

- a. These state requirements apply to the sale or lease of newly subdivided land and condominium conversions and to the sale of existing residential property.
- b. The statutes define an airport influence area “the area in which current or future airport-related noise, overflight, safety, or airspace protection factors may significantly affect land uses or necessitate restrictions on the those uses as determined by an airport land use commission.” (See Figure 1 or Exhibit D1 of Appendix D).
- c. Where disclosure is required (if the property is located within an airport planning area), the state statutes dictate that the following statement shall be provided:

NOTICE OF AIRPORT IN VICINITY:

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibrations, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.

- a. For the purposes of this Compatibility Plan:
 - i. The disclosure provisions of state law are deemed mandatory for new development and shall continue in effect as ALUC policy even if the state law is revised or rescinded.
 - ii. Although not required by state law, the policy of the ALUC is that the above airport proximity disclosure should be provided as part of all real estate transactions involving private property within the airport

- influence area, especially any sale, lease, or rental of residential property.
- iii. City and county policy is that signs providing the above notice be prominently posted in the real estate sales office and/or other key locations at any new development within the airport influence area. Appendix J to the FMA AELUP contains the Fullerton Municipal Airport Helicopter and Fixed Wing Noise Abatement Procedures which show the traffic pattern FMA and current noise sensitive areas. Overflight over these noise sensitive areas should be avoided. And, conversely, new sensitive land uses under the helicopter and fixed wing traffic pattern should be avoided.

To mitigate the effects of aircraft noise, the City of Fullerton has implemented the City of Fullerton Pilot's Guide. This guide shows recommended arrival and departure paths for Helicopter and Fixed Wing aircraft which have shown to be effective for noise abatement (see Appendix J). Due to the potential noise impacts caused by helicopter and fixed wing overflight, it would be helpful to require outdoor signage informing the public of the presence of aircraft activity for the areas impacted by helicopter flights.

2.1.5 Airports/Heliports/Helistops

The Commission is charged with reviewing and acting on proposed airport master plans, expansion of existing airports, and plans for construction of new airports and heliports within its jurisdiction and with making recommendations directly to the California Department of Transportation/Aeronautics Division, regarding the state airport/heliport permit under Section 21661.5 of the California Public Utilities Code. Heliports/helistops to be located at an existing airport do not require Commission review. Additionally, Emergency/Temporary landing sites do not need to be submitted to the Commission. Policies, criteria and submittal information for heliports can be found in the ALUC's separate *Airport Environs Land Use Plan for Heliports*.

The Commission review of proposed projects for airports/heliports/helistops is initiated by the local agency's referral of the proponent's request for a development permit to construct and operate an airport/heliport/helistop. (Note that per Section 3534(b)(5) of the California Code of Regulations, a referral for a heliport/helistop may also be submitted directly from the applicant/sponsor.) A finding by the Commission regarding consistency of the proposed project with this AELUP will be forwarded to the local jurisdiction for their consideration. Prior to a heliport referral to ALUC, the applicant must obtain an Airspace Analysis from the FAA. To obtain this analysis the applicant must file FAA form 7480-1 Notice of Landing Area Proposal (See Appendix B for sample FAA forms).

2.1.6 Airport Planning Areas

Designated planning areas for FMA are set forth in Section 2.2. (Also see Figure 1 and Exhibit D1 of Appendix D) The Commission evaluated the factors germane to its mandated duties and decided that the planning areas shall be based on the following criteria:

1. Areas that are within the FAA FAR Part 77 Notification Area and 60 dB CNEL contour, as specified in Section 2.2 of the AELUP.
2. Areas that are within the Runway Protection Zones or Accident Potential Zones, as specified in Section 2.2 of the AELUP.
3. Areas subject to building height restrictions, as specified in Section 2.2 of the AELUP.
4. In addition to the criteria listed above in items 1-3, the entire County shall be deemed within the Commission's planning area for development proposals (as defined in PUC Section 21676(b)) which are:
 - a. Germane to air transportation, i.e., sites of developments whose proposed populations are so large as to have an effect on air transportation.
 - b. Outside the height restriction planning area specified in Section 2.2 of the AELUP, but which are planned to be built to a height of more than 200 feet above ground level, and which in the opinion of the local agency, the FAA, or the Commission, may pose an adverse aeronautical effect, as generally defined in AELUP Section 3.2.1, must be submitted to the Commission.
 - c. Within 10,000 feet from the nearest point of the nearest runway of less than 3,200' in length at FMA, which in the opinion of the local agency, the FAA, or the Commission would interfere with visual or electronic navigation systems or would threaten the operation of an airport or decrease its utility, by producing or causing excessive glare, light, steam, smoke, dust, electronic interference, or by attracting birds, must be submitted to the Commission.

In those portions of the planning areas that lie outside of the Runway Protection Zones or Accident Potential Zones and 60 dB CNEL contours or other areas of special concern as specified in Items 4a, 4b, or 4c above, local agencies are required to submit only those matters which contemplate or permit structures that would penetrate the imaginary surfaces as defined in FAR Part 77.17, 77.21, or 77.23 which have been designated for each individual airport for height restriction referral. A local jurisdiction's legislative acts (general plan or specific plan amendments, including conventional zoning and Planned Communities, zoning

ordinances or building regulations and airport plans) shall be referred to the Commission pursuant to Public Utilities Code Section 21676(b).

2.1.7 Planning Areas – New Airports

Public Utilities Code Section 21661.5 states that no application for the construction of a new airport may be submitted to any local, regional, state or federal agency unless that plan has been both:

1. Approved by the board of supervisors of the county, or the city council of the city, in which the airport is to be located; and
2. Submitted to and acted upon by the Commission.

During the process by the local land use authority and the FAA to certify/approve an EIR/EIS and a Master Plan for the development of a new airport, the Commission shall review the EIR/EIS and/or Master Plan for consistency with, and possible future inclusion in, Section 2.2 of the AELUP. The Commission will adopt the projected noise contours presented in the EIR/EIS and/or Master Plan based on the selected alternative runway alignment and future operational projections. Likewise, the Commission will adopt the FAR Part 77 height restriction criteria based on the selected alternative or Master Plan project. These will form the basis for the planning area for Commission referral until revised data can be generated based on an evaluation of actual operations. New or amended Accident Potential and Runway Protection Zones may be considered for possible establishment as a planning area if called for as a mitigation in the EIR/EIS or included in the Master Plan. Other factors such as light and glare or smoke will also be considered if called for in the EIR/EIS and/or Master Plan.

2.2 Establishment of Planning Areas for Fullerton Municipal Airport

The following section details the considerations of the Commission in fixing the particular contours and boundaries around Fullerton Municipal Airport.

HISTORY, SETTING, AND ROLE – Fullerton Municipal Airport (FMA) is located 22 miles southeast of metropolitan Los Angeles at the western edge of the city of Fullerton in highly urbanized northern Orange County (see Figure 1 and Exhibit D1 of Appendix D). Beginning as early as 1913 when barnstormers and crop dusters used the vacant 53-acre former sewer farm as a makeshift landing site, FMA was the site of numerous aviation “firsts” while evolving through such phases as Chamber of Commerce stewardship to wartime military utilization to city owned and operated transportation center. Now comprised of 86 acres, FMA serves transient general aviation aircraft, as well as the approximately 292 based aircraft comprised of 256 single engine, 5 multi engine, and 31 helicopters. In this capacity, FMA also fulfills its role as the significant general aviation reliever airport for John Wayne Airport in Orange County.

CNEL CONTOURS - The Commission utilized the contours developed by P&D Aviation for the City of Fullerton during 2003-04 (Appendix D, Exhibit D2). These contours are based on approved noise modeling techniques using FAA Air Traffic Control Tower records and sound recordings, and represent the most accurate data available for the busiest recent operations year (2002).

RUNWAY PROTECTION ZONES / ACCIDENT POTENTIAL ZONES - The Commission analyzed the accident history of Fullerton Airport and concluded that the significant number of accidents justified the establishment of a Runway Protection Zone (RPZ) for land use planning purposes at each runway end beginning 200 feet beyond the displaced thresholds and extending outward for a linear distance of 1,000, and an Accident Potential Zone "II" (APZ) within 500 feet of the runway centerline beyond the areas of the RPZ and the airport proper, as shown in Appendix D, Exhibit D2 on the map entitled Airport Impact Zones and Noise Contours.. Since the year 2000, there have been 22 accidents at FMA as documented by the National Transportation Safety Board (NTSB) database. From 1984 through September 2004, twenty aircraft accidents occurred within two miles of the airport in the cities of Fullerton and Buena Park. This, plus the lack of airport ownership of the entire runway protection zones at the runway ends, has convinced the Commission that the runway protection / accident potential zones depicted on the map are justified.

BUILDING HEIGHT RESTRICTIONS – For Fullerton, the Commission, by reference, has adopted Part 77, Objects Affecting Navigable Airspace, of the Federal Aviation Regulations as a guideline to describe the ultimate height of structures under the "imaginary surfaces" as defined in FAR Part 77.25. These airspace imaginary surfaces for FMA now include a second set of FAA-mandated RPZs which extend farther from the respective runway ends than the separate “land use” RPZs discussed and depicted in the context of accident potential zones, above. These height-restriction “FAR Part 77 RPZs” represent imaginary surfaces beyond the runway ends through which no physical objects should penetrate, per FAA policy. These RPZs, which rise from points 200 feet beyond the ends of the runway surface and which extend outward for a linear distance of 10,000 feet at a slope ratio of 50:1, are depicted on the Airport Impact Zones and Noise Contours Map in Exhibit D1 of Appendix D. Additional imaginary surfaces depicted in Exhibit D3 of Appendix D include the ground-level Primary Surface, the 7:1 Transitional Surfaces, the 5,000-foot radius Horizontal Surface, and the 20:1 Conical Surface. Structures should not exceed the elevations defined in FAR Part 77.25 unless, upon completion of an aeronautical analysis conducted by the FAA pursuant to FAR Part 77.13, the Commission finds that they will be consistent with the Policies of Section 3.2 of the AELUP. In addition to the “imaginary surfaces”, the Commission will use all of the FAR Part 77.23 standards for determining if a structure is an “obstruction.” Structural height is limited to the distance between the ground elevation of the site and an elevation which the FAA has determined will not adversely affect this airport or its aeronautical operations, including interference with navigational-aids or published flight paths and procedures.

The Commission may consider the utilization of criteria for protecting aircraft traffic patterns at this airport which may differ from those contained in FAR Part 77, should evidence of health, welfare, or air safety surface sufficient to justify such an action. The Commission will utilize the results of an aeronautical study, conducted by the FAA pursuant to FAR Part 77.13, in order to determine if a structure will have an adverse effect on the airport or on aeronautical operations. The California Airport Land Use Planning Handbook emphasizes that the FAA aeronautical studies are concerned only with airspace hazards, not with hazards to people and property on the ground. An FAA determination of “no hazard” says nothing about whether proposed construction is compatible with airport activity in terms of safety and noise.

PLANNING AREAS - The Commission has adopted and defined as its Planning Areas for Fullerton Municipal Airport all area within the 60 dB CNEL Contour, all area within the Runway Protection and Accident Potential Zones, and all area that lies above or penetrates the 50:1 Imaginary Notification Surface as defined in FAR Part 77.13.

Outside of the 60 dB CNEL Contour and the Runway Protection and Accident Potential Zones, or other areas of special concern as delineated by the FAA and adopted by the Commission, local agencies are required to submit only those matters which contemplate or permit structures that would penetrate the 50:1 imaginary surface for notice to the FAA as defined in FAR Part 77.13.

TWENTY YEAR FUTURE - The Fullerton Municipal Airport Master Plan Update indicates that a modest increase in operations is forecast although the present level of operations will remain relatively constant for the foreseeable future. The Commission utilized the 2004 Fullerton Municipal Airport Master Plan Update prepared by P&D Aviation, as a guideline for establishing its planning areas.

SECTION 3.0 - LAND USE POLICIES

3.1 Concept

To fulfill the purpose of this plan, land use within the planning area boundaries of the AELUP must conform to noise, safety and height restriction standards. Section 3.0 sets forth both the General Policy and Specific Policies pertaining to land use. The General Policy outlines the land use standards for the planning areas. The Specific Policies clarify the General Policy. Impact areas are denoted either on maps (appended) or by reference to some standard source.

3.2 Land Use Policies

3.2.1 General Policy

The General Land Use policy of the Airport Land Use Commission for Orange County shall be:

Within the boundaries of the AELUP, any land use may be found to be Inconsistent with the AELUP which;

- (1) Places people so that they are affected adversely by aircraft noise,
- (2) Concentrates people in areas susceptible to aircraft accidents,
- (3) Permits structures of excessive height in areas which would adversely affect the continued operation of the airport, or
- (4) Permits activities or facilities that would adversely affect aeronautical operations.

Adverse effects of aircraft noise are defined by the "reasonable person" concept presented in the Noise Standards for California Airports, Title 21 of the California Code of Regulations (Appendix H for web address). Adverse effects of aircraft noise include single event noise disturbances to which people near airports are subjected.

A concentration of people in an area susceptible to aircraft accidents is defined as a number of people situated on the ground so as to increase the potential magnitude of a major crash catastrophe (i.e., a larger number of fatalities or injuries than otherwise may occur).

Adverse effect of structure height refers to a structure of such height and/or location that its existence would threaten the continued operation of the airport, or would decrease the airport's utility, such as by creating an obstacle in the flight paths or other aircraft traffic patterns employed at the airport, or by interfering with visual or electronic navigation systems.

Adverse effect of activities or facilities refers to a land use that would hamper aeronautical operations within the boundaries of the AELUP of an airport by producing or causing excessive glare, light, steam, smoke, dust or electronic interference, or by attracting birds.

Any land use which is in conformance with this general policy shall be consistent with the AELUP. Any land use which is not in conformance with this general policy shall be inconsistent with the AELUP.

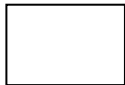
3.2.2 Specific Policies

Some proposed land uses as normally designed and constructed may be found to be inconsistent with the AELUP by the Commission on a case-by-case basis. Other land uses may be found to be consistent with the AELUP by the Commission provided that certain conditions, mitigations, or design measures as described in the following sections are utilized. Examples of limitations on land uses due to noise are set forth in Table 1.

TABLE 1

AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY
 AIRPORT ENVIRONS LAND USE PLAN
 LIMITATIONS ON LAND USE DUE TO NOISE
 (Applicable to Aircraft Noise Sources)

LAND USE CATEGORY	COMMUNITY NOISE EQUIVALENT LEVEL dB						
	55	60	65	70	75	80	
Residential (all types): Single and Multi-Family Residences							
Community Facilities: Churches, Libraries, Schools, Preschools, Day-Care Centers, Hospitals, Nursing/Convalescent Homes, & Other noise sensitive uses							
Commercial: Retail, Office							
Industrial:							

**NORMALLY CONSISTENT**

Conventional construction methods used. No special noise reduction requirements.

**CONDITIONALLY CONSISTENT**

Must use sound attenuation as required by the California Noise Insulation Standards, Title 25, California Code of Regulations. Residential use sound attenuation required to ensure that the interior CNEL does not exceed 45 dB. Commercial and industrial structures shall be sound attenuated to meet Noise Impact Zone "1" criteria (refer to Section 3.2.3).

**NORMALLY INCONSISTENT**

All residential units are inconsistent unless sound attenuated to ensure that the interior CNEL does not exceed 45 dB, and that all units are indoor oriented so as to preclude noise impingement on outdoor living areas.

3.2.3 Noise Impact Zone "1" - High Noise Impact (65 db CNEL and Above)

Noise impact in this zone is sufficient to warrant restrictions on residential uses and to require sound attenuation measures on other uses. The ALUC does not support residential development within the 65 dB CNEL noise contour. All residential units are inconsistent in this area unless it can be shown conclusively that such units are sufficiently sound attenuated for present and projected noise exposures, which shall be the energy sum of all noise impacting the project, so as not to exceed an interior standard of 45 dB CNEL, with an accompanying dedication of an avigation easement for noise to the airport proprietor applicable to single family residences, multi-family residences and mobile homes. Furthermore, all residential units are to be sufficiently indoor oriented so as to preclude noise impingement on outdoor living areas, as defined in Section 1.7.

Noise-sensitive institutional uses such as schools, churches, hospitals, libraries, and other noise-sensitive uses may also be inconsistent in this zone. All noise sensitive uses are inconsistent in this area unless it can be shown conclusively that such units are sufficiently sound attenuated for present and projected noise exposures, which shall be the energy sum of all noise impacting the project, so as not to exceed an interior standard of 45 dB CNEL, and may require the dedication of an avigation easement for noise to the airport proprietor. Commercial, industrial, and recreational uses may be acceptable in this zone providing that commercial and industrial structures are sufficiently sound attenuated to allow normal work activities to be conducted. Said structures shall be sound attenuated against the combined input of all present and projected exterior noise to meet the following criteria:

<u>Typical Use</u>	<u>Level L (eq)*(12)**</u>
Private office ¹ , church sanctuary, board room, conference room, etc.	45 dB(A)
General office ² , reception, clerical etc.	50 dB(A)
Bank lobby, retail store, restaurant,	55 dB(A)
Manufacturing, kitchen, warehousing, etc.	65 dB(A)

* L(eq) is the equivalent sound level for a specified time period in dB(A).

** Measured from 7:00 a.m. to 7:00 p.m. or other appropriate, approved time period.

¹ An enclosed office intended for use by an individual.

² An open office intended to have more than one work station.

In addition, it is recommended that all designated outdoor common or recreational areas within Noise Impact Zone 1 provide outdoor signage informing the public of the presence of operating aircraft.

3.2.4 Noise Impact Zone "2" - Moderate Noise Impact (60 dB CNEL or greater, less than 65 dB CNEL)

Noise impact in this area is sufficient to require sound attenuation as set forth in the California Noise Insulation Standards, Title 25, California Code of Regulations. Single noise events in this area create serious disturbances to many inhabitants. Even though the Commission would not find residential units incompatible in this area, the Commission strongly recommends that residential units be limited or excluded from this area unless sufficiently sound attenuated. The residential use interior sound attenuation requirement shall be a CNEL value not exceeding an interior level of 45 dB. In addition, it is recommended that all designated outdoor common or recreational areas within Noise Impact Zone 2 provide outdoor signage informing the public of the presence of operating aircraft.

3.2.5 Land Use Runway Protection Zone "RPZ," Extreme Crash Hazard

The severe potential for loss of life and property due to accidents prohibits most land uses in this area. Also, the close proximity to aircraft operations limits land uses which would endanger such operations. Only airport-related uses and open space uses, including agriculture and certain types of transportation and utility uses are permitted. No buildings intended for human habitation are permitted in the RPZ. Furthermore, because of the proximity to aeronautical operations, uses in this area must not attract birds nor emit excessive glare or light, nor produce or cause steam, smoke, dust, or electronic interference so as to interfere with, or endanger, aeronautical operations. Land Use (LU) Runway Protection Zones are shown on Exhibit D1 of Appendix D.

3.2.6 Accident Potential Zone I "APZ I," Considerable Crash Hazard

The potential for loss of life and property due to aircraft accidents is sufficient to require density and intensity of use restrictions in this zone. In accordance with the General Policy (3.2.1), the Commission would find unacceptable any land use where lot coverage exceeded fifty (50) percent or where more than one hundred (100) persons were placed for long periods in a structure (i.e., a free-standing building). All forms of residential uses are unacceptable in this zone, as are places of indoor or outdoor assembly (i.e., churches, schools, conference centers, restaurants, etc.). Open space, commercial, industrial, and airport-related uses are acceptable in this zone providing they adhere to the density and intensity of use restrictions. Furthermore, because of the proximity to aeronautical operations, uses in this area must not emit excessive glare or light, nor produce or cause steam, smoke, dust, or electronic interference so as to interfere with, or endanger, aeronautical operations. Currently there is no APZ I shown for FMA.

3.2.7 Accident Potential Zone II “APZ II,” Limited Crash Hazard

The potential for loss of life and property due to aircraft accidents is sufficient to require density and intensity of use restrictions in this zone. In accordance with the General Policy (3.2.1), the Commission would find unacceptable any land use where lot coverage exceeded seventy-five (75) percent or where more than two hundred

(200) persons were placed for long periods in an open assembly area or in a structure (i.e., a free-standing building). Most forms of open space, industrial, commercial, and airport-related uses are acceptable, whereas residential and public facilities (schools, churches, etc.) are not acceptable. Furthermore, because of the proximity to aeronautical operations, uses in this area must not emit excessive glare or light, nor produce or cause steam, smoke, dust, or electronic interference so as to interfere with, or endanger, aeronautical operations.

In applying the APZ standards, the Commission considers a free-standing building as one structure despite the existence of fire walls that may separate tenants or users. Furthermore, the Commission considers that if a structure crosses over boundary lines of APZs I or II, or over a boundary between a non-crash hazard area and an APZ, then the entire building shall be considered to be in the more restrictive APZ area regarding density standards. See Exhibit D2 of Appendix D to view the APZ II Zones for FMA.

3.2.8 Height Restriction Zone

Any object, which by reason of its height or location would interfere with the established, or planned, airport flight procedures, patterns, or navigational systems, is unacceptable to the Commission. Similarly, any proposal which would cause a diminution in the utility of an airport is unacceptable to the Commission. The standards, criteria, and procedures promulgated by the FAA for the thorough evaluation of development projects are designed to ensure the safe and efficient use of the navigable airspace. The application of these principles by the Commission will ensure the stability of local air transportation, as well as promote land uses that are compatible with the airport environs. However, any object which rises above the height of surrounding development, or which is located in close proximity to any of the various flight paths, must be clearly visible during hours of twilight or darkness and must not threaten, endanger, or interfere with aeronautical operations. Such objects, even if within the above height restrictions, are not acceptable to the Commission unless they are clearly marked or lighted according to FAA standards. See Exhibit D3 of Appendix D to view the FAR Part 77 Obstruction Imaginary Surfaces for FMA.

3.2.9 Airspace/Airport Inconsistency

In reviewing projects, the Commission will find any structure, either within or outside of the planning areas, inconsistent with this AELUP if it:

1. Is determined to be a "Hazard" by the FAA;
2. Would raise the ceiling or visibility minimums at an airport for an existing or planned instrument procedure (i.e., a procedure consistent with the FAA-approved airport layout plan or a proposed procedure formally on file with the FAA):
3. Would result in a loss in airport utility, e.g. in a diminution of the established operational efficiency and capacity of the airport, such as by causing the usable length of the runway (s) to be reduced; or
4. Would conflict with the VFR air space used for the airport traffic pattern or enroute navigation to and from the airport.

3.2.10 Avigation Easements

The dedication of an avigation easement in favor of an airport proprietor is designated as a method which may be employed by airport proprietors for controlling and reducing noise problems surrounding airports, pursuant to Title 21, California Code of Regulations, Section 5037. (See Appendix H for web address for the Noise Standards for California Airports.)

Therefore, in recognition of Section 5037 the continuing policy of the Commission is that an avigation easement may be considered by the Commission if so requested by a local agency or project proponent as a factor which may render a land use, within the AELUP planning area set forth in Section 3.2.3 (Noise Impact Zone "1"), consistent with the AELUP. However, nothing in this section shall be deemed to confer upon the Commission the legal jurisdiction or authority to require, compel or mandate the dedication of an avigation easement as a condition of consistency; and the lack of an avigation easement shall not constitute the basis for a determination by the Commission that a project is inconsistent with the AELUP. This section is applicable only to projects submitted to the Commission by local agencies after the adoption of the revisions set forth herein and only to projects within the subject matter jurisdiction of the Commission.

3.3 Specific Policies for Consistency Determinations

- 3.3.1 As set forth in Public Utilities Code Sections 21676 and 21676.5 and as discussed in the Caltrans *California Airport Land Use Planning Handbook*, a key responsibility of an airport land use commission is to review particular types of local actions for compliance with the criteria and policies set forth in a commission's adopted compatibility plan.
- 3.3.2 Section 3.0 of the Airport Environs Land Use Plan sets forth the policies and criteria by which a local action can be reviewed, and a determination made of its consistency/inconsistency with the AELUP.

- 3.3.3 The ALUC may find a local action consistent with the AELUP; or
- 3.3.4 The ALUC may find a local action consistent with the AELUP with condition(s) attached if the local agency/project proponent offer such conditions. These condition(s) serve to mitigate a project which would otherwise be found inconsistent with the AELUP; or
- 3.3.5 The ALUC may find an action inconsistent with the AELUP.
- 3.3.6 Examples of conditions which may serve to mitigate a project/action and thus may permit the ALUC to make a finding of consistency include the following:
- Requirement for the lighting of structures per FAA Standards as set forth in FAA Advisory Circular 70/7460-1K “Obstruction Marking and Lighting”.
 - Specification of maximum density of residential development
 - Specification of maximum intensity of non-residential development
 - Appropriate written notification, (as set forth in the “Noise Disclosure” and “Notice of Airport in Vicinity” definitions), for residential and other noise sensitive land uses (as described in Table 1), of aircraft noise impact to all initial and subsequent buyers, lessees, and renters within the AELUP Noise Impact Zones set forth in Sections 3.2.3 and 3.2.4, may on a case-by-case basis be a condition/mitigation for a land use to be found consistent with this AELUP.
 - Inclusion of a statement on the Final Tract or Parcel Map and the Deed Disclosure Notice for property in Noise Impact Zone “1” or Zone “2”, that the residential or other noise-sensitive land use property is subject to aircraft noise impact in substantially this form:

“This property is in an area in the vicinity of Fullerton Municipal Airport and as a result residents and occupants of buildings may experience inconvenience, annoyance or discomfort arising from the noise resulting from aircraft operating at the airport.

State law (Public Utilities Code Section 21670 et seq.) establishes the importance of public use airports for the protection of public interest of the people of the State of California. Residents and building occupants near a public airport should therefore be prepared to accept such inconvenience, annoyance or discomfort from normal aircraft operations.

Any subsequent deed conveying parcels or lots shall contain a statement in substantially this form.”

- Presentation of evidence that commercial and industrial structures are sufficiently sound attenuated to allow normal work activities to be conducted. The structures should be attenuated to at least meet the level specified in Section 3.2.3. (Noise Impact Zone “1”).
- If offered by a local agency or project proponent, dedication of an avigation easement in favor of an airport proprietor for residential and other noise sensitive uses as described in Table 1 under “Community Facilities” of this AELUP. A sample avigation easement is included in Appendix K.

The dedication of an avigation easement in favor of an airport proprietor is designated as a method which may be employed by airport proprietors for controlling and reducing noise problems surrounding airports, pursuant to Title 21, California Code of Regulations, Section 5037.

- The Commission may elect to mitigate a residential action/project within the airport influence area by including a condition based on Business and Professional Code 11010 that requires the following language on the Final tract or Parcel Map and the Deed Disclosure Notice for the Property:

“NOTICE OF AIRPORT IN VICINITY

This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example: noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you.”

- Other condition(s) as determined by the Commission which would mitigate an action/project.

In order to apply the preceding specific policies in the most diligent manner, the Commission will consider all relevant data pertaining to the various airports within Orange County and the areas surrounding them. The Commission will consider current information, as it becomes available, whenever germane to the Commission's deliberations. The integration of current and reliable information into this plan will be an ongoing goal of the Commission.

SECTION 4.0 - IMPLEMENTATION

4.1 Statutes

The Public Utilities Code for the State of California, Sections 21670 through 21679.5 governs the activities and responsibilities of the Airport Land Use Commission. The web address for these Sections can be found in Appendix A of this document. Further discussion of these responsibilities can be found below. Generally, the Commission is required to make recommendations directly to the California Department of Transportation/Aeronautics Division regarding the required State permit for new airports and heliports/helistops. The Commission also makes findings regarding consistency of proposed land use plans/regulations/projects with this AELUP and forwards those findings to the appropriate local jurisdictions for their consideration.

4.2 General Plans and Specific Plans (Zoning)

Each local agency having jurisdiction over any area within the planning areas (as defined in Section 2.1.6) is required to submit its general or specific plans for that area to the Commission for a determination in accordance with the Government Code for the State of California, Section 65302.3 and Public Utilities Code Section 21676. The submittals should highlight those areas which address the AELUP noise impact, safety impact, height restriction zones and overflight areas. The only requirement is that the submittals illustrate how local agencies will incorporate the performance standards outlined in this AELUP into their planning, zoning, and development processes. All agencies are encouraged to file their submittals at the earliest practical time. The agencies are encouraged further to include a statement or summary of those issues which are believed to be consistent, as well as inconsistent, with the standards of this AELUP.

4.3 Amendments to General Plans and Specific Plans (Zoning)

Within the AELUP planning areas (as defined in Section 2.1.6), any amendment to a General Plan or Specific Plan (including conventional zoning and Planned Communities) must be submitted to the Commission for a determination prior to its adoption by the local agency. The submittal should be in the same manner as with Section 4.2 above.

4.4 Zoning Ordinances and Building Regulations

Within the AELUP planning areas (as defined in Section 2.1.6), any proposed changes to a zoning ordinance or building regulation must be submitted to the Commission for a determination prior to its adoption by the local agency. The submittal should be in the same manner as with Section 4.2 above.

4.5 Airport Master Plans

Each public agency owning an airport within Orange County must submit any change to its Airport Master Plan to the Commission for a determination prior to its adoption pursuant to Section 21676 of the Public Utilities Code.

4.6 Other Submittals

A project other than those described above, including but not limited to use permits and site plans, may be submitted voluntarily to the Commission for a recommendation prior to its adoption. See Section 4.11 for exception to “voluntary” submittal of projects such as use permits and site plans. The submittal should be in the same manner as with Section 4.2 above.

4.7 Submittal Requirements

To file a project for a consistency determination with the Airport Land Use Commission (ALUC), a letter from the local jurisdiction (city, county or special district) requesting the ALUC to review the project for consistency with the Airport Environs Land Use Plan (AELUP) and attachments as specified below are required.

1. Description of Project: General Plan Amendment (GPA); Specific Plan Amendment (or other zoning amendment); Zoning Ordinance; Building Regulation; Conditional Use Permit (CUP); etc.
2. Location of Project: Area Map; Site Plan; street address, etc.
3. Existing and proposed General Plan and zoning designations.
4. Existing and proposed uses on the site and adjacent properties (descriptive text and maps from an environmental document may be submitted to respond to this item).
5. Approval Schedule: Planning Commission, City Council or Board of Supervisors.
6. Is the project within the 60 CNEL Contour of the affected airport? Within the 65 CNEL Contour? What noise mitigation measures will be required to achieve interior standards?
7. Is the project within the Runway Protection Zone (RPZ) of the affected airport? Within the Accident Potential Zone (APZ) II? What are the planned lot coverage and building occupancy criteria?
8. Is the project within the Height Restriction Zone (FAR Part 77 Notification Area) of the affected airport? Has the project sponsor filed a 7460-1 Notice with the FAA? (Provide a copy of the FAA Determination to ALUC staff. If a 7460-1 Determination is necessary, the ALUC must have this as part of the submittal before the project can be accepted for filing.)

9. Applicable sections of CEQA documentation.
10. Latitude and Longitude (accurate to within the nearest hundredth of a second if known).
11. Height of each of the proposed structures above ground level.
12. Elevation of the project site using North American Vertical Datum 1988 (NAVD88) or National Geodetic Vertical Datum of 1929 (NGVD29).
13. Local agency building height restrictions for the project area (Zoning Requirements).
14. Building heights of surrounding structures within 1000' radius of the proposed project area.
15. Project submittals should be sent to:

Airport Land Use Commission
Attn: Executive Officer
3160 Airway Avenue
Costa Mesa, CA 92626

PLEASE NOTE: A heliport (airport) referral checklist is in the AELUP for Heliports.

4.8 Submittal Deadlines

The Commission requests that project referrals be submitted and agendaized by the ALUC staff between the Local Agency's expected Planning Commission and City Council hearings. The ALUC meets on the third Thursday afternoon of each month so submittals must be received in the ALUC office by the first business day of the month to ensure sufficient time for review, analysis, and agendaizing.

4.9 Acceptance of Submittal

Matters referred to the Commission for review shall be deemed accepted upon the date when all materials and information necessary for processing a project have been confirmed as received by the Commission staff. Staff will inform the local jurisdiction, in writing within five working days after receipt of an item for consideration (with copy to applicant), whether more information as specified in Section 4.7 is necessary or if the item will then be deemed accepted and scheduled for formal review by the Commission. Necessary information as specified in Section 4.7 must include final plans, acoustical reports or FAA Aeronautical Studies when deemed necessary for Commission review by the Commission staff. This procedure does not apply to screen checks or Draft Environmental Impact Report responses which staff will respond to within the specified review period. If the

local jurisdiction is not contacted by Commission staff by the sixth business day of the month, they should contact the Commission office to verify receipt of the original referral package. Upon receipt of a complete referral for Airport Land Use Commission review and consideration, the Commission Secretary shall schedule and agendaize said referral for the next available Airport Land Use Commission meeting.

4.10 Who May File

The implementation of this AELUP shall result generally from the interaction between the Commission and local agencies. Only local agencies may submit General and Specific Plans, Airport Master Plans, and amendments thereto.

4.11 Commission Finding of Inconsistency

When the Commission determines that a submittal is inconsistent with the AELUP, the Commission shall promptly notify the affected local agency. The local agency may modify the submitted project so as to be consistent with the AELUP, and resubmit the project to the Commission for a Determination of Consistency; or the local agency may instead choose to overrule the Commission by following the procedure established in PUC Sections 21676 and 21676.5 (see Appendix A). This procedure requires the local agency to: hold a public hearing on the matter by its governing body (Board of Supervisors, City Council); make specific findings that the proposed overruling is consistent with the purposes stated in PUC Section 21670; and overrule the Commission by at least a two-thirds vote of the Board of Supervisors or City Council.

When such an overruling occurs, the PUC provides in Section 21678 that if the local agency does not operate the public airport in question, then the operator of that affected public airport shall be immune from liability for damages to property or personal injury caused by, or resulting directly or indirectly from, the local agency's decision to overrule the Commission's Determination of Inconsistency.

4.12 Inconsistent Local Agency

If the Commission determines that a City or the County is an Inconsistent Local Agency and the local jurisdiction does not overrule that determination, the Commission may require that the jurisdiction submit all land use actions to the Commission for review and determination.

4.13 Continuous Monitoring

It shall be the ongoing function of the Commission and its staff to monitor all development within the planning areas to ensure that the purposes of this AELUP are fulfilled.

4.14 Periodic Review

The Commission shall review the substance and adequacy of this AELUP at a minimum of once every five years. AELUPs may not be amended more than once per calendar year.

4.15 AELUP Amendments

Upon approving any amendment to this AELUP, the Commission will promptly inform all affected agencies of the action and the requirement for local agency action per Government Code Section 65302.3 as specified below:

65302.3 (a) The general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the airport land use compatibility plan (i.e., AELUP) adopted or amended pursuant to Section 21675 of the Public Utilities Code.

(b) The general plan, and any applicable specific plan, shall be amended, as necessary, within 180 days of any amendment to the AELUP required under Section 21675 of the Public Utilities Code.

(c) If the legislative body does not concur with any provision of the AELUP required under Section 21675 of the Public Utilities Code, it may satisfy the provisions of this section by adopting findings pursuant to Section 21676 of the Public Utilities Code.

APPENDIX A

(Information in this appendix is provided as a reference source to assist the users of the AELUP.)

STATE AERONAUTICS ACT AND AIRPORT LAND USE COMMISSION LAW

Current provisions of the California Public Utilities Code related to Airport Land Use
Commissions and land use planning around airports.

Readers should check the following website for up-to-date version:

http://www.dot.ca.gov/hq/planning/aeronaut/documents/regulations/PUC_SAA.pdf

APPENDIX B

(Information in this appendix is provided as a reference source to assist the users of the AELUP.)

SUMMARY OF FEDERAL AVIATION REGULATIONS

PART 77 – “OBJECTS AFFECTING NAVIGABLE AIRSPACE”

The Airport Land Use Commission has adopted the criteria contained in FAR Part 77 as standards for development in and around airports. The following describes the scope of that document:

- (a) Establishes standards for determining obstructions in navigable airspace;
- (b) Sets forth the requirements for notice to the Administrator of certain proposed construction or alteration;
- (c) Provides for aeronautical studies of obstructions to air navigation to determine their effect on the safe and efficient use of airspace;
- (d) Provides for public hearings on the hazardous effect of proposed construction or alteration on air navigation; and
- (e) Provides for the establishment of antenna farm areas.

Included in this appendix are samples of the appropriate FAA Forms, 7460-1 and 7480-1, for the proper filing of proposed projects with the FAA Regional Office. The FAA encourages these forms be obtained and submitted online at:

For FAA Form 7460-1 go to:

https://www.faa.gov/documentLibrary/media/Form/FAA_Form_7460-1_AJV-1-050117.pdf

For FAA 7480-1 go to;

<https://www.faa.gov/documentLibrary/media/Form/faa-form-7480-1-notice-for-construction-2017.pdf>

NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

§ 77.7 Form and time of notice.

(a) If you are required to file notice under §77.9, you must submit to the FAA a completed FAA Form 7460-1, Notice of Proposed Construction or Alteration. FAA Form 7460-1 is available at FAA regional offices and on the Internet.

(b) You must submit this form at least 45 days before the start date of the proposed construction or alteration or the date an application for a construction permit is filed, whichever is earliest.

(c) If you propose construction or alteration that is also subject to the licensing requirements of the Federal Communications Commission (FCC), you must submit notice to the FAA on or before the date that the application is filed with the FCC.

(d) If you propose construction or alteration to an existing structure that exceeds 2,000 ft. in height above ground level (AGL), the FAA presumes it to be a hazard to air navigation that results in an inefficient use of airspace. You must include details explaining both why the proposal would not constitute a hazard to air navigation and why it would not cause an inefficient use of airspace.

(e) The 45-day advance notice requirement is waived if immediate construction or alteration is required because of an emergency involving essential public services, public health, or public safety. You may provide notice to the FAA by any available, expeditious means. You must file a completed FAA Form 7460-1 within 5 days of the initial notice to the FAA. Outside normal business hours, the nearest flight service station will accept emergency notices.

§ 77.9 Construction or alteration requiring notice.

If requested by the FAA, or if you propose any of the following types of construction or alteration, you must file notice with the FAA of:

(a) Any construction or alteration that is more than 200 ft. AGL at its site.

(b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:

(1) 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.

(2) 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.

(3) 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.

(c) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.

(d) Any construction or alteration on any of the following airports and heliports:

(1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;

(2) A military airport under construction, or an airport under construction that will be available for public use;

(3) An airport operated by a Federal agency or the DOD.

(4) An airport or heliport with at least one FAA-approved instrument approach procedure.

(e) You do not need to file notice for construction or alteration of:

(1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;

(2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;

(3) Any construction or alteration for which notice is required by any other FAA regulation.

(4) Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177
Fax: (817) 222-5920

Website: <https://oeaaa.faa.gov>

INSTRUCTIONS FOR COMPLETING FAA FORM 7460-1

PLEASE TYPE or PRINT

ITEM #1. Please include the name, address and phone number of a personal contact point as well as the company name.

ITEM #2. Please include the name, address and phone number of a personal contact point as well as the company name.

ITEM #3. New Construction would be a structure that has not yet been built.

Alteration is a change to an existing structure such as the addition of a side mounted antenna, a change to the marking and lighting, a change to power and/or frequency, or a change to the height. The nature of the alteration shall be included in ITEM #21 "Complete Description of Proposal".

Existing would be a correction to the latitude and/or longitude, a correction to the height, or if filing on an existing structure which has never been studied by the FAA. The reason for the notice shall be included in ITEM #21 "Complete Description of Proposal".

ITEM #4. If Permanent, so indicate. If Temporary, such as a crane or drilling derrick, enters the estimated length of time the temporary structure will be up.

ITEM #5. Enter the date that construction is expected to start and the date that construction should be completed.

ITEM #6. Please indicate the type of structure. **DO NOT LEAVE BLANK.**

ITEM #7. In the event that obstruction marking and lighting is required, please indicate type desired. If no preference, check "other" and indicate "no preference" **DO NOT LEAVE BLANK.** NOTE: High Intensity lighting shall be used only for structures over 500' AGL. In the absence of high intensity lighting for structures over 500' AGL, marking is also required.

ITEM #8. If this is an existing tower that has been registered with the FCC, enter the FCC Antenna Structure Registration number here.

ITEM #9 and #10. Latitude and longitude must be geographic coordinates, accurate to within the nearest second or to the nearest hundredth of a second if known. Latitude and longitude derived solely from a hand-held GPS instrument is NOT acceptable. A hand-held GPS is only accurate to within 100 meters (328 feet) 95 percent of the time. This data, when plotted, should match the site depiction submitted under ITEM #20.

ITEM #11. NAD 83 is preferred; however, latitude and longitude may be submitted in NAD 27. Also, in some geographic areas where NAD 27 and NAD 83 are not available other datum may be used. It is important to know which datum is used. **DO NOT LEAVE BLANK.**

ITEM #12. Enter the name of the nearest city and state to the site. If the structure is or will be in a city, enter the name of that city and state.

ITEM #13. Enter the full name of the nearest public-use (not private-use) airport or heliport or military airport or heliport to the site.

ITEM #14. Enter the distance from the airport or heliport listed in #13 to the structure.

ITEM #15. Enter the direction from the airport or heliport listed in #13 to the structure.

ITEM #16. Enter the site elevation above mean sea level and expressed in whole feet rounded to the nearest foot (e.g. 17'3" rounds to 17', 17'6" rounds to 18'). This data should match the ground contour elevations for site depiction submitted under ITEM #20.

ITEM #17. Enter the total structure height above ground level in whole feet rounded to the next highest foot (e.g. 17'3" rounds to 18'). The total structure height shall include anything mounted on top of the structure, such as antennas, obstruction lights, lightning rods, etc.

ITEM #18. Enter the overall height above mean sea level and expressed in whole feet. This will be the total of ITEM #16 + ITEM #17.

ITEM #19. If an FAA aeronautical study was previously conducted, enter the previous study number.

ITEM #20. Enter the relationship of the structure to roads, airports, prominent terrain, existing structures, etc. Attach an 8-1/2" x 11" non-reduced copy of the appropriate 7.5 minute U.S. Geological Survey (USGS) Quadrangle Map MARKED WITH A PRECISE INDICATION OF THE SITE LOCATION. To obtain maps, contact USGS at 1-888-275-8747 or via internet at "<http://store.usgs.gov>". If available, attach a copy of a documented site survey with the surveyor's certification stating the amount of vertical and horizontal accuracy in feet.

ITEM #21.

- For transmitting stations, include maximum effective radiated power (ERP) and all frequencies.
- For antennas, include the type of antenna and center of radiation (Attach the antenna pattern, if available).
- For microwave, include azimuth relative to true north.
- For overhead wires or transmission lines, include size and configuration of wires and their supporting structures (Attach depiction).
- For each pole/support, include coordinates, site elevation, and structure height above ground level or water.
- For buildings, include site orientation, coordinates of each corner, dimensions, and construction materials.
- For alterations, explain the alteration thoroughly.
- For existing structures, thoroughly explain the reason for notifying the FAA (e.g. corrections, no record or previous study, etc.).

Filing this information with the FAA does not relieve the sponsor of this construction or alteration from complying with any other federal, state or local rules or regulations. If you are not sure what other rules or regulations apply to your proposal, contact local/state aviation's and zoning authorities.

Paperwork Reduction Work Act Statement: This information is collected to evaluate the effect of proposed construction or alteration on air navigation and is not confidential. Providing this information is mandatory or anyone proposing construction or alteration that meets or exceeds the criteria contained in 14 CFR, part 77. We estimate that the burden of this collection is an average 19 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB control number associated with this collection is 2120-0001. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, ASP-110.

U.S. Department of Transportation
Federal Aviation Administration

Failure To Provide All Requested Information May Delay Processing of Your Notice

Notice of Proposed Construction or Alteration

FOR FAA USE ONLY

Aeronautical Study Number

1. Sponsor (person, company, etc. proposing this action):

Attn. _____ of: _____
 Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____
 Telephone: _____ Fax: _____

2. Sponsor's Representative (if other than #1):

Attn. _____ of: _____
 Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____
 Telephone: _____ Fax: _____

3. Notice of: ☐ New Construction ☐ Alteration ☐ Existing4. Duration: ☐ Permanent ☐ Temporary (____ months, ____ days)

5. Work Schedule: Beginning _____ End _____

6. Type: ☐ Antenna Tower ☐ Crane ☐ Building ☐ Power Line
☐ Landfill ☐ Water Tank ☐ Other _____

7. Marking/Painting and/or Lighting Preferred:

☐ Red Lights and Paint ☐ Dual - Red and Medium Intensity
☐ White-Medium Intensity ☐ Dual - Red and high Intensity
☐ White -High Intensity ☐ Other _____

8. FCC Antenna Structure Registration Number (if applicable): _____

9. Latitude: _____° _____', _____"

10. Longitude: _____° _____', _____"

11. Datum: ☐ NAD 83 ☐ NAD 27 ☐ Other _____

12. Nearest City: _____ State: _____

13. Nearest **Public-use** (not private-use) or Military Airport or Heliport: _____

14. Distance from #13. to Structure: _____

15. Direction from #13. to Structure: _____

16. Site Elevation (AMSL): _____ ft.

17. Total Structure Height (AGL): _____ ft.

18. Overall Height (#16 + #17) (AMSL): _____ ft.

19. Previous FAA Aeronautical Study Number (if applicable): _____

-OE

20. Description of Location: (Attach a USGS 7.5 minute Quadrangle Map with the precise site marked and any certified survey)

21. Complete Description of Proposal:

Frequency/Power (kW)

Notice is required by 14 Code of Federal Regulations, part 77 pursuant to 49 U.S.C., Section 44718. Persons who knowingly and willingly violate the notice requirements of part 77 are subject to a civil penalty of \$1,000 per day until the notice is received, pursuant to 49 U.S.C., Section 46301(a)

I hereby certify that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to mark and/or light the structure in accordance with established marking & lighting standards as necessary.

Date

Typed or Printed Name and Title of Person Filing Notice

Signature



U.S. Department
Of Transportation
Federal Aviation
Administration

FAA Form 7480-1, Notice for Construction, Alteration and Deactivation of Airports

Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0036. Public reporting for this collection of information is estimated to be approximately 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information.

All responses to this collection of information are required if the proponent wishes to have the airport on file with the FAA, as required by Title 14 Code of Federal Regulations Part 157, and entered into the National Airspace System. No assurances of confidentiality are given. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, ASP-110.

When to File a Notice for Construction, Alteration and Deactivation of Airports

Title 14 Code of Federal Regulations Part 157 requires all persons to notify the FAA at least 90 days before construction, alteration, activation, deactivation, or change to the status or use of a civil or joint-use (civil/military) airport. (As used herein, the term "airport" means any Landing or Takeoff Area, e.g. Airport, Heliport, Vertiport, Gliderport, Seaplane Base, Ultralight Flightpark, or Balloonport.)

Notice is not required for:

1. An airport subject to conditions of a Federal agreement that requires an approved current airport layout plan to be on file with the Federal Aviation Administration.
2. Establishment of a temporary airport at which operations will be conducted under visual flight rule (VFR) *and will be used for less than 30 days with no more than 10 operations per day.*
3. Intermittent use of a site that is *not an established airport, which is used for less than one year and at which flight operations will be conducted only under VFR.* (Intermittent use means the use of the site for no more than 3 days in any one week and for no more than 10 operations per day.)

Required notice will be submitted on this form from each person who intends to do the any of the following:

1. Construct or otherwise establish a new airport or activate an airport.
2. Construct, alter, realign, or activate any runway, or other aircraft landing or takeoff area of an airport.
3. Construct, alter, realign, or activate a taxiway associated with a landing or takeoff area on a public-use airport.
4. Deactivate, discontinue using, or abandon an airport or any landing or takeoff area of an airport for a period of one year or more.

5. Deactivate, abandon, or discontinue using a taxiway associated with a landing or takeoff area on a public-use airport.
6. Change the status of an airport from private use (use by the owner or use by the owner and other person authorized by the owner) to an airport open to the public or from public-use to another status.
7. Change status from IFR (Instrument Flight Rules) to VFR or from VFR to IFR.
8. Establish or change any traffic pattern or traffic pattern altitude or direction.

Section 901 of the Federal Aviation Act of 1958, as amended, provides that any person who violates a rule, regulation, or order issued under Title III of this Act will be subject to a civil penalty not to exceed \$1,000 for each violation.

General Instructions – Form Completion

Please contact the local ADO or Regional office for filing instructions.

Section A – Complete this section.

- Provide the name of the Airport Owner.
- Include contact information (phone number, email address, and mailing address) of the Airport Owner.
- Indicate if the Airport Owner owns the airport property.
- Indicate if the Airport Owner's address is the physical address of the airport. (If the Airport Owner's address is not the physical address of the airport, provide the physical address of the airport in box C.6. Description.)

Section B – Complete this section if the Airport Manager is not the same person listed in section A.

- If the Airport Owner provided in Section A is the Airport Manager, write "SAME" in box B.1. Airport Manager.
- If the Airport Owner provided in Section A is not the Airport Manager, provide the name of the Airport Manager.
- Include contact information (phone number, email address, and mailing address) of the Airport Manager.
- Indicate if the Airport Manager owns the airport property.
- Indicate if the Airport Manager address is the physical address of the airport. (If the Airport Manager's address is not the physical address of the airport, provide the physical address of the airport in box C.6. Description.)

Section C – Provide the reason for notification by completing all applicable items in this section.

Report only one action per form

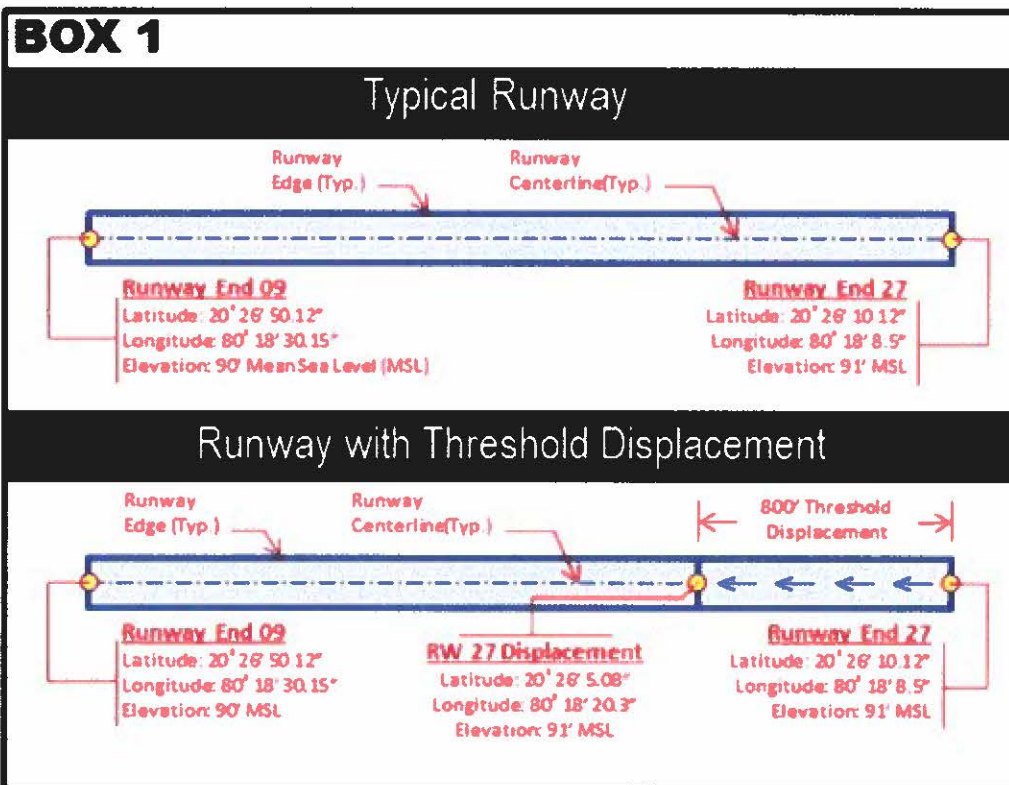
- Section C.1: Select one type of facility.
- Section C.2: Select one. For public-use taxiway, include information in box C.6. Description and depict taxiway layout on airport drawing or sketch.
- Section C.3: Select one. If change is from VFR to IFR, include anticipated IFR procedure in box 6. Description.
- Section C.4: Provide the information proposed for the changes and explain further in box 6. Description.
- Section C.5: Provide appropriate information and include abandonment date in box 6. Description.

Section D – Provide all applicable information.

- Section D.1: Enter name of landing area.
- Section D.2: Enter the Location Identifier (Loc ID) for an existing Airport.
- Section D.3: Enter principle city or town which the airport serves and with it is normally associated.
- Section D.4: Enter straight-line distance and direction, to the nearest nautical mile, from the Associated City (C.3. above) to the Airport.
- Section D.6: Enter the direction, to the nearest eighth compass point (i.e. E, SE, etc.), from the Associated City to the Airport.
- Section D.7, 8, and 9: Enter the Latitude and Longitude of the Airport Reference Point and the Airport Elevation. The airport reference point can be calculated by using the NGS tool located at <http://www.ngs.noaa.gov/AERO/arpcomp/arpframe.html>. The Airport elevation is the highest point of an airport's usable runways measured in feet above mean sea level.
- Section D.10: Select one Current Use option.
- Section D.11: Select one Ownership option.
- Section D.12: Select Airport Type.

Section E – Provide all applicable information.

- Section E.1: Address each runway end independently, if applicable. Provide runway end coordinates and elevations; and runway threshold coordinates and elevations for runway threshold displacements, if applicable (see an example Box 1 below).



- **Section E.2:** If helipad is elevated, provide the elevated height above ground level (AGL) and do not add the AGL height to Above Mean Sea Level (AMSL). For Heliports, include the TLOF (Touchdown and Liftoff Area) and FATO (Final Approach and Take Off) dimensions.

Section F – Provide all applicable information.

Section G – All information is required and must be complete.

- **For an Airport/Runway:** Provide a detailed drawing and/or imagery of the proposed landing area depicting latitude, longitude, length and width. The document(s) must show the runway orientation in relation to known roads, terrain etc. such that the FAA can locate the runway(s) accurately and efficiently. Notate any obstructions (buildings, high-line wires, roads, railroads, towers, etc.) within the vicinity of the runway. You must include runway end coordinates and the runway elevations on the runway centerline.
- **For a Heliport:** Provide a detailed drawing, imagery or map identifying the exact location of the heliport in red. The document(s) must show the helipad(s) in relation to known roads, terrain etc. such that the FAA can locate the heliport accurately and efficiently. Provide site plan depicting the landing pad in relation to buildings and other obstacles (light poles, fences, trees, bollards, parking lots) in the vicinity of the landing area. Provide dimensions of the landing pad and the height of the buildings/obstacles and their distance from the helipad. Provide a heliport layout plan (in accordance with FAA Advisory Circular 150/5390-2, Heliport Design) identifying the proposed marking, lights, beacon location, windsock(s), the approach/departure paths (if room allows, the heliport layout plan may be shown on the site plan).

Notification to the FAA does not waive the requirements of any other government agency.

Regional Office Addresses

Submit your completed form by mail to the appropriate regional office.

Alaskan Region

AK

U.S. Department of Transportation
Federal Aviation Administration
Alaskan Region Airports Division, AAL-600
222 W. 7th Ave, M/S #14
Anchorage, AK 99513
Tel: (907) 271-5438
Fax: (907) 271-2851

Central Region

IA, KS, MO, NE

U.S. Department of Transportation
Federal Aviation Administration
Central Region Airports Division, ACE-600
901 Locust St., Room 364
Kansas City, MO 64106-2325
Tel: (816) 329-2600
Fax: (816) 329-2610/2611

Eastern Region

DC, DE, MD, NJ, NY, PA, VA, WV

U.S. Department of Transportation
Federal Aviation Administration
Eastern Region Airports Division, AEA-600
1 Aviation Plaza
Jamaica, NY 11434
Tel: (718) 553-3330
Fax: (718) 995-5694

Great Lakes Region

IL, IN, MI, MN, ND, OH, SD, WI

U.S. Department of Transportation
Federal Aviation Administration
Great Lakes Region Airports Division, AGL-600
2300 East Devon Avenue
Des Plaines, IL 60018
Tel: (847) 294-7272
Fax: (847) 294-7036

New England Region

CT, ME, MA, NH, RI, VT

U.S. Department of Transportation
Federal Aviation Administration
New England Region Airports Division, ANE-600
1200 District Avenue
Burlington, MA 01803
Tel: (781) 238-7600
Fax: (781) 238-7608

Northwest Mountain Region

CO, ID, MT, OR, UT, WA, WY

U.S. Department of Transportation
Federal Aviation Administration
Northwest Mountain Region Airports Division, ANM-600
1601 Lind Avenue, SW, Suite 315
Renton, WA 98057-3356
Tel: (425) 227-2600
Fax: (425) 227-1600

Southern Region

AL, FL, GA, KY, MS, NC, TN, SC, PR, VI

U.S. Department of Transportation
Federal Aviation Administration
Southern Region Airports Division, ASO-600
1701 Columbia Ave., Suite 540
Atlanta, GA 30337
Tel: (404) 305-6700
Fax: (404) 305-6730

Southwest Region

AR, LA, NM, OK, TX

U.S. Department of Transportation
Federal Aviation Administration
Southwest Region Airports Division,
ASW-600
10101 Hillwood Parkway
Fort Worth, TX 76177
Tel: (817) 222-5600
Fax: (817) 222-5987

Western-Pacific Region

CA, NV, AZ, HI

U.S. Department of Transportation
Federal Aviation Administration
Western-Pacific Region Airports Division, AWP-600
P.O. Box 92007
Los Angeles, CA 90009
Tel: (310) 725-3600
Fax: (310) 725-6847



NOTICE FOR CONSTRUCTION, ALTERATION AND DEACTIVATION OF AIRPORTS

A. Airport Owner <input type="checkbox"/> Check if this is also the Property Owner 1. Name and Address <input type="checkbox"/> Check if this is the Airport's Physical Address			B. Airport Manager (Complete if different than the Airport Owner) 1. Name and Address <input type="checkbox"/> Check if this is the Airport's Physical Address				
2. Phone		3. Email		2. Phone		3. Email	
C. Purpose of Notification (Answer all questions that apply)				D. Name, Location, Use and Type of Landing Area			
1. Construct or Establish an: <input type="checkbox"/> Airport <input type="checkbox"/> Ultralight Flightpark <input type="checkbox"/> Balloonport <input type="checkbox"/> Heliport <input type="checkbox"/> Seaplane Base <input type="checkbox"/> Other		2. Construct, Alter or Realign a: <input type="checkbox"/> Runway <input type="checkbox"/> Heliport(s) <input type="checkbox"/> Other <input type="checkbox"/> Taxiway (Public Use Airports only)		3. Change Status From/To: <input type="checkbox"/> VFR to IFR <input type="checkbox"/> IFR to VFR <input type="checkbox"/> Private Use to Public Use <input type="checkbox"/> Public Use to Other		4. Change Traffic Pattern: <input type="checkbox"/> Direction _____ <input type="checkbox"/> Altitude (select from below) <input type="checkbox"/> 1500' AGL (turbo) <input type="checkbox"/> 1000' AGL (prop) <input type="checkbox"/> 500' AGL (helo) <input type="checkbox"/> Other (Describe Below)	
5. Deactivate: <input type="checkbox"/> Airport <input type="checkbox"/> RWY _____ <input type="checkbox"/> TWY _____		6. Description:		5. Name of Landing Area 2. Loc ID (for existing)		3. Associated City and State 4. Distance from City (nm)	
7. Latitude 8. Longitude 9. Elevation ° ' " ° ' " "		10. Current Use: <input type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Private Use of Public Lands		11. Ownership: <input type="checkbox"/> Private <input type="checkbox"/> Public <input type="checkbox"/> Military (Branch) _____		12. Airport Type: <input type="checkbox"/> Airport <input type="checkbox"/> Ultralight Flightpark <input type="checkbox"/> Balloonport <input type="checkbox"/> Heliport <input type="checkbox"/> Seaplane Base <input type="checkbox"/> Other	
E. Landing Area Data (List any Proposed, New or Unregistered Runways, Heliports etc.)							
1. Airport, Seaplane Base or Ultralight Flightpark (use second page if needed)				2. Heliport, Balloonport or other Landing Area (use second page if needed)			
RWY ID	/	/	Helipad ID				
Lat. & Long.	Show on attachment(s)	Show on attachment(s)	Lat. & Long.	Show on attachment(s)	Show on attachment(s)	Show on attachment(s)	Show on attachment(s)
Surface Type			Surface Type				
Length (feet)			TLOF Dimensions				
Width (feet)			FATO Dimensions				
Lighting (if any)			Lighting (if any)				
Right Traffic (Y/N)	/	/	Ingress/Egress (Degrees)				
Elevation (AMSL)	Show on attachment(s)	Show on attachment(s)	Elevation (AMSL)	Show on attachment(s)	Show on attachment(s)	Show on attachment(s)	Show on attachment(s)
VFR or IFR	/	/	Elevated Height (AGL)				
F. Operational Data (Indicate if the number provided is Actual or Estimated)							
	1. Number of Based Aircraft		2. Average Number of Monthly Landings				
	Present or Estimated	Estimated in 5 Years	Present or Estimated	Estimated in 5 Years			
Single Engine							
Multi Engine							
Jet							
Helicopter							
Glider							
Military							
Ultralight							
3. What is the Most Demanding Aircraft that operates or will operate at the Airport? (Provide approach speed, rotor diameter, etc. if known)							
4. Are IFR Procedures for the Airport Anticipated? <input type="checkbox"/> Yes <input type="checkbox"/> No. If Yes, within _____ years							
G. CERTIFICATION: I hereby certify that all of the above statements made by me are true and complete to the best of my knowledge.							
1. Name, title of person filing this notice (type or print)		2. Signature (in ink):					
		3. Date		4. Phone		5. Email	

APPENDIX C

PERTINENT RESOLUTIONS OF THE AIRPORT LAND USE COMMISSION



AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY

3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.5178

November 18, 2004
Agenda Item : 2

RESOLUTION NO. 2004-1

A RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY
APPROVING THE 2004 AIRPORT ENVIRONS LAND USE PLAN FOR FULLERTON MUNICIPAL
AIRPORT AMENDMENT.

On the motion of Commissioner H. Beverburg, duly seconded and carried, the following Resolution was adopted.

WHEREAS, Section 21675 (a) of the Public Utilities Code requires the Airport Land Use Commission for Orange County to formulate a Comprehensive Land Use Plan for the areas surrounding all public airports within its jurisdiction; and

WHEREAS, Section 21675 (a) of the Public Utilities Code requires that the Comprehensive Land Use Plan shall provide for the orderly growth of the areas surrounding airports, and shall safeguard the general welfare of the inhabitants within the vicinity of airports and the public in general; and

WHEREAS, on June 17, 2004 this Commission found the Fullerton Municipal Airport Master Plan Update to be consistent with the Airport Environs Land Use Plan (AELUP) for Fullerton Municipal Airport (FMA), and directed staff to prepare a revision of the FMA AELUP incorporating all relevant data and aspects of the updated Master Plan; and

WHEREAS, staff has conferred with the involved agencies and has prepared a revision of the FMA AELUP incorporating the relevant data and aspects into FMA AELUP Sections 2.2.1, 3.2.5, 3.2.6, 3.2.7, and Appendix D-Maps which depict the new 60 and 65 dB CNEL (Community Noise Equivalent Level) noise contours and the new airspace Runway Protection Zones (RPZs).

WHEREAS, a Mitigated Negative Declaration for the Fullerton Municipal Airport Master Plan Update and related City of Fullerton General Plan Amendments was adopted by the City of Fullerton on July 20, 2004

NOW, THEREFORE, BE IT RESOLVED that the Airport Land Use Commission finds that the previously adopted Mitigated Negative Declaration has been considered in relation to the proposed amendment of the Airport Environs Land Use Plan for Fullerton Municipal Airport and the proposed project's effects were fully addressed in the CEQA document and the proposed project would not have any effects beyond those analyzed in the Mitigated Negative Declaration, that this Commission is not responsible for any of the mitigation measures, and therefore no further CEQA compliance is required for the proposed project.

BE IT FURTHER RESOLVED that the Airport Land Use Commission for Orange County hereby adopts the amendment to the Airport Environs Land Use Plan for Fullerton Municipal Airport dated November 18, 2004.

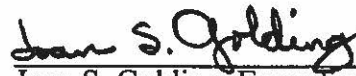
I HEREBY CERTIFY that the foregoing Resolution No. 2004-1 was adopted on November 18, 2004 by the Airport Land Use Commission by the following vote:

AYES: H. Beverburg, Bludau (for Webb), Bresnahan, Carruth, O'Malley and Propst

NOES: None

ABSENT: Dotson and Webb

(ABSTAIN): None



Joan S. Golding, Executive Officer
Airport Land Use Commission



AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY

3160 Airway Avenue • Costa Mesa, California 92626 • 949.252.5170 fax: 949.252.5178

RESOLUTION NO. 2002-1

December 19, 2002

A RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY APPROVING THE AIRPORT ENVIRONS LAND USE PLAN AMENDMENT.

On the motion of Commissioner Herman Beverburg, duly seconded and carried, the following Resolution was adopted.

WHEREAS, Section 21675 (a) of the Public Utilities Code requires the Airport Land Use Commission for Orange County to formulate a Comprehensive Land Use Plan for the areas surrounding all public airports within its jurisdiction; and

WHEREAS, Section 21675 (a) of the Public Utilities Code requires that the Comprehensive Land Use Plan shall provide for the orderly growth of the areas surrounding airports, and shall safeguard the general welfare of the inhabitants within the vicinity of airports and the public in general;

WHEREAS, Section 21675 (b) of the Public Utilities Code permits the inclusion of the area within the jurisdiction of the Commission surrounding any federal military airport for all of the purposes specified in Section 21675 (a);

WHEREAS, the Airport Environs Land Use Plan requires this Commission to review periodically the substance and adequacy of the Comprehensive Land Use Plan; and

WHEREAS, this Commission has held numerous public meetings and workshops and has held a public hearing and has complied with State and local environmental procedures regarding this Airport Environs Land Use Plan Amendment;

WHEREAS, the Commission has received the Final Environmental Impact Statement (FEIS)/Final Environmental Impact Report (FEIR) for the Disposal and Reuse of Marine Corps Air Station (MCAS) Tustin which was certified by the City of Tustin and finds it to be adequate and complete under CEQA to disclose the environmental impacts of deleting the MCAS Tustin AELUP and concurs with the findings, statement of overriding considerations, and mitigation monitoring plan adopted by the City of Tustin.

If a court adjudicates, determines or finds that any provision of this Resolution is illegal or void, such adjudication shall not effect the validity or efficacy of the balance of this Resolution, and the balance of the Resolution is therefore severable.

NOW, THEREFORE, BE IT RESOLVED that in accordance with Section 21080 of the Public Utilities Code and CEQA Guidelines Section 15074, Negative Declaration IP 02-203, which

reflects the independent judgment of the lead agency, satisfies the requirements of CEQA and is approved for the proposed project. The Negative Declaration was considered and found adequate in addressing the environmental impacts related to the project prior to its approval. The project will not have a significant effect on the environment.

BE IT FURTHER RESOLVED that the Airport Land Use Commission for Orange County hereby approves the amendments to the Airport Environs Land Use Plan dated November 16, 1995 for John Wayne Airport, Fullerton Municipal Airport, Joint Forces Training Base, Los Alamitos and for Heliports; such amendment creating a new and separate AELUP for each airport and for heliports.

BE IT FURTHER RESOLVED that the Airport Land Use Commission for Orange County hereby removes and deletes the Airport Environs Land Use Plan relating to and surrounding MCAS Tustin and cedes it jurisdiction pursuant to Public Utilities Code § 21675 (b) pertaining to land use planning surrounding MCAS Tustin.

BE IT FURTHER RESOLVED that the Airport Land Use Commission for Orange County takes no action with regard to amending the Airport Environs Land Use Plan dated November 16, 1995 relating to and surrounding MCAS El Toro; and directs staff to continue to monitor and review the status of the ongoing MCAS El Toro base closure process and return to the Commission at the appropriate time with its recommendations.

BE IT FURTHER RESOLVED that this Commission finds that pursuant to Section 711.4 of the California Fish and Game Code, this project is exempt from the required fees, as it has been determined that no adverse impacts to wildlife resources will result from the project.

BE IT FURTHER RESOLVED that this Commission finds that the proposed project will not have a significant unmitigated impact upon Coastal Sage Scrub habitat and, therefore, will not preclude the ability to prepare an effective Subregional Natural Communities Conservation Planning (NCCP) Program.

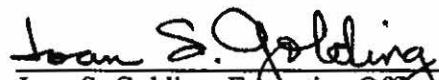
I HEREBY CERTIFY that the foregoing Resolution No. 2002-1 was adopted on December 19, 2002 by the Airport Land Use Commission by the following vote:

AYES: H. Beverburg, Naughton, Adams, Bresnahan, Campbell, and Houston (for Propst)

NOES: Harris

ABSENT: None

(ABSTAIN): None


Joan S. Golding, Executive Officer
Airport Land Use Commission



AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY

3151 Airway Avenue, Building K-101
Costa Mesa, Ca. 92626

Phone: (714) 252-5170

Fax: (714) 252-5290

November 16, 1995

Agenda Item: 1

RESOLUTION NO. 95-1

A RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY ADOPTING THE AIRPORT ENVIRONS LAND USE PLAN AMENDMENT.

On the motion of Commissioner Erickson, duly seconded and carried, the following Resolution was adopted.

WHEREAS, Section 21675 of the Public Utilities Code of the State of California requires the Airport Land Use Commission for Orange County to formulate a Comprehensive Land Use Plan for the areas surrounding all public airports within its jurisdiction; and

WHEREAS, Section 21675 of the Public Utilities Code of the State of California requires that said Comprehensive Land Use Plan provide for the orderly growth of the area surrounding airports and safeguard the general welfare of the inhabitants within the vicinity of airports and the public in general; and

WHEREAS, Section 4.11 of the Airport Environs Land Use Plan requires this Commission to review periodically the substance and adequacy of said plan; and

WHEREAS, this Commission has conducted a public hearing and complied with State environmental procedures regarding this Airport Environs Land Use Plan Amendment.

NOW, THEREFORE, BE IT RESOLVED that in accordance with Section 21080(c) of the Public Resources Code and CEQA Guidelines Section 15074, Negative Declaration No. IP 95-215, which reflects the independent judgment of the lead agency, satisfies the requirements of CEQA and is approved for the proposed project. The Negative Declaration was considered and found adequate in addressing the environmental impacts related to the project prior to its approval. The project will not have a significant effect on the environment.

BE IT FURTHER RESOLVED that the Airport Land Use Commission for Orange County hereby adopts the Airport Environs Land Use Plan dated November 16, 1995.

BE IT FURTHER RESOLVED that this Commission finds that pursuant to Section 711.4 of the California Fish and Game Code, this project is exempt from the required fees as it has been determined that no adverse impacts to wild life resources will result from the project.

BE IT FURTHER RESOLVED that this Commission finds that the proposed project will not have a significant unmitigated impact upon Coastal Sage Scrub habitat and, therefore, will not preclude the ability to prepare an effective subregional Natural Communities Conservation Planning (NCCP) Program.

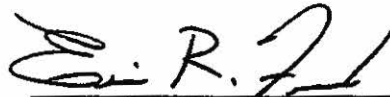
I HEREBY CERTIFY that the foregoing Resolution No 95-1 was adopted on November 16, 1995 by the Airport Land Use Commission by the following vote:

AYES: Chairman Tom Wall, Herman Beverburg, Alfred Brady for Gerald Bresnahan, Art Brown, and Joe Erickson

NOES: None

ABSENT: James Carlson, and Roland Elder

(ABSTAIN:)



Eric R. Freed, Executive Officer
Airport Land Use Commission



AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY

300 N. Flower St., Rm.356, Santa Ana, Ca 92702-4048
Mailing Address: P.O.Box 4048, Santa Ana, Ca 92702-4048

Phone: (714) 834-5311
Fax: (714) 834-6131

December 15, 1994
Agenda Item: 2

RESOLUTION NO. 94-1

A RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY ADOPTING THE AIRPORT ENVIRONS LAND USE PLAN AMENDMENT.

On motion of Commissioner Erickson, duly seconded and carried, the following Resolution was adopted.

WHEREAS, Section 21675 of the Public Utilities Code of the State of California requires the Airport Land Use Commission for Orange County to formulate a comprehensive Land Use Plan for the areas surrounding all public airports within its jurisdiction; and

WHEREAS, Section 21675 of the Public Utilities Code of the State of California requires that said Comprehensive Land Use Plans provide for the orderly growth of the area surrounding airports and safeguard the general welfare of the inhabitants within the vicinity of airports and the public in general; and

WHEREAS, Section 4.12 of the Airport Environs Land Use Plan requires this Commission to review periodically the substance and adequacy of said plan; and

WHEREAS, this Commission has conducted a public hearing and complied with State environmental procedures regarding this Airport Environs Land Use Plan Amendment.

NOW, THEREFORE, BE IT RESOLVED that in accordance with Section 21080(c) of the Public Resources Code and CEQA Guidelines Section 15074, Negative Declaration No. IP 94-194, which reflects the independent judgment of the lead agency, satisfies the requirements of CEQA and is approved for the proposed project. The Negative Declaration was considered and found adequate in addressing the environmental impacts related to the project prior to its approval. The project will not have a significant effect on the environment.

BE IT FURTHER RESOLVED that the Airport Land Use Commission for Orange County hereby adopts the Airport Environs Land Use Plan dated December 15, 1994.

BE IT FURTHER RESOLVED that this Commission finds that pursuant to Section 711.4 of the California Fish and Game Code, this project is exempt from the required fees as it has been determined that no adverse impacts to wild life resources will result from the project.

BE IT FURTHER RESOLVED that this Commission finds that the proposed project will not have a significant unmitigated impact upon Coastal Sage Scrub habitat and, therefore, will not preclude the ability to prepare an effective subregional Natural Communities Conservation Planning (NCCP) Program.

I HEREBY CERTIFY that the foregoing Resolution No. 94-1 was adopted on December 15, 1994 by the Airport Land Use Commission by the following vote:

AYES: Joe Erickson, Art Brown, Herman Beverburg, Al Brady for
Gerald Bresnahan, Roland Elder, Tom Wall

NOES: None

ABSENT: James Carlson

(ABSTAIN:)


George Britton, Executive Officer
Airport Land Use Commission

1
2
3 RESOLUTION OF THE BOARD OF SUPERVISORS OF
4 ORANGE COUNTY, CALIFORNIA

5 May 9, 1984

6 On motion of Supervisor Riley, duly seconded and carried, the
7 following Resolution was adopted:

8 WHEREAS, Section 21676 of the California Public Utilities Code re-
9 quires that each local agency whose general plan includes areas covered
10 by an airport land use commission plan submit a copy of its plan or spe-
11 cific plans to said commission and that the commission determine whethe:
12 the plan or plans are consistent with the commission's plans; and

13 WHEREAS, pursuant to that requirement, County General and Specific
14 Plans and the County Zoning Code were submitted for review by the Orange
15 County Airport Land Use Commission (ALUC) for consistency with that Com-
16 mission's Airport Environs Land Use Plan (AELUP); and

17 WHEREAS, the ALUC on August 19, 1983 determined that the County's
18 General Plan Safety Element was inconsistent with the ALUC-adopted AELUP
19 and

20 WHEREAS, pursuant to the Planning and Zoning Law of the State of
21 California, this Board has considered an amendment to the Safety Element
22 and County Administrative Procedures to ensure consistency with the Air-
23 port Environs Land Use Plan; and

24 WHEREAS, in compliance with said laws, a public hearing was held on
25 March 20, April 3, and April 9, 1984, by the Planning Commission on said
26 proposal; and

27 //

28 //

Resolution No. 84-704
Hearing-Safety Element
Amendment 84-1

RECEIVED

MAY 31 1984

JOHN WAYNE AIRPORT.

1 WHEREAS, Negative Declaration No. IP 84-012 was prepared for the
2 proposal, granted on February 17, 1984, and became final on March 2, 1984.

3 NOW, THEREFORE, BE IT RESOLVED that Negative Declaration No. IP
4 84-012 satisfies the requirements of CEQA for this project and is there-
5 fore approved. It was considered and found adequate in addressing the
6 environmental impacts and mitigations for the project prior to its ap-
7 proval. The project will not have a significant effect on the environ-
8 ment.

9 BE IT ALSO RESOLVED that the public interest, health, comfort,
10 safety, order, and general welfare will be more adequately served by the
11 project.

12 BE IT FURTHER RESOLVED that amendment of the Safety Element and
13 county administrative procedures, as set forth in the Environmental
14 Management Agency Report of April 9, 1984, is hereby adopted.

16 AYES: SUPERVISORS THOMAS F. RILEY, BRUCE NESTANDE, ROGER R. STANTON,
17 RALPH B. CLARK, and HARRIETT M. WIEDER

18 NOES: SUPERVISORS NONE

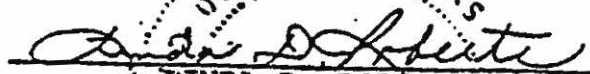
19 ABSENT: SUPERVISORS NONE

20 STATE OF CALIFORNIA)

21 COUNTY OF ORANGE) ss.

22 I, LINDA D. ROBERTS, Clerk of the Board of Supervisors of Orange
23 County, California, hereby certify that the above and foregoing
24 Resolution was duly and regularly adopted by the said Board at a
25 regular meeting thereof held on the 9th day of May
26 1984, and passed by a unanimous vote of said Board.

27 IN WITNESS WHEREOF, I have hereunto set my hand and seal this
28 9th day of May, 1984.


LINDA D. ROBERTS
Clerk of the Board of Supervisors
of Orange County, California



AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY - 18741 Airport Way North, Santa Ana, Cal. 9270

Phone: 714 834-671

June 30, 1983
Agenda Item: #3

RESOLUTION NO. 83-2

A RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY ADOPTING THE FIRST REVISION OF THE AIRPORT ENVIRONS LAND USE PLAN.

WHEREAS, Section 21675 of the Public Utilities Code of the State of California requires the Airport Land Use Commission for Orange County to formulate a Comprehensive Land Use Plan for the areas surrounding all public airports within its jurisdiction; and

WHEREAS, Section 21675 of the Public Utilities Code of the State of California requires that above said Comprehensive Land Use Plans provide for the orderly growth of the area surrounding airports and safeguard the general welfare of the inhabitants within the vicinity of airports and the public in general; and

WHEREAS, Section 21675 of the Public Utilities Code of the State of California requires the Airport Land Use Commission for Orange County to establish planning boundaries; and

WHEREAS, during the period of April 17 to August 7, 1975 the Airport Land Use Commission for Orange County duly adopted the several elements of the Airport Environs Land Use Plan; and

WHEREAS, Section 4.9 of the Airport Environs Land Use Plan requires this Commission to review periodically the substance and adequacy of said plan; and

WHEREAS, this Commission having done so, this Commission has prepared the First Revision of the Airport Environs Land Use Plan; and

WHEREAS; on the basis of an initial study, a Negative Declaration was prepared for this project; and

WHEREAS; the Airport Land Use Commission has received and approved the Negative Declaration;

NOW, THEREFORE, it is RESOLVED that the Airport Land Use Commission for Orange County hereby adopts the First Revision of the Airport Environs Land Use Plan; and it is hereby

RESOLVED, that the First Revision of the Airport Environs Land Use Plan shall be the primary instrument for the disposition of this Commission's mandated duties as long as the plan remains adequate to its purpose.

I, ALFRED W. BRADY Secretary to the Airport
Land Use Commission for Orange County hereby certify
and declare that the foregoing Resolution was duly
adopted by said Commission on June 30, 1983.

Executed this 30th day of June, 1983.


SECRETARY



AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY - 18741 Airport Way North, Santa Ana, Cal. 92706

Phone: 714 834-6

RESOLUTION No. 83-1

RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY AMENDING THE AIRPORT ENVIRONS LAND USE PLAN FOR FULLERTON MUNICIPAL AIRPORT.

WHEREAS, Section 21675 of the Public Utilities Code of the State of California empowers the Airport Land Use Commission to adopt a comprehensive land use plan for the areas surrounding airports within the County of Orange; and

WHEREAS, The Airport Land Use Commission has adopted the Airport Environs Land Use Plan for Fullerton Municipal Airport; and

WHEREAS, the Airport Land Use Commission has researched, studied, and evaluated updated materials concerning the location of the 60 and 65 CNEL contours of the Airport Environs Land Use Plan for Fullerton Municipal Airport; and

WHEREAS, the Airport Land Use Commission has consulted with the two involved agencies and has held a public hearing on an Amendment to the Airport Environs Land Use Plan for Fullerton Municipal Airport; and

WHEREAS, the Airport Land Use Commission has established that the two involved agencies have each certified separate environmental impact reports which adequately and appropriately address the associated environmental impacts; and

WHEREAS, the adoption of the current 60 and 65 CNEL contours for Fullerton Municipal Airport will enhance the consistency of planning activities between the Airport Land Use Commission and the two involved agencies;

NOW, THEREFORE, the Airport Land Use Commission for Orange County amends the Airport Environs Land Use Plan for Fullerton Municipal Airport, finding:

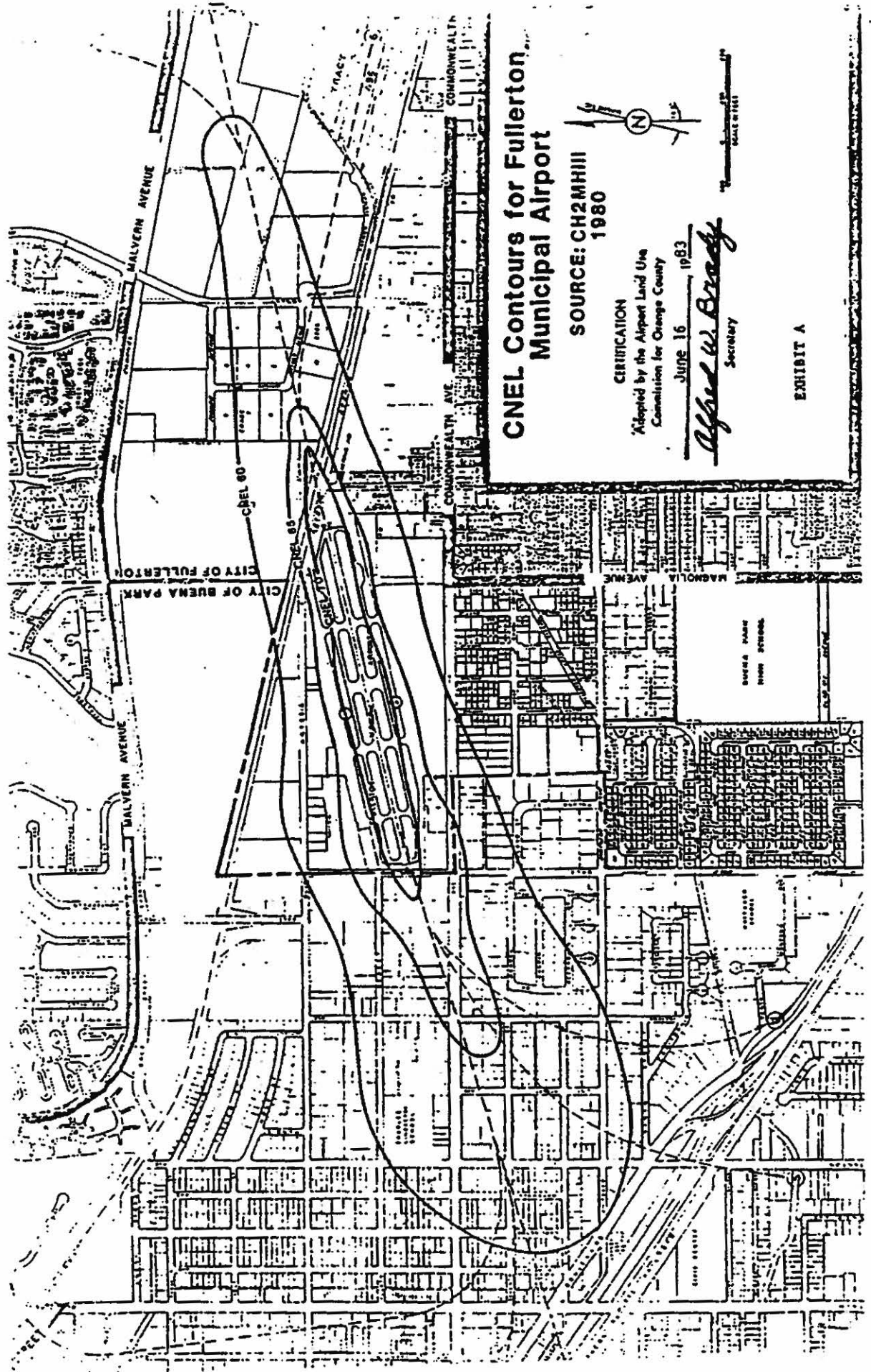
1. That as a result of the proposed Airport Environs Land Use Plan boundary modification, there will be no significant adverse environmental impacts and an Environmental Impact Report need not be prepared; and
2. That as a result of the proposed Airport Environs Land Use Plan boundary modification, there will be no significant adverse impact on the inhabitants within the vicinity of the airport; and
3. That as a result of the proposed Airport Environs Land Use Plan boundary modification, there will be no significant adverse impact on the operation of Fullerton Municipal Airport; and that it is hereby

RESOLVED, that the map for Fullerton Municipal Airport, appearing in Section 3.4 of the Airport Environs Land Use Plan and appearing in Appendix D of the proposed first revision thereof, be amended to show the 60 and 65 CNEL contours as appear on the map, "Exhibit A", attached hereto.

I, Alfred W. Brady Secretary to the Airport
Land Use Commission for Orange County hereby certify and declare
that the foregoing Resolution was duly adopted by said
Commission on June 16, 1983.

Executed this 16th day of June 1983

Alfred W. Brady
SECRETARY



CNEL Contours for Fullerton Municipal Airport

SOURCE: CH2MHILL
1980

CERTIFICATION

Adopted by the Airport Land Use
Commission for Orange County

June 16, 1983

Alfred W. Brady
Secretary

EXHIBIT A

RESOLUTION No. 79-1

RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY AMENDING SEGMENT "A" OF THE AIRPORT ENVIRONS LAND USE PLAN FOR EL TORO MARINE CORPS AIR STATION.

WHEREAS, Section 21675 of the Public Utilities Code of the State of California empowers the Airport Land Use Commission to adopt a comprehensive land use plan for the areas surrounding military airports within the County of Orange; and

WHEREAS, the Airport Land Use Commission has adopted the Airport Environs Land Use Plan for El Toro Marine Corps Air Station; and

WHEREAS, the Airport Land Use Commission has researched, studied, and evaluated updated materials concerning the location of the 60 and 65 CNEL contours for Segment "A" of the Airport Environs Land Use Plan for the El Toro Marine Corps Air Station, known as the Aliso Viejo property; and

WHEREAS, the Airport Land Use Commission has held a public hearing on an Amendment to the Airport Environs Land Use Plan for El Toro Marine Corps Air Station; and

WHEREAS, the Airport Land Use Commission has evaluated this project for compliance with the California Environmental Quality Act; and

WHEREAS, on the basis of an Initial Study, a Negative Declaration was prepared for this project; and

WHEREAS, the Airport Land Use Commission has received and approved the Negative Declaration; and

WHEREAS, notice of the preparation of a Negative Declaration was posted for a period of seven days at the County Clerk and Clerk of the Board Offices, as well as published in a newspaper of general circulation, Daily Pilot, on May 5 and 9, 1979; and WHEREAS, no written statements of opposition were received;

NOW, THEREFORE, the Airport Land Use Commission for Orange County amends the Airport Environs Land Use Plan for the El Toro Marine Corps Air Station, Segment "A," the Aliso Viejo property, finding:

1. That as a result of the proposed Airport Environs Land Use Plan boundary modification, there will be no significant adverse environmental impacts and an Environmental Impact Report need not be prepared; and
2. That as a result of the proposed Airport Environs Land Use Plan boundary modification, there will be no significant adverse impact on the inhabitants within the vicinity of the airport; and

3. That as a result of the proposed Airport Environs Land Use Plan boundary modification, there will be no significant adverse impact on the operation of the El Toro Marine Corps Air Station; and that it is hereby

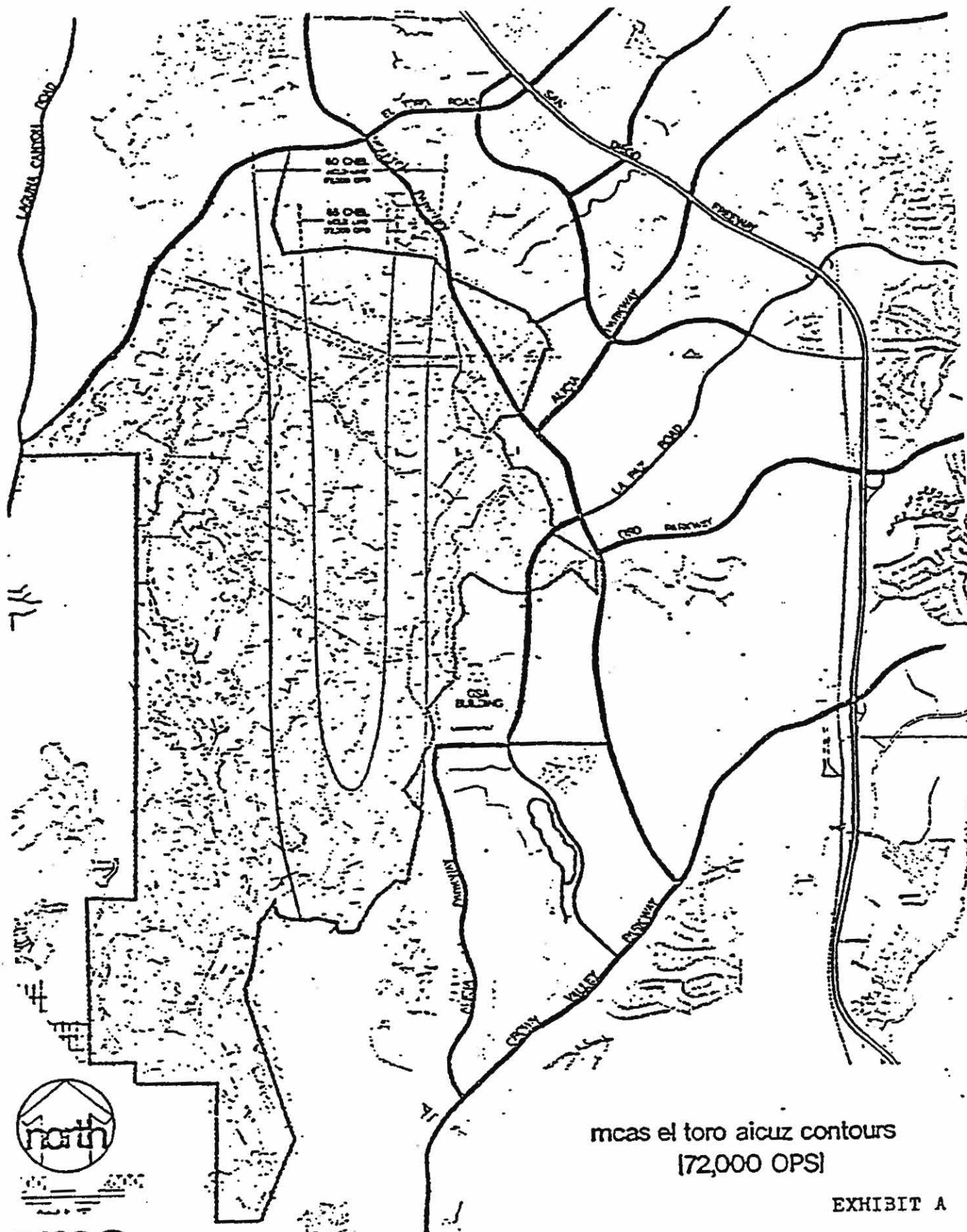
RESOLVED, that the map for El Toro Marine Corps Air Station appearing in Section 3.4, page 13, of the Airport Environs Land Use Plan be amended to appear as the map, Exhibit A, hereto attached.

I, SHIRLI A. REITHARD Secretary to the Airport
Land Use Commission for Orange County hereby certify and
declare that the foregoing Resolution was duly adopted by
said Commission on May 17, 1979.

Executed this 17th day of MAY 1979

Shirli A. Reithard
SECRETARY

Resolution No. 79-1





AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY - 18741 Airport Way North, Santa Ana, Cal. 92706

Phone: 714 833-1500

RESOLUTION No. 79-2

RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY AMENDING SEGMENT "B" OF THE AIRPORT ENVIRONS LAND USE PLAN FOR EL TORO MARINE CORPS AIR STATION.

WHEREAS, Section 21675 of the Public Utilities Code of the State of California empowers the Airport Land Use Commission to adopt a comprehensive land use plan for the areas surrounding military airports within the County of Orange; and

WHEREAS, the Airport Land Use Commission has adopted the Airport Environs Land Use Plan for El Toro Marine Corps Air Station; and

WHEREAS, the Airport Land Use Commission has researched, studied, and evaluated updated materials concerning the location of the 60 and 65 CNEL contours for Segment "B" of the Airport Environs Land Use Plan for the El Toro Marine Corps Air Station; and

WHEREAS, the Airport Land Use Commission has held a public hearing on an Amendment to the Airport Environs Land Use Plan for El Toro Marine Corps Air Station; and

WHEREAS, the Airport Land Use Commission has evaluated this project for compliance with the California Environmental Quality Act; and

WHEREAS, on the basis of an Initial Study, a Negative Declaration was prepared for this project; and

WHEREAS, the Airport Land Use Commission has received and approved the Negative Declaration; and

WHEREAS, notice of the preparation of a Negative Declaration was posted for a period of seven days at the Clerk of the Board Office, as well as published in a newspaper of general circulation, Daily Pilot, on October 1 and 8, 1979; and WHEREAS, no written statements of opposition were received;

NOW, THEREFORE, the Airport Land Use Commission for Orange County amends the Airport Environs Land Use Plan for the El Toro Marine Corps Air Station, Segment "B" finding:

1. That as a result of the proposed Airport Environs Land Use Plan boundary modification, there will be no significant adverse environmental impacts and an Environmental Impact Report need not be prepared; and
2. That as a result of the proposed Airport Environs Land Use Plan boundary modification, there will be no significant adverse impact on the inhabitants within the vicinity of the airport; and

3. That as a result of the proposed Airport Environs Land Use Plan boundary modification, there will be no significant adverse impact on the operation of the El Toro Marine Corps Air Station; and that it is hereby

RESOLVED, that the map for El Toro Marine Corps Air Station appearing in Section 3.4, page 13, of the Airport Environs Land Use Plan be amended to appear as the map, Segment "B" hereto attached.

RESOLVED, that the Airport Land Use Commission for Orange County recommends that Orange County prohibit the construction of residential units within the 65 CNEL area.

RESOLVED, that the Airport Land Use Commission for Orange County recommends that Orange County limit the construction of hospitals, convalescent homes, churches, schools, and other noise sensitive uses within the 65 CNEL area.

RESOLVED, that the Airport Land Use Commission for Orange County recommends that Orange County continue "Noise Studies" within the 60-65 CNEL area for the purpose of determining sound attenuation requirements for development.

RESOLVED, that the Airport Land Use Commission for Orange County recommends that provisions be made for full disclosure of Noise Impact to initial and subsequent buyers of residential and other property in Noise Impacted areas.

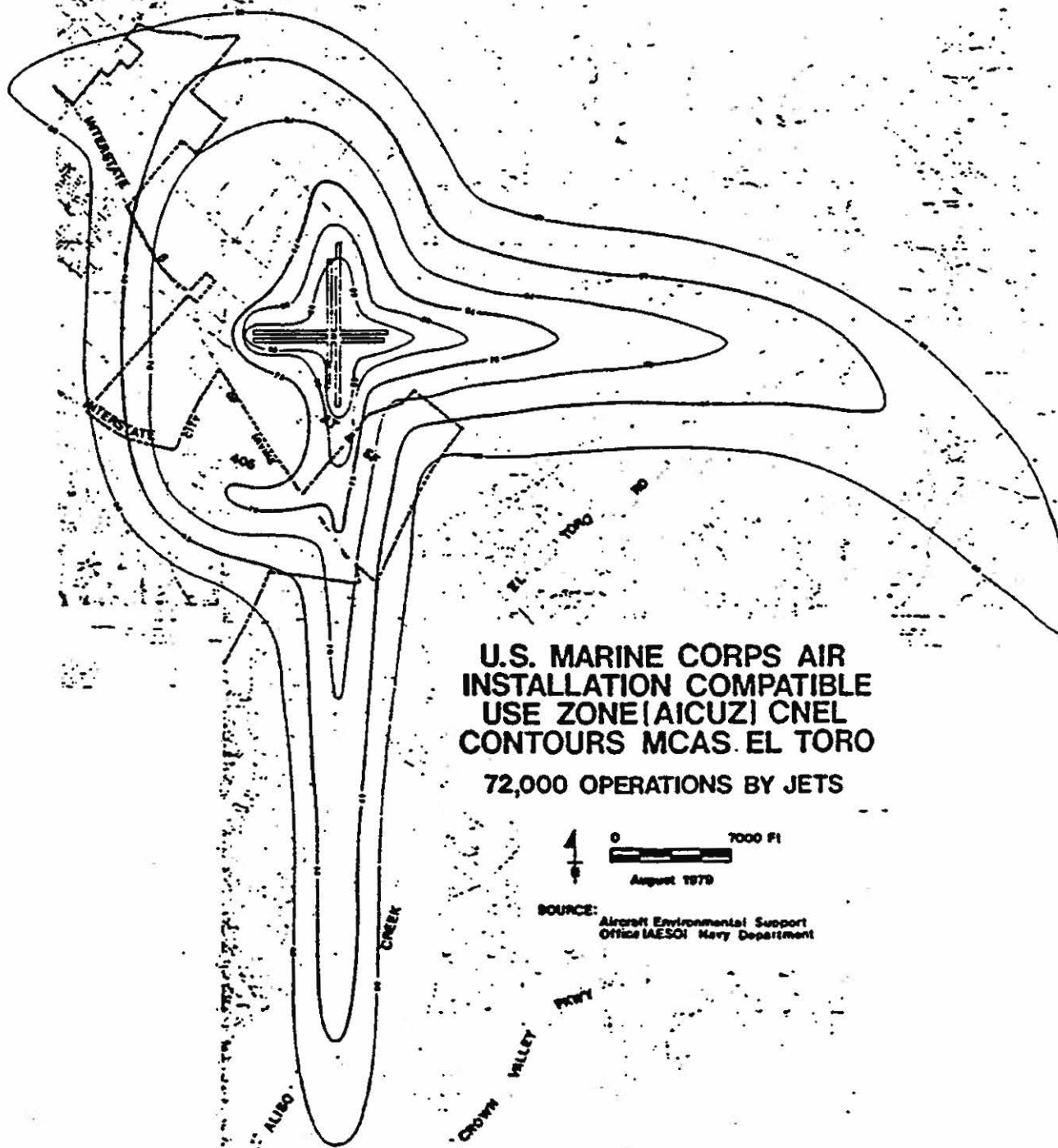
RESOLVED, that the Airport Land Use Commission for Orange County recommends continued and expanded use of "Noise Impacted Area" Sign Program.

RESOLVED, that the Airport Land Use Commission for Orange County recommends continued quest of Avigational Rights/Easements for all developments which are overflowed by aircraft or are within the 65 CNEL area.

I, SHIRLI A. REITHARD Secretary to the Airport
Land Use Commission for Orange County hereby certify and declare
that the foregoing Resolution was duly adopted by said
Commission on December 20, 1979.

Executed this 21st day of December 1979

Shirli A. Reithard
SECRETARY





AIRPORT LAND USE COMMISSION

FOR ORANGE COUNTY - 18741 Airport Way North, Santa Ana, Cal. 92704

Phone: 714 833-1500

RESOLUTION No. 78-1

A RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY CONCERNING THE USE OF LAND WITHIN 65 CNEL NOISE CONTOUR AREAS WITHIN ORANGE COUNTY.

WHEREAS, the Airport Land Use Commission for Orange County has previously adopted a policy of no residential development within 65 CNEL noise contour areas of airports within Orange County; and

WHEREAS, the Airport Land Use Commission for Orange County has previously adopted, as a mitigation measure only, the proposed construction of low-cost housing within the 65 CNEL noise contour for the Marine Corps Air Station, El Toro; and

WHEREAS, the Airport Land Use Commission for Orange County has researched, studied, and evaluated residential development within the 65 CNEL noise contours for airports within Orange County; and

WHEREAS, the Airport Land Use Commission for Orange County has considered and rejected the following land use controls for reasons stated:

High density residential development, as high density does not preclude outdoor recreational facilities unless so restricted to exclude the expected southern California amenities of barbecue areas, swimming pools, tennis courts, and/or other outdoor facilities; and

High density residential development, sound attenuated to limit intruding noise to 45 CNEL, indoor oriented without any outdoor living areas, as sound attenuation to 45 CNEL does not preclude high SENEL disruptions that interfere with conversation and social interaction and that affect the quantity and quality of sleep; and

Low and medium density residential development, sound attenuation to limit intruding noise to 45 CNEL as such sound attenuation does not preclude high SENEL disruptions that interfere with conversation and social interaction and that affect the quantity and quality of sleep and because low and/or medium density residential development usually implies space for outdoor living and recreational facilities; and

Restricting the 65 CNEL noise areas to rental units as at some later time these may become individually owned and thereby defeating the original intent; and

(Continued)

RESOLUTION No. 78-1

Restriction to "adult only" residential units as schools and playgrounds are incompatible uses within 65 CNEL noise areas because such restriction could create hardship for persons who could ill afford to move if children become part of a formerly childless household; and

Avigational easements that would protect the County but would not protect the buyer/renter of low-cost housing from harm arising from aircraft generated noise; and

Notice to potential buyers of residential units of severe noise impaction as the current terms of description are neither realistic nor understandable and because the use of CNEL, although applicable to regularly scheduled jet flights, when applied to military airport noise is misleading, as the scheduling of military jet flights is highly variable; and

Notice to potential buyers of residential units of severe aircraft generated vibrations that disrupt television and radio reception as the extent of such disruptions may not be realistically communicated; and

Agricultural zoning because it permits four-acre parcels for residential use and with variances, it permits one-half and/or one acre parcels for residential use. Hence, it does not preclude residential use within the 65 CNEL areas; and

WHEREAS, the Airport Land Use Commission for Orange County has considered the following health problems arising from aircraft noise impaction, particularly long-term noise impaction:

Data indicating that hearing damage in children may occur in a relatively short period of time; and

Noise sensitivity of individuals varies widely and sensitivity to noise may develop upon long-term exposure to high noise impact, and extremes of noise sensitivity may occur in one family to the hardship of those who are noise sensitive; and

WHEREAS, the Airport Land Use Commission for Orange County has considered the following social problems as related to aircraft noise impaction:

Low-cost housing within 65 CNEL noise areas as it would relegate the group least able to afford housing to the least desirable area from which it could be difficult to relocate as they have the fewest alternatives; and

The concept of low-cost housing within 65 CNEL noise areas because of the possibility of compounding existing social problems and because of its discriminatory implications; and

(Continued)

RESOLUTION No. 78-1

The buyer/renter expectation of outdoor living in Orange County as reasonable; and

The expectation of families with children of outdoor play areas in Orange County as reasonable; and

The quality of living as measured by expectations of outdoor living for residents of Orange County as reasonable; and

WHEREAS, the Airport Land Use Commission for Orange County has considered and rejected the following presumptions and found them wanting for reasons stated:

A renter is free to move if dissatisfied. There may not be a reasonable alternative due to the scarcity of low-cost units; and

Renters are likely to spend less time in their residences. Such persons may not have the physical and/or financial capacity to go elsewhere; and

The less affluent are less noise sensitive than the more affluent. Affluence has not been found to be a determinative factor of noise sensitivity; and

Renters are less noise sensitive than owners. Renter/owner relationship has not been found to be a determinative factor of noise sensitivity; and

NOW, THEREFORE, it is RESOLVED, that the Airport Land Use Commission for Orange County recommends that no residential units, including low-cost or affordable, be constructed within the 65 CNEL noise contour areas of airports within Orange County.

I, George E. Perry, Secretary to the Airport Land Use Commission for Orange County hereby certify and declare that the foregoing resolution was duly adopted by said Commission on December 21, 1978

Executed this 5th day of January 1979


Secretary

RESOLUTION NO. 77-1

RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY ADOPTING AN AMENDMENT TO THE AIRPORT ENVIRONS LAND USE PLAN AND APPROVING THE ENVIRONMENTAL IMPACT REPORT FOR THAT AMENDMENT.

WHEREAS, Section 21675 of the Public Utilities Code of the State of California empowers the Airport Land Use Commission to adopt a comprehensive land use plan for the areas surrounding military airports within the County of Orange; and

WHEREAS, the Airport Land Use Commission has an adopted Airport Environs Land Use Plan for El Toro Marine Corps Air Station; and

WHEREAS, the Airport Land Use Commission has held public hearings on an Amendment to the Airport Environs Land Use Plan for El Toro Marine Corps Air Station; and

WHEREAS, this Amendment is a project in terms of the California Environmental Quality Act and an EIR was reviewed and considered by the Airport Land Use Commission;

NOW, THEREFORE, the Airport Land Use Commission for Orange County finds that the EIR is complete and adequately addresses the environmental impacts of the Amendment and that;

- a) Election of the No Project Option presented in the EIR would not adequately fulfill the spirit of the ALUC's legislative mandate. Inhabitants near the air station would not be adequately protected by local jurisdiction planning which allows residential construction in identified high noise impact areas as documented in the EIR;
- b) The ALUC has considered other noise disturbance criteria but has chosen the 65 CNEL standard for the reasons stated in the Commission's Airport Environs Land Use Plan;
- c) The Commission has chosen the 60 and 65 CNEL contours developed by Ultrasonics as the best estimates available;
- d) The Commission has not chosen to use alternative project designs (a), (b), (c), (d), or (e) as presented in the EIR because each of these would allow some number of persons to be adversely affected by aircraft noise;
- e) Substantial discretion is allowed to local jurisdictions to minimize the impacts of this project by (1) redesigning residential units to limit noise disturbance and (2) replanning areas to replace incompatible uses within the impact area with compatible uses from outside the impact area;

(Continued)

f) The following were identified in the EIR as significant effects:

1. The loss of available dwellings,
2. the economic impact to land owners,
3. the increase in the cost of housing,
4. the loss of low and moderate income dwellings,
5. the loss of employment in the building and trade industry,
6. the outflow of dollars from Orange County,
7. the shifting of population,
8. the increased vehicle emissions and,
9. the economic loss within utility assessment districts.

As to each of the above significant effects, the changes or alterations which could mitigate or avoid their impact are within the jurisdiction of other public agencies and such changes can be adopted by the other agencies, if other agencies take advantage of the provisions within the AELUP which allow for sound attenuated, indoor oriented residential construction. The land use guidelines within the AELUP allow apartment like structures with central air conditioning to be located within high noise impact areas. The Commission finds that the replacement of single family units with such multiple family units would eliminate many of the adverse impacts enumerated in the EIR.

- g) The AELUP contains implementation procedures which minimize delays in processing. The prolongation of the planning and developing process which will result from the adoption of this Amendment to the AELUP is a necessary consequence of the fulfillment of the ALUC's legislative mandate to protect the airport and the inhabitants near the airport.

NOW, THEREFORE, BE IT RESOLVED THAT THE Airport Land Use Commission for Orange County amends Section 2.2.1 of the Airport Environs Land Use Plan to read as follows:

(Continued)

2.2.1 Marine Corps Air Station, El Toro

The original plan adopted on April 17, 1975 was amended by the Commission on June 16, 1977.

CNEL CONTOURS - The Commission utilized the average annual CNEL contours depicted in "An Update of the Noise Contours for El Toro Marine Corps Air Station" prepared by Ultrasystems, Inc., for the Board of Supervisors, County of Orange, dated May, 1976.

These contours were developed on the basis of 1975 and 1976 operations data and the latest available information concerning noise characteristics of military aircraft.* Both the 60 CNEL and 65 CNEL contours depicted on the map in section 3 were the products of the Ultrasystems' report.

ACCIDENT POTENTIAL ZONES - An analysis of the ten year accident history and the operational characteristics of MCAS, El Toro, was conducted in accordance with the adopted AICUZ methodology. The analysis revealed no justification for extending the limits of Accident Potential Zone "B" farther than 10,000 feet from the runway ends. No Accident Potential Zone "A" was placed at the end of Runway 3/21 because it is not presently in use nor are there any plans for its use. The AICUZ methodology was strictly observed on all other runways. This analysis was based on the same operations data which appears in the Ultrasystems' noise contour report discussed above.

PLANNING AREA - The Commission expanded the planning area adopted April 17, 1975 to include all that area embraced by the Ultrasystems' 1976 average annual 60 CNEL contour.

TWENTY YEAR FUTURE - (This section will not be drafted until a statement is received from the Marine Corps regarding future plans for El Toro. However, it is assumed that a continuation of present operations is a reasonable requirement for adoption of this plan.)

* Aerospace Medical Division, "Community Noise Exposure Resulting from Aircraft Operations: Acquisition and Analysis of Aircraft Noise and Performance Data," Wright-Patterson Air Force Base, Ohio, and Bolt Beranek and Newman, Inc., Canoga Park, California, AMRL-TR-73-107, August, 1975.

(Continued)

and that is hereby

RESOLVED, that the map for El Toro Marine Corps Air Station appearing in Section 3.4 of the Airport Environs Land Use Plan be amended to appear as the map hereto attached, and that it is hereby

RESOLVED, that for purposes of implementation of the amended Airport Environs Land Use Plan for El Toro Marine Corps Air Station, all that area within the City of Irvine which is regulated by the North Irvine (Northwood II) Planned Community Regulations adopted November 11, 1975 by the City Council of the City of Irvine be considered already devoted to incompatible uses by the Airport Land Use Commission.

AYES: Ablott, Beverburg, Doan, Dostal, Foringer, Hudson

NOES: Bresnahan

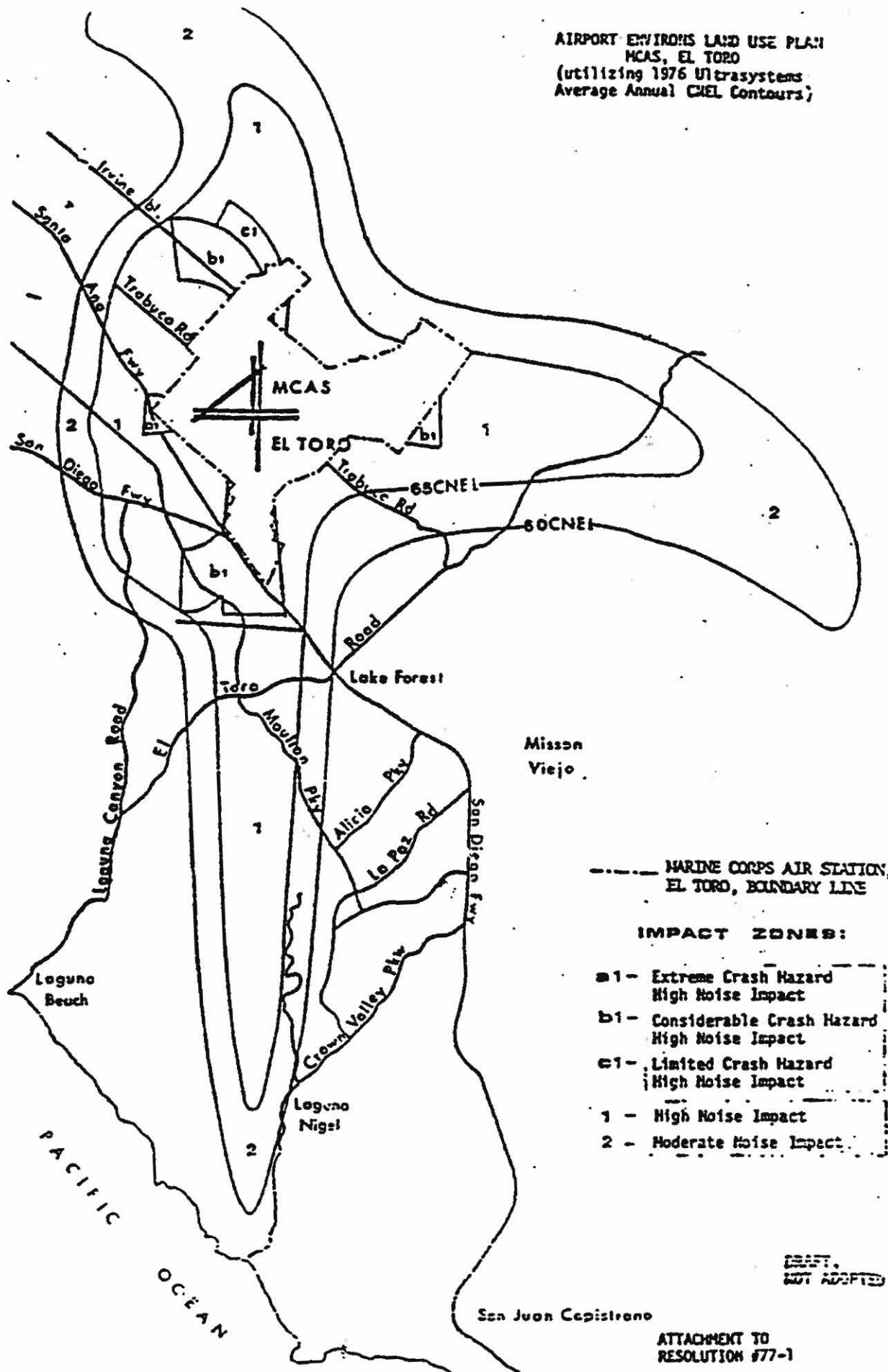
ABSTENTIONS: None

I, KENNETH J. DELINO, Secretary to the Airport Land Use Commission for Orange County hereby certify and declare that the foregoing resolution was duly adopted by said Commission on June 16, 1977.

Executed this 17th day of June 1977


SECRETARY

AIRPORT ENVIRONS LAND USE PLAN
MCAS, EL TORO
 (utilizing 1976 Ultrasonics
 Average Annual CNEL Contours)



RESOLUTION NO. 75-1

RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY ADOPTING STANDARDS AND CRITERIA FOR THE ESTABLISHMENT OF PLANNING BOUNDARIES FOR USE IN COMPREHENSIVE LAND USE PLANS.

WHEREAS, Section 21675 of the Public Utilities Code of the State of California requires the Airport Land Use Commission for Orange County to formulate a Comprehensive Land Use Plan for the areas surrounding all public airports within its jurisdiction; and

WHEREAS, Section 21675 of the Public Utilities Code of the State of California requires that above said Comprehensive Land Use Plans provide for the orderly growth of the area surrounding airports and safeguard the general welfare of the inhabitants within the vicinity of airports and the public in general; and

WHEREAS, Section 21675 of the Public Utilities Code of the State of California requires the Airport Land Use Commission for Orange County to establish planning boundaries; and

WHEREAS, the Airport Land Use Commission for Orange County has researched, studied, and evaluated available materials concerning guidelines for the establishment of above said planning boundaries; and

WHEREAS, the Airport Land Use Commission for Orange County held a public hearing and invited the participation of affected jurisdictions and persons in the process of determining standards and criteria for the establishment of planning boundaries;

NOW, THEREFORE, the Airport Land Use Commission for Orange County hereby adopts the following standards and criteria for establishing planning boundaries; and therefore it is hereby

RESOLVED, that aircraft noise emanating from airports may be incompatible with the general welfare of the inhabitants within the vicinity of an airport and in order to measure the impact of aircraft noise on the inhabitants within the vicinity of an airport, the Airport Land Use Commission for Orange County adopts the Community Noise Equivalent Level methodology as specified in the Noise Standards for California Airports (Title Four, California Administrative Code); and it is hereby

RESOLVED, that the potentiality of aircraft accidents outside the boundary of an airport may be incompatible with the general welfare of the inhabitants within the vicinity of an airport and in order to designate such accident potential zones near military airports the Airport Land Use Commission for Orange County adopts the Department of the Navy, Aircraft Installation Compatible Use Zone Program methodology as attached; and it is hereby

(Continued)

RESOLVED; that objects affecting navigable airspace within the vicinity of airports is incompatible with the safety of air navigation and in order to limit such obstructions, the Airport Land Use Commission for Orange County adopts the regulations regarding Notices of Proposed Construction or Alteration as contained in Federal Aviation Regulations Part 77; and it is hereby

RESOLVED, that the delineation of the Planning Area of the Airport Land Use Commission for Orange County will generally include those areas embraced by the 60 dB CNEL contours and accident potential zones.

I, BRIAN DOUGLASS, Secretary to the Airport Land Use Commission for Orange County hereby certify and declare that the foregoing resolution was duly adopted by said Commission on JANUARY 9, 1975.

Executed this 9th day of January, 1975


SECRETARY

RESOLUTION #75-3

A RESOLUTION OF THE AIRPORT LAND USE COMMISSION FOR ORANGE COUNTY CONCERNING ACCIDENT
POTENTIAL ZONES AROUND CIVIL AIRPORTS.

WHEREAS, the Airport Land Use Commission for Orange County has previously resolved that the potentiality of aircraft accidents outside the boundary of an airport may be incompatible with the general welfare of the inhabitants within the vicinity of an airport; and

WHEREAS, the Airport Land Use Commission for Orange County has researched, studied, and evaluated accident data for civil aircraft operating in California; and

WHEREAS, the aircraft operations at the civil airports in Orange County are relatively typical of aircraft operations throughout California; and

WHEREAS, the Airport Land Use Commission for Orange County has studied and evaluated the aircraft accident data for civil airports within Orange County; and

WHEREAS, the data for civil aircraft accidents in California indicates that the locations of off-airport accidents are in no discernible pattern; and

WHEREAS, the accident data studied indicates that there is no relationship between overall accident locations and accident locations around individual airports;

NOW, THEREFORE, it is RESOLVED, that the Airport Land Use Commission for Orange County shall designate accident potential zones around civil airports on the basis of study and evaluation of each airport's accident history and operational characteristics.

I, Brian Douglas Secretary to the Airport Land Use Commission
for Orange County hereby certify and declare that the foregoing resolution
was duly adopted by said Commission on April 3 1975.

Executed this 3 day of April, 1975

Brian Douglas
SECRETARY

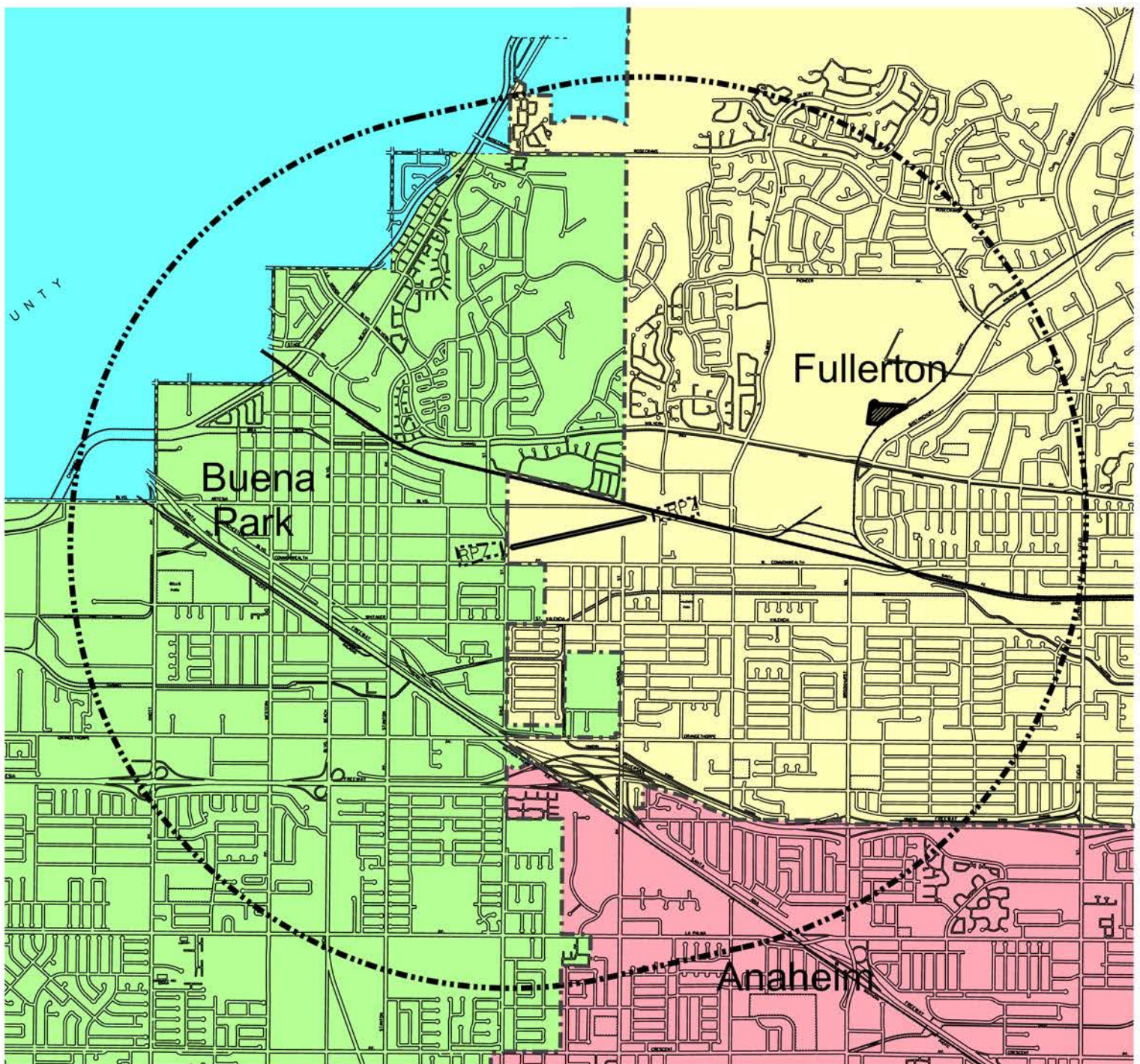
APPENDIX D

Exhibit D1: Notification Area for FMA

Exhibit D2: Airport Impact Zones and Noise Contours

Exhibit D3: FAR Part 77 FMA Obstruction Imaginary Surfaces

AELUP Notification Area for FMA



Note: – County Unincorporated areas are shown in white.
– Larger format map is available through Commission office at 949-252-5170

FAR PART 77 Fullerton Municipal Airport Notification Area: 10,000' Radius at 50:1 Slope

D1



0 1000 2000 3000 4000 5000
500
Scale In Feet

LEGEND

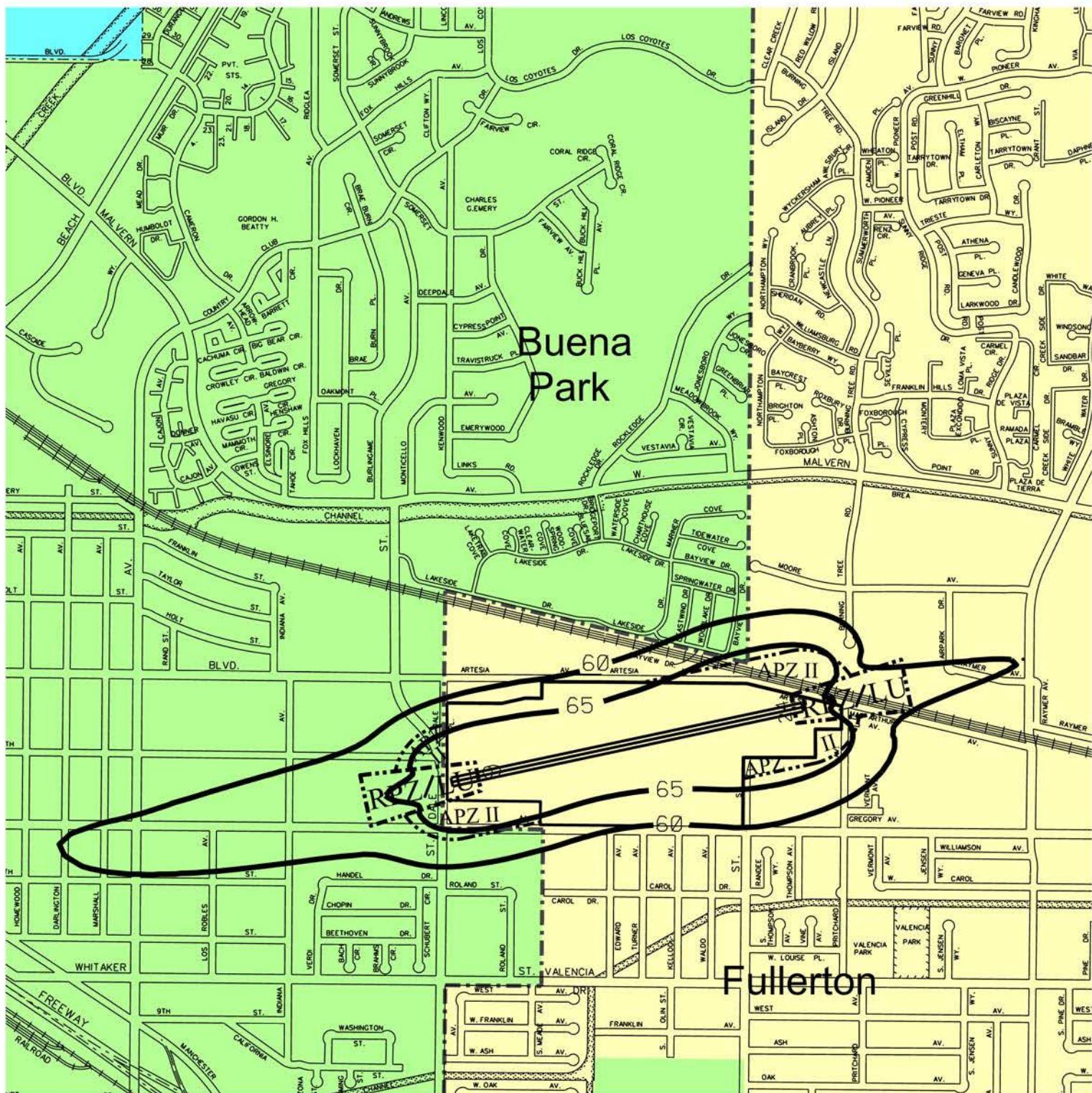
- 10,000' Radius
- CITY BOUNDARIES

CERTIFICATION

Adopted by the Airport Land Use Commission for Orange County

Kari A. Rigoni, Executive Officer

Date



Note – Larger format map is available through Commission office at 949-252-5170

Fullerton Municipal Airport Airport Impact Zones And Noise Contours

D2

LEGEND

- RPZ /LU RUNWAY PROTECTION ZONE LAND USE
- 60— CNEL CONTOUR
- RUNWAY PROTECTION ZONE
- ACCIDENT POTENTIAL ZONE II
- CITY BOUNDARIES
- AIRPORT BOUNDARIES

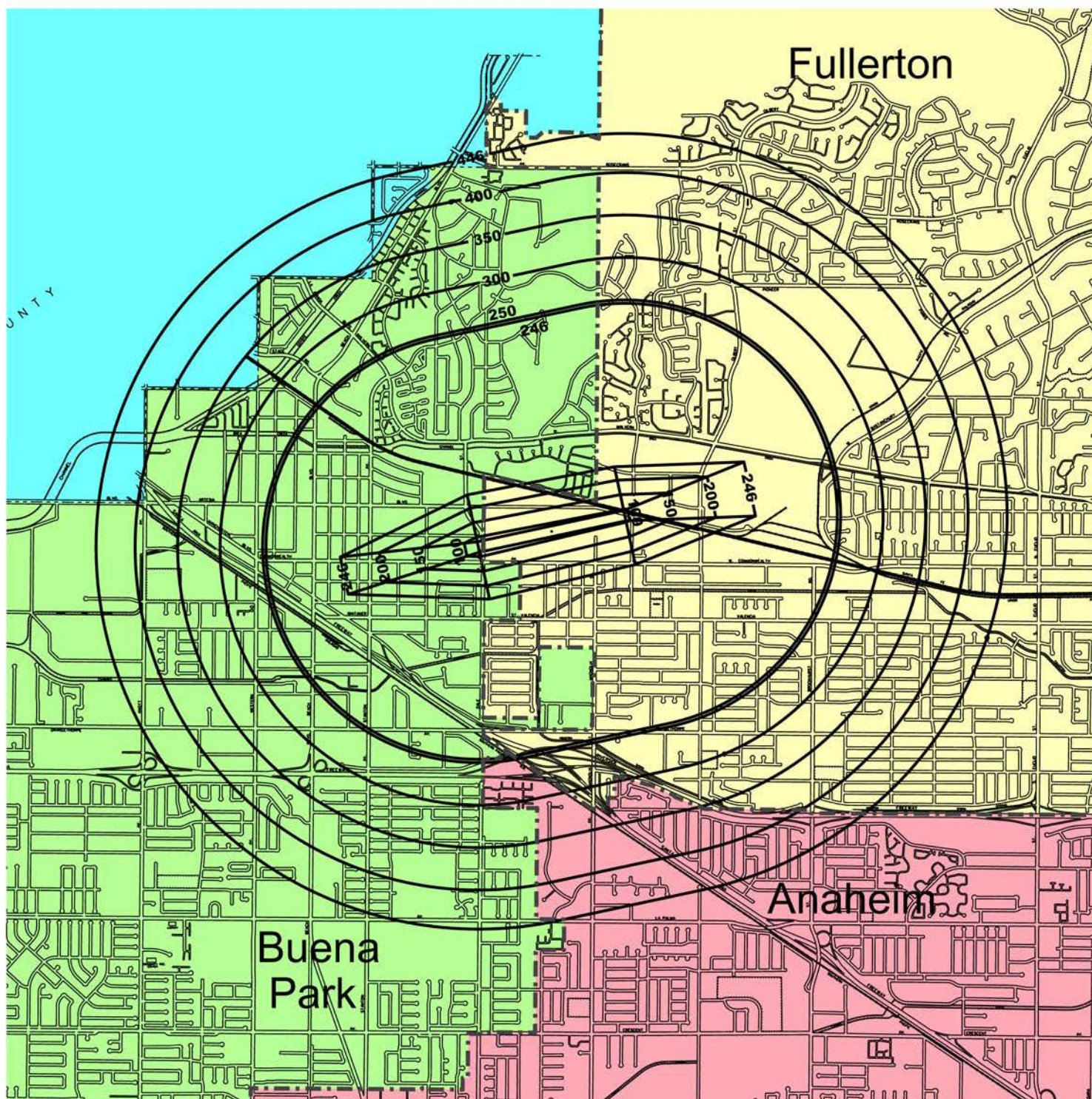
CERTIFICATION

Adopted by the Airport Land Use Commission for Orange County

Kari A. Rigoni, Executive Officer

Date





Note: – County Unincorporated areas are shown in white.
 – Larger format map is available through Commission office at 949-252-5170

FAR PART 77

D3

Fullerton Municipal Airport Obstruction Imaginary Surfaces



0 1000 2000 3000 4000 5000
 500 Scale In Feet

LEGEND

--- CITY BOUNDARIES
 — AIRPORT BOUNDARIES

CERTIFICATION

Adopted by the Airport Land Use Commission for Orange County

Kari A. Rigoni, Executive Officer

Date

APPENDIX E

FULLERTON AIRPORT ACCIDENT HISTORY

Also, as a reference, Appendix E of the California Airport Land Use Planning Handbook (October 2011), contains information on Aircraft Accident Characteristics. The Handbook is a California Department of Transportation/Aeronautics Division publication. Their address and phone number are listed below:

California Department of Transportation
Division of Aeronautics, MS #40
P. O. Box 942874
Sacramento, CA 94274-0001
(916) 654-4959
(916) 653-9531 Fax

The California Airport Land Use Planning Handbook is available online at:

<http://www.dot.ca.gov/hq/planning/aeronaut/documents/alucp/AirportLandUsePlanningHandbook.pdf>



FULLERTON AIRPORT ACCIDENT HISTORY 2000-2018

Month/Year - ACCIDENT DATE



APPENDIX F

(Information in this appendix is provided as a reference source to assist the users of the AELUP.)

FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR 150/5190-4A

A MODEL ZONING ORDINANCE

The model ordinance defines and provides language governing the establishment of various zones in the vicinity of airports. It prescribes height limitations for each zone as required to prevent the creation or establishment of objects which would interfere with the operation of an airport. These zones will vary depending on the type, size, and layout of the runways. The model ordinance, therefore, leaves the specific zone measurements to be inserted by the political subdivision adopting the ordinance as appropriate for its particular airport.

If you would like to obtain a copy, please contact:

Federal Aviation Administration
Western Pacific Region
Public Affairs
P. O. Box 92007 WPC
Los Angeles, CA 90009
(310) 725-3500

You may also obtain the document online at:

https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_150_5190-4A.pdf



U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: A MODEL ZONING ORDINANCE TO LIMIT HEIGHT OF OBJECTS AROUND AIRPORTS	Date: 12/14/87 Initiated by: AAS-100	AC No: 150/5190-4A Change:
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1. PURPOSE.

a. This advisory circular provides a model zoning ordinance to be used as a guide to control the height of objects around airports.

b. This advisory circular has been editorially updated for reprint/stock purposes only. There were no changes made to the content of the advisory circular except to update the format and renumber the document to AC 150/5190-4A.

2. CANCELLATION. AC 150/5190-4, A Model Zoning Ordinance to Limit Height of Objects Around Airports, dated August 23, 1977.

3. FOCUS.

a. Aviation safety requires a minimum clear space (or buffer) between operating aircraft and other objects. When these other objects are structures (such as buildings), the buffer may be achieved by limiting aircraft operations, by limiting the location and height of these objects, or, by a combination of these factors. This advisory circular concerns itself with developing zoning ordinances to control the height of objects, based on the obstruction surfaces described in Subpart C of Federal Aviation Regulations (FAR) Part 77, Objects Affecting Navigable Airspace, current edition. It should be recognized, however, that not all obstructions (objects whose height exceeds an obstruction surface) are a hazard to air navigation.

b. The Federal Aviation Administration (FAA) conducts aeronautical studies on obstructions which examine their effect on such factors as: aircraft operational capabilities; electronic and procedural requirements; and, airport hazard standards. If an aeronautical study shows that an obstruction, when evaluated against these factors, has no substantial adverse effect upon the safe and efficient use of navigable airspace, then the obstruction is considered not to be a hazard to air navigation. Advisory Circular 150/5300-4, Utility Airports--Air Access to National Transportation, current edition, presents additional discussion on hazards to air navigation.

c. Airport zoning ordinances developed for height limitations do not in themselves ensure compatible land use surrounding the airport. Land use zoning, incorporating height limiting criteria, is an appropriate means for achieving this objective. Advisory Circular 150/5050-6, Airport-Land Use Compatibility Planning, current edition, presents generalized guidance for compatible land use planning in the vicinity of airports.

4. BACKGROUND.

a. The purpose of zoning to limit the height of objects in the vicinity of airports is to prevent their interference with the safe and efficient operations of the airport.

b. Section 511 of the Airport and Airway Improvement Act of 1982, states, in part, the following: ". . . Sec. 511(a) SPONSORSHIP. As a condition precedent to approval of an airport development project contained in a project grant application submitted under this title, the Secretary shall receive assurances in writing, satisfactory to the Secretary that . . . (4) the aerial approaches to the airport will be adequately cleared and protected by removing, lowering, re-locating, marking, or lighting or mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards; (5) appropriate action, including the adoption of zoning laws has been or will be taken, to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff aircraft;" Conformity with this advisory circular will assist the responsible local government in complying with the Section 511 assurances with respect to the height of objects. However, this advisory circular does not address other land use compatibility criteria, such as noise compatibility, which may be required under Section 511.

c. This advisory circular is based on the obstruction surfaces described in Subpart C of FAR Part 77. Examples of zoning ordinances for a utility airport and for a larger than utility airport have been included in appendices 2 and 3.

5. USE OF MODEL ZONING ORDINANCE.

a. Those responsible for drafting an airport zoning ordinance to limit height of objects are aware, of course, that it must conform to the prescribed authority of that particular airport zoning enabling act. Only terminology applicable to the airport named in the ordinance should be used.

b. The model ordinance included in this advisory circular defines and provides for the establishment of various zones and prescribes height limitations for each zone as required to prevent the creation or establishment of objects which would interfere with the operation of the airport. These zones will vary depending on the type, size, and layout of the runways. The model ordinance, therefore, leaves the specific zone measurements to be inserted by the political subdivision adopting the ordinance as appropriate for its particular airport.

c. The appendices also include examples of how the model ordinance may be used for various types of airports. Since much of the technical terminology and definitions are derived from Federal Aviation Regulations, technical procedural handbooks, and advisory circulars, care should be taken to ensure that language used in the ordinance drafted is consistent with terms used in the model ordinance.

d. Any height limitations imposed by a zoning ordinance must be "reasonable," meaning that the height limitations prescribed should not be so low at any point as to constitute a taking of property without compensations under local law. Therefore, the zoning ordinance should not purport to impose height limitations in any area so close to the ground that the application of criteria prescribed would result in unreasonable or unduly restrictive height limitations. This is provided for by provision 12, Excepted Height Limitations, of Section IV, Airport Zone Height Limitations, in the Model Zoning Ordinance.

e. The decision as to the excepted height limits should be made on the basis of local conditions and circumstances, including the uses being made of property in the vicinity of the airport. In making such a decision, the political subdivision should use the same procedures generally recognized as desirable in preparing comprehensive zoning ordinances, including necessary coordination with recognized state, regional, and local planning offices, where applicable.

f. Areas in the various zones where the height limitation is below the excepted height limit prescribed in the ordinance should be acquired to ensure the required protection. In the approach area, the minimum acquisition begins at the end of the primary surface defined in FAR Part 77, Section 77.25, and extends outward with the width of the approach surface defined in that section, to a point where the approach surface slope reaches a height of 50 feet above the ground elevation of the runway or terrain, whichever distance is the shorter. If easements are acquired, they should include the right of passage over the property by aircraft as well as the right to prevent creation of future obstructions.

g. Drafters of airport zoning ordinances should consult with Federal Aviation Administration (FAA) Airports personnel in regional or district offices when developing airport zoning regulations.

h. The standards contained in FAR Part 77, Subpart C, make it possible to determine, for any location on or adjacent to an airport, the height at which any structure or object of natural growth would constitute an obstruction. Section 77.13 of FAR Part 77, Subpart C sets forth the requirements for filing notice of proposed construction or alteration.

i. If the object exceeds a height or surface defined in Subpart C of FAR Part 77, it would be an obstruction and would be the subject of an aeronautical study by the FAA to determine its effect on navigable airspace. If the object is concluded to have a substantial adverse effect upon the safe and efficient utilization of such airspace, it would be determined to be a hazard to air navigation. The FAA cannot prevent its erection without local assistance. The enactment of this proposed model zoning ordinance will permit the local authorities to control the erection of hazards to air navigation and thus protect the community's investment in the airport.

j. The FAA aeronautical study will be made available to the local zoning authorities and will set forth the effects on aviation of any proposed object that would constitute an obstruction under Subpart C of FAR Part 77. This information can then be considered by the Board of Adjustment when processing applications for variances.

6. AIRPORT ZONING ORDINANCE MAP.

a. Attached to the airport zoning ordinance and made a part thereof is the airport zoning map. The airport zoning map is similar for all types of airports and heliports, and must be compiled from the criteria in Subpart C of FAR Part 77 as reflected in the Ordinance. A typical example of this zoning map was reduced in size for printing in this publication (see appendix 4).

b. The airport zoning map is of the area affected by the airport zoning ordinance and shows the layout of the runways, the airport boundaries, the airport elevation, and the area topography. The map should also set forth the various zones with the applicable height limitations for each as described in the body of the ordinance. The zoning map should contain a method of land identification, as typical in different areas of the country, such as section, township and range, block and lot, or metes and bounds. This map should also depict other identifying geographic objects such as streams, rivers, railroads, roads, and streets. By using a map with this amount of detail, in conjunction with the text of an ordinance, a property owner should, without undue difficulty, be able to determine not only the location of his property, but also the height limitations imposed thereon by the ordinance.

c. Adequate topographic maps may be available from local government sources. Standard topographic maps (quadrangle maps) are available from the U. S. Geological Survey. Maps should be ordered from the Distribution Branch, U. S. Geological Survey, P. O. Box 25286, Federal Center, Denver, Colorado 80225.

d. Many state agencies also make topographic maps available. In the absence of contour topographic data, land evaluation source data may be available from bench marks, railroads, highways, or local project surveys. Contour data on zoning maps should be shown to the extent reasonably available or required locally to support the ordinance.

7. BOARD OF ADJUSTMENT. The model ordinance provides for the creation of a Board of Adjustment to hear appeals, to hear and decide special exemptions, and to hear and decide special variances. Provision is also made for judicial review of decisions of the Board of Adjustment. Such review and appeal procedures are intended to conform to applicable constitutional requirements.

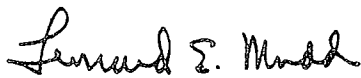
8. GENERAL INSTRUCTIONS FOR USING THE MODEL ZONING ORDINANCE.

a. The model zoning ordinance may be used as a guide for developing airport zoning ordinances to limit the height of objects that may interfere with the operation of a civil airport or heliport. The blank spaces should be filled in with appropriate data as noted.

b. It is not necessary that all material set forth in the model ordinance be used for all airport zoning ordinances. For example, if the airport to be zoned is a utility airport with no precision or nonprecision instrument runways existing or planned, those definitions and paragraphs referring to precision or nonprecision instrument runways or larger than utility runways may be omitted, (see appendix 2). However, if the airport changes to a larger than utility airport or receives instrument approach procedures, the ordinance should be amended to provide for the changes.

c. Section III should only include the airport zones applicable to the airport being zoned. An approach zone is applied to each end of each runway based upon the type of approach available or planned for that runway end. The most precise type of approach, existing or planned, for either end of the runway determines the primary surface width. Heliports do not have horizontal or conical zones. Other zones to accommodate the areas covered in FAR Par 77.23(a) (2) and (3) may be added.

d. Examples of several airport-type ordinances are included in the appendices for guidance.



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Director, Office of Airport Standards

APPENDIX 1. MODEL ZONING ORDINANCE TO LIMIT HEIGHT
OF OBJECTS AROUND AN AIRPORT 1/

AN ORDINANCE REGULATING AND RESTRICTING THE HEIGHT OF STRUCTURES AND OBJECTS OF NATURAL GROWTH, AND OTHERWISE REGULATING THE USE OF PROPERTY, IN THE VICINITY OF THE _____ 2/ BY CREATING THE APPROPRIATE ZONES AND ESTABLISHING THE BOUNDARIES THEREOF; PROVIDING FOR CHANGES IN THE RESTRICTIONS AND BOUNDARIES OF SUCH ZONES; DEFINING CERTAIN TERMS USED HEREIN; REFERRING TO THE _____ 2/ ZONING MAP WHICH IS INCORPORATED IN AND MADE A PART OF THIS ORDINANCE; PROVIDING FOR ENFORCEMENT; ESTABLISHING A BOARD OF ADJUSTMENT; AND IMPOSING PENALTIES. 1/.

This Ordinance is adopted pursuant to the authority conferred by _____ 3/. It is hereby found that an obstruction has the potential for endangering the lives and property of users of _____ 2/, and property or occupants of land in its vicinity; that an obstruction may affect existing and future instrument approach minimums of _____ 2/; and that an obstruction may reduce the size of areas available for the landing, takeoff, and maneuvering of aircraft, thus tending to destroy or impair the utility of _____ 2/ and the public investment therein. Accordingly, it is declared:

- (1) that the creation or establishment of an obstruction has the potential of being a public nuisance and may injure the region served by _____ 2/;
- (2) that it is necessary in the interest of the public health, public safety, and general welfare _____ 4/ that the creation or establishment of obstructions that are a hazard to air navigation be prevented; and
- (3) that the prevention of these obstructions should be accomplished, to the extent legally possible, by the exercise of the police power without compensation.

1/ This title should be written to meet the usages and legal requirements of your state, and the political subdivision.

2/ Insert the name of the airport being zoned by the Ordinance.

3/ This citation should be made to conform to the usual method of citing your state laws.

4/ If other terms are commonly used by the courts of your state in defining the limits of police power, such as "convenience" or "prosperity," they should be added here.

It is further declared that the prevention of the creation or establishment of hazards to air navigation, the elimination, removal, alteration or mitigation of hazards to air navigation, or the marking and lighting of obstructions are public purposes for which a political subdivision may raise and expend public funds and acquire land or interests in land.

IT IS HEREBY ORDAINED BY _____ 5/ as follows:

SECTION I: SHORT TITLE

This Ordinance shall be known and may be cited as ____ 2/ Zoning Ordinance.

SECTION II: DEFINITIONS

As used in this Ordinance, unless the context otherwise requires:

1. AIRPORT - _____ 2/.
2. AIRPORT ELEVATION - The highest point of an airport's usable landing area measured in feet from sea level.
3. APPROACH SURFACE - A surface longitudinally centered on the extended runway centerline, extending outward and upward from the end of the primary surface and at the same slope as the approach zone height limitation slope set forth in Section IV of this Ordinance. In plan the perimeter of the approach surface coincides with the perimeter of the approach zone.
4. APPROACH, TRANSITIONAL, HORIZONTAL, AND CONICAL ZONES - These zones are set forth in Section III of this Ordinance.
5. BOARD OF ADJUSTMENT - A Board consisting of _____ 6/ members appointed by the _____ 6/ as provided in _____ o/.
6. CONICAL SURFACE - A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.
7. HAZARD TO AIR NAVIGATION - An obstruction determined to have a substantial adverse effect on the safe and efficient utilization of the navigable airspace.

5/ A form of enacting clause commonly used by the political subdivision in adopting ordinances should be followed.

6/ Insert the number of members appointed to the Board of Adjustment, the appointing body, and the enabling legislation authorizing same.

8. HEIGHT - For the purpose of determining the height limits in all zones set forth in this Ordinance and shown on the zoning map, the datum shall be mean sea level elevation unless otherwise specified.
9. HELIPORT PRIMARY SURFACE - The area of the primary surface coincides in size and shape with the designated takeoff and landing area of a heliport. This surface is a horizontal plane at the elevation of the established heliport elevation.
10. HORIZONTAL SURFACE - A horizontal plane 150 feet above the established airport elevation, the perimeter of which in plan coincides with the perimeter of the horizontal zone.
11. LARGER THAN UTILITY RUNWAY - A runway that is constructed for and intended to be used by propeller driven aircraft of greater than 12,500 pounds maximum gross weight and jet powered aircraft.
12. NONCONFORMING USE - Any pre-existing structure, object of natural growth, or use of land which is inconsistent with the provisions of this Ordinance or an amendment thereto.
13. NONPRECISION INSTRUMENT RUNWAY - A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in nonprecision instrument approach procedure has been approved or planned.
14. OBSTRUCTION - Any structure, growth, or other object, including a mobile object, which exceeds a limiting height set forth in Section IV of this Ordinance.
15. PERSON - An individual, firm, partnership, corporation, company, association, joint stock association, or governmental entity; includes a trustee, a receiver, an assignee, or a similar representative of any of them.
16. PRECISION INSTRUMENT RUNWAY - A runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS) or a Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated on an approved airport layout plan or any other planning document.
17. PRIMARY SURFACE - A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; for military runways or when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The width of the primary surface is set forth in Section III of this Ordinance. The elevation of any point on the primary surface

is the same as the elevation of the nearest point on the runway centerline.

18. RUNWAY - A defined area on an airport prepared for landing and take-off of aircraft along its length.
19. STRUCTURE - An object, including a mobile object, constructed or installed by man, including but without limitation, buildings, towers, cranes, smokestacks, earth formation, and overhead transmission lines.
20. TRANSITIONAL SURFACES - These surfaces extend outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces, which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at 90 degree angles to the extended runway centerline.
21. TREE - Any object of natural growth.
22. UTILITY RUNWAY - A runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.
23. VISUAL RUNWAY - A runway intended solely for the operation of aircraft using visual approach procedures.

SECTION III: AIRPORT ZONES

In order to carry out the provisions of this Ordinance, there are hereby created and established certain zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surfaces, and conical surfaces as they apply to ____ 2/. Such zones are shown on ____ 2/ Zoning map consisting of ____ sheets, prepared by ____, and dated ____ 19 ____, which is attached to this Ordinance and made a part hereof. An area located in more than one (1) of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

1. Utility Runway Visual Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is ____ 7/ feet wide. The approach zone expands outward uniformly to a width of 1,250 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.

7/ Insert dimension as set forth in FAR Part 77. Where more than one dimension is applicable, insert dimension identified to the appropriate runway involved.

2. Utility Runway Nonprecision Instrument Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 2,000 feet at a horizontal distance 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
 3. Runway Larger Than Utility Visual Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is _____ 7/ feet wide. The approach zone expands outward uniformly to a width of 1,500 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
 4. Runway Larger Than Utility With A Visibility Minimum Greater Than 3/4 Mile Nonprecision Instrument Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is _____ 7/ feet wide. The approach zone expands outward uniformly to a width of 3,500 feet at a horizontal distance of 10,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
 5. Runway Larger Than Utility With A Visibility Minimum As Low As 3/4 Mile Nonprecision Instrument Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach zone expands outward uniformly to a width of 4,000 feet at a horizontal distance of 10,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
 6. Precision Instrument Runway Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach zone expands outward uniformly to a width of 16,000 feet at a horizontal distance of 50,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
 7. Heliport Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is _____ 8/ feet wide. The approach zone expands outward uniformly to a width of 500 feet at a horizontal distance of 4,000 feet from the primary surface.
 8. Transitional Zones - The transitional zones are the areas beneath the transitional surfaces.
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- 8/ The size of the heliport primary surface must be based on present and future heliport operations.

9. Heliport Transitional Zones - These zones extend outward from the sides of the primary surface and the heliport approach zones a horizontal distance of 250 feet from the primary surface centerline and the heliport approach zone centerline.
10. Horizontal Zone - The horizontal zone is established by swinging arcs of 9/ feet radii from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal zone does not include the approach and transitional zones.
11. Conical Zone - The conical zone is established as the area that commences at the periphery of the horizontal zone and extends outward therefrom a horizontal distance of 4,000 feet.

SECTION IV: AIRPORT ZONE HEIGHT LIMITATIONS

Except as otherwise provided in this Ordinance, no structure shall be erected, altered, or maintained, and no tree shall be allowed to grow in any zone created by this Ordinance to a height in excess of the applicable height limit herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

1. Utility Runway Visual Approach Zone - Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
2. Utility Runway Nonprecision Instrument Approach Zone - Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
3. Runway Larger Than Utility Visual Approach Zone - Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
4. Runway Larger Than Utility With A Visibility Minimum Greater Than 3/4 Mile Nonprecision Instrument Approach Zone - Slopes thirty-four (34) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline.

9/ The radius of arc is:

- a) 5,000 feet for all runways designated utility or visual,
- b) 10,000 feet for all others.

The radius of the arcs for each end of the runway shall be the same.
The radius used shall be the longest determined for either end.

5. Runway Larger Than Utility With A Visibility Minimum As Low As 3/4 Mile Nonprecision Instrument Approach Zone - Slopes thirty-four (34) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline.
6. Precision Instrument Runway Approach Zone - Slopes fifty (50) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline; thence slopes upward forty (40) feet horizontally for each foot vertically to an additional horizontal distance of 40,000 feet along the extended runway centerline.
7. Heliport Approach Zone - Slopes eight (8) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a distance of 4,000 feet along the heliport approach zone centerline.
8. Transitional Zones - Slope seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the primary surface and the approach surface, and extending to a height of 150 feet above the airport elevation which is ___ feet above mean sea level. In addition to the foregoing, there are established height limits sloping seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the approach surface, and extending to where they intersect the conical surface. Where the precision instrument runway approach zone projects beyond the conical zone, there are established height limits sloping seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the approach surface, and extending a horizontal distance of 5,000 feet measured at 90 degree angles to the extended runway centerline.
9. Heliport Transitional Zones - Slope two (2) feet outward for each foot upward beginning at the sides of and at the same elevation as the primary surface and the heliport approach zones and extending a distance of 250 feet measured horizontally from and at 90 degree angles to the primary surface centerline and heliport approach zones centerline.
10. Horizontal Zone - Established at 150 feet above the airport elevation or at a height of ___ feet above mean sea level.
11. Conical Zone - Slopes twenty (20) feet outward for each foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending to a height of 350 feet above the airport elevation.

12. Excepted Height Limitations - Nothing in this Ordinance shall be construed as prohibiting the construction or maintenance of any structure, or growth of any tree to a height up to _____ 10/ feet above the surface of the land.

SECTION V: USE RESTRICTIONS

Notwithstanding any other provisions of this Ordinance, no use may be made of land or water within any zone established by this Ordinance in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and others, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.

SECTION VI: NONCONFORMING USES

1. Regulations Not Retroactive - The regulations prescribed by this Ordinance shall not be construed to require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations as of the effective date of this Ordinance, or otherwise interfere with the continuance of nonconforming use. Nothing contained herein shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this Ordinance, and is diligently prosecuted.
2. Marking and Lighting - Notwithstanding the preceding provision of this Section, the owner of any existing nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the _____ 11/ to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport obstruction. Such markers and lights shall be installed, operated, and maintained at the expense of the _____ 12/.

10/ The adoption of height limits should be reasonable and based on land use considerations in the vicinity of the airport and the nature of the area to be zoned. The adoption of height limits should not be so low as to constitute a taking of private property without due process of law.

11/ Insert the title of the appropriate official who has been charged with the responsibility for determining the necessity for marking and lighting.

12/ Insert the name of the appropriate political body or subdivision.

SECTION VII: PERMITS

1. Future Uses - Except as specifically provided in a, b, and c hereunder, no material change shall be made in the use of land, no structure shall be erected or otherwise established, and no tree shall be planted in any zone hereby created unless a permit therefor shall have been applied for and granted. Each application for a permit shall indicate the purpose for which the permit is desired, with sufficient particularity to permit it to be determined whether the resulting use, structure, or tree would conform to the regulations herein prescribed. If such determination is in the affirmative, the permit shall be granted. No permit for a use inconsistent with the provisions of this Ordinance shall be granted unless a variance has been approved in accordance with Section VII, 4.
 - a. In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when, because of terrain, land contour, or topographic features, such tree or structure would extend above the height limits prescribed for such zones.
 - b. In areas lying within the limits of the approach zones, but at a horizontal distance of not less than 4,200 feet from each end of the runway, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when such tree or structure would extend above the height limit prescribed for such approach zones.
 - c. In the areas lying within the limits of the transition zones beyond the perimeter of the horizontal zone, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when such tree or structure, because of terrain, land contour, or topographic features, would extend above the height limit prescribed for such transition zones.

Nothing contained in any of the foregoing exceptions shall be construed as permitting or intending to permit any construction, or alteration of any structure, or growth of any tree in excess of any of the height limits established by this Ordinance except as set forth in Section IV, 12.

2. Existing Uses - No permit shall be granted that would allow the establishment or creation of an obstruction or permit a nonconforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of this Ordinance or any amendments thereto or than it is when the application for a permit is made. Except as indicated, all applications for such a permit shall be granted.

3. Nonconforming Uses Abandoned or Destroyed - Whenever the ____ 13/
determines that a nonconforming tree or structure has been abandoned
or more than 80 percent torn down, physically deteriorated, or decayed,
no permit shall be granted that would allow such structure or tree to
exceed the applicable height limit or otherwise deviate from the
zoning regulations.
4. Variances - Any person desiring to erect or increase the height of any
structure, or permit the growth of any tree, or use property, not in
accordance with the regulations prescribed in this Ordinance, may
apply to the Board of Adjustment for a variance from such regulations.
The application for variance shall be accompanied by a determination
from the Federal Aviation Administration as to the effect of the proposal
on the operation of air navigation facilities and the safe, efficient use
of navigable airspace. Such variances shall be allowed where it is duly
found that a literal application or enforcement of the regulations will
result in unnecessary hardship and relief granted, will not be contrary
to the public interest, will not create a hazard to air navigation, will
do substantial justice, and will be in accordance with the spirit of this
Ordinance. Additionally, no application for variance to the requirements
of this Ordinance may be considered by the Board of Adjustment unless a
copy of the application has been furnished to the ____ 14/ for advice
as to the aeronautical effects of the variance. If the ____ 14/ does
not respond to the application within fifteen (15) days after receipt,
the Board of Adjustment may act on its own to grant or deny said applica-
tion.
5. Obstruction Marking and Lighting - Any permit or variance granted may,
if such action is deemed advisable to effectuate the purpose of this
Ordinance and be reasonable in the circumstances, be so conditioned
as to require the owner of the structure or tree in question to install,
operate, and maintain, at the owner's expense, such markings and lights as
may be necessary. If deemed proper by the Board of Adjustment, this
condition may be modified to require the owner to permit the ____ 12/
at its own expense, to install, operate, and maintain the necessary
markings and lights.

13/ Insert here the title of the appropriate official charged with making
this determination.

14/ Insert here the official or body responsible for operation and
maintenance of the airport to be zoned.

SECTION VIII: ENFORCEMENT

It shall be the duty of the ___ 15/ to administer and enforce the regulations prescribed herein. Applications for permits and variances shall be made to the ___ 15/ upon a form published for that purpose. Applications required by this Ordinance to be submitted to the ___ 15/ shall be promptly considered and granted or denied. Application for action by the Board of Adjustment shall be forthwith transmitted by the ___ 15/.

SECTION IX: BOARD OF ADJUSTMENT

1. There is hereby created a Board of Adjustment to have and exercise the following powers: (1) to hear and decide appeals from any order, requirement, decision, or determination made by the ___ 15/ in the enforcement of this Ordinance; (2) to hear and decide special exceptions to the terms of this Ordinance upon which such Board of Adjustment under such regulations may be required to pass; and (3) to hear and decide specific variances.
2. The Board of Adjustment shall consist of ___ members appointed by the ___ 12/ and each shall serve for a term of ___ years until a successor is duly appointed and qualified. Of the members first appointed, one shall be appointed for a term of ___ year, ___ for a term of ___ years, and ___ for a term of ___ years. Members shall be removable by the appointing authority for cause, upon written charges, after a public hearing.
3. The Board of Adjustment shall adopt rules for its governance and in harmony with the provisions of this Ordinance. Meetings of the Board of Adjustment shall be held at the call of the Chairperson and at such other times as the Board of Adjustment may determine. The Chairperson or, in the absence of the Chairperson, the Acting Chairperson may administer oaths and compel the attendance of witnesses. All hearings of the Board of Adjustment shall be public. The Board of Adjustment shall keep minutes of its proceedings showing the vote of each member upon each question; or if absent or failing to vote, indicating such fact, and shall keep records of its examinations and other official actions, all of which shall immediately be filed in the office of ___ 15/ and on due cause shown.
4. The Board of Adjustment shall make written findings of facts and conclusions of law giving the facts upon which it acted and its legal conclusions from such facts in reversing, affirming, or modifying any order, requirement, decision, or determination which comes before it under the provisions of this Ordinance.

15/ Insert here the title of the appropriate official, such as Director, Department of Public Works, etc.

5. The concurring vote of a majority of the members of the Board of Adjustment shall be sufficient to reverse any order, requirement, decision, or determination of the ____ 15/ or decide in favor of the applicant on any matter upon which it is required to pass under this Ordinance, or to effect variation to this Ordinance.

SECTION X: APPEALS

1. Any person aggrieved, or any taxpayer affected, by any decision of the ____ 15/ made in the administration of the Ordinance, may appeal to the Board of Adjustment.
2. All appeals hereunder must be taken within a reasonable time as provided by the rules of the Board of Adjustment, by filing with the ____ 15/ a notice of appeal specifying the grounds thereof. The ____ 15/ shall forthwith transmit to the Board of Adjustment all the papers constituting the record upon which the action appealed from was taken.
3. An appeal shall stay all proceedings in furtherance of the action appealed from unless the ____ 15/ certifies to the Board of Adjustment, after the notice of appeal has been filed with it, that by reason of the facts stated in the certificate a stay would in the opinion of ____ 15/ cause imminent peril to life or property. In such case, proceedings shall not be stayed except by the order of the Board of Adjustment on notice to the ____ 15/ and on due cause shown.
4. The Board of Adjustment shall fix a reasonable time for hearing appeals, give public notice and due notice to the parties in interest, and decide the same within a reasonable time. Upon the hearing, any party may appear in person or by agent or by attorney.
5. The Board of Adjustment may, in conformity with the provisions of this Ordinance, reverse or affirm, in whole or in part, or modify the order, requirement, decision, or determination appealed from and may make such order, requirement, decision, or determination as may be appropriate under the circumstances.

SECTION XI: JUDICIAL REVIEW

Any person aggrieved, or any taxpayer affected, by any decision of the Board of Adjustment, may appeal to the Court of ____ as provided in Section ____ of Chapter ____ of the Public Laws of ____ 16/.

16/ Insert the jurisdiction. Consideration should be given the desirability of setting forth this procedure here, or as an alternative attaching to all copies of this Ordinance, a copy of excerpts from the statute cited.

SECTION XII: PENALTIES

Each violation of this Ordinance or of any regulation, order, or ruling promulgated hereunder shall constitute a misdemeanor and shall be punishable by a fine of not more than _____ dollars or imprisonment for not more than _____ days or both; and each day a violation continues to exist shall constitute a separate offense.

SECTION XIII: CONFLICTING REGULATIONS

Where there exists a conflict between any of the regulations or limitations prescribed in this Ordinance and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures or trees, and the use of land, or any other matter, the more stringent limitation or requirement shall govern and prevail.

SECTION XIV: SEVERABILITY

If any of the provisions of this Ordinance or the application thereof to any person or circumstances are held invalid, such invalidity shall not affect other provisions or applications of the Ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this Ordinance are declared to be severable.

SECTION XV: EFFECTIVE DATE

WHEREAS, the immediate operation of the provisions of this Ordinance is necessary for the preservation of the public health, public safety, and general welfare, an EMERGENCY is hereby declared to exist, and this Ordinance shall be in full force and effect from and after its passage by the _____ and publication and posting as required by law.
Adopted by the _____ this _____ day of _____, 19____.

APPENDIX 2. SAMPLE ORDINANCE FOR UTILITY-TYPE
AIRPORT WITHOUT INSTRUMENT PROCEDURES

ZONING ORDINANCE TO LIMIT HEIGHT OF OBJECTS AROUND AIRVILLE AIRPORT

AN ORDINANCE REGULATING AND RESTRICTING THE HEIGHT OF STRUCTURES AND OBJECTS OF NATURAL GROWTH, AND OTHERWISE REGULATING THE USE OF PROPERTY, IN THE VICINITY OF THE AIRVILLE AIRPORT BY CREATING THE APPROPRIATE ZONES AND ESTABLISHING THE BOUNDARIES THEREOF; PROVIDING FOR CHANGES IN THE RESTRICTIONS AND BOUNDARIES OF SUCH ZONES; DEFINING CERTAIN TERMS USED HEREIN; REFERRING TO THE AIRVILLE AIRPORT ZONING MAP WHICH IS INCORPORATED IN AND MADE A PART OF THIS ORDINANCE; PROVIDING FOR ENFORCEMENT; ESTABLISHING A BOARD OF ADJUSTMENT; AND IMPOSING PENALTIES.

This Ordinance is adopted pursuant to the authority conferred by Chapter 333 of the Laws of the State of xxxxx. It is hereby found that an obstruction has the potential for endangering the lives and property of users of Airville Airport, and property or occupants of land in its vicinity; that an obstruction may affect existing and future instrument approach minimums of Airville Airport; and that an obstruction may reduce the size of areas available for the landing, takeoff, and maneuvering of aircraft, thus tending to destroy or impair the utility of Airville Airport and the public investment therein. Accordingly, it is declared:

- (1) that the creation or establishment of an obstruction has the potential of being a public nuisance and may injure the region served by Airville Airport;
- (2) that it is necessary in the interest of the public health, public safety, and general welfare that the creation or establishment of obstructions that are a hazard to air navigation be prevented; and
- (3) that the prevention of these obstructions should be accomplished, to the extent legally possible, by the exercise of the police power without compensation.

It is further declared that the prevention of the creation or establishment of hazards to air navigation, the elimination, removal, alteration or mitigation of hazards to air navigation, or marking and lighting of obstructions are public purposes for which a political subdivision may raise and expend public funds and acquire land or interests in land.

IT IS HEREBY ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF INDIAN COUNTY, XXXX, AS FOLLOWS:

SECTION I: SHORT TITLE

This Ordinance shall be known and may be cited as Airville Airport Zoning Ordinance.

SECTION II: DEFINITIONS

As used in this Ordinance, unless the context otherwise requires:

1. AIRPORT - Means Airville Airport.
2. AIRPORT ELEVATION - 100 feet above mean sea level.
3. APPROACH SURFACE - A surface longitudinally centered on the extended runway centerline, extending outward and upward from the end of the primary surface and at the same slope as the approach zone height limitation slope set forth in Section IV of this Ordinance. In plan the perimeter of the approach surface coincides with the perimeter of the approach zone.
4. APPROACH, TRANSITIONAL, HORIZONTAL, AND CONICAL ZONES - These zones are set forth in Section III of this Ordinance.
5. BOARD OF ADJUSTMENT - A board consisting of 3 members appointed by the Board of County Commissioners of Indian County as provided for in Chapter 33 of the Laws of the State of xxxxx.
6. CONICAL SURFACE - A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.
7. HAZARD TO AIR NAVIGATION - An obstruction determined to have a substantial adverse effect on the safe and efficient utilization of the navigable airspace.
8. HEIGHT - For the purpose of determining the height limits in all zones set forth in this Ordinance and shown on the zoning map, the datum shall be mean sea level elevation unless otherwise specified.
9. HORIZONTAL SURFACE - A horizontal plane 150 feet above the established airport elevation, the perimeter of which in plan coincides with the perimeter of the horizontal zone.
10. NONCONFORMING USE - Any pre-existing structure, object of natural growth, or use of land which is inconsistent with the provisions of this Ordinance or an amendment thereto.
11. OBSTRUCTION - Any structure, growth, or other object, including a mobile object, which exceeds a limiting height set forth in Section IV of this Ordinance.

12. PERSON - An individual, firm, partnership, corporation, company, association, joint stock association, or governmental entity; includes a trustee, a receiver, an assignee, or a similar representative of any of them.
13. PRIMARY SURFACE - A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The width of the primary surface is set forth in Section III of this Ordinance. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.
14. RUNWAY - A defined area on an airport prepared for landing and take-off of aircraft along its length.
15. STRUCTURE - An object, including a mobile object, constructed or installed by man, including but without limitation, buildings, towers, cranes, smokestacks, earth formation, and overhead transmission lines.
16. TRANSITIONAL SURFACES - These surfaces extend outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces
17. TREE - Any object of natural growth.
18. UTILITY RUNWAY - A runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.
19. VISUAL RUNWAY - A runway intended solely for the operation of aircraft using visual approach procedures.

SECTION III: AIRPORT ZONES

In order to carry out the provisions of this Ordinance, there are hereby created and established certain zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surfaces, and conical surfaces as they apply to the Airville Airport. Such zones are shown on the Airville Airport Zoning Map consisting of one sheet, prepared by the Department of Public Works and dated August 1, 1975, which

is attached to this Ordinance and made a part hereof. An area located in more than one (1) of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

1. Utility Runway Visual Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 250 feet wide. The approach zone expands outward uniformly to a width of 1,250 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
2. Transitional Zones - The transitional zones are the areas beneath the transitional surfaces.
3. Horizontal Zone - The horizontal zone is established by swinging arcs of 5,000 feet radii from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal zone does not include the approach and transitional zones.
4. Conical Zone - The conical zone is established as the area that commences at the periphery of the horizontal zone and extends outward therefrom a horizontal distance of 4,000 feet.

SECTION IV: AIRPORT ZONE HEIGHT LIMITATIONS

Except as otherwise provided in this Ordinance, no structure shall be erected, altered, or maintained, and no tree shall be allowed to grow in any zone created by this Ordinance to a height in excess of the applicable height limit herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

1. Utility Runway Visual Approach Zone - Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
2. Transitional Zones - Slope seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the primary surface and the approach surface, and extending to a height of 150 feet above the airport elevation which is 100 feet above mean sea level. In addition to the foregoing, there are established height limits sloping seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the approach surface, and extending to where they intersect the conical surface.
3. Horizontal Zone - Established at 150 feet above the airport elevation or at a height of 250 feet above mean sea level.

4. Conical Zone - Slopes 20 feet outward for each foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending to a height of 350 feet above the airport elevation.
5. Excepted Height Limitations - Nothing in this Ordinance shall be construed as prohibiting the construction or maintenance of any structure, or growth of any tree to a height up to 50 feet above the surface of the land.

SECTION V: USE RESTRICTIONS

Notwithstanding any other provisions of this Ordinance, no use may be made of land or water within any zone established by this Ordinance in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and others, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.

SECTION VI: NONCONFORMING USES

1. Regulations Not Retroactive - The regulations prescribed by this Ordinance shall not be construed to require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations as of the effective date of this Ordinance, or otherwise interfere with the continuance of a nonconforming use. Nothing contained herein shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this Ordinance, and is diligently prosecuted.
2. Marking and Lighting - Notwithstanding the preceding provision of this Section, the owner of any existing nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the Director, Department of Public Works, to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport obstruction. Such markers and lights shall be installed, operated, and maintained at the expense of the Indian County Department of Public Works.

SECTION VII: PERMITS

1. Future Uses - Except as specifically provided in a, b, and c hereunder, no material change shall be made in the use of land, no structure shall be erected or otherwise established, and no tree shall be planted in any zone hereby created unless a permit therefor shall have been applied for

and granted. Each application for a permit shall indicate the purpose for which the permit is desired, with sufficient particularity to permit it to be determined whether the resulting use, structure, or tree would conform to the regulations herein prescribed. If such determination is in the affirmative, the permit shall be granted. No permit for a use inconsistent with the provisions of this Ordinance shall be granted unless a variance has been approved in accordance with Section VII, 4.

- a. In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when, because of terrain, land contour, or topographic features, such tree or structure would extend above the height limits prescribed for such zones.
- b. In areas lying within the limits of the approach zones, but at a horizontal distance of not less than 4,200 feet from each end of the runway, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when such tree or structure would extend above the height limit prescribed for such approach zones.
- c. In the areas lying within the limits of the transition zones beyond the perimeter of the horizontal zone, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when such tree or structure, because of terrain, land contour, or topographic features, would extend above the height limit prescribed for such transition zones.

Nothing contained in any of the foregoing exceptions shall be construed as permitting or intending to permit any construction, or alteration of any structure, or growth of any tree in excess of any of the height limits established by this Ordinance except as set forth in Section IV, 5.

2. Existing Uses - No permit shall be granted that would allow the establishment or creation of an obstruction or permit a nonconforming use, structure, or tree to become a greater hazard to air navigation than it was on the effective date of this Ordinance or any amendments thereto or than it is when the application for a permit is made. Except as indicated, all applications for such a permit shall be granted.
3. Nonconforming Uses Abandoned or Destroyed - Whenever the Director, Department of Public Works, determines that a nonconforming tree or structure has been abandoned or more than 80 percent torn down, physically deteriorated, or decayed, no permit shall be granted that would allow such structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations.

4. Variances - Any person desiring to erect or increase the height of any structure, or permit the growth of any tree, or use property, not in accordance with the regulations prescribed in this Ordinance, may apply to the Board of Adjustment for a variance from such regulations. The application for variance shall be accompanied by a determination from the Federal Aviation Administration as to the effect of the proposal on the operation of air navigation facilities and the safe, efficient use of navigable airspace. Such variances shall be allowed where it is duly found that a literal application or enforcement of the regulations will result in unnecessary hardship and relief granted, will not be contrary to the public interest, will not create a hazard to air navigation, will do substantial justice, and will be in accordance with the spirit of this Ordinance. Additionally, no application for variance to the requirements of this Ordinance may be considered by the Board of Adjustment unless a copy of the application has been furnished to the Airport Manager for advice as to the aeronautical effects of the variance. If the Airport Manager does not respond to the application within 15 days after receipt, the Board of Adjustment may act on its own to grant or deny said application.
5. Obstruction Marking and Lighting - Any permit or variance granted may, if such action is deemed advisable to effectuate the purpose of this Ordinance and be reasonable in the circumstances, be so conditioned as to require the owner of the structure or tree in question to install, operate, and maintain, at the owner's expense, such markings and lights as may be necessary. If deemed proper by the Board of Adjustment, this condition may be modified to require the owner to permit the Indian County Department of Public Works, at its own expense, to install, operate, and maintain the necessary markings and lights.

SECTION VIII: ENFORCEMENT

It shall be the duty of the Director, Department of Public Works, to administer and enforce the regulations prescribed herein. Applications for permits and variances shall be made to the Director, Department of Public Works upon a form published for that purpose. Applications required by this Ordinance to be submitted to the Director, Department of Public Works, shall be promptly considered and granted or denied. Application for action by the Board of Adjustment shall be forthwith transmitted by the Director, Department of Public Works.

SECTION IX: BOARD OF ADJUSTMENT

1. There is hereby created a Board of Adjustment to have and exercise the following powers: (1) to hear and decide appeals from any order, requirement, decision, or determination made by the Director, Department of Public Works, in the enforcement of this Ordinance; (2) to hear and decide special exceptions to the terms of this Ordinance upon which such Board of Adjustment under such regulations may be required to pass; and (3) to hear and decide specific variances.

2. The Board of Adjustment shall consist of three members appointed by the Board of County Commissioners and each shall serve for a term of three years until a successor is duly appointed and qualified. Of the members first appointed, one shall be appointed for a term of one year, one for a term of two years, and one for a term of three years. Members shall be removable by the appointing authority for cause, upon written charges, after a public hearing.
3. The Board of Adjustment shall adopt rules for its governance and in harmony with the provisions of this Ordinance. Meetings of the Board of Adjustment shall be held at the call of the Chairperson and at such other times as the Board of Adjustment may determine. The Chairperson or, in the absence of the Chairperson, the Acting Chairperson may administer oaths and compel the attendance of witnesses. All hearings of the Board of Adjustment shall be public. The Board of Adjustment shall keep minutes of its proceedings showing the vote of each member upon each question; or if absent or failing to vote, indicating such fact, and shall keep records of its examinations and other official action, all of which shall immediately be filed in the office of County Clerk and on due cause shown.
4. The Board of Adjustment shall make written findings of facts and conclusions of law giving the facts upon which it acted and its legal conclusions from such facts in reversing, affirming, or modifying any order, requirement, decision, or determination which comes before it under the provisions of this Ordinance.
5. The concurring vote of a majority of the members of the Board of Adjustment shall be sufficient to reverse any order, requirement, decision, or determination of the Director, Department of Public Works, or to decide in favor of the applicant on any matter upon which it is required to pass under this Ordinance, or to effect variation to this Ordinance.

SECTION X: APPEALS

1. Any person aggrieved, or any taxpayer affected, by any decision of the Director, Department of Public Works, made in the administration of the Ordinance, may appeal to the Board of Adjustment.
2. All appeals hereunder must be taken within a reasonable time as provided by the rules of the Board of Adjustment, by filing with the Director, Department of Public Works, a notice of appeal specifying the grounds thereof. The Director, Department of Public Works, shall forthwith transmit to the Board of Adjustment all the papers constituting the record upon which the action appealed from was taken.
3. An appeal shall stay all proceedings in furtherance of the action appealed from unless the Director, Department of Public Works, certifies to the Board of Adjustment, after the notice of appeal has been filed with it, that by reason of the facts stated in the certificate a stay

would in the opinion of the Director, Department of Public Works cause imminent peril to life or property. In such case, proceedings shall not be stayed except by order of the Board of Adjustment or notice to the Director, Department of Public Works, and on due cause shown.

4. The Board of Adjustment shall fix a reasonable time for hearing appeals, give public notice and due notice to the parties in interest, and decide the same within a reasonable time. Upon the hearing, any party may appear in person or by agent or by attorney.
5. The Board of Adjustment may, in conformity with the provisions of this Ordinance, reverse or affirm, in whole or in part, or modify the order, requirement, decision, or determination appealed from and may make such order, requirement, decision, or determination as may be appropriate under the circumstances.

SECTION XI: JUDICIAL REVIEW

Any person aggrieved, or any taxpayer affected, by any decision of the Board of Adjustment, may appeal to the Circuit Court as provided in Section 333.111 of Chapter 333 of the Public Laws of the State of xxxxx.

SECTION XII: PENALTIES

Each violation of this Ordinance or of any regulation, order, or ruling promulgated hereunder shall constitute a misdemeanor and be punishable by a fine of not more than 500 dollars or imprisonment for not more than 180 days or both; and each day a violation continues to exist shall constitute a separate offense.

SECTION XIII: CONFLICTING REGULATIONS

Where there exists a conflict between any of the regulations or limitations prescribed in this Ordinance and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures or trees, and the use of land, or any other matter, the more stringent limitation or requirement shall govern and prevail.

SECTION XIV: SEVERABILITY

If any of the provisions of this Ordinance or the application thereof to any person or circumstances are held invalid, such invalidity shall not affect other provisions or applications of the Ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this Ordinance are declared to be severable.

SECTION XV: EFFECTIVE DATE

WHEREAS, the immediate operation of the provisions of this Ordinance is necessary for the preservation of the public health, public safety, and general welfare, an EMERGENCY is hereby declared to exist, and this Ordinance shall be in full force and effect from and after its passage by the Indian County Board of Commissioners and publication and posting as required by law. Adopted by the Indian County Board of Commissioners this 12th day of October, 1975.

APPENDIX 3. SAMPLE ORDINANCE FOR LARGER THAN UTILITY
TYPE AIRPORT WITH INSTRUMENT APPROACHES

ZONING ORDINANCE TO LIMIT HEIGHT OF OBJECTS AROUND AIRVILLE AIRPORT

AN ORDINANCE REGULATING AND RESTRICTING THE HEIGHT OF STRUCTURES AND OBJECTS OF NATURAL GROWTH, AND OTHERWISE REGULATING THE USE OF PROPERTY, IN THE VICINITY OF THE AIRVILLE AIRPORT BY CREATING THE APPROPRIATE ZONES AND ESTABLISHING THE BOUNDARIES THEREOF; PROVIDING FOR CHANGES IN THE RESTRICTIONS AND BOUNDARIES OF SUCH ZONES; DEFINING CERTAIN TERMS USED HEREIN; REFERRING TO THE AIRVILLE AIRPORT ZONING MAP WHICH IS INCORPORATED IN AND MADE A PART OF THIS ORDINANCE; PROVIDING FOR ENFORCEMENT; ESTABLISHING A BOARD OF ADJUSTMENT; AND IMPOSING PENALTIES.

This Ordinance is adopted pursuant to the authority conferred by Chapter 49 of Statutes of the State of xxxxx. It is hereby found that an obstruction has the potential for endangering the lives and property of users of Airville Airport, and property or occupants of land in its vicinity; that an obstruction may affect existing and future instrument approach minimums of Airville Airport; and that an obstruction may reduce the size of areas available for the landing, takeoff, and maneuvering of aircraft, thus tending to destroy or impair the utility of Airville Airport and the public investment therein. Accordingly, it is declared:

- (1) that the creation or establishment of an obstruction has the potential of being a public nuisance and may injure the region served by Airville Airport;
- (2) that it is necessary in the interest of the public health, public safety, and general welfare that the creation or establishment of obstructions that are a hazard to air navigation be prevented; and
- (3) that the prevention of these obstructions should be accomplished, to the extent legally possible, by the exercise of the police power without compensation.

It is further declared that the prevention of the creation or establishment of hazards to air navigation, the elimination, removal, alteration or mitigation of hazards to air navigation, or marking and lighting of obstructions are public purposes for which a political subdivision may raise and expend public funds and acquire land or interests in land.

IT IS HEREBY ORDAINED BY THE CITY COUNCIL OF AIRVILLE, XXXXX, AS FOLLOWS:

SECTION I: SHORT TITLE

This Ordinance shall be known and may be cited as Airville Airport Zoning Ordinance.

SECTION II: DEFINITIONS

As used in this Ordinance, unless the context otherwise requires:

1. AIRPORT - Means Airville Airport.
2. AIRPORT ELEVATION - 100 feet above mean sea level.
3. APPROACH SURFACE - A surface longitudinally centered on the extended runway centerline, extending outward and upward from the end of the primary surface and at the same slope as the approach zone height limitation slope set forth in Section IV of this Ordinance. In plan the perimeter of the approach surface coincides with the perimeter of the approach zone.
4. APPROACH, TRANSITIONAL, HORIZONTAL, AND CONICAL ZONES - These zones are set forth in Section III of this Ordinance.
5. BOARD OF ADJUSTMENT - A board consisting of 3 members appointed by the City Council as provided in Chapter 12 of the Laws of the State of xxxxx.
6. CONICAL SURFACE - A surface extending outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4,000 feet.
7. HAZARD TO AIR NAVIGATION - An obstruction determined to have a substantial adverse effect on the safe and efficient utilization of the navigable airspace.
8. HEIGHT - For the purpose of determining the height limits in all zones set forth in this Ordinance and shown on the zoning map, the datum shall be mean sea level elevation unless otherwise specified.
9. HORIZONTAL SURFACE - A horizontal plane 150 feet above the established airport elevation, the perimeter of which in plan coincides with the perimeter of the horizontal zone.
10. LARGER THAN UTILITY RUNWAY - A runway that is constructed for and intended to be used by propeller driven aircraft of greater than 12,500 pounds maximum gross weight and jet powered aircraft.
11. NONCONFORMING USE - Any pre-existing structure, object of natural growth, or use of land which is inconsistent with the provisions of this Ordinance or an amendment thereto.

12. NONPRECISION INSTRUMENT RUNWAY - A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in nonprecision instrument approach procedure has been approved or planned.
13. OBSTRUCTION - Any structure, growth, or other object, including a mobile object, which exceeds a limiting height set forth in Section IV of this Ordinance.
14. PERSON - An individual, firm, partnership, corporation, company, association, joint stock association or government entity; includes a trustee, a receiver, an assignee, or a similar representative of any of them.
15. PRECISION INSTRUMENT RUNWAY - A runway having an existing instrument approach procedure utilizing an Instrument Landing System (ILS) or a Precision Approach Radar (FAR). It also means a runway for which a precision approach system is planned and is so indicated on an approved airport layout plan or any other planning document.
16. PRIMARY SURFACE - A surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway; for military runways or when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The width of the primary surface is set forth in Section III of this Ordinance. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline.
17. RUNWAY - A defined area on an airport prepared for landing and take-off of aircraft along its length.
18. STRUCTURE - An object, including a mobile object, constructed or installed by man, including but without limitation, buildings, towers, cranes, smokestacks, earth formation, and overhead transmission lines.
19. TRANSITIONAL SURFACES - These surfaces extend outward at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each foot vertically from the sides of the primary and approach surfaces to where they intersect the horizontal and conical surfaces. Transitional surfaces for those portions of the precision approach surfaces, which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at 90 degree angles to the extended runway centerline.
20. TREE - Any object of natural growth.

21. UTILITY RUNWAY - A runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 pounds maximum gross weight and less.
22. VISUAL RUNWAY - A runway intended solely for the operation of aircraft using visual approach procedures.

SECTION III: AIRPORT ZONES

In order to carry out the provisions of this Ordinance, there are hereby created and established certain zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surfaces, and conical surfaces as they apply to Airville Airport. Such zones are shown on Airville Airport Zoning Map consisting of one sheet, prepared by the Department of Public Works, dated September 1, 1975, which is attached to this Ordinance and made a part hereof. An area located in more than one of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

1. Utility Runway Visual Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 250 feet wide. The approach zone expands outward uniformly to a width of 1,250 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
2. Utility Runway Nonprecision Instrument Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 2,000 feet at a horizontal distance 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
3. Runway Larger Than Utility Visual Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 1,500 feet at a horizontal distance of 5,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
4. Runway Larger Than Utility With A Visibility Minimum Greater Than 3/4 Mile Nonprecision Instrument Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 500 feet wide. The approach zone expands outward uniformly to a width of 3,500 feet at a horizontal distance of 10,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.

5. Runway Larger Than Utility With A Visibility Minimum As Low As 3/4 Mile Nonprecision Instrument Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach zone expands outward uniformly to a width of 4,000 feet at a horizontal distance of 10,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
6. Precision Instrument Runway Approach Zone - The inner edge of this approach zone coincides with the width of the primary surface and is 1,000 feet wide. The approach zone expands outward uniformly to a width of 16,000 feet at a horizontal distance of 50,000 feet from the primary surface. Its centerline is the continuation of the centerline of the runway.
7. Transitional Zones - The transitional zones are the areas beneath the transitional surfaces.
8. Horizontal Zone - The horizontal zone is established by swinging arcs of 5,000 feet radii for all runways designated utility or visual and 10,000 feet for all others from the center of each end of the primary surface of each runway and connecting the adjacent arcs by drawing lines tangent to those arcs. The horizontal zone does not include the approach and transitional zones.
9. Conical Zone - The conical zone is established as the area that commences at the periphery of the horizontal zone and extends outward therefrom a horizontal distance of 4,000 feet.

SECTION IV: AIRPORT ZONE HEIGHT LIMITATIONS

Except as otherwise provided in this Ordinance, no structure shall be erected, altered, or maintained, and no tree shall be allowed to grow in any zone created by this Ordinance to a height in excess of the applicable height herein established for such zone. Such applicable height limitations are hereby established for each of the zones in question as follows:

1. Utility Runway Visual Approach Zone - Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
2. Utility Runway Nonprecision Instrument Approach Zone - Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.
3. Runway Larger Than Utility Visual Approach Zone - Slopes twenty (20) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.

4. Runway Larger Than Utility With A Visibility Minimum Greater Than 3/4 Mile Nonprecision Instrument Approach Zone - Slopes thirty-four (34) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline.
5. Runway Larger Than Utility With A Visibility Minimum As Low As 3/4 Mile Nonprecision Instrument Approach Zone - Slopes thirty-four (34) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline.
6. Precision Instrument Runway Approach Zone - Slopes fifty (50) feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline; thence slopes upward forty (40) feet horizontally for each foot vertically to an additional horizontal distance of 40,000 feet along the extended runway centerline.
7. Transitional Zones - Slope seven (7) feet outward for each foot upward beginning at the sides of and at the same elevation as the primary surface and the approach surface, and extending to a height of 150 feet above the airport elevation which is 100 feet above mean sea level. In addition to the foregoing, there are established height limits sloping seven (7) feet outward for each foot upward beginning at the sides of and the same elevation as the approach surface, and extending to where they intersect the conical surface. Where the precision instrument runway approach zone projects beyond the conical zone, there are established height limits sloping seven (7) feet outward for each foot upward beginning at the sides of and the same elevation as the approach surface, and extending a horizontal distance of 5,000 feet measured at 90 degree angles to the extended runway centerline.
8. Horizontal Zone - Established at 150 feet above the airport elevation or at a height of 250 feet above mean sea level.
9. Conical Zone - Slopes twenty (20) feet outward for each foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending to a height of 350 feet above the airport elevation.
10. Excepted Height Limitations - Nothing in this Ordinance shall be construed as prohibiting the construction or maintenance of any structure, or growth of any tree to a height up to 50 feet above the surface of the land.

SECTION V: USE RESTRICTION

Notwithstanding any other provisions of this Ordinance, no use may be made of land or water within any zone established by this Ordinance in such a manner as to create electrical interference with navigational signals or radio communication between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and others, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, create bird strike hazards, or otherwise in any way endanger or interfere with the landing, takeoff, or maneuvering of aircraft intending to use the airport.

SECTION VI: NONCONFORMING USES

1. Regulations Not Retroactive - The regulations prescribed in this Ordinance shall not be construed to require the removal, lowering, or other change or alteration of any structure or tree not conforming to the regulations as the effective date of this Ordinance, or otherwise interfere with the continuance of a nonconforming use. Nothing contained herein shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this Ordinance, and is diligently prosecuted.
2. Marking and Lighting - Notwithstanding the preceding provision of this Section, the owner of any existing nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the City Manager to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport obstruction. Such markers and lights shall be installed, operated, and maintained at the expense of the City of Airville.

SECTION VII: PERMITS

1. Future Uses - Except as specifically provided in a, b, and c hereunder, no material change shall be made in the use of land, no structure shall be erected or otherwise established, and no tree shall be planted in any zone hereby created unless a permit therefor shall have been applied for and granted. Each application for a permit shall indicate the purpose for which the permit is desired, with sufficient particularity to permit it to be determined whether the resulting use, structure, or tree would conform to the regulations herein prescribed. If such determination is in the affirmative, the permit shall be granted. No permit for a use inconsistent with the provisions of this ordinance shall be granted unless a variance has been approved in accordance with Section VII, 4.

- a. In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when, because of terrain, land contour, or topographic features, such tree or structure would extend above the height limits prescribed for such zones.
- b. In areas lying within the limits of the approach zones but at a horizontal distance of not less than 4,200 feet from each end of the runway, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when such tree or structure would extend above the height limit prescribed for such approach zones.
- c. In the areas lying within the limits of the transition zones beyond the perimeter of the horizontal zone, no permit shall be required for any tree or structure less than seventy-five feet of vertical height above the ground, except when such tree or structure, because of terrain, land contour, or topographic features, would extend above the height limit prescribed for such transition zones.

Nothing contained in any of the foregoing exceptions shall be construed as permitting or intending to permit any construction, or alteration of any structure, or growth of any tree in excess of any of the height limits established by this Ordinance except as set forth in Section IV, 10.

2. Existing Uses - No permit shall be granted that would allow the establishment or creation of an obstruction or permit a nonconforming use, structure, or tree to become a greater hazard to air navigation, than it was on the effective date of this Ordinance or any amendments thereto or than it is when the application for a permit is made. Except as indicated, all applications for such a permit shall be granted.
3. Nonconforming Uses Abandoned or Destroyed - Whenever the City Manager determines that a nonconforming tree or structure has been abandoned or more than 80 percent torn down, physically deteriorated, or decayed, no permit shall be granted that would allow such structure or tree to exceed the applicable height limit or otherwise deviate from the zoning regulations.
4. Variances - Any person desiring to erect or increase the height of any structure, or permit the growth of any tree, or use property, not in accordance with the regulations prescribed in this Ordinance, may apply to the Board of Adjustment for a variance from such regulations. The application for variance shall be accompanied by a determination from the Federal Aviation Administration as to the effect of the proposal on the operation of air navigation facilities and the safe, efficient use of navigable airspace. Such variances shall be allowed where it is duly found that a literal application or enforcement of the regulations will

result in unnecessary hardship and relief granted, will not be contrary to the public interest, will not create a hazard to air navigation, will do substantial justice, and will be in accordance with the spirit of this Ordinance. Additionally, no application for variance to the requirements of this Ordinance may be considered by the Board of Adjustment unless a copy of the application has been furnished to the Airport Manager for advice as to the aeronautical effects of the variance. If the Airport Manager does not respond to the application within 15 days after receipt, the Board of Adjustment may act on its own to grant or deny said application.

5. Obstruction Marking and Lighting - Any permit or variance granted may, if such action is deemed advisable to effectuate the purpose of this Ordinance and be reasonable in the circumstances, be so conditioned as to require the owner of the structure or tree in question to install, operate, and maintain, at the owner's expense, such markings and lights as may be necessary. If deemed proper by the Board of Adjustment, this condition may be modified to require the owner to permit the City of Airville, at its own expense, to install, operate, and maintain the necessary markings and lights.

SECTION VIII: ENFORCEMENT

It shall be the duty of the City Manager to administer and enforce the regulations prescribed herein. Applications for permits and variances shall be made to the City Manager upon a form published for that purpose. Applications required by this Ordinance to be submitted to the City Manager shall be promptly considered and granted or denied. Application for action by the Board of Adjustment shall be forthwith transmitted by the City Manager.

SECTION IX: BOARD OF ADJUSTMENT

1. There is hereby created a Board of Adjustment to have and exercise the following powers: (1) to hear and decide appeals from any order, requirement, decision, or determination made by the City Manager in the enforcement of this Ordinance; (2) to hear and decide special exceptions to the terms of this Ordinance upon which such Board of Adjustment under such regulations may be required to pass; and (3) to hear and decide specific variances.
2. The Board of Adjustment shall consist of three members appointed by the City Council and each shall serve for a term of three years until a successor is duly appointed and qualified. Of the members first appointed, one shall be appointed for a term of one year, one for a term of two years, and one for a term of three years. Members shall be removable by the appointing authority for cause, upon written charges, after a public hearing.

3. The Board of Adjustment shall adopt rules for its governance and in harmony with the provisions of this Ordinance. Meetings of the Board of Adjustment shall be held at the call of the Chairperson and at such other times as the Board of Adjustment may determine. The Chairperson or, in the absence of the Chairperson, the Acting Chairperson may administer oaths and compel the attendance of witnesses. All hearings of the Board of Adjustment shall be public. The Board of Adjustment shall keep minutes of its proceedings showing the vote of each member upon each question; or if absent or failing to vote, indicating such fact, and shall keep records of its examinations and other official actions, all of which shall immediately be filed in the office of the City Clerk and on due cause shown.
4. The Board of Adjustment shall make written findings of facts and conclusions of law giving the facts upon which it acted and its legal conclusions from such facts in reversing, affirming, or modifying any order, requirement, decision, or determination which comes before it under the provisions of this Ordinance.
5. The concurring vote of a majority of the members of the Board of Adjustment shall be sufficient to reverse any order, requirement, decision, or determination of the City Manager or decide in favor of the applicant on any matter upon which it is required to pass under this Ordinance, or to effect variation to this Ordinance.

SECTION X: APPEALS

1. Any person aggrieved, or any taxpayer affected, by any decision of the City Manager, made in the administration of the Ordinance, may appeal to the Board of Adjustment.
2. All appeals hereunder must be taken within a reasonable time as provided by the rules of the Board of Adjustment, by filing with the City Manager a notice of appeal specifying the grounds thereof. The City Manager shall forthwith transmit to the Board of Adjustment all the papers constituting the record upon which the action appealed from was taken.
3. An appeal shall stay all proceedings in furtherance of the action appealed from unless the City Manager certifies to the Board of Adjustment, after the notice of appeal has been filed with it, that by reason of the facts stated in the certificate a stay would in the opinion of the City Manager cause imminent peril to life or property. In such case, proceedings shall not be stayed except by order of the Board of Adjustment or notice to the City Manager and on due cause shown.

4. The Board of Adjustment shall fix a reasonable time for hearing appeals, give public notice and due notice to the parties in interest, and decide the same within a reasonable time. Upon the hearing, any party may appear in person or by agent or by attorney.
5. The Board of Adjustment may, in conformity with the provisions of this Ordinance, reverse or affirm, in whole or in part, or modify the order, requirement, decision, or determination appealed from and may make such order, requirement, decision, or determination as may be appropriate under the circumstances.

SECTION XI: JUDICIAL REVIEW

Any person aggrieved, or any taxpayer affected, by any decision of the Board of Adjustment, may appeal to the Circuit Court as provided in Section III of Chapter 12 of the Public Laws of the State of xxxxx.

SECTION XII: PENALTIES

Each violation of this Ordinance or of any regulation, order, or ruling promulgated hereunder shall constitute a misdemeanor and be punishable by a fine of not more than 500 dollars or imprisonment for not more than 180 days or both; and each day a violation continues to exist shall constitute a separate offense.

SECTION XIII: CONFLICTING REGULATIONS

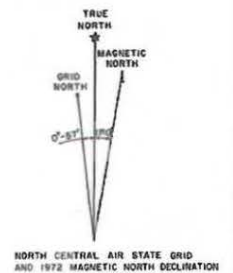
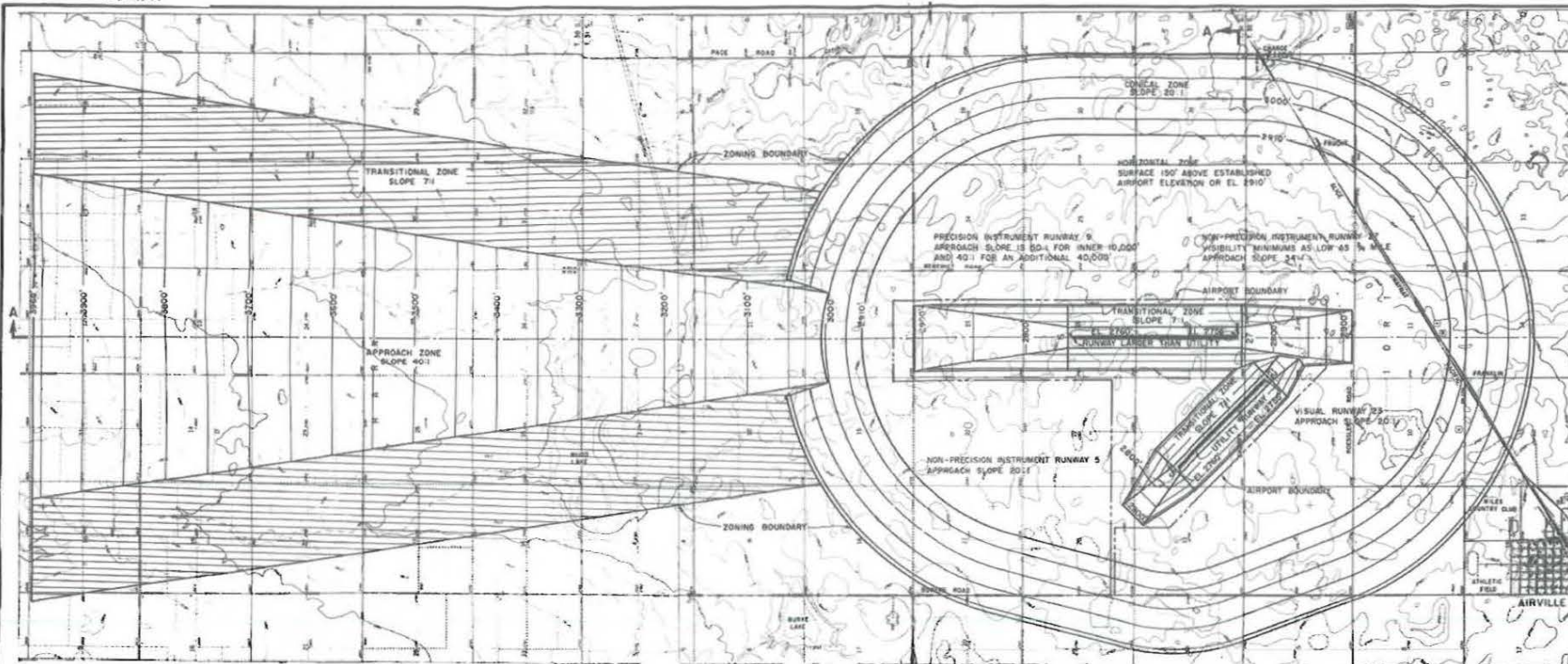
Where there exists a conflict between any of the regulations or limitations prescribed in this Ordinance and any other regulations applicable to the same area, whether the conflict be with respect to the height of structures or trees, and the use of land, or any other matter, the more stringent limitation or requirement shall govern and prevail.

SECTION XIV: SEVERABILITY

If any of the provisions of this Ordinance or the application thereof to any person or circumstances are held invalid, such invalidity shall not affect other provisions or applications of the Ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this Ordinance are declared to be severable.

SECTION XV: EFFECTIVE DATE

WHEREAS, the immediate operation of the provisions of this Ordinance is necessary for the preservation of the public health, public safety, and general welfare, an EMERGENCY is hereby declared to exist, and this Ordinance shall be in full force and effect from and after its passage by the City Council and publication and posting as required by law. Adopted by the City Council this 12th day of October, 1975.



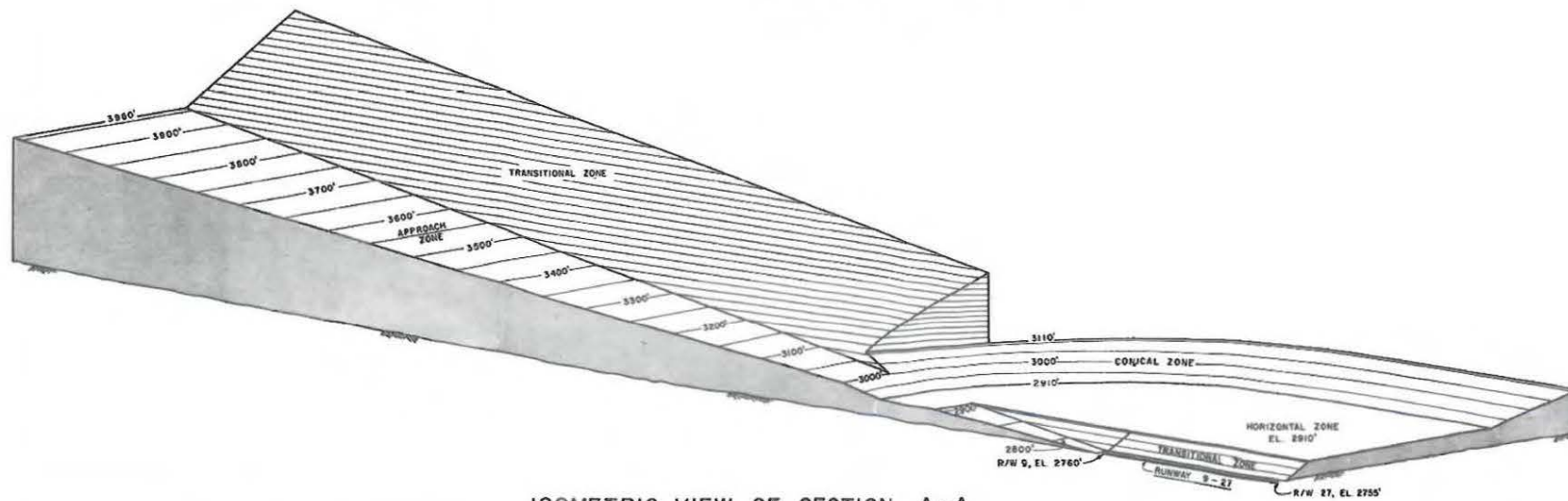
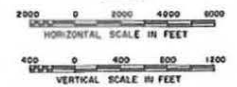
LEGEND

ULTIMATE RUNWAY	—
AIRPORT BOUNDARY	—
ZONE BOUNDARIES	—
TOPOGRAPHIC CONTOURS	—
AERIAL CONTOURS	—
MEDIUM DUTY ROAD	—
LIGHT-DUTY ROAD	—
UNIMPROVED DIRT ROAD	—

NOTES

1. THE AERIAL CONTOURS ILLUSTRATE THE HEIGHT LIMITATIONS WITHIN EACH ZONE.
2. A SLOPE, SUCH AS 20:1 EXPRESSED THE HORIZONTAL DISTANCE OF 20 FEET TO THE VERTICAL DISTANCE OF 1 FOOT.
3. EXISTING TOPOGRAPHIC SYMBOLS ARE THOSE USED BY THE U.S. GEOLOGICAL SURVEY.
4. THE NORTH CENTRAL AIR STATE GRID SYSTEM IS USED.

SCALES



ISOMETRIC VIEW OF SECTION A-A

CITY & COUNTY OF AIRVILLE JOINT ZONING BOARD			
AIRVILLE MUNICIPAL AIRPORT ZONING MAP			
ZONING ORDINANCE ADOPTED (DATE)			
REVISION	APPROVED		
	REVIEWED		
	SUBMITTED		
CHECKED	DATE	DWG BY:	DWG NO.

APPENDIX G

(Information in this appendix is provided as a reference source to assist the users of the AELUP)

AIRPORT AND HELIPORT REGULATIONS

The following regulations may be obtained online at:

http://www.dot.ca.gov/hq/planning/aeronaut/documents/regulations/Regs_pub.pdf

California Code of Regulations

Title 21 Sections 3525 through 3560

AIRPORTS AND HELIPORTS

ARTICLE 1. DEFINITIONS

3525. PREAMBLE

The following rules and regulations are promulgated in accordance with Public Utilities Code, State Aeronautics Act. These rules and regulations do not supersede any of the regulations of the Federal Aviation Administration (FAA). The term "airport" shall apply equally to heliports unless specified for "airports only" or "heliports only".

3526. GENERAL

(a) These regulations are intended to be used in conjunction with relevant FAA Advisory Circulars (ACs); Title 14, Code of Federal Regulations [(CFRs); also referred to as Federal Aviation Regulations (FARs)]; and California Public Utilities Code (PUC), State Aeronautics Act, Sections 21001 et seq.

(b) Variations in proposed sites may justify the Department of Transportation's (Department's) reasonable deviations from the basic requirements contained herein through variances. Any justification for deviation must be balanced against the effect it would have on the safe use of the airport when compared to other advantages of the site.

(c) The Department hereby incorporates by reference pertinent sections of the following FAA ACs, all readily available from the FAA:

AC 70/7460-1J, "Obstruction Marking and Lighting", 1/1/96;
AC 150/5300-13, "Airport Design", 9/29/89, including through Change 4, 11/10/94;
AC 150/5325-4A, "Runway Length Requirements for Airport Design", 1/29/90,
including through Change 1, 3/11/91;
AC 150/5340-1G, "Standards for Airport Markings", 9/27/93;
AC 150/5340-5B, "Segmented Circle Airport Marker System", 12/21/84,
including through Change 1, 2/25/85;
AC 150/5340-24, "Runway & Taxiway Edge Lighting Systems", 9/3/75,
including through Change 1, 11/25/77;
AC 150/5390-2A, "Heliport Design", 1/20/94.

3527. DEFINITIONS

Except as provided in this section, the terms in these regulations are defined in the FARs; FAA ACs; and the PUC, State Aeronautics Act, Sections 21001 et seq.

(a) **Agricultural Airport:** An airport restricted to use only by agricultural aerial applicator aircraft (FAR Part 137 operators).

(b) **Approach Surface:** A surface which begins at the end of the primary surface, with the same width as the primary surface, and extends outward and upward for a horizontal distance, width, and slope in accordance with FAR 77.25(d) for airports only and FAR 77.29(b) for heliports only.

(c) **Approach/Takeoff Path:** The flight track, centered within an approach surface, which helicopters follow when landing at or taking off from a heliport.

(d) **Commercial Activities:** Those activities which may offer a facility, service or commodity for sale, hire, profit, or any other business purpose. Examples of commodities for sale are: food, lodging, entertainment, real estate, petroleum products, parts and equipment. Examples of services are: flight training, charter flights, maintenance, aircraft storage and tie-down. Examples of a facility used for a business purpose are: facility used for the transport of persons for a corporate business purpose and a facility used to transport persons for compensation or hire.

(e) **Design Helicopter:** A generic helicopter which, for helicopters expected to operate at a heliport, reflects the maximum of the following design characteristics: weight, overall length, main rotor diameter, height, and length/width of the undercarriage.

(f) **Displaced Threshold:** A threshold at the approach end of a runway, not located at the physical end of a runway, which designates the beginning of the portion of the runway usable for landing.

(g) **Emergency Medical Services (EMS) Landing Site:** A site used for the landing and taking off of EMS helicopters that is located at or as near as practical to a medical emergency or at or near a medical facility and

(1) has been designated an EMS landing site by an officer authorized by a public safety agency, as defined in PUC Section 21662.1, using criteria that the public safety agency has determined is reasonable and prudent for the safe operation of EMS helicopters and

(2) is used, over any twelve month period, for no more than an average of six landings per month with a patient or patients on the helicopter, except to allow for adequate medical response to a mass casualty event even if that response causes the site to be used beyond these limits, and

(3) is not marked as a permitted heliport as described in Section 3554 of these regulations and

(4) is used only for emergency medical purposes.

(h) Emergency Use Facility: An area for accommodating helicopters in support of emergency public safety agency operations, but it is not used as a heliport for any other purpose.

(i) Final Approach and Takeoff Area (FATO): The area of a heliport over which the final phase of the approach to a hover or a landing is completed and from which the takeoff is initiated.

(j) Heliport: An area of land, water, or structure used or intended to be used for the landing and takeoff of helicopters.

(k) Obstruction to Air Navigation: Any object that is higher than any of the heights defined in FAR 77.23.

(l) Offshore Oil Platform: A structure in the ocean, not connected to the shore by pier, bridge, wharf, dock or breakwater, used in the support of petroleum exploration or production.

(m) Operation: Either the landing or takeoff of an aircraft.

(n) Owner: The person with the authority to possess the facility, which may be in “fee simple” or a leasehold for a period of at least one year.

(o) Personal-Use Airport: An airport limited to the noncommercial activities of an individual owner or family and occasional invited guests.

(p) Primary Surface:

(1) For airports only: A surface longitudinally centered on a runway with a width and length determined in accordance with FAR 77.25(c).

(2) For heliports only: The area of the primary surface, in accordance with FAR 77.29(a), coincides in size and shape with the designated FATO of a heliport. This surface is a horizontal plane at the elevation of the established heliport elevation.

(q) Public-Use Airport: An airport that is open for aircraft operations to the general public and is listed in the current edition of the Airport/Facility Directory that is published by the National Ocean Service of the U.S. Department of Commerce.

(r) Relocated Threshold: Defines the start of the usable portion of a runway, but is not located at the physical end of a runway.

(s) Runway (airports only): A defined rectangular area on an airport prepared for the landing and takeoff of aircraft.

(t) Safety Area:

(1) For airports only: A defined surface surrounding the runway or taxiway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway or taxiway.

(2) For heliports only: A defined area on a heliport surrounding the FATO which is free of objects at or above the elevation of the closest point of the TLOF, other than those required for air navigation purposes, and is intended to reduce the risk of damage to helicopters accidentally diverging from the FATO. Objects required for air navigation purposes within this area shall be on frangible mounts and shall not penetrate the approach or transitional surfaces by more than two inches.

(u) Seaplane Landing Site: An area of water used, or intended for use, for landing and takeoff of seaplanes.

(v) Site Approval Permit: A written approval issued by the Department authorizing construction of an airport in accordance with approved plans, specifications, and conditions.

(w) Special-Use Airport: An airport not open to the general public, access to which is controlled by the owner in support of commercial activities, public service operations and/or personal use.

(x) Taxiway: A designated, but not necessarily paved, path or route for aircraft to taxi from one airport area to another.

(y) Temporary Helicopter Landing Site: A site, other than an emergency medical service landing site at or near a medical facility, which is used for landing and taking off of helicopters and

(1) is used or intended to be used for less than one year, except for recurrent annual events, and

(2) is not marked or lighted to be distinguishable as a heliport and

(3) is not used exclusively for helicopter operations.

(z) Threshold: The beginning of that portion of the runway available and suitable for landing of aircraft.

(aa) Touchdown and Liftoff Area (TLOF): The load bearing area of a heliport that is centered within the FATO and upon which a helicopter lands or takes off.

(bb) Transitional Surface: Surface which extends outward and upward from the lateral boundaries of the primary surface and from the approach surfaces in accordance with FAR 77.25(e) for airports only or FAR 77.29(c) for heliports only.

ARTICLE 2. PERMITS

3530. PERMIT REQUIREMENTS

(a) No person may hold an airport open for use, unless otherwise exempted, without first applying for and obtaining an appropriate permit or authorization as required by the Department.

(b) No aircraft takeoff or landing may be made at a site that is not permitted, exempted, or authorized in accordance with these regulations.

(c) A separate heliport permit is not required for a designated heliport located within the boundaries of a permitted airport if the heliport meets heliport design standards as described in Article 4 of these regulations.

(d) Any permit issued by the Department shall continue in effect so long as the airport meets the conditions under which the permit is issued or until action is taken by the Department to revoke or suspend the permit.

(e) When airport ownership changes, the new airport owner shall submit an application [an Amended/Corrected Airport Permit-Application (DOA-0103 (Rev. 10/96) for airports only) or a Corrected Heliport Permit-Application (DOA-0202 (Rev. 10/96) for heliports only)] and documentation showing who owns the airport to the Department within 30 days of such change.

(f) Before physical or operational changes are made which affect conditions which have been imposed upon operation of the airport, the airport owner shall submit an application [an Amended/Corrected Airport Permit Application (DOA-0103 (Rev. 10/96) for airports only) or a Corrected Heliport Permit Application (DOA-0202 (Rev. 10/96) for heliports only)] and supporting documentation identified on the applicable form to the Department to remove, add or amend the conditions. The application and supporting documentation shall be submitted to the Department by the airport owner at least 30 working days prior to the physical or operational change.

3532. TEMPORARY AIRPORT AUTHORIZATION

(a) No person may make aircraft landings and takeoffs from a nonpermitted or nonexempt site without first applying for and obtaining a temporary airport authorization from the Department to conduct such operations.

(b) For a temporary airport authorization other than for helicopter operations within 1000 feet of a school, a person shall apply for a temporary airport authorization by submitting a letter to the Department. Information to be submitted with the letter, for the application to be complete, is as follows:

- (1) Name of person applying and name of the aircraft operator;
- (2) Site location (latitude and longitude or other descriptive information which will assist in locating site);
- (3) Local area map with site plotted on map (United States Geological Survey, city map, etc.);
- (4) Type(s) of aircraft to use the site;
- (5) Period and expected number of operations (landings and takeoffs);
- (6) Purpose and description of operations;
- (7) Letter or notice of approval from local governing body (city or county); and
- (8) Letter or notice of approval by landowner.

(c) For a temporary airport authorization for helicopter operations within 1000 feet of a school:

(1) No person may takeoff or land a helicopter within 1000 feet of the boundary of any public or private school that maintains kindergarten classes or any classes in grades 1 through 12, unless at a permitted heliport or an EMS landing site, without first applying for and obtaining a Helicopter Landing Authorization (HLA) from the Department or from a public safety agency (PSA) designated by the Department.

(2) To apply for an HLA, a person shall submit to the Department, or to a PSA designated by the Department, a completed Helicopter Landing Authorization-Application [Form DOA-0204 (Rev. 10/96)]. The application shall include the following:

(A) a signed statement from the administration of each school that is within 1000 feet of the proposed helicopter operations stating that the administration does not object to the proposed helicopter operations at the site and the administration waives its right to demand a public hearing in accordance with PUC Section 21662.5 and

(B) a signed statement approving the helicopter operations from the landing site's owner, if the helicopter operations will not be on school property.

(d) The Department shall evaluate temporary airport sites on the basis of the airport design standards in Articles 3 and 4 of these regulations. Variances may be granted from design standards when safety of flight or the interests of the general public are not jeopardized.

(e) Temporary airport authorizations are for specific events and specified time periods.

3533. EXEMPTIONS

(a) All airports in the State of California, except those owned or operated by the United States Government, are subject to the permitting requirements of these regulations.

(b) The following classes of airport are exempt from the permitting requirements of these regulations pursuant to PUC Section 21661:

- (1) Agricultural airports;
- (2) Seaplane landing sites;
- (3) Personal-use airports in unincorporated areas which meet the requirements of Article 5 of these regulations;
- (4) Any airport which has heretofore been established and which is currently being used pursuant to exemption granted under previous regulations of the Department. Such airports shall continue to be exempt, provided the use and conditions pertaining to such exemption continue to be met. Such airports shall be marked in accordance with Section 3560(e) of these regulations;
- (5) Heliports established on offshore oil platforms;
- (6) Temporary helicopter landing sites that are not within 1000 feet of the boundary of a public or private school maintaining kindergarten classes or any classes in grades 1 through 12;
- (7) Emergency medical services (EMS) landing sites; and
- (8) Emergency use facilities.

(c) An owner of an exempt airport may apply for a permit under these regulations.

(d) The above listed exemptions do not supersede or negate any requirements of Federal agencies or local government jurisdictions.

(e) An airport's exemption ceases if the airport's owner no longer operates the airport within the limitations of the exemption.

3534. APPLICATIONS FOR AN AIRPORT PERMIT

(a) Application to construct or establish an airport for which a permit is required in accordance with these regulations shall, prior to the construction or establishment of the proposed airport, be submitted to the Department for approval on a Site Approval Permit Application form [DOA-0100, (Rev. 10/96) for airports only or DOA-0201, (Rev. 10/96) for heliports only].

(b) For the Department to consider an application complete, the following items shall be submitted as a part of the Site Approval Permit Application:

(1) Two copies of scaled drawings of the airport and adjoining areas that show:

(A) the airport meets or exceeds the design standards established in Article 3 (for airports only) or Article 4 (for heliports only) of these regulations, unless the Department has granted a variance to a specific standard;

(B) arrows for magnetic and true north;

(C) magnetic alignment of the centerline of each approach surface; for a heliport that has multiple, consecutive approach surfaces which create a sector, include the magnetic alignment of each approach surface which defines the limits of the sector;

(D) locations and heights of structures, highways, railways, above ground wires, above ground cables, poles, fences, vegetation, and other potential obstructions that underlie the airport's imaginary surfaces as defined in FAR Part 77.25 (for airports only) or 77.29 (for heliports only); and

(E) additional information that is pertinent to the safe use of the airport;

(2) Topographic map that shows the location and altitude of the aircraft traffic patterns relative to the airport (for airports only) or the location of the approach surfaces relative to the heliport (for heliports only);

(3) Local area map or drawing depicting the airport and the location of schools, places of public gatherings, and residential areas within two miles of the centerline of a proposed runway or within 1,000 feet of the center of a proposed FATO;

(4) Documentation of approval of the plan for construction by either the Board of Supervisors of the county or the City Council of the city (as appropriate) in which the airport is to be located;

(5) Documentation of action by the Airport Land Use Commission of the county in which the airport is to be located (as appropriate);

Act;

(6) Documentation of compliance with the California Environmental Quality

(7) Documentation showing ownership of the airport; and

(8) FAA Airspace Determination for the airport.

(c) Upon completion of the airport, the airport owner shall notify the Department and request an airport permit authorizing the airport to be opened for operations. The Department shall inspect the airport. If the airport meets all the conditions of the Site Approval Permit, the Department shall issue the airport permit.

(d) Examples of the various application forms are found in the Appendix of these regulations.

3535. PROCESSING TIME

(a) Within 10 working days after receipt of an application for a permit or temporary airport authorization, the Department shall notify the person applying in writing if the application is incomplete. An incomplete application cannot be processed. A complete application will initiate the permitting or authorization process.

(b) The Department's time periods for processing any complete application or notification per Section 3534(c) of these regulations from receipt to the final decision regarding issuance or denial of a permit or authorization are as follows:

- (1) minimum time: 15 working days;
- (2) median time: 30 working days; and
- (3) maximum time: 45 working days, depending on proceedings/outcome of a public hearing or other problems.

3536. REVOCATION AND SUSPENSION

An airport owner may request, by notification in writing to the Department, that the Department suspend or revoke the airport permit.

ARTICLE 3. DESIGN STANDARDS, AIRPORTS ONLY

3540. GENERAL

(a) The information and standards included in this Article establish minimum standards for a permitted airport suitable for airplanes with a design approach speed of less than 91 knots, a wingspan of less than 49 feet, and a maximum certificated takeoff weight of 12,500 pounds or less.

(b) Design standards for runways and taxiways shall be in accordance with FAA ACs.

(c) Obstruction standards and designation of imaginary surfaces related to airports shall be in accordance with FAR Part 77.

(d) The Department may grant variances to these design and obstruction standards. These variances may be granted where reasonable conditions exist and the interests of the general public will not be compromised.

(e) The Department may require flight demonstrations by the airport's owner to assist in determining whether requested variances would affect safety.

3542. AIRPORT DESIGN STANDARDS

As a minimum, the following items are required for a permitted airport:

(a) runway and runway safety area;

(b) a wind cone;

(c) a segmented circle with traffic pattern indicators if:

(1) the airport has right traffic to any runway and

(2) the airport does not have an operational air traffic control tower during all airport operating hours;

(d) runway and taxiway markings in accordance with Section 3543(a) of these regulations;

(e) clear 20:1 approach surfaces to each end of each runway's primary surface or to its displaced threshold;

(f) clear 7:1 transitional surfaces to each runway's primary surface and approach surfaces; and

(g) if night use is planned, airport lighting in accordance with Section 3543(b) of these regulations.

3543. MARKING, LIGHTING, AND VISUAL AIDS

(a) AIRPORT MARKING. Airport markings are as follows:

(1) runway and taxiway markings:

(A) markings for paved runways and taxiways shall be in accordance with FAA AC 150/5340-1G and shall include runway designation numbers, centerline, runway holding position, and, if applicable, displaced or relocated threshold markings. Additionally, a runway that is not open to the general public shall be marked with the letter "R" at each runway end. The "R" shall be at least 20 feet in height and 11 feet in width. Line width shall be 30 inches. The marking is to be painted white and it shall be kept in a clearly distinguishable condition.

(B) markings for unpaved runways shall include delineation of runway ends and, if applicable, displaced threshold bars. Additionally, an unpaved runway that is not open to the general public shall be marked with the letter "R". The "R" shall be located adjacent to the runway as near as practical to either the runway mid-point or each end of the runway, and in a location that is not a hazard to aircraft operations. The "R" shall be at least 20 feet in height and 11 feet in width. Line width shall be 30 inches. The marking shall be a color that provides contrast with the ground and it shall be kept in a clearly distinguishable condition. Any materials used to delineate features on a runway or taxiway or to construct the "R" shall be constructed such that they are not a hazard to aircraft operations.

(2) markings of a closed or abandoned runway shall be in accordance with FAA AC 150/5340-1G.

(b) AIRPORT LIGHTING. An airport lighting system is required for night operations. An airport lighting system consists of the following:

(1) runway edge and threshold lights in accordance with FAA AC 150/5340-24;

(2) a lighted wind cone;

(3) if traffic pattern indicators are required in accordance with Section 3542(c) of these regulations, they shall be illuminated;

(4) if a runway is lighted and it is not open to the general public, at least one "R", as required in Section 3543(a) of these regulations, shall be illuminated; and

(5) obstruction lights as follows:

(A) at a public-use airport, any obstruction to air navigation as defined in FAR 77.23 shall be lighted in accordance with FAA AC 70/7460-1J, unless the FAA has conducted an aeronautical study and determined that the lighting is not necessary for safety and the Department concurs.

(B) at an airport that is not for public-use, the airport owner shall survey the airport area and shall identify objects that are obstructions to air navigation as defined in FAR 77.23. The Department shall evaluate the obstructions and determine whether obstruction lighting is required.

ARTICLE 4. DESIGN STANDARDS, HELIPORTS ONLY

3550. GENERAL

(a) The information and standards included in this Article establish minimum standards for a permitted heliport suitable for a design helicopter.

(b) Design standards for a permitted heliport shall be in accordance with FAA ACs.

(c) Obstruction standards and designation of imaginary surfaces related to heliports shall be in accordance with FAR Part 77.

(d) The Department may grant variances to these design and obstruction standards. These variances may be granted where reasonable conditions exist and the interests of the general public will not be compromised.

(e) The Department may require flight demonstrations by the heliport's owner to assist in determining whether requested variances would affect safety.

3551. HELIPORT DESIGN STANDARDS

As a minimum, the following items are required for a permitted heliport:

(a) final approach and takeoff area (FATO) with:

(1) a length and width or diameter that is at least one and one half times the overall length of the design helicopter. This area shall be free of objects, to include safety nets and guard rails, at or above the closest point of the touchdown and lift-off area (TLOF);

(2) a safety area, surrounding the FATO, that is the greater of one third times the main rotor diameter of the design helicopter or ten feet; and

(3) a load bearing portion that:

(A) is centered within the FATO and, if the entire FATO is not load bearing, is delineated as a TLOF. A delineated TLOF shall be at least 1.5 times the undercarriage length or width, whichever is greater, of the design helicopter;

(B) is free of objects and surface irregularities; and

(C) has a grade that does not exceed 2%. If approved by the Department, the grade may exceed 2% to allow for a curb around the edges so long as the curb is tapered so that it does not present a sharp lip that could create a pivot point for a helicopter's landing gear. If allowed, this curb shall not exceed two inches in height;

(b) a wind cone;

(c) at least one clear 8:1 approach surface to the FATO, centered along an approach/takeoff path;

(d) heliport markings as described in Section 3554(a) of these regulations;

(e) clear 2:1 transitional surfaces to the FATO and approach surfaces; and

(f) if night use is planned, heliport lighting in accordance with Section 3554(b) of these regulations.

3554. MARKING, LIGHTING, AND VISUAL AIDS

(a) HELIPORT MARKING. All markings, except for FATO and TLOF boundary markings, shall be oriented to be legible when flying toward the heliport using the primary approach/takeoff path. Heliport markings are as follows:

(1) an underlined letter "H" that shall be centered within the FATO and it shall be at least 10 feet in height. If the heliport is at a medical facility, the underlined letter "H" shall be red and it shall be imposed in the middle of a 30' white cross. A heliport not open to the public may utilize a company logo or some other marking in lieu of the "H" if approved by the Department;

(2) either FATO or TLOF boundary markings in accordance with Chapter 3 of FAA AC 150/5390-2A. A heliport may have both FATO and TLOF boundary markings;

(3) a heliport not open to the public shall be marked with the letters "PVT" in letters at least 5 feet in height that are located on the FATO;

(4) a heliport that is restricted to helicopters under a certain weight (e.g., rooftop heliport) shall be marked with a weight limit marking, in thousands of pounds, that is located on the FATO;

(5) a landing direction arrow shall be used when an approach/takeoff path is constrained by environmental or safety concerns which require the precise navigation that the arrow affords. An arrow shall not be used for a curved approach; and

(6) markings of a closed or abandoned heliport shall be in accordance with AC 150/5390-2A.

(b) HELIPORT LIGHTING. A heliport lighting system is required for night operations. No lights may penetrate the heliport's primary, approach, or transitional surfaces by more than two inches. Any lighting fixture used shall present a low profile to minimize interference with ground maneuvering and flight operations. A heliport lighting system consists of the following:

(1) perimeter lighting in accordance with Chapter 3 of FAA AC 150/5390-2A. Floodlights may be used in lieu of perimeter lights if approved by the Department. If approved by the Department, floodlights shall be located and oriented so they do not interfere with the pilot's ability to see clearly during takeoff, landing, or taxiing;

(2) a lighted wind cone;

(3) if a landing direction arrow is required in Section 3554(a)(5) of these regulations, the arrow shall have landing direction lights centered within it; and

(4) obstruction lights as follows:

(A) at a public-use heliport, any obstruction to air navigation as defined in FAR 77.23 shall be lighted in accordance with FAA AC 70/7460-1J, unless the FAA has conducted an aeronautical study and determined that the lighting is not necessary for safety and the Department concurs.

(B) at a heliport that is not for public-use, the heliport owner shall survey the heliport area to identify objects that are obstructions to air navigation as defined in FAR 77.23. The Department shall evaluate the obstructions and determine whether obstruction lighting is required.

ARTICLE 5. PERSONAL-USE AIRPORTS

3560. GENERAL

Many elements in the design of Personal-Use airports are at the discretion of the owner. However, the Department requires at least the following:

(a) a runway length and width or FATO dimensions adequate to enable aircraft to operate safely, considering airport location and the performance data of the most demanding aircraft to utilize the airport;

(b) the ends of each runway shall be at least 200 feet from the airport property line or the closest point of each FATO shall be at least 80 feet from the airport property line;

(c) the distance from the runway centerline to the property line of another owner shall be at least 50 feet;

(d) the distance from the taxiway centerline to the property line of another owner shall be at least 50 feet; and

(e) if the airport is identifiable as an airport from the air, it shall be marked with the letter “R” in accordance with Section 3543(a) [for airports only] or the letters “PVT” in accordance with Section 3554(a)(3) [for heliports only]. If an airport lighting system is installed, it shall illuminate the required markings. The Department shall determine whether or not the airport is identifiable from the air if there is a dispute.

APPENDIX

(Sample Application Forms)

APPENDIX H

Information in this appendix is provided as a reference source to assist the users of the AELUP and may be obtained online at:

<http://www.dot.ca.gov/hq/planning/aeronaut/documents/regulations/statenoisestnds.pdf>

NOISE STANDARDS FOR CALIFORNIA AIRPORTS

California Code of Regulations

Title 21(Div.2.5, Ch. 6) Sections 5000 through 5090

SUBCHAPTER 6. NOISE STANDARDS

Article 1. General

5000. Preamble.

The following rules and regulations are promulgated in accordance with Article 3, Chapter 4, Part 1, Division 9, Public Utilities Code (Regulation of Airports) to provide noise standards governing the operation of aircraft and aircraft engines for all airports operating under a valid permit issued by the Department of Transportation. These standards are based upon two separate legal grounds: (1) the power of airport proprietors to impose noise ceilings and other limitations on the use of the airport, and (2) the power of the state to act to an extent not prohibited by federal law. The regulations are designed to cause the airport proprietor, aircraft operator, local governments, pilots, and the department to work cooperatively to diminish noise problems. The regulations accomplish these ends by controlling and reducing the noise impact area in communities in the vicinity of airports.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Amendment filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5001. Definitions.

The definitions in the following subsections apply to this subchapter.

(a) Air Carrier: Air carrier is any aircraft operating pursuant to a federal certificate of public convenience and necessity, including any certificate issued pursuant to 49 U.S.C. Section 1371 and any permit issued pursuant to 49 U.S.C. Section 1371.

(b) Aircraft Operator: Aircraft operator means the legal or beneficial owner of the aircraft with authority to control the aircraft utilization except where the aircraft is leased, the lessee is the operator.

(c) Airport Proprietor: Airport proprietor means the holder of an airport permit issued by the department pursuant to Article 3, Chapter 4, Part 1, Division 9, Public Utilities Code.

(d) Annual CNEL: The annual CNEL, in decibels, is the average (on an energy basis) of the daily CNEL over a 12-month period. The annual CNEL is calculated in accordance with the following:

$$\text{Annual CNEL} = 10 \log_{10} [(1/365) \sum \text{Antilog (CNEL(i)/10)}]$$

where CNEL(i) = the daily CNEL for each day in a continuous 12-month period, and \sum means summation.

When the annual CNEL is approximated by measurements on a statistical basis, as specified in Section 5034, the number 365 is replaced by the number of days for which measurements are obtained.

(e) County: County, as used herein, shall mean the county board of supervisors or its designee authorized to exercise the powers and duties herein specified.

(f) Daily Community Noise Equivalent Level (CNEL): Community noise equivalent level, in decibels, represents the average daytime noise level during a 24-hour day, adjusted to an equivalent level to account for the lower tolerance of people to noise during evening and night time periods relative to the daytime period. Community noise equivalent level is calculated from the hourly noise levels by the following:

$$\text{CNEL} = 10 \log (1/24) [\sum \text{antilog} (\text{HNLD}/10) + 3 \sum \text{antilog} (\text{HNLE}/10) + 10 \sum \text{antilog} (\text{HNLN}/10)]$$

Where

HNLD are the hourly noise levels for the period 0700-1900 hours;

HNLE are the hourly noise levels for the period 1900-2200 hours;

HNLN are the hourly noise levels for the period 2200-0700 hours; and Σ means summation.

(g) Department: Department means the Department of Transportation of the State of California.

(h) General Aviation: General aviation aircraft are all aircraft other than air carrier aircraft and military aircraft.

(i) Hourly Noise Level (HNL): The hourly noise level, in decibels, is the average (on an energy basis) noise level during a particular hour. Hourly noise level is determined by subtracting 35.6 decibels (equal to $10 \log_{10} 3600$) from the noise exposure level measured during the particular hour, integrating for those periods during which the noise level exceeds a threshold noise level.

For implementation in this subchapter of these regulations, the threshold noise level shall be a noise level which is 10 decibels below the numerical value of the appropriate Community Noise Equivalent Level (CNEL) standard specified in Section 5012. At some microphone locations, sources of noise other than aircraft may contribute to the CNEL. Where the airport proprietor can demonstrate that the accuracy of the CNEL measurement will remain within the required tolerance specified in Section 5070, the department may grant a waiver to increase the threshold noise level.

(j) Noise Exposure Level (NEL): The noise exposure level is the level of noise accumulated during a given event, with reference to a duration of one second. More specifically, noise exposure level, in decibels, is the level of the time-integrated A-weighted squared sound pressure for a stated time interval or event, based on the reference pressure of 20 micronewtons per square meter and reference duration of one second.

(k) Noise Impact Area: Noise impact area is the area within the noise impact boundary that is composed of incompatible land use.

(l) Noise Impact Boundary: Noise impact boundary is the locus of points around an airport for which the annual CNEL is equal to the airport noise standard established in Section 5012. The concepts of noise impact boundary and noise impact area are illustrated in Figure 1.

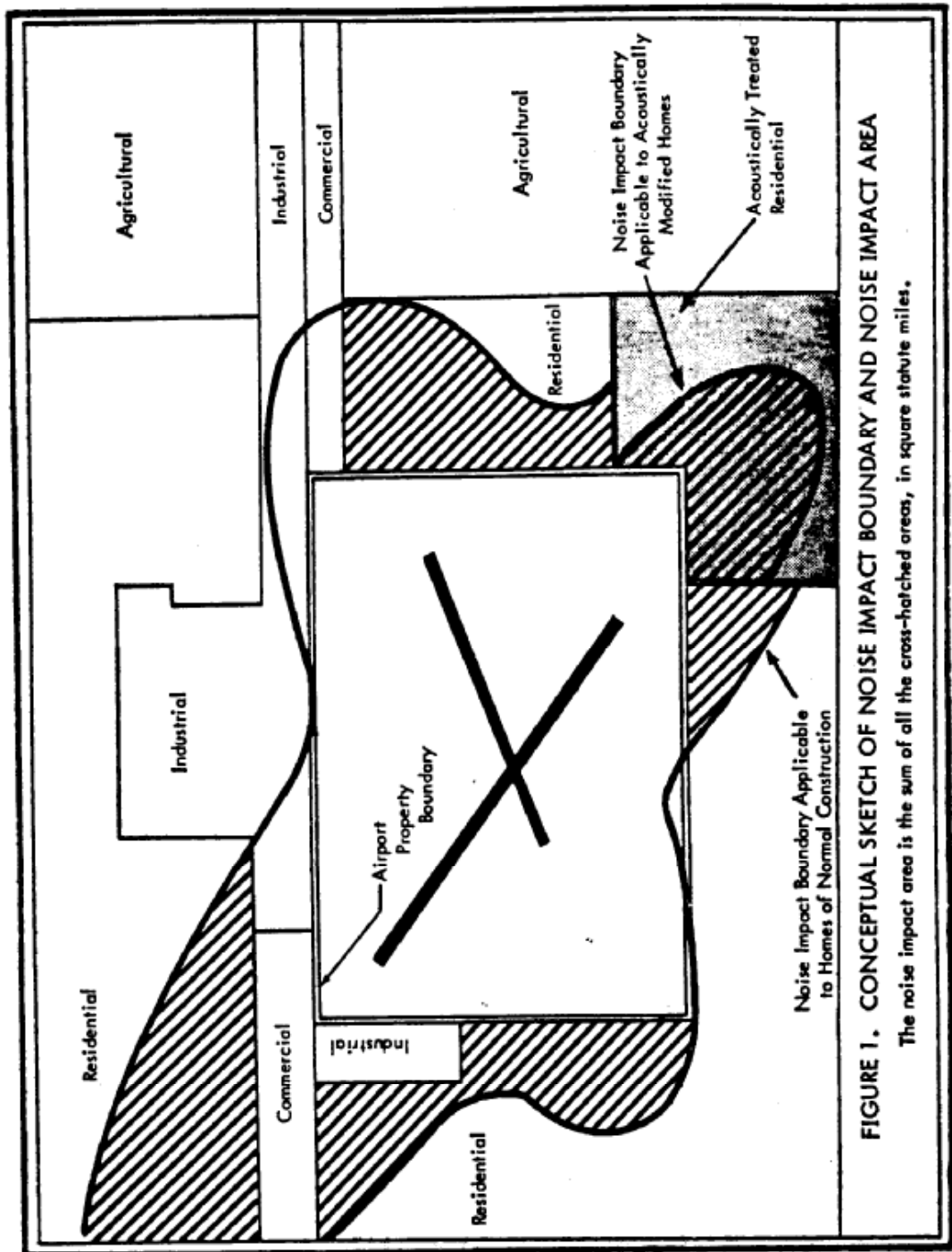


Figure 1. Conceptual Sketch of Noise Impact Boundary and Noise Impact Area

(m) Noise Level (NL): Noise level is the measure in decibels of an A-weighted sound pressure level as measured using the slow dynamic characteristic for sound level meters specified in American National Standard Specification for Sound Level Meters, (ANSI S1.4-1983 as revised by ANSI S1.4A-1985) which is hereby incorporated by reference. The A-weighting characteristic modifies the frequency response of the measuring instrument to account approximately for the frequency characteristics of the human ear. The reference pressure is 20 micronewtons/square meter (2×10^{-4} microbar).

(n) Noise Problem Airport: "Noise problem airport" is an airport that the county in which the airport is located has declared to have a noise problem under section 5020.

(o) Single Event Noise Exposure Level (SENEL): The single event noise exposure level, in decibels, is the noise exposure level of a single event, such as an aircraft flyby, measured over the time interval between the initial and final times for which the noise level of a single event exceeds a predetermined threshold noise level.

(p) Sound Pressure Level (SPL): The sound pressure level, in decibels (dB), of a sound is 20 times the logarithm to the base 10 of the ratio of the pressure of that sound to the reference pressure 20 micronewtons/square meter (2×10^{-4} microbar).

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5001 to Section 5002, and renumbering and amendment of former Section 5006 to Section 5001 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5002. Liberal Construction.

This subchapter shall be liberally construed and applied to promote its underlying purposes which are to protect the public from noise and to resolve incompatibilities between airports and their surrounding neighbors.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering of former Section 5002 to Section 5003, and renumbering of Section 5001 to Section 5002 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5003. Constitutionality.

If any provision of this subchapter or the application thereof to any person or circumstance is held to be unconstitutional, the remainder of the subchapter and the application of such provision to other persons or circumstances shall not be affected thereby.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering of former Section 5003 to Section 5004, and renumbering of former Section 5002 to Section 5003 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5004. Provisions Not Exclusive.

The provisions of this subchapter are not exclusive, and the remedies provided for in this subchapter shall be in addition to any other remedies provided for in any other law or available under common law. It is not the intent of these regulations to preempt the field of aircraft noise limitation in the state. The noise limits specified herein are not intended to prevent any local government to the extent not prohibited by federal law or any airport proprietor from setting more stringent standards.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5004 to Section 5005, and renumbering of former Section 5003 to Section 5004 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5005. Applicability.

These regulations establish to the extent not prohibited by Federal law a mandatory procedure which is applicable to all airports in California that are required to operate under a valid permit issued by the department. These regulations are applicable (to the extent not prohibited by Federal law) to all operations of aircraft and aircraft engines which produce noise.

The regulations established by this subchapter are not intended to set noise levels applicable in litigation arising out of claims for damages occasioned by noise. Nothing herein contained in these regulations shall be construed to prescribe a duty of care in favor of, or to create any evidentiary presumption for use by, any person or entity other than the State of California, counties and airport proprietors in the enforcement of these regulations.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5005 to Section 5006, and renumbering and amendment of former Section 5004 to Section 5005 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5006. Findings.

Citizens residing in the vicinity of airports are exposed to the noise of aircraft operations. There have been numerous instances wherein individual citizens or organized citizen groups have complained about airport noise to various authorities. The severity of these complaints has ranged from a few telephone calls to organized legal action. Many of these cases have been studied by acoustics research workers under sponsorship of governmental and private organizations. These studies have generally shown that the severity of the complaint is principally associated with a combination of the following factors:

- (a) Magnitude and duration of the noise from aircraft operations;
- (b) Number of aircraft operations; and
- (c) Time of occurrence during the day (daytime, evening or night).

There are many reasons given by residents for their complaints; however, those most often cited are interference with speech communication, TV, and sleep. Numerous studies have been made related to speech interference and hearing damage, and some studies have been made related to sleep disturbance and other physiological effects. These studies provide substantial evidence for the relationship between noise level and its interference with speech communication and its effect relative to hearing loss. Significantly less information is available from the results of sleep and physiological studies.

In order to provide a systematic method for evaluating and eventually reducing noise incompatibilities in the vicinity of airports, it is necessary to quantify the noise problem. For this purpose, these regulations establish a procedure for defining a noise impact area surrounding an individual airport. The criteria and noise levels utilized to define the boundaries of the noise impact area have been based on existing evidence from studies of community noise reaction, noise interference with speech and sleep, and noise induced hearing loss.

One of the fundamental philosophies underlying the procedures in these regulations is that any noise quantity specified by these regulations be measurable by relatively simple means. Therefore, these regulations utilize as their basic measure the A-weighted noise level, which is the most commonly accepted simple measure. To insure consistency between criteria and measurement, the units for the criteria are also based on the A-weighted sound level rather than one of the several more complex perceived noise levels.

The level of noise acceptable to a reasonable person residing in the vicinity of an airport is established as a community noise equivalent level (CNEL) value of 65 dB for purposes of these regulations. This criterion level has been chosen for reasonable persons residing in urban residential areas where houses are of typical California construction and may have windows partially open. It has been selected with reference to speech, sleep and community reaction.

It is recognized that there is a considerable individual variability in the reaction to noise. Further, there are several factors that undoubtedly influence this variability and which are not thoroughly understood. Therefore, this criterion level does not have a degree of precision which is often associated with engineering criteria for a physical phenomenon (e.g., the strength of a bridge, building, et cetera). For this reason, the state will review the criterion periodically, taking into account any new information that might become available.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Renumbering and amendment of former Section 5006 to Section 5001, and renumbering and amendment of former Section 5005 to Section 5006 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5010. Purpose.

The purpose of these regulations is to provide a positive basis to accomplish resolution of existing noise problems in communities surrounding airports and to prevent the development of new noise problems. To accomplish this purpose, these regulations establish a quantitative framework within which the various interested parties (i.e., airport proprietors, aircraft operators, local communities, counties and the state) can work together cooperatively to reduce and prevent airport noise problems.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Amendment filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5011. Methodology for Controlling and Reducing Noise Problems.

HISTORY:

1. Renumbering and amendment of former Section 5011 to Section 5037 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5012. Airport Noise Standard.

The standard for the acceptable level of aircraft noise for persons living in the vicinity of airports is hereby established to be a community noise equivalent level of 65 decibels. This standard forms the basis for the following limitation.

No airport proprietor of a noise problem airport shall operate an airport with a noise impact area based on the standard of 65 dB CNEL unless the operator has applied for or received a variance as prescribed in Article 5 of this subchapter.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Repealer of former Section 5012, and renumbering and amendment of former Section 5062 to Section 5012 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5013. Noise Impact Boundary.

HISTORY:

1. Repealer filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5014. Incompatible Land Uses Within the Noise Impact Boundary.

For the purpose of determining the size of the noise impact area, the following land uses are incompatible:

(a) Residences, including but not limited to, detached single-family dwellings, multi-family dwellings, high-rise apartments or condominiums, and mobile homes, unless:

(1) an avigation easement for aircraft noise has been acquired by the airport proprietor, or

(2) the dwelling unit was in existence at the same location prior to January 1, 1989, and has adequate acoustic insulation to ensure an interior CNEL due to aircraft noise of 45 dB or less in all habitable rooms. However, acoustic treatment alone does not convert residences having an exterior CNEL of 75 dB or greater due to aircraft noise to a compatible land use if the residence has an exterior normally occupiable private habitable area such as a backyard, patio, or balcony. Or,

(3) the residence is a high rise apartment or condominium having an interior CNEL of 45 dB or less in all habitable rooms due to aircraft noise, and an air circulation or air conditioning system as appropriate, or

(4) the airport proprietor has made a genuine effort as determined by the department in accordance with adopted land use compatibility plans and appropriate laws and regulations to acoustically treat residences exposed to an exterior CNEL less than 80 dB (75 dB if the residence has an exterior normally occupiable private habitable area such as a backyard, patio, or balcony) or acquire avigation easements, or both, for the residences involved, but the property owners have refused to take part in the program, or

(5) the residence is owned by the airport proprietor.

(b) Public and private schools of standard construction for which an avigation easement for noise has not been acquired by the airport proprietor, or that do not have adequate acoustic performance to ensure an interior CNEL of 45 dB or less in all classrooms due to aircraft noise;

(c) hospitals and convalescent homes for which an avigation easement for noise has not been acquired by the airport proprietor, or that do not have adequate acoustic performance to provide an interior CNEL of 45 dB or less due to aircraft noise in all rooms used for patient care;

(d) churches, synagogues, temples, and other places of worship for which an aviation easement for noise has not been acquired by the airport proprietor, or that do not have adequate acoustic performance to ensure an interior CNEL of 45 dB or less due to aircraft noise.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal 1975) 389 F.Supp. 58.

HISTORY:

1. Amendment filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Registers 79, No. 21 and 78, No. 38.

5015. Changes in Airport Ownership or Control.

NOTE: Authority cited: Section 21243, Public Utilities Code. Reference: Sections 21669-21669.5, Public Utilities Code.

HISTORY:

1. New section filed 5-30-78 as an emergency, effective upon filing (Register 78, No. 22).
2. Certificate of Compliance filed 9-22-78 (Register 78, No. 38).
3. Renumbering and amendment of former Section 5015 to Section 5090 filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

Article 2. Implementation by Counties

5020. Designating Noise Problem Airport.

Any county may, at any time, in accordance with the procedure herein, declare any airport within its boundaries to have a noise problem, by adopting a resolution to this effect and forwarding it to this department. In making the determination, the county shall:

(a) Review relevant information, including but not limited to, the record of complaints made, and litigation filed, by residents of the area regarding airport related aircraft noise.

(b) Investigate the possible existence of a noise impact area.

(c) Coordinate with and give due consideration to the recommendations of the applicable airport land use commission established under section 21670 of the Public Utilities Code.

(d) For an airport with joint use by both military and civilian aircraft operations, base its finding only on civilian operations.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5020 to Section 5032, and new Section 5020 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 78, No. 22.

5021. Review of Finding

Any person or government agency shown, by the results of an investigation conducted under section 5020(b) or by independent competent evidence, to own, reside in, or have jurisdiction over any area within the 65 dB CNEL boundary of any airport may seek review of the finding of the county under section 5020 solely on the issue of substantial evidence by filing a petition to this effect with the department within 10 days of adoption of the finding.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Repealer and new section filed 2-2-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 78, No. 22.

5022. County Enforcement.

The county wherein a noise problem airport is situated shall enforce this subchapter.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5022 to Section 5034, and new Section 5022 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 78, No. 22.

5023. Noise Monitoring.

The county shall require the airport proprietor for each airport within its jurisdiction determined to have a noise problem, for which the estimated location of the noise impact boundary extends into incompatible land uses, to establish a program of noise monitoring to validate the location of the noise impact boundary in accordance with a monitoring plan approved by the department.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Repealer and new section filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 78, No. 22.

5024. Audit.

For each noise problem airport, the county shall review and audit noise monitoring data supplied by the airport proprietor for the purpose of ensuring that the data were produced in accordance with the monitoring system plan approved by the department and that the information presented by the airport proprietor is certified as being true and correct by the person in charge of operating the noise monitoring system. Duplicative monitoring by the county is not required.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering of former Section 5024 to Section 5047, and new Section 5024 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 78, No. 22.

5025. County Report.

The county shall submit quarterly to the department for each noise problem airport within 75 days after the end of each calendar quarter, a report containing at least the following information:

(a) A map illustrating the location of the noise impact boundary, as validated by measurement, and the location of measurement points, in the four preceding calendar quarters;

(b) The annual noise impact area as obtained from the preceding four calendar quarterly reports, an estimate of the number of dwelling units, and the number of people residing therein;

(c) The daily CNEL measurement, together with identification of the date on which each measurement was made, number of total aircraft operations during the calendar quarter, estimated number of operations of the highest noise level aircraft type (as defined in the 14th Code of Federal Regulations, Part 1, for the certification of airmen) in the calendar quarter, and any other data pertinent to the activity. The Hourly Noise Level (HNL) data shall be retained for at least 3 years, and made available to the department upon request.

(d) The quarterly report shall include use of a standard information format provided by the department (form DOA 617, dated 10/89). The standard form provides a listing for certain summary information including size of noise impact area and the aircraft operational data specified in paragraph (c) above.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5025 to Section 5049, and new Section 5025 filed 2-20-90; operative 2-20-90 (Register 90, No. 10). For prior history, see Register 78, No. 22.

Article 3. Implementation by Airport Proprietors

5030. Cooperation with County.

(a) Each airport proprietors shall cooperate with the county in the county's investigations to determine the existence of a noise problem and shall furnish data it may have concerning the location of the 65 and 70 dB CNEL contours upon request by the county.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5060(a) to Section 5030 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For history of former Section 5030, see Register 79, No. 21.

5031. Establishment of the Noise Impact Boundary

Each noise problem airport shall measure, establish and validate noise impact boundaries by noise monitoring as required by this subchapter and shall furnish such information to the county.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5060(b) to Section 5031 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For history of former Section 5031, see Register 79, No. 21.

5032. Validation of the Noise Impact Boundary.

The noise impact boundary shall be validated by measurements made at locations approved for this purpose by the department. The noise problem airport proprietor shall ascertain the noise impact boundary within a tolerance of plus or minus 1.5 decibels annual CNEL by measurements made in accordance with, and at locations designated in, a noise monitoring plan approved by the department. The noise impact boundary may be ascertained directly from information gathered from monitors or from the combined use of an approved computer model and the data reported by the noise monitoring system. Monitoring shall be accomplished at locations in the approved monitoring system layout plan. The locations shall be selected to facilitate locating the maximum extent (closure points) of the noise impact boundary when the contour extremities encompass incompatible land uses.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5020 to Section 5032 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For history of former Section 5032, see Register 79, No. 21.

5033. Submittal of Monitoring Plan.

Each proprietor of a noise problem airport shall submit a description of the proposed monitoring plan to the department for approval containing at least the following information:

- (a) the general monitoring system plan, including at least locations and the type of instrumentation to be employed;
- (b) Justification for any proposed deviations from the measurement system locations specified in these regulations;
- (c) Statistical sampling plan proposed for intermittent monitoring at community locations;
- (d) Additional information as pertinent or as requested by the department.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Renumbering and amendment of former Section 5063 to Section 5033 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5034. Frequency of Measurement.

(a) For airports with 1,000 or more homes within the noise impact boundary based on CNEL of 70 dB, continuous monitoring is required at those monitoring positions which fall within residential areas. Measurement for at least 48 weeks in a year shall be considered as continuous monitoring.

(b) For all other noise problem airports, an intermittent monitoring schedule is allowed. The intermittent monitoring schedule shall be designed so as to obtain the resulting annual CNEL as computed from measurements at each location which will correspond to the value that would be measured by a monitor operated continuously throughout the year at that location, within an accuracy of plus or minus 1.5 dB.

Thus, it is required that the intermittent monitoring schedule be designed to obtain a realistic statistical sample of the noise at each location. As a minimum, this requires that measurements be taken continuously for 24-hour periods during four 7-day samples throughout the year, chosen so that for each sample, each day of the week is represented, the four seasons of the year are represented, and the results account for the effect of annual proportion of runway utilization. At most airports, these intermittent measurements can be accomplished by a single portable monitoring instrument.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5022 to Section 5034 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5035. Schedule of Implementation.

Within 90 days following the declaration by a county that an airport has a noise problem, and current estimates indicate that a noise impact area exists, the airport proprietor shall forward a schedule of major actions and events involved in the initiation of noise monitoring to the county and to the department. The schedule shall include an estimate of the number of dwelling units inside the 70 dB CNEL contour based upon current airport operations, and the forecast dates for budget amendments, contract award,

system design, system construction, system installation, and the system becoming operational in cases where continuous monitoring is required.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. New section filed 2-20-90; operative 3-22-90 (Register 90, No. 9). For history of former Section 5035, see Register 79, No. 21.

5037. Suggested Methodology for Controlling and Reducing Noise Problems.

The methods whereby the impact of airport noise may be controlled and reduced include, but are not limited to, the following:

- (a) Encouraging use of the airport by aircraft classes with lower noise level characteristics and discouraging use by higher noise level aircraft classes;
- (b) Encouraging approach and departure flight paths and procedures to minimize the noise in residential areas;
- (c) Planning runway utilization schedules to take into account adjacent residential areas, noise characteristics of aircraft and noise sensitive time periods;
- (d) Reduction of the flight frequency, particularly in the most noise sensitive time periods and by the noisier aircraft;
- (e) Employing shielding for advantage, using natural terrain, buildings, and other obstructions to noise; and
- (f) Development of compatible land uses within the noise impact boundary through rezoning, acquisition of avigation easements for noise (voluntarily in exchange for acoustical insulation, an agreed fee, or by eminent domain), application of acoustical insulation, or acquisition of property as examples.

Preference shall be given to actions which reduce the impact of airport noise on existing communities. Land use conversion involving existing residential communities shall normally be considered the least desirable action for achieving compliance with these regulations.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5011 to Section 5037 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21).

5039. Grounds for Approval.

Failure of the airport proprietor to comply with the provisions of this subchapter constitutes a ground for revocation of its airport permit.

NOTE: Authority cited: Section 21668, Public Utilities Code. Reference: Section 21668, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5064 to Section 5039 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

Article 4. Implementation by the Department

5040. Departmental Review.

Upon receipt of a petition for review under section 5021, the department shall conduct an investigation on, and make a determination as to, whether the county's finding is based on substantial evidence. If the department determines the county's finding to be not based on substantial evidence, it may either remand the matter to the county for reconsideration or decide the issue on the merits, either classifying the airport as having a noise problem or not. Notice of the determination and of classification as to whether a noise problem

exists, together with the record of the investigation, shall be served by mail on the county, the airport proprietor, and the petitioner. The determination shall, unless a request for hearing is filed, become final on the day after the time for demanding a hearing has lapsed. NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5040 to Section 5048, and new Section 5040 filed 2-20-90; operative 3-22-90 (Register 90, No. 10.) For prior history, see Register 79, No. 21.

5041. Hearing on Determination.

Upon services of a determination, the county, airport proprietor, or petitioner under section 5021, may demand a hearing by notice to the department, county, airport proprietor, petitioner, and any additional parties of interest in writing within 10 days. The department shall then arrange for the hearing in accordance with the Administrative Procedure Act (Government Code, Section 11,500 et seq.) and will give appropriate consideration to the findings and recommendations of the administrative law judge before issuing its final determination.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4 and 21669.6, Public Utilities Code.

HISTORY:

1. New section filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5042. Effective Date of Determination.

Upon a final determination that the county's finding is not based on substantial evidence, the department shall issue a decision regarding whether the airport shall be deemed a noise problem airport.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. New section filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5043. Approval of Noise Monitoring Plans.

The department will consider monitoring system plans filed by airport proprietors for approval in accordance with the requirements of these regulations.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. New section filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5044. Review of Quarterly Reports.

The department will review the data submitted quarterly by the counties for the purpose of assessing progress toward reducing the noise impact area. The department's review will include, but not be limited to, observation of any changes in noise monitor positions, and numerical values of CNEL.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5065 to Section 5044, and new Section 5044 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5045. Retention of Monitoring Data.

The department will maintain the quarterly reports of noise monitoring forwarded by the counties pursuant to these regulations for three years in accordance with the provisions of the California Public Records Act (Government Code, Chapter 3.5, Division 7, Title 1, Section 6250 et seq.).

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5045 to Section 5070, and new Section 5045 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5046. Detailed Specifications.

HISTORY:

1. Renumbering and amendment of former Section 5046 to Section 5071 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5047. Deviations from Specified Measurement Locations.

Recognizing the unique geographic and land use features surrounding specific airports, the department will consider measurement plans tailored to fit any airport for which the specified CNEL monitoring locations are impractical. For example, monitors should not be located on bodies of water or at points where other noise sources might interfere with aircraft CNEL measurements, nor are measurements required in regions where land use will clearly remain compatible.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5047 to Section 5072, and renumbering of former Section 5024 to Section 5047 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5048. Additional Monitoring Locations.

Nothing in this subchapter precludes any airport proprietor from establishing monitors in addition to those required herein.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5048 to Section 5073, and renumbering and amendment of former Section 5040 to Section 5048 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5049. Alternative Measurement Systems.

The use of noise measurement systems that are more extensive or technically improved over those specified herein is encouraged, particularly at airports where a major noise problem requires more comprehensive noise monitoring, for example, to monitor noise abatement flight procedures. Airports contemplating the acquisition of such monitoring systems may apply to the department for exemptions from specific monitoring requirements set forth in this subchapter.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5025 to Section 5049 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

Article 5. Variances

5050. Variances.

In granting variances, the department shall be guided by the underlying policy that the proprietor of each existing airport having a noise impact area be required to develop and implement programs to reduce the noise impact area of the airport to an acceptable degree in an orderly manner over a reasonable period of time.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Repealer of former Section 5050, and renumbering and amendment of former Section 5075(a) to Section 5050 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Registers 85, No. 51 and 79, No. 21.

5051. Variance Request.

A proprietor of a noise problem airport may request variances from the requirement of Section 5012 for periods of not exceeding three years as set forth hereinafter.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5075(b) to Section 5051 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 85, No. 51.

5052. Procedure.

- (a) The airport proprietor shall apply to the department for a variance.
- (b) An application for a variance shall be made upon a form which the department shall make available (DOA Form 618, dated 11-21-89).
- (c) Such application shall set forth the reasons why the airport proprietor believes a variance is necessary. The application shall state the date by which the airport proprietor expects to achieve compliance with the requirement that there not be a noise impact area based upon the airport noise standard identified in Section 5012. The application shall set forth an incremental schedule of noise impact area reductions for the intervening time.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5075(b) (1)-(b) (3) to Section 5052 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 85, No. 51.

5053. Conditions of Variance.

The department may grant a variance if to do so would be in the public interest. In weighing the public interest, the department's considerations include but are not limited to the following:

- (a) The economic and technological feasibility of complying with the noise standards set by these regulations;
 - (b) The noise impact should the variance be granted;
 - (c) The value to the public of the services for which the variance is sought;
- and

(d) Whether the airport proprietor is taking good faith measures to the best of its ability to achieve the airport noise standards.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5075 (b) (4)-(b) (5) to Section 5053 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 85, No. 51.

5054. Reasonable Conditions.

The department in granting a variance may impose reasonable conditions to achieve the purposes of this subchapter of these regulations.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5075(b) (7) to Section 5054 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 85, No. 51.

5055. Hearing.

On its own motion, or upon the request of any person or governmental agency residing, owning property within, or having jurisdiction over, the noise impact area, the department shall hold a public hearing under the provisions of the Administrative Procedure Act on the application for variance. Any person may obtain from the department information on pending requests for variances at any time.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

History:

1. Renumbering and amendment of former Section 5075(b) (6) to Section 5055 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Registers 85, No. 51 and 79, No. 21.

5056. Burden of Proof.

The burden of proof shall be upon the applicant for the variance.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. New section filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5057. Additional Variances.

In the event a variance has been granted and it reasonably appears that the airport proprietor cannot within the term of the variance achieve compliance with the requirement that there be no noise impact area based upon the airport noise standard identified in Section 5012, an application for a further variance from such requirement must be made not less than thirty days before the termination date of the prior variance. In the event timely application is made under the provisions of this section, the prior variance shall continue in effect until the department acts on the application.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: Section 21669, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5075(b) (8) to Section 5057 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 85, No. 51.

Article 6. (Reserved)

5060. Monitoring Requirements.

HISTORY:

1. Renumbering and amendment of former Section 5060(a) to Section 5030 and renumbering and amendment of Section 5060(b) to Section 5031 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5061. Single Event Noise Limit Violations.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Repealer filed 5-23-79; effective thirtieth day thereafter (Register 79, No. 21). For history of former section, see Register 77, No. 10.

5062. Noise Impact Area Violations.

HISTORY:

1. Renumbering and amendment of former Section 5062 to Section 5012 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5063. Submittal of Monitoring Plan.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Amendment filed 5-23-79; effective thirtieth day thereafter (Register 79, No. 21).
2. Renumbering and amendment of former Section 5063 to Section 5033 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5064. Grounds for Approval.

HISTORY:

1. Renumbering and amendment of former Section 5064 to Section 5039 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5065. Implementation by the Department.

HISTORY:

1. Renumbering and amendment of former Section 5065 to Section 5044 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

Article 7. Noise Monitoring System Requirements

5070. General Specifications.

(a) The noise monitoring system shall measure with an accuracy within plus or minus 1.5 dB on the CNEL scale and record the hourly noise level for each hour of the day, together with identification of the hour, and the CNEL for each day.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Repealer of former Section 5070, and renumbering and amendment of former Section 5045 to Section 5070 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5071. Detailed Specifications.

Noise monitoring systems shall comply with the specifications given in Sections 5080 through 5080.5 of these regulations.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5046 to Section 5071 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5072. Field Measurement Requirements.

Specific locations of the monitoring system shall be chosen whenever possible, such that the CNEL from sources other than aircraft in flight is equal to or less than 55dB. This objective may be satisfied by selecting locations in a residential area not immediately adjacent to a noisy industry, freeway, railroad track, et cetera. The measurement microphone shall be placed 20 feet above the ground level, or at least 10 feet above neighboring roof tops, whichever is higher and has a clear line of sight to the path of aircraft in flight.

No obstructions which significantly influence the sound field from the aircraft shall exist within a conical space above the measurement position, the cone being defined by a vertical axis and by a half angle of 75 degrees from that axis.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Renumbering and amendment of former Section 5047 to Section 5072 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5073. Number of Measurement Systems.

The frequency of measurement specified in Section 5034 has been designed to limit the number of monitoring systems required. The minimum number of systems required per airport is one for intermittent measurements of the noise impact boundary.

For continuous monitoring systems the number of monitoring locations will increase where necessary to provide ample information to ensure the accuracy tolerance of plus or minus 1.5 dB CNEL for location of the noise impact boundary in areas where land use is incompatible. The minimum number of continuous monitoring system stations will be determined by the monitoring system layout plan for each individual airport.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Renumbering and amendment of former Section 5048 to Section 5073 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

5075. Variances.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: Section 21669, Public Utilities Code.

HISTORY:

1. New subsection (b) (8) filed 5-23-79; effective thirtieth day thereafter (Register 79, No. 21).
2. Amendment of subsection (b) filed 12-16-85; effective thirtieth day thereafter (Register 85, No. 51).
3. Renumbering and amendment of former Section 5075 (a) to Section 5050 and renumbering and amendment of former Section 5075 (b) to Sections 5051-5055 and 5057 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Registers 85, No. 51 and 79, No. 21.

Article 8. Specification: Noise Monitoring System

5080. Purpose and Scope.

(a) Purpose. This specification establishes the minimum requirements for instrumentation to be utilized by airport proprietors required to monitor aircraft noise in accordance with this subchapter.

(b) Scope. The measurement systems defined herein shall be used to monitor noise levels at specifically designated locations in a community surrounding an airport.

(c) Design Goals. The design goals for the noise monitoring system are accuracy, reliability, and ease of maintenance. The measurement techniques set forth herein are sufficiently uncomplicated so that current state-of-the-art instrumentation equipment may be used. The monitor system specifications are not intended to be unduly restrictive in specifying individual system components. The specifications allow the utilization of equipment ranging from analog systems to automated computer systems. The exact configuration will depend upon the specific monitoring requirement and the nature of existing user instrumentation.

This is a total systems specification. It is the prerogative of the user to configure the system with components that will be most compatible with his existing equipment and personnel.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Amendment of subsection (b) filed 5-23-79; effective thirtieth day thereafter (Register 79, No. 21).
2. Amendment filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5080.1. Additional Definitions Applicable to Article 8.

(a) Field Instrumentation. Field instrumentation are those elements or components of a noise monitoring system that are exposed to the outdoor environment in the vicinity of the measurement microphone. This equipment functions within specification during exposure to a year-around environment adjacent to any public use airport in the state of California.

(b) Centralized Instrumentation. Centralized Instrumentation are those elements of a noise monitoring system that are contained in an environmentally-controlled room.

(c) HNL Monitoring System. The HNL monitoring system is one which measures the hourly noise level and provides identification of the hour. This system is deployed as a community monitoring system. An HNL system consists of two subsystems: a noise level subsystem and an integrator/logger subsystem.

(d) Noise Level Subsystem. Noise level subsystem is a subsystem composed of a microphone, an A-weighted filter, a squaring circuit and a lag network. This subsystem is used to derive a signal representing the mean square, A-weighted value of acoustic pressure.

(e) Integrator/Logger Subsystem. Integrator/logger subsystem is a subsystem composed of a threshold comparator, an integrator, a clock, an accumulator, a logger or printer and a logarithmic converter. This subsystem is used to transform the output from a noise level subsystem in excess of a pre-set threshold into HNL.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Amendment filed 5-23-79; effective thirtieth day thereafter (Register 79, No. 21).
2. Amendment filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5080.2. Examples of Possible System Configurations.

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Amendment filed 5-23-79; effective thirtieth day thereafter (Register 79, No. 21).
2. Repealer filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5080.3. Performance Specifications.

(a) Overall Accuracy. The overall accuracy of the HNL Monitoring System shall be plus or minus 1.5 dB when measuring noise from aircraft in flight. It is the intent of the following specifications to verify this accuracy with laboratory simulation.

(b) Noise Level Subsystem.

(1) Frequency Response and Microphone Characteristics. The frequency response, and associated tolerance of the subsystem, shall be in accordance with American National Standard Specification For Sound Level Meters (ANSI S1.4-1983, as amended by ANSI S1.4A-1985) for Type 1 precision sound level meters for the A-weighting network, which is hereby incorporated by reference.

(2) Dynamic Range. The system output shall be proportional to the antilog of the noise level over a noise level range of at least 60 dB to 120 dB. For the noise level subsystem, the internal electrical noise shall not exceed an equivalent input noise level of 50 dB, and the full scale range of 120 dB shall apply to signals with a crest factor as great as 3:1.

(3) Linearity. The electrical amplitude response to sine waves in the frequency range of 22.4 Hz to 11,200 Hz shall be linear within one decibel from 30 dB below each full scale range up to 7dB above the full scale range on any given range of the instrument.

(c) Integrator/Logger Subsystem.

(1) Threshold Comparator. For HNL, the threshold level shall be adjustable over a noise level range of at least 55 to 70 dB. Threshold triggering shall be repeatable within plus or minus 0.5 dB.

(2) Clock. The clock shall be capable of being set to the time of day within an accuracy of 10 seconds and shall not drift more than 20 seconds in a 24-hour period.

(3) End-to-End Accuracy. The end-to-end accuracy of the integrator/logger subsystem is defined in terms of a unipolar, positive-going square wave input. The logged, integrated output of the system shall fall within plus or minus 1 dB of the true value predicted for the wave of a given duration at an amplitude exceeding the measurement threshold by at least 10 dB, and at all higher amplitudes within the range. The square wave shall be applied at the input to the integrator and level comparator.

(A) HNL Integrator/Logger Subsystem.

1. For each hour during which no noise event exceeds the HNL system noise level threshold, the subsystem shall output the time on the hour, and indicate that the antilog of the HNL for the preceding hour is zero.

2. The overall accuracy of a noise monitoring system pursuant to these regulations shall be determined over a range of HNL from 45 dB to 95 dB for each combination of the following conditions which gives a value in this range:

a. Square waves, as defined above, shall have repetitions of 1, 3, 10, 30 and 100 cycles.

b. Square waves shall have durations of 40, 20, 10, and 5 seconds.

c. Square waves shall have amplitudes equivalent to sound pressure levels of 70, 80, 90, 100 and 110 dB.

d. Overall System Accuracy Demonstration. The overall system accuracy shall be demonstrated for several conditions within each of the above specified ranges, utilizing a 1000 Hz sinusoidal acoustic plane wave oriented along the preferred plane wave axis of the microphone, or an equivalent signal generated in an acoustic coupler:

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Repealer of subsection (d) (1) filed 5-23-79; effective thirtieth day thereafter (Register 79, No. 21).
2. Amendment filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5080.4. Field Calibration.

The monitoring system shall include an internal electrical means to electrically check and maintain calibration without resort to additional equipment. Provision shall also be made to enable calibration with an external acoustic coupler.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. New NOTE filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

5080.5. Environmental Precautions and Requirements.

(a) The field instrumentation shall be provided with suitable protection such that the system performance specified will not be degraded while the system is operating within the range of weather conditions encountered at airports within the State of California.

(b) Humidity. The effect of changes in relative humidity on sensitivity of field instrumentation shall be less than 0.5 decibel at any frequency between 22.4 and 11,200 Hz in the range of 5 to 100 percent relative humidity.

(c) Vibration. The field instrumentation shall be designed and constructed to minimize the effects of vibration resulting from mechanical excitation. Shock mounting of the field instrumentation shall be provided as required to preclude degradation of system performance.

(d) Acoustic Noise. The field instrumentation shall be designed and constructed so as to minimize effects of vibration resulting from airborne noise, and shall operate in an environment of 125 dB SPL-broadband noise over a frequency range of 22.4 to 11,200 Hz-without degradation of system performance.

(e) Magnetic, Electrostatic and Radio Frequency Interference. The effects of magnetic, electrostatic and radio frequency interference shall be reduced to a minimum. The magnitude of such fields which would degrade the performance of the system in accordance with the specifications in Section 5080.3 shall be determined and stated.

(f) Windscreen. A windscreen suitable for use with the microphone shall be used at all times. The windscreen shall be designed so that for windspeeds of 20 miles per hour or less, the overall accuracy of the measurement system specified in Section 5080.3(a) is not compromised.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Amendment of subsections (c) and (e) filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

Article 9. Changes in Airport Ownership

5090. Changes in Airport Ownership or Control.

In the case of a change in airport ownership or control, the new airport proprietor shall be deemed to be in full compliance with these regulations until such time as the department takes final action on the new proprietor's application for a variance in accordance with Article 5, provided, however, that the new proprietor complies with the following:

(a) The new proprietor shall make application to the department for a variance within twenty (20) days after assuming ownership or control, and

(b) The new proprietor, in operating the airport, shall not permit or authorize any activity in conjunction with the airport that results in an increase of the size of the noise impact area.

NOTE: Authority cited: Section 21669, Public Utilities Code. Reference: Sections 21669-21669.4, Public Utilities Code.

HISTORY:

1. Renumbering and amendment of former Section 5015 to Section 5090 filed 2-20-90; operative 3-22-90 (Register 90, No. 10). For prior history, see Register 79, No. 21.

FIGURE 4. TYPICAL HOURLY NOISE LEVEL (HNL) SYSTEM

NOTE: Authority cited: Sections 21243 and 21669, Public Utilities Code. Reference: *Air Transport Association of America v. Crotti* (N.D.Cal. 1975) 389 F.Supp. 58.

HISTORY:

1. Repealer of Figure 4, and renumbering of Figure 5 to Figure 4 filed 5-23-79; effective thirtieth day thereafter (Register 79, No. 21).
2. Repealer filed 2-20-90; operative 3-22-90 (Register 90, No. 10).

(Next page is 245)

APPENDIX I

(Information in this appendix is provided as a reference source to assist the users of the AELUP.)

FAA Advisory Circular No. 150/5200-33B: Hazardous Wildlife Attractants On or Near Airports

The document may be found online at:

https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_150_5200-33B.pdf



U.S. Department
of Transportation

**Federal Aviation
Administration**

Advisory Circular

**Subject: HAZARDOUS WILDLIFE
ATTRACTANTS ON OR NEAR
AIRPORTS**

Date: 8/28/2007

AC No: 150/5200-33B

Initiated by: AAS-300 **Change:**

1. PURPOSE. This Advisory Circular (AC) provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports. It also discusses airport development projects (including airport construction, expansion, and renovation) affecting aircraft movement near hazardous wildlife attractants. Appendix 1 provides definitions of terms used in this AC.

2. APPLICABILITY. The Federal Aviation Administration (FAA) recommends that public-use airport operators implement the standards and practices contained in this AC. The holders of Airport Operating Certificates issued under Title 14, Code of Federal Regulations (CFR), Part 139, Certification of Airports, Subpart D (Part 139), may use the standards, practices, and recommendations contained in this AC to comply with the wildlife hazard management requirements of Part 139. Airports that have received Federal grant-in-aid assistance must use these standards. The FAA also recommends the guidance in this AC for land-use planners, operators of non-certificated airports, and developers of projects, facilities, and activities on or near airports.

3. CANCELLATION. This AC cancels AC 150/5200-33A, *Hazardous Wildlife Attractants on or near Airports*, dated July 27, 2004.

4. PRINCIPAL CHANGES. This AC contains the following major changes, which are marked with vertical bars in the margin:

- a. Technical changes to paragraph references.
- b. Wording on storm water detention ponds.
- c. Deleted paragraph 4-3.b, *Additional Coordination*.

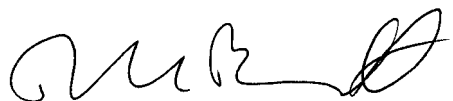
5. BACKGROUND. Information about the risks posed to aircraft by certain wildlife species has increased a great deal in recent years. Improved reporting, studies, documentation, and statistics clearly show that aircraft collisions with birds and other wildlife are a serious economic and public safety problem. While many species of wildlife can pose a threat to aircraft safety, they are not equally hazardous. Table 1

ranks the wildlife groups commonly involved in damaging strikes in the United States according to their relative hazard to aircraft. The ranking is based on the 47,212 records in the FAA National Wildlife Strike Database for the years 1990 through 2003. These hazard rankings, in conjunction with site-specific Wildlife Hazards Assessments (WHA), will help airport operators determine the relative abundance and use patterns of wildlife species and help focus hazardous wildlife management efforts on those species most likely to cause problems at an airport.

Most public-use airports have large tracts of open, undeveloped land that provide added margins of safety and noise mitigation. These areas can also present potential hazards to aviation if they encourage wildlife to enter an airport's approach or departure airspace or air operations area (AOA). Constructed or natural areas—such as poorly drained locations, detention/retention ponds, roosting habitats on buildings, landscaping, odor-causing rotting organic matter (putrescible waste) disposal operations, wastewater treatment plants, agricultural or aquaculture activities, surface mining, or wetlands—can provide wildlife with ideal locations for feeding, loafing, reproduction, and escape. Even small facilities, such as fast food restaurants, taxicab staging areas, rental car facilities, aircraft viewing areas, and public parks, can produce substantial attractions for hazardous wildlife.

During the past century, wildlife-aircraft strikes have resulted in the loss of hundreds of lives worldwide, as well as billions of dollars in aircraft damage. Hazardous wildlife attractants on and near airports can jeopardize future airport expansion, making proper community land-use planning essential. This AC provides airport operators and those parties with whom they cooperate with the guidance they need to assess and address potentially hazardous wildlife attractants when locating new facilities and implementing certain land-use practices on or near public-use airports.

6. MEMORANDUM OF AGREEMENT BETWEEN FEDERAL RESOURCE AGENCIES. The FAA, the U.S. Air Force, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture - Wildlife Services signed a Memorandum of Agreement (MOA) in July 2003 to acknowledge their respective missions in protecting aviation from wildlife hazards. Through the MOA, the agencies established procedures necessary to coordinate their missions to address more effectively existing and future environmental conditions contributing to collisions between wildlife and aircraft (wildlife strikes) throughout the United States. These efforts are intended to minimize wildlife risks to aviation and human safety while protecting the Nation's valuable environmental resources.



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Director, Office of Airport Safety
and Standards

Table 1. Ranking of 25 species groups as to relative hazard to aircraft (1=most hazardous) based on three criteria (damage, major damage, and effect-on-flight), a composite ranking based on all three rankings, and a relative hazard score. Data were derived from the FAA National Wildlife Strike Database, January 1990–April 2003.¹

Species group	Ranking by criteria			Composite ranking ²	Relative hazard score ³
	Damage ⁴	Major damage ⁵	Effect on flight ⁶		
Deer	1	1	1	1	100
Vultures	2	2	2	2	64
Geese	3	3	6	3	55
Cormorants/pelicans	4	5	3	4	54
Cranes	7	6	4	5	47
Eagles	6	9	7	6	41
Ducks	5	8	10	7	39
Osprey	8	4	8	8	39
Turkey/pheasants	9	7	11	9	33
Hérons	11	14	9	10	27
Hawks (buteos)	10	12	12	11	25
Gulls	12	11	13	12	24
Rock pigeon	13	10	14	13	23
Owls	14	13	20	14	23
H. lark/s. bunting	18	15	15	15	17
Crows/ravens	15	16	16	16	16
Coyote	16	19	5	17	14
Mourning dove	17	17	17	18	14
Shorebirds	19	21	18	19	10
Blackbirds/starling	20	22	19	20	10
American kestrel	21	18	21	21	9
Meadowlarks	22	20	22	22	7
Swallows	24	23	24	23	4
Sparrows	25	24	23	24	4
Nighthawks	23	25	25	25	1

¹ Excerpted from the *Special Report for the FAA, "Ranking the Hazard Level of Wildlife Species to Civil Aviation in the USA: Update #1, July 2, 2003"*. Refer to this report for additional explanations of criteria and method of ranking.

² Relative rank of each species group was compared with every other group for the three variables, placing the species group with the greatest hazard rank for ≥ 2 of the 3 variables above the next highest ranked group, then proceeding down the list.

³ Percentage values, from Tables 3 and 4 in Footnote 1 of the *Special Report*, for the three criteria were summed and scaled down from 100, with 100 as the score for the species group with the maximum summed values and the greatest potential hazard to aircraft.

⁴ Aircraft incurred at least some damage (destroyed, substantial, minor, or unknown) from strike.

⁵ Aircraft incurred damage or structural failure, which adversely affected the structure strength, performance, or flight characteristics, and which would normally require major repair or replacement of the affected component, or the damage sustained makes it inadvisable to restore aircraft to airworthy condition.

⁶ Aborted takeoff, engine shutdown, precautionary landing, or other.

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SECTION 1.

GENERAL SEPARATION CRITERIA FOR HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS.

1-1. INTRODUCTION. When considering proposed land uses, airport operators, local planners, and developers must take into account whether the proposed land uses, including new development projects, will increase wildlife hazards. Land-use practices that attract or sustain hazardous wildlife populations on or near airports can significantly increase the potential for wildlife strikes.

The FAA recommends the minimum separation criteria outlined below for land-use practices that attract hazardous wildlife to the vicinity of airports. Please note that FAA criteria include land uses that cause movement of hazardous wildlife onto, into, or across the airport's approach or departure airspace or air operations area (AOA). (See the discussion of the synergistic effects of surrounding land uses in Section 2-8 of this AC.)

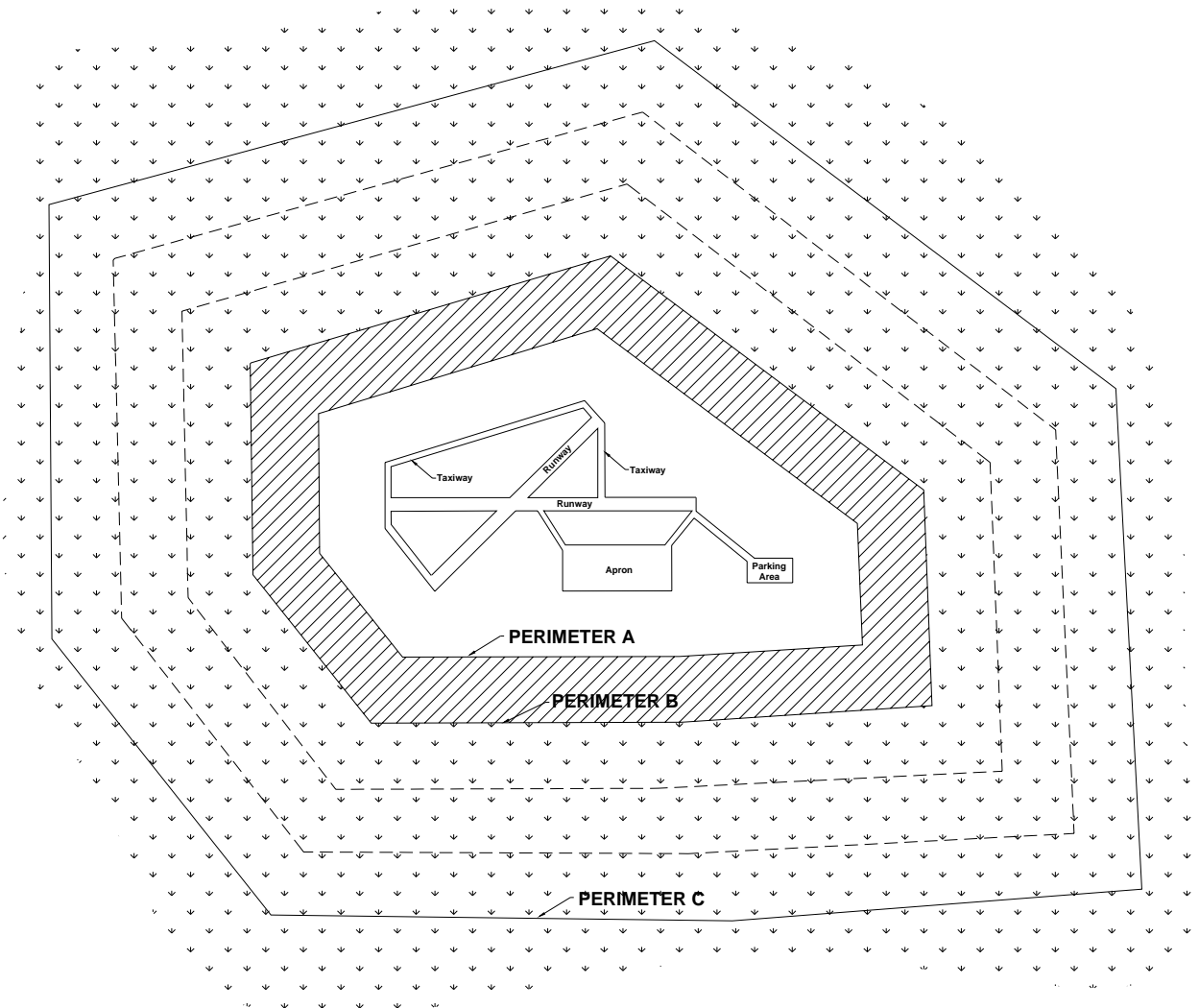
The basis for the separation criteria contained in this section can be found in existing FAA regulations. The separation distances are based on (1) flight patterns of piston-powered aircraft and turbine-powered aircraft, (2) the altitude at which most strikes happen (78 percent occur under 1,000 feet and 90 percent occur under 3,000 feet above ground level), and (3) National Transportation Safety Board (NTSB) recommendations.

1-2. AIRPORTS SERVING PISTON-POWERED AIRCRAFT. Airports that do not sell Jet-A fuel normally serve piston-powered aircraft. Notwithstanding more stringent requirements for specific land uses, the FAA recommends a separation distance of 5,000 feet at these airports for any of the hazardous wildlife attractants mentioned in Section 2 or for new airport development projects meant to accommodate aircraft movement. This distance is to be maintained between an airport's AOA and the hazardous wildlife attractant. Figure 1 depicts this separation distance measured from the nearest aircraft operations areas.

1-3. AIRPORTS SERVING TURBINE-POWERED AIRCRAFT. Airports selling Jet-A fuel normally serve turbine-powered aircraft. Notwithstanding more stringent requirements for specific land uses, the FAA recommends a separation distance of 10,000 feet at these airports for any of the hazardous wildlife attractants mentioned in Section 2 or for new airport development projects meant to accommodate aircraft movement. This distance is to be maintained between an airport's AOA and the hazardous wildlife attractant. Figure 1 depicts this separation distance from the nearest aircraft movement areas.

1-4. PROTECTION OF APPROACH, DEPARTURE, AND CIRCLING AIRSPACE. For all airports, the FAA recommends a distance of 5 statute miles between the farthest edge of the airport's AOA and the hazardous wildlife attractant if the attractant could cause hazardous wildlife movement into or across the approach or departure airspace.

Figure 1. Separation distances within which hazardous wildlife attractants should be avoided, eliminated, or mitigated.



PERIMETER A: For airports serving piston-powered aircraft, hazardous wildlife attractants must be 5,000 feet from the nearest air operations area.

PERIMETER B: For airports serving turbine-powered aircraft, hazardous wildlife attractants must be 10,000 feet from the nearest air operations area.

PERIMETER C: 5-mile range to protect approach, departure and circling airspace.

SECTION 2.

LAND-USE PRACTICES ON OR NEAR AIRPORTS THAT POTENTIALLY ATTRACT HAZARDOUS WILDLIFE.

2-1. GENERAL. The wildlife species and the size of the populations attracted to the airport environment vary considerably, depending on several factors, including land-use practices on or near the airport. This section discusses land-use practices having the potential to attract hazardous wildlife and threaten aviation safety. In addition to the specific considerations outlined below, airport operators should refer to *Wildlife Hazard Management at Airports*, prepared by FAA and U.S. Department of Agriculture (USDA) staff. (This manual is available in English, Spanish, and French. It can be viewed and downloaded free of charge from the FAA's wildlife hazard mitigation web site: <http://wildlife-mitigation.tc.FAA.gov>.) And, *Prevention and Control of Wildlife Damage*, compiled by the University of Nebraska Cooperative Extension Division. (This manual is available online in a periodically updated version at: ianrwww.unl.edu/wildlife/solutions/handbook/.)

2-2. WASTE DISPOSAL OPERATIONS. Municipal solid waste landfills (MSWLF) are known to attract large numbers of hazardous wildlife, particularly birds. Because of this, these operations, when located within the separations identified in the siting criteria in Sections 1-2 through 1-4, are considered incompatible with safe airport operations.

- a. Siting for new municipal solid waste landfills subject to AIR 21.** Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (Public Law 106-181) (AIR 21) prohibits the construction or establishment of a new MSWLF within 6 statute miles of certain public-use airports. Before these prohibitions apply, both the airport and the landfill must meet the very specific conditions described below. These restrictions do not apply to airports or landfills located within the state of Alaska.

The airport must (1) have received a Federal grant(s) under 49 U.S.C. § 47101, et. seq.; (2) be under control of a public agency; (3) serve some scheduled air carrier operations conducted in aircraft with less than 60 seats; and (4) have total annual enplanements consisting of at least 51 percent of scheduled air carrier enplanements conducted in aircraft with less than 60 passenger seats.

The proposed MSWLF must (1) be within 6 miles of the airport, as measured from airport property line to MSWLF property line, and (2) have started construction or establishment on or after April 5, 2001. Public Law 106-181 only limits the construction or establishment of some new MSWLF. It does not limit the expansion, either vertical or horizontal, of existing landfills.

NOTE: Consult the most recent version of AC 150/5200-34, *Construction or Establishment of Landfills Near Public Airports*, for a more detailed discussion of these restrictions.

- b. Siting for new MSWLF not subject to AIR 21.** If an airport and MSWLF do not meet the restrictions of Public Law 106-181, the FAA recommends against locating MSWLF within the separation distances identified in Sections 1-2 through 1-4. The separation distances should be measured from the closest point of the airport's AOA to the closest planned MSWLF cell.
- c. Considerations for existing waste disposal facilities within the limits of separation criteria.** The FAA recommends against airport development projects that would increase the number of aircraft operations or accommodate larger or faster aircraft near MSWLF operations located within the separations identified in Sections 1-2 through 1-4. In addition, in accordance with 40 CFR 258.10, owners or operators of existing MSWLF units that are located within the separations listed in Sections 1-2 through 1-4 must demonstrate that the unit is designed and operated so it does not pose a bird hazard to aircraft. (See Section 4-2(b) of this AC for a discussion of this demonstration requirement.)
- d. Enclosed trash transfer stations.** Enclosed waste-handling facilities that receive garbage behind closed doors; process it via compaction, incineration, or similar manner; and remove all residue by enclosed vehicles generally are compatible with safe airport operations, provided they are not located on airport property or within the Runway Protection Zone (RPZ). These facilities should not handle or store putrescible waste outside or in a partially enclosed structure accessible to hazardous wildlife. Trash transfer facilities that are open on one or more sides; that store uncovered quantities of municipal solid waste outside, even if only for a short time; that use semi-trailers that leak or have trash clinging to the outside; or that do not control odors by ventilation and filtration systems (odor masking is not acceptable) do not meet the FAA's definition of fully enclosed trash transfer stations. The FAA considers these facilities incompatible with safe airport operations if they are located closer than the separation distances specified in Sections 1-2 through 1-4.
- e. Composting operations on or near airport property.** Composting operations that accept only yard waste (e.g., leaves, lawn clippings, or branches) generally do not attract hazardous wildlife. Sewage sludge, woodchips, and similar material are not municipal solid wastes and may be used as compost bulking agents. The compost, however, must never include food or other municipal solid waste. Composting operations should not be located on airport property. Off-airport property composting operations should be located no closer than the greater of the following distances: 1,200 feet from any AOA or the distance called for by airport design requirements (see AC 150/5300-13, *Airport Design*). This spacing should prevent material, personnel, or equipment from penetrating any Object Free Area (OFA), Obstacle Free Zone (OFZ), Threshold Siting Surface (TSS), or Clearway. Airport operators should monitor composting operations located in proximity to the airport to ensure that steam or thermal rise does not adversely affect air traffic. On-airport disposal of compost by-products should not be conducted for the reasons stated in 2-3f.

- f. Underwater waste discharges.** The FAA recommends against the underwater discharge of any food waste (e.g., fish processing offal) within the separations identified in Sections 1-2 through 1-4 because it could attract scavenging hazardous wildlife.
- g. Recycling centers.** Recycling centers that accept previously sorted non-food items, such as glass, newspaper, cardboard, or aluminum, are, in most cases, not attractive to hazardous wildlife and are acceptable.
- h. Construction and demolition (C&D) debris facilities.** C&D landfills do not generally attract hazardous wildlife and are acceptable if maintained in an orderly manner, admit no putrescible waste, and are not co-located with other waste disposal operations. However, C&D landfills have similar visual and operational characteristics to putrescible waste disposal sites. When co-located with putrescible waste disposal operations, C&D landfills are more likely to attract hazardous wildlife because of the similarities between these disposal facilities. Therefore, a C&D landfill co-located with another waste disposal operation should be located outside of the separations identified in Sections 1-2 through 1-4.
- i. Fly ash disposal.** The incinerated residue from resource recovery power/heat-generating facilities that are fired by municipal solid waste, coal, or wood is generally not a wildlife attractant because it no longer contains putrescible matter. Landfills accepting only fly ash are generally not considered to be wildlife attractants and are acceptable as long as they are maintained in an orderly manner, admit no putrescible waste of any kind, and are not co-located with other disposal operations that attract hazardous wildlife.

Since varying degrees of waste consumption are associated with general incineration (not resource recovery power/heat-generating facilities), the FAA considers the ash from general incinerators a regular waste disposal by-product and, therefore, a hazardous wildlife attractant if disposed of within the separation criteria outlined in Sections 1-2 through 1-4.

2-3. WATER MANAGEMENT FACILITIES. Drinking water intake and treatment facilities, storm water and wastewater treatment facilities, associated retention and settling ponds, ponds built for recreational use, and ponds that result from mining activities often attract large numbers of potentially hazardous wildlife. To prevent wildlife hazards, land-use developers and airport operators may need to develop management plans, in compliance with local and state regulations, to support the operation of storm water management facilities on or near all public-use airports to ensure a safe airport environment.

- a. Existing storm water management facilities.** On-airport storm water management facilities allow the quick removal of surface water, including discharges related to aircraft deicing, from impervious surfaces, such as pavement and terminal/hangar building roofs. Existing on-airport detention ponds collect storm water, protect water quality, and control runoff. Because they slowly release water

after storms, they create standing bodies of water that can attract hazardous wildlife. Where the airport has developed a Wildlife Hazard Management Plan (WHMP) in accordance with Part 139, the FAA requires immediate correction of any wildlife hazards arising from existing storm water facilities located on or near airports, using appropriate wildlife hazard mitigation techniques. Airport operators should develop measures to minimize hazardous wildlife attraction in consultation with a wildlife damage management biologist.

Where possible, airport operators should modify storm water detention ponds to allow a maximum 48-hour detention period for the design storm. The FAA recommends that airport operators avoid or remove retention ponds and detention ponds featuring dead storage to eliminate standing water. Detention basins should remain totally dry between rainfalls. Where constant flow of water is anticipated through the basin, or where any portion of the basin bottom may remain wet, the detention facility should include a concrete or paved pad and/or ditch/swale in the bottom to prevent vegetation that may provide nesting habitat.

When it is not possible to drain a large detention pond completely, airport operators may use physical barriers, such as bird balls, wires grids, pillows, or netting, to deter birds and other hazardous wildlife. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, airport operators must get approval from the appropriate FAA Regional Airports Division Office.

The FAA recommends that airport operators encourage off-airport storm water treatment facility operators to incorporate appropriate wildlife hazard mitigation techniques into storm water treatment facility operating practices when their facility is located within the separation criteria specified in Sections 1-2 through 1-4.

- b. New storm water management facilities.** The FAA strongly recommends that off-airport storm water management systems located within the separations identified in Sections 1-2 through 1-4 be designed and operated so as not to create above-ground standing water. Stormwater detention ponds should be designed, engineered, constructed, and maintained for a maximum 48-hour detention period after the design storm and remain completely dry between storms. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lined, narrow, linearly shaped water detention basins. When it is not possible to place these ponds away from an airport's AOA, airport operators should use physical barriers, such as bird balls, wires grids, pillows, or netting, to prevent access of hazardous wildlife to open water and minimize aircraft-wildlife interactions. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, airport operators must get approval from the appropriate FAA Regional Airports Division Office. All vegetation in or around detention basins that provide food or cover for hazardous wildlife should be eliminated. If soil conditions and other requirements allow, the FAA encourages

the use of underground storm water infiltration systems, such as French drains or buried rock fields, because they are less attractive to wildlife.

- c. Existing wastewater treatment facilities.** The FAA strongly recommends that airport operators immediately correct any wildlife hazards arising from existing wastewater treatment facilities located on or near the airport. Where required, a WHMP developed in accordance with Part 139 will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should encourage wastewater treatment facility operators to incorporate measures, developed in consultation with a wildlife damage management biologist, to minimize hazardous wildlife attractants. Airport operators should also encourage those wastewater treatment facility operators to incorporate these mitigation techniques into their standard operating practices. In addition, airport operators should consider the existence of wastewater treatment facilities when evaluating proposed sites for new airport development projects and avoid such sites when practicable.
- d. New wastewater treatment facilities.** The FAA strongly recommends against the construction of new wastewater treatment facilities or associated settling ponds within the separations identified in Sections 1-2 through 1-4. Appendix 1 defines wastewater treatment facility as “any devices and/or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes.” The definition includes any pretreatment involving the reduction of the amount of pollutants or the elimination of pollutants prior to introducing such pollutants into a publicly owned treatment works (wastewater treatment facility). During the site-location analysis for wastewater treatment facilities, developers should consider the potential to attract hazardous wildlife if an airport is in the vicinity of the proposed site, and airport operators should voice their opposition to such facilities if they are in proximity to the airport.
- e. Artificial marshes.** In warmer climates, wastewater treatment facilities sometimes employ artificial marshes and use submergent and emergent aquatic vegetation as natural filters. These artificial marshes may be used by some species of flocking birds, such as blackbirds and waterfowl, for breeding or roosting activities. The FAA strongly recommends against establishing artificial marshes within the separations identified in Sections 1-2 through 1-4.
- f. Wastewater discharge and sludge disposal.** The FAA recommends against the discharge of wastewater or sludge on airport property because it may improve soil moisture and quality on unpaved areas and lead to improved turf growth that can be an attractive food source for many species of animals. Also, the turf requires more frequent mowing, which in turn may mutilate or flush insects or small animals and produce straw, both of which can attract hazardous wildlife. In addition, the improved turf may attract grazing wildlife, such as deer and geese. Problems may also occur when discharges saturate unpaved airport areas. The resultant soft, muddy conditions can severely restrict or prevent emergency vehicles from reaching accident sites in a timely manner.

2-4. WETLANDS. Wetlands provide a variety of functions and can be regulated by local, state, and Federal laws. Normally, wetlands are attractive to many types of wildlife, including many which rank high on the list of hazardous wildlife species (Table 1).

NOTE: If questions exist as to whether an area qualifies as a wetland, contact the local division of the U.S. Army Corps of Engineers, the Natural Resources Conservation Service, or a wetland consultant qualified to delineate wetlands.

- a. Existing wetlands on or near airport property.** If wetlands are located on or near airport property, airport operators should be alert to any wildlife use or habitat changes in these areas that could affect safe aircraft operations. At public-use airports, the FAA recommends immediately correcting, in cooperation with local, state, and Federal regulatory agencies, any wildlife hazards arising from existing wetlands located on or near airports. Where required, a WHMP will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should develop measures to minimize hazardous wildlife attraction in consultation with a wildlife damage management biologist.
- b. New airport development.** Whenever possible, the FAA recommends locating new airports using the separations from wetlands identified in Sections 1-2 through 1-4. Where alternative sites are not practicable, or when airport operators are expanding an existing airport into or near wetlands, a wildlife damage management biologist, in consultation with the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the state wildlife management agency should evaluate the wildlife hazards and prepare a WHMP that indicates methods of minimizing the hazards.
- c. Mitigation for wetland impacts from airport projects.** Wetland mitigation may be necessary when unavoidable wetland disturbances result from new airport development projects or projects required to correct wildlife hazards from wetlands. Wetland mitigation must be designed so it does not create a wildlife hazard. The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Sections 1-2 through 1-4.

(1) Onsite mitigation of wetland functions. The FAA may consider exceptions to locating mitigation activities outside the separations identified in Sections 1-2 through 1-4 if the affected wetlands provide unique ecological functions, such as critical habitat for threatened or endangered species or ground water recharge, which cannot be replicated when moved to a different location. Using existing airport property is sometimes the only feasible way to achieve the mitigation ratios mandated in regulatory orders and/or settlement agreements with the resource agencies. Conservation easements are an additional means of providing mitigation for project impacts. Typically the airport operator continues to own the property, and an easement is created stipulating that the property will be maintained as habitat for state or Federally listed species.

Mitigation must not inhibit the airport operator's ability to effectively control hazardous wildlife on or near the mitigation site or effectively maintain other aspects of safe airport operations. Enhancing such mitigation areas to attract hazardous wildlife must be avoided. The FAA will review any onsite mitigation proposals to determine compatibility with safe airport operations. A wildlife damage management biologist should evaluate any wetland mitigation projects that are needed to protect unique wetland functions and that must be located in the separation criteria in Sections 1-2 through 1-4 before the mitigation is implemented. A WHMP should be developed to reduce the wildlife hazards.

(2) Offsite mitigation of wetland functions. The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Sections 1-2 through 1-4 unless they provide unique functions that must remain onsite (see 2-4c(1)). Agencies that regulate impacts to or around wetlands recognize that it may be necessary to split wetland functions in mitigation schemes. Therefore, regulatory agencies may, under certain circumstances, allow portions of mitigation to take place in different locations.

(3) Mitigation banking. Wetland mitigation banking is the creation or restoration of wetlands in order to provide mitigation credits that can be used to offset permitted wetland losses. Mitigation banking benefits wetland resources by providing advance replacement for permitted wetland losses; consolidating small projects into larger, better-designed and managed units; and encouraging integration of wetland mitigation projects with watershed planning. This last benefit is most helpful for airport projects, as wetland impacts mitigated outside of the separations identified in Sections 1-2 through 1-4 can still be located within the same watershed. Wetland mitigation banks meeting the separation criteria offer an ecologically sound approach to mitigation in these situations. Airport operators should work with local watershed management agencies or organizations to develop mitigation banking for wetland impacts on airport property.

2-5. DREDGE SPOIL CONTAINMENT AREAS. The FAA recommends against locating dredge spoil containment areas (also known as Confined Disposal Facilities) within the separations identified in Sections 1-2 through 1-4 if the containment area or the spoils contain material that would attract hazardous wildlife.

2-6. AGRICULTURAL ACTIVITIES. Because most, if not all, agricultural crops can attract hazardous wildlife during some phase of production, the FAA recommends against the use of airport property for agricultural production, including hay crops, within the separations identified in Sections 1-2 through 1-4. If the airport has no financial alternative to agricultural crops to produce income necessary to maintain the viability of the airport, then the airport shall follow the crop distance guidelines listed in the table titled "Minimum Distances between Certain Airport Features and Any On-Airport Agricultural Crops" found in AC 150/5300-13, *Airport Design*, Appendix 17. The cost of wildlife control and potential accidents should be weighed against the income produced by the on-airport crops when deciding whether to allow crops on the airport.

- a. Livestock production.** Confined livestock operations (i.e., feedlots, dairy operations, hog or chicken production facilities, or egg laying operations) often attract flocking birds, such as starlings, that pose a hazard to aviation. Therefore, The FAA recommends against such facilities within the separations identified in Sections 1-2 through 1-4. Any livestock operation within these separations should have a program developed to reduce the attractiveness of the site to species that are hazardous to aviation safety. Free-ranging livestock must not be grazed on airport property because the animals may wander onto the AOA. Furthermore, livestock feed, water, and manure may attract birds.
- b. Aquaculture.** Aquaculture activities (i.e. catfish or trout production) conducted outside of fully enclosed buildings are inherently attractive to a wide variety of birds. Existing aquaculture facilities/activities within the separations listed in Sections 1-2 through 1-4 must have a program developed to reduce the attractiveness of the sites to species that are hazardous to aviation safety. Airport operators should also oppose the establishment of new aquaculture facilities/activities within the separations listed in Sections 1-2 through 1-4.
- c. Alternative uses of agricultural land.** Some airports are surrounded by vast areas of farmed land within the distances specified in Sections 1-2 through 1-4. Seasonal uses of agricultural land for activities such as hunting can create a hazardous wildlife situation. In some areas, farmers will rent their land for hunting purposes. Rice farmers, for example, flood their land during waterfowl hunting season and obtain additional revenue by renting out duck blinds. The duck hunters then use decoys and call in hundreds, if not thousands, of birds, creating a tremendous threat to aircraft safety. A wildlife damage management biologist should review, in coordination with local farmers and producers, these types of seasonal land uses and incorporate them into the WHMP.

2-7. GOLF COURSES, LANDSCAPING AND OTHER LAND-USE CONSIDERATIONS.

- a. Golf courses.** The large grassy areas and open water found on most golf courses are attractive to hazardous wildlife, particularly Canada geese and some species of gulls. These species can pose a threat to aviation safety. The FAA recommends against construction of new golf courses within the separations identified in Sections 1-2 through 1-4. Existing golf courses located within these separations must develop a program to reduce the attractiveness of the sites to species that are hazardous to aviation safety. Airport operators should ensure these golf courses are monitored on a continuing basis for the presence of hazardous wildlife. If hazardous wildlife is detected, corrective actions should be immediately implemented.
- b. Landscaping and landscape maintenance.** Depending on its geographic location, landscaping can attract hazardous wildlife. The FAA recommends that airport operators approach landscaping with caution and confine it to airport areas not associated with aircraft movements. A wildlife damage management biologist should review all landscaping plans. Airport operators should also monitor all landscaped areas on a continuing basis for the presence of hazardous wildlife. If

hazardous wildlife is detected, corrective actions should be immediately implemented.

Turf grass areas can be highly attractive to a variety of hazardous wildlife species. Research conducted by the USDA Wildlife Services' National Wildlife Research Center has shown that no one grass management regime will deter all species of hazardous wildlife in all situations. In cooperation with wildlife damage management biologist, airport operators should develop airport turf grass management plans on a prescription basis, depending on the airport's geographic locations and the type of hazardous wildlife likely to frequent the airport

Airport operators should ensure that plant varieties attractive to hazardous wildlife are not used on the airport. Disturbed areas or areas in need of re-vegetating should not be planted with seed mixtures containing millet or any other large-seed producing grass. For airport property already planted with seed mixtures containing millet, rye grass, or other large-seed producing grasses, the FAA recommends disking, plowing, or another suitable agricultural practice to prevent plant maturation and seed head production. Plantings should follow the specific recommendations for grass management and seed and plant selection made by the State University Cooperative Extension Service, the local office of Wildlife Services, or a qualified wildlife damage management biologist. Airport operators should also consider developing and implementing a preferred/prohibited plant species list, reviewed by a wildlife damage management biologist, which has been designed for the geographic location to reduce the attractiveness to hazardous wildlife for landscaping airport property.

- c. **Airports surrounded by wildlife habitat.** The FAA recommends that operators of airports surrounded by woodlands, water, or wetlands refer to Section 2.4 of this AC. Operators of such airports should provide for a Wildlife Hazard Assessment (WHA) conducted by a wildlife damage management biologist. This WHA is the first step in preparing a WHMP, where required.
- d. **Other hazardous wildlife attractants.** Other specific land uses or activities (e.g., sport or commercial fishing, shellfish harvesting, etc.), perhaps unique to certain regions of the country, have the potential to attract hazardous wildlife. Regardless of the source of the attraction, when hazardous wildlife is noted on a public-use airport, airport operators must take prompt remedial action(s) to protect aviation safety.

2-8. SYNERGISTIC EFFECTS OF SURROUNDING LAND USES. There may be circumstances where two (or more) different land uses that would not, by themselves, be considered hazardous wildlife attractants or that are located outside of the separations identified in Sections 1-2 through 1-4 that are in such an alignment with the airport as to create a wildlife corridor directly through the airport and/or surrounding airspace. An example of this situation may involve a lake located outside of the separation criteria on the east side of an airport and a large hayfield on the west side of an airport, land uses that together could create a flyway for Canada geese directly across the airspace of the airport. There are numerous examples of such situations;

therefore, airport operators and the wildlife damage management biologist must consider the entire surrounding landscape and community when developing the WHMP.

SECTION 3.

PROCEDURES FOR WILDLIFE HAZARD MANAGEMENT BY OPERATORS OF PUBLIC-USE AIRPORTS.

3.1. INTRODUCTION. In recognition of the increased risk of serious aircraft damage or the loss of human life that can result from a wildlife strike, the FAA may require the development of a Wildlife Hazard Management Plan (WHMP) when specific triggering events occur on or near the airport. Part 139.337 discusses the specific events that trigger a Wildlife Hazard Assessment (WHA) and the specific issues that a WHMP must address for FAA approval and inclusion in an Airport Certification Manual.

3.2. COORDINATION WITH USDA WILDLIFE SERVICES OR OTHER QUALIFIED WILDLIFE DAMAGE MANAGEMENT BIOLOGISTS. The FAA will use the Wildlife Hazard Assessment (WHA) conducted in accordance with Part 139 to determine if the airport needs a WHMP. Therefore, persons having the education, training, and expertise necessary to assess wildlife hazards must conduct the WHA. The airport operator may look to Wildlife Services or to qualified private consultants to conduct the WHA. When the services of a wildlife damage management biologist are required, the FAA recommends that land-use developers or airport operators contact a consultant specializing in wildlife damage management or the appropriate state director of Wildlife Services.

NOTE: Telephone numbers for the respective USDA Wildlife Services state offices can be obtained by contacting USDA Wildlife Services Operational Support Staff, 4700 River Road, Unit 87, Riverdale, MD, 20737-1234, Telephone (301) 734-7921, Fax (301) 734-5157 (<http://www.aphis.usda.gov/ws/>).

3-3. WILDLIFE HAZARD MANAGEMENT AT AIRPORTS: A MANUAL FOR AIRPORT PERSONNEL. This manual, prepared by FAA and USDA Wildlife Services staff, contains a compilation of information to assist airport personnel in the development, implementation, and evaluation of WHMPs at airports. The manual includes specific information on the nature of wildlife strikes, legal authority, regulations, wildlife management techniques, WHAs, WHMPs, and sources of help and information. The manual is available in three languages: English, Spanish, and French. It can be viewed and downloaded free of charge from the FAA's wildlife hazard mitigation web site: <http://wildlife-mitigation.tc.FAA.gov/>. This manual only provides a starting point for addressing wildlife hazard issues at airports. Hazardous wildlife management is a complex discipline and conditions vary widely across the United States. Therefore, qualified wildlife damage management biologists must direct the development of a WHMP and the implementation of management actions by airport personnel.

There are many other resources complementary to this manual for use in developing and implementing WHMPs. Several are listed in the manual's bibliography.

3-4. WILDLIFE HAZARD ASSESSMENTS, TITLE 14, CODE OF FEDERAL REGULATIONS, PART 139. Part 139.337(b) requires airport operators to conduct a Wildlife Hazard Assessment (WHA) when certain events occur on or near the airport.

Part 139.337 (c) provides specific guidance as to what facts must be addressed in a WHA.

3-5. WILDLIFE HAZARD MANAGEMENT PLAN (WHMP). The FAA will consider the results of the WHA, along with the aeronautical activity at the airport and the views of the airport operator and airport users, in determining whether a formal WHMP is needed, in accordance with Part 139.337. If the FAA determines that a WHMP is needed, the airport operator must formulate and implement a WHMP, using the WHA as the basis for the plan.

The goal of an airport's Wildlife Hazard Management Plan is to minimize the risk to aviation safety, airport structures or equipment, or human health posed by populations of hazardous wildlife on and around the airport.

The WHMP must identify hazardous wildlife attractants on or near the airport and the appropriate wildlife damage management techniques to minimize the wildlife hazard. It must also prioritize the management measures.

3-6. LOCAL COORDINATION. The establishment of a Wildlife Hazards Working Group (WHWG) will facilitate the communication, cooperation, and coordination of the airport and its surrounding community necessary to ensure the effectiveness of the WHMP. The cooperation of the airport community is also necessary when new projects are considered. Whether on or off the airport, the input from all involved parties must be considered when a potentially hazardous wildlife attractant is being proposed. Airport operators should also incorporate public education activities with the local coordination efforts because some activities in the vicinity of your airport, while harmless under normal leisure conditions, can attract wildlife and present a danger to aircraft. For example, if public trails are planned near wetlands or in parks adjoining airport property, the public should know that feeding birds and other wildlife in the area may pose a risk to aircraft.

Airport operators should work with local and regional planning and zoning boards so as to be aware of proposed land-use changes, or modification of existing land uses, that could create hazardous wildlife attractants within the separations identified in Sections 1-2 through 1-4. Pay particular attention to proposed land uses involving creation or expansion of waste water treatment facilities, development of wetland mitigation sites, or development or expansion of dredge spoil containment areas. At the very least, airport operators must ensure they are on the notification list of the local planning board or equivalent review entity for all communities located within 5 miles of the airport, so they will receive notification of any proposed project and have the opportunity to review it for attractiveness to hazardous wildlife.

3-7 COORDINATION/NOTIFICATION OF AIRMEN OF WILDLIFE HAZARDS. If an existing land-use practice creates a wildlife hazard and the land-use practice or wildlife hazard cannot be immediately eliminated, airport operators must issue a Notice to Airmen (NOTAM) and encourage the land-owner or manager to take steps to control the wildlife hazard and minimize further attraction.

SECTION 4.

FAA NOTIFICATION AND REVIEW OF PROPOSED LAND-USE PRACTICE CHANGES IN THE VICINITY OF PUBLIC-USE AIRPORTS

4-1. FAA REVIEW OF PROPOSED LAND-USE PRACTICE CHANGES IN THE VICINITY OF PUBLIC-USE AIRPORTS.

- a. The FAA discourages the development of waste disposal and other facilities, discussed in Section 2, located within the 5,000/10,000-foot criteria specified in Sections 1-2 through 1-4.
- b. For projects that are located outside the 5,000/10,000-foot criteria but within 5 statute miles of the airport's AOA, the FAA may review development plans, proposed land-use changes, operational changes, or wetland mitigation plans to determine if such changes present potential wildlife hazards to aircraft operations. The FAA considers sensitive airport areas as those that lie under or next to approach or departure airspace. This brief examination should indicate if further investigation is warranted.
- c. Where a wildlife damage management biologist has conducted a further study to evaluate a site's compatibility with airport operations, the FAA may use the study results to make a determination.

4-2. WASTE MANAGEMENT FACILITIES.

- a. **Notification of new/expanded project proposal.** Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (Public Law 106-181) limits the construction or establishment of new MSWLF within 6 statute miles of certain public-use airports, when both the airport and the landfill meet very specific conditions. See Section 2-2 of this AC and AC 150/5200-34 for a more detailed discussion of these restrictions.

The Environmental Protection Agency (EPA) requires any MSWLF operator proposing a new or expanded waste disposal operation within 5 statute miles of a runway end to notify the appropriate FAA Regional Airports Division Office and the airport operator of the proposal (40 CFR 258, *Criteria for Municipal Solid Waste Landfills*, Section 258.10, *Airport Safety*). The EPA also requires owners or operators of new MSWLF units, or lateral expansions of existing MSWLF units, that are located within 10,000 feet of any airport runway end used by turbojet aircraft, or within 5,000 feet of any airport runway end used only by piston-type aircraft, to demonstrate successfully that such units are not hazards to aircraft. (See 4-2.b below.)

When new or expanded MSWLF are being proposed near airports, MSWLF operators must notify the airport operator and the FAA of the proposal as early as possible pursuant to 40 CFR 258.

- b. Waste handling facilities within separations identified in Sections 1-2 through 1-4.** To claim successfully that a waste-handling facility sited within the separations identified in Sections 1-2 through 1-4 does not attract hazardous wildlife and does not threaten aviation, the developer must establish convincingly that the facility will not handle putrescible material other than that as outlined in 2-2.d. The FAA strongly recommends against any facility other than that as outlined in 2-2.d (enclosed transfer stations). The FAA will use this information to determine if the facility will be a hazard to aviation.
- c. Putrescible-Waste Facilities.** In their effort to satisfy the EPA requirement, some putrescible-waste facility proponents may offer to undertake experimental measures to demonstrate that their proposed facility will not be a hazard to aircraft. To date, no such facility has been able to demonstrate an ability to reduce and sustain hazardous wildlife to levels that existed before the putrescible-waste landfill began operating. For this reason, demonstrations of experimental wildlife control measures may not be conducted within the separation identified in Sections 1-2 through 1-4.

4-3. OTHER LAND-USE PRACTICE CHANGES. As a matter of policy, the FAA encourages operators of public-use airports who become aware of proposed land use practice changes that may attract hazardous wildlife within 5 statute miles of their airports to promptly notify the FAA. The FAA also encourages proponents of such land use changes to notify the FAA as early in the planning process as possible. Advanced notice affords the FAA an opportunity (1) to evaluate the effect of a particular land-use change on aviation safety and (2) to support efforts by the airport sponsor to restrict the use of land next to or near the airport to uses that are compatible with the airport.

The airport operator, project proponent, or land-use operator may use FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, or other suitable documents similar to FAA Form 7460-1 to notify the appropriate FAA Regional Airports Division Office. Project proponents can contact the appropriate FAA Regional Airports Division Office for assistance with the notification process.

It is helpful if the notification includes a 15-minute quadrangle map of the area identifying the location of the proposed activity. The land-use operator or project proponent should also forward specific details of the proposed land-use change or operational change or expansion. In the case of solid waste landfills, the information should include the type of waste to be handled, how the waste will be processed, and final disposal methods.

- a. Airports that have received Federal grant-in-aid assistance.** Airports that have received Federal grant-in-aid assistance are required by their grant assurances to take appropriate actions to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations. The FAA recommends that airport operators to the extent practicable oppose off-airport land-use changes or practices within the separations identified in Sections 1-2 through 1-4 that may attract hazardous wildlife. Failure to do so may lead to noncompliance with applicable grant assurances. The FAA will not approve the placement of airport

development projects pertaining to aircraft movement in the vicinity of hazardous wildlife attractants without appropriate mitigating measures. Increasing the intensity of wildlife control efforts is not a substitute for eliminating or reducing a proposed wildlife hazard. Airport operators should identify hazardous wildlife attractants and any associated wildlife hazards during any planning process for new airport development projects.

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APPENDIX 1. DEFINITIONS OF TERMS USED IN THIS ADVISORY CIRCULAR.

1. GENERAL. This appendix provides definitions of terms used throughout this AC.

- 1. Air operations area.** Any area of an airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft. An air operations area includes such paved areas or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiways, or apron.
- 2. Airport operator.** The operator (private or public) or sponsor of a public-use airport.
- 3. Approach or departure airspace.** The airspace, within 5 statute miles of an airport, through which aircraft move during landing or takeoff.
- 4. Bird balls.** High-density plastic floating balls that can be used to cover ponds and prevent birds from using the sites.
- 5. Certificate holder.** The holder of an Airport Operating Certificate issued under Title 14, Code of Federal Regulations, Part 139.
- 6. Construct a new MSWLF.** To begin to excavate, grade land, or raise structures to prepare a municipal solid waste landfill as permitted by the appropriate regulatory or permitting agency.
- 7. Detention ponds.** Storm water management ponds that hold storm water for short periods of time, a few hours to a few days.
- 8. Establish a new MSWLF.** When the first load of putrescible waste is received on-site for placement in a prepared municipal solid waste landfill.
- 9. Fly ash.** The fine, sand-like residue resulting from the complete incineration of an organic fuel source. Fly ash typically results from the combustion of coal or waste used to operate a power generating plant.
- 10. General aviation aircraft.** Any civil aviation aircraft not operating under 14 CFR Part 119, Certification: Air Carriers and Commercial Operators.
- 11. Hazardous wildlife.** Species of wildlife (birds, mammals, reptiles), including feral animals and domesticated animals not under control, that are associated with aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a strike hazard
- 12. Municipal Solid Waste Landfill (MSWLF).** A publicly or privately owned discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR § 257.2. An MSWLF may receive

other types wastes, such as commercial solid waste, non-hazardous sludge, small-quantity generator waste, and industrial solid waste, as defined under 40 CFR § 258.2. An MSWLF can consist of either a stand alone unit or several cells that receive household waste.

13. **New MSWLF.** A municipal solid waste landfill that was established or constructed after April 5, 2001.
14. **Piston-powered aircraft.** Fixed-wing aircraft powered by piston engines.
15. **Piston-use airport.** Any airport that does not sell Jet-A fuel for fixed-wing turbine-powered aircraft, and primarily serves fixed-wing, piston-powered aircraft. Incidental use of the airport by turbine-powered, fixed-wing aircraft would not affect this designation. However, such aircraft should not be based at the airport.
16. **Public agency.** A State or political subdivision of a State, a tax-supported organization, or an Indian tribe or pueblo (49 U.S.C. § 47102(19)).
17. **Public airport.** An airport used or intended to be used for public purposes that is under the control of a public agency; and of which the area used or intended to be used for landing, taking off, or surface maneuvering of aircraft is publicly owned (49 U.S.C. § 47102(20)).
18. **Public-use airport.** An airport used or intended to be used for public purposes, and of which the area used or intended to be used for landing, taking off, or surface maneuvering of aircraft may be under the control of a public agency or privately owned and used for public purposes (49 U.S.C. § 47102(21)).
19. **Putrescible waste.** Solid waste that contains organic matter capable of being decomposed by micro-organisms and of such a character and proportion as to be capable of attracting or providing food for birds (40 CFR §257.3-8).
20. **Putrescible-waste disposal operation.** Landfills, garbage dumps, underwater waste discharges, or similar facilities where activities include processing, burying, storing, or otherwise disposing of putrescible material, trash, and refuse.
21. **Retention ponds.** Storm water management ponds that hold water for several months.
22. **Runway protection zone (RPZ).** An area off the runway end to enhance the protection of people and property on the ground (see AC 150/5300-13). The dimensions of this zone vary with the airport design, aircraft, type of operation, and visibility minimum.
23. **Scheduled air carrier operation.** Any common carriage passenger-carrying operation for compensation or hire conducted by an air carrier or commercial

operator for which the air carrier, commercial operator, or their representative offers in advance the departure location, departure time, and arrival location. It does not include any operation that is conducted as a supplemental operation under 14 CFR Part 119 or as a public charter operation under 14 CFR Part 380 (14 CFR § 119.3).

- 24. Sewage sludge.** Any solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works. (40 CFR 257.2)
- 25. Sludge.** Any solid, semi-solid, or liquid waste generated from a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. (40 CFR 257.2)
- 26. Solid waste.** Any garbage, refuse, sludge, from a waste treatment plant, water supply treatment plant or air pollution control facility and other discarded material, including, solid liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by product material as defined by the Atomic Energy Act of 1954, as amended, (68 Stat. 923). (40 CFR 257.2)
- 27. Turbine-powered aircraft.** Aircraft powered by turbine engines including turbojets and turboprops but excluding turbo-shaft rotary-wing aircraft.
- 28. Turbine-use airport.** Any airport that sells Jet-A fuel for fixed-wing turbine-powered aircraft.
- 29. Wastewater treatment facility.** Any devices and/or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes, including Publicly Owned Treatment Works (POTW), as defined by Section 212 of the Federal Water Pollution Control Act (P.L. 92-500) as amended by the Clean Water Act of 1977 (P.L. 95-576) and the Water Quality Act of 1987 (P.L. 100-4). This definition includes any pretreatment involving the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. (See 40 CFR Section 403.3 (q), (r), & (s)).

- 30. Wildlife.** Any wild animal, including without limitation any wild mammal, bird, reptile, fish, amphibian, mollusk, crustacean, arthropod, coelenterate, or other invertebrate, including any part, product, egg, or offspring thereof (50 CFR 10.12, *Taking, Possession, Transportation, Sale, Purchase, Barter, Exportation, and Importation of Wildlife and Plants*). As used in this AC, wildlife includes feral animals and domestic animals out of the control of their owners (14 CFR Part 139, Certification of Airports).
- 31. Wildlife attractants.** Any human-made structure, land-use practice, or human-made or natural geographic feature that can attract or sustain hazardous wildlife within the landing or departure airspace or the airport's AOA. These attractants can include architectural features, landscaping, waste disposal sites, wastewater treatment facilities, agricultural or aquaculture activities, surface mining, or wetlands.
- 32. Wildlife hazard.** A potential for a damaging aircraft collision with wildlife on or near an airport.
- 33. Wildlife strike.** A wildlife strike is deemed to have occurred when:
- a. A pilot reports striking 1 or more birds or other wildlife;
 - b. Aircraft maintenance personnel identify aircraft damage as having been caused by a wildlife strike;
 - c. Personnel on the ground report seeing an aircraft strike 1 or more birds or other wildlife;
 - d. Bird or other wildlife remains, whether in whole or in part, are found within 200 feet of a runway centerline, unless another reason for the animal's death is identified;
 - e. The animal's presence on the airport had a significant negative effect on a flight (i.e., aborted takeoff, aborted landing, high-speed emergency stop, aircraft left pavement area to avoid collision with animal) (Transport Canada, Airports Group, *Wildlife Control Procedures Manual*, Technical Publication 11500E, 1994).

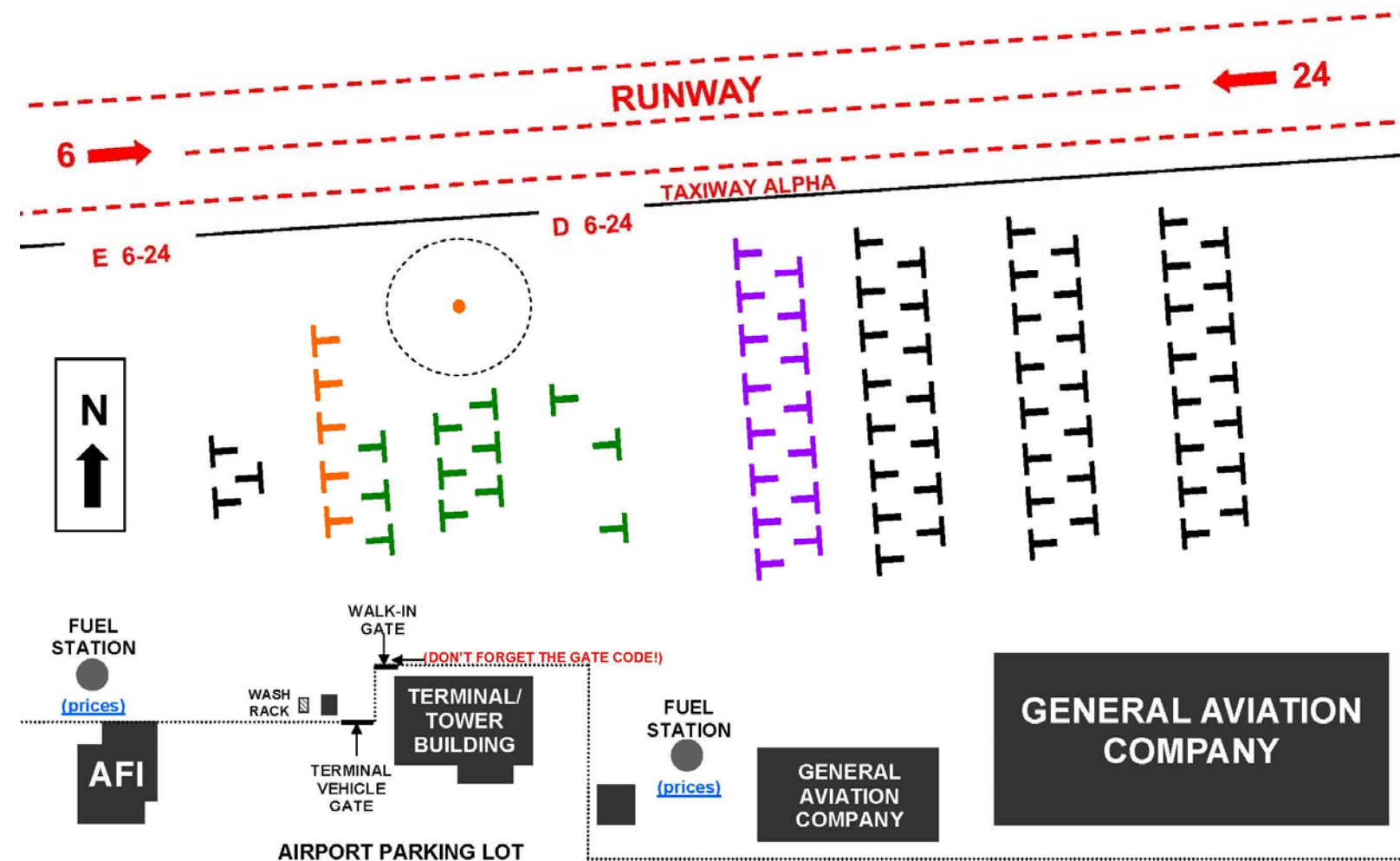
2. RESERVED.

APPENDIX J

City of Fullerton Pilot's Guide and Noise Abatement Procedures

Readers should check the following website for up-to-date version:

https://www.cityoffullerton.com/gov/departments/public_works/airport/pilotguide.asp



- AIRPORT TENANT TIEDOWNS
- VISITOR AIRCRAFT PARKING
- GENERAL AVIATION COMPANY CUSTOMER PARKING
- AFI CUSTOMER PARKING

FULLERTON AIRPORT PARKING

FREQUENCIES & CONTACTS

Tower	119.1	UNICOM (FUEL):		Tower	(714) 525-1623	ATIS	(714) 870-6222
ATIS	125.05	Epic	123.30	Airport Operations	(714) 240-2759	ASOS	(714) 870-1372
Ground	121.8	Phillips 66	122.95	Airport Office	(714) 738-6323	Flight Service	(800) 992-7433
Localizer	108.9			AFI	(714) 773-0741	General Aviation	(714) 526-6611
				Ben's Motorworks	(714) 396-6090	Hangar 21	(714) 331-2915

WINGS CAFÉ
(714) 735-8432
7am to 2pm, 7 Days a week

FULLERTON AIRPORT PILOTS ASSOCIATION
Promoting general aviation, pilots and the Fullerton Airport
Contact Jim Gandee (562) 587-9939 for more information

OVERNIGHT VISITOR PARKING FEES

\$10 NIGHTLY

Please pay prior to Departure in Blue Payment Box at
North Entrance of Terminal Lobby.

RESTRICTIONS

Pattern Work Prohibited Between

10:00 pm & 7:00 am Weekdays

10:00 pm & 8:00 am Weekends & Holidays

Touch & Go's Prohibited Between

6:00 pm & 7:00 am Weekdays

All Weekends & Holidays

Intersection Takeoffs

Prohibited for Fixed Wing Aircraft

Formation Takeoffs & Landings

Prohibited

Prior Permission Required for

Aircraft Over 12,500 lbs GWT and
Single Engine Exceeding 1000 Horsepower

PLEASE SEE ALSO

NOISE ABATEMENT PROCEDURES →

APPENDIX K

SAMPLE AVIGATION EASEMENTS AND DEED NOTICE

- Sample Avigation Easement and Deed Notice from the State of California Department of Transportation (Caltrans)/Division of Aeronautics *California Airport Land Use Planning Handbook, Appendix H* (October 2011)(Exhibits H1 and H2).

The Handbook may be obtained online at:

<http://www.dot.ca.gov/hq/planning/aeronaut/documents/alucp/AirportLandUsePlanningHandbook.pdf>

EXHIBIT H1
Typical Avigation Easement

This indenture made this _____ day of _____, 20____, between _____ herein after referred to as Grantor, and the [Insert County or City name], a political subdivision in the State of California, hereinafter referred to as Grantee.

The Grantor, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby grant to the Grantee, its successors and assigns, a perpetual and assignable easement over the following described parcel of land in which the Grantor holds a fee simple estate. The property which is subject to this easement is depicted as _____ on "Exhibit A" attached and is more particularly described as follows:

[Insert legal description of real property]

The easement applies to the Airspace above an imaginary plane over the real property. The plane is described as follows:

The imaginary plane above the hereinbefore described real property, as such plane is defined by Part 77 of the Federal Aviation Regulations, and consists of a plane [describe approach, transition, or horizontal surface]; the elevation of said plane being based upon the _____ Airport official runway end elevation of _____ feet Above Mean Sea Level (AMSL), as determined by [Insert name and Date of Survey or Airport Layout Plan that determines the elevation] the approximate dimensions of which said plane are described and shown on Exhibit A attached hereto and incorporated herein by reference.

The aforesaid easement and right-of-way includes, but is not limited to:

1. For the use and benefit of the public, the easement and continuing right to fly, or cause or permit the flight by any and all persons, or any aircraft, of any and all kinds now or hereafter known, in, through, across, or about any portion of the Airspace hereinabove described; and
2. The easement and right to cause or create, or permit or allow to be caused or created within all space above the existing surface of the hereinabove described real property and any and all Airspace laterally adjacent to said real property, such noise, vibration, currents and other effects of air, illumination, and fuel consumption as may be inherent in, or may arise or occur from or during the operation of aircraft of any and all kinds, now or hereafter known or used, for navigation of or flight in air; and
3. A continuing right to clear and keep clear from the Airspace any portions of buildings, structures, or improvements of any kinds, and of trees or other objects, including the right to remove or demolish those portions of such buildings, structures, improvements, trees, or other things which extend into or above said Airspace, and the right to cut to the ground level and remove, any trees which extend into or above the Airspace; and
4. The right to mark and light, or cause or require to be marked or lighted, as obstructions to air navigation, any and all buildings, structures, or other

improvements, and trees or other objects, which extend into or above the Airspace;
and

5. The right of ingress to, passage within, and egress from the hereinabove described real property, for the purposes described in subparagraphs (3) and (4) above at reasonable times and after reasonable notice.

For and on behalf of itself, its successors and assigns, the Grantor hereby covenants with the [Insert County or City name], for the direct benefit of the real property constituting the _____ Airport hereinafter described, that neither the Grantor, nor its successors in interest or assigns will construct, install, erect, place or grow in or upon the hereinabove described real property, nor will they permit to allow, any building structure, improvement, tree or other object which extends into or above the Airspace, or which constitutes an obstruction to air navigation, or which obstructs or interferes with the use of the easement and rights-of-way herein granted.

The easements and rights-of-way herein granted shall be deemed both appurtenant to and for the direct benefit of that real property which constitutes the _____ Airport, in the [Insert County or City name], State of California; and shall further be deemed in gross, being conveyed to the Grantee for the benefit of the Grantee and any and all members of the general public who may use said easement or right-ofway, in landing at, taking off from or operating such aircraft in or about the _____ Airport, or in otherwise flying through said Airspace.

Grantor, together with its successors in interest and assigns, hereby waives its right to legal action against Grantee, its successors, or assigns for monetary damages or other redress due to impacts, as described in Paragraph (2) of the granted rights of easement, associated with aircraft operations in the air or on the ground at the airport, including future increases in the volume or changes in location of said operations. Furthermore, Grantor, its successors, and assigns shall have no duty to avoid or mitigate such damages through physical modification of airport facilities or establishment or modification of aircraft operational procedures or restrictions. However, this waiver shall not apply if the airport role or character of its usage (as identified in an adopted airport master plan, for example) changes in a fundamental manner which could not reasonably have been anticipated at the time of the granting of this easement and which results in a substantial increase in the impacts associated with aircraft operations. Also, this grant of easement shall not operate to deprive the Grantor, its successors or assigns, of any rights which may from time to time have against any air carrier or private operator for negligent or unlawful operation of aircraft.

These covenants and agreements run with the land and are binding upon the heirs, administrators, executors, successors and assigns of the Grantor, and, for the purpose of this instrument, the real property firstly hereinabove described is the servient tenement and said _____ Airport is the dominant tenement.

DATED: _____

STATE OF _____

COUNTY OF _____

On _____, before me, the undersigned, a Notary Public in and for said County and State, personally appeared _____, and _____ known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

Notary Public

EXHIBIT H-2
Sample Deed Notice

A statement similar to the following should be included on the deed for any real property subject to the deed notice requirements set forth in the [Insert ALUC name] Airport Land Use Compatibility Plan. Such notice should be recorded by the county of [Insert County name]. Also, this deed notice should be included on any parcel map, tentative map, or final map for subdivision approval.

The [Insert ALUC name] Airport Land Use Compatibility Plan and [Insert County/City name] Ordinance (Ordinance No. _____) identify a [Insert Airport name] Airport Influence Area. Properties within this area are routinely subject to overflights by aircraft using this public-use airport and, as a result, residents may experience inconvenience, annoyance, or discomfort arising from the noise of such operations. State law (Public Utilities Code Section 21670 et seq.) establishes the importance of public-use airports to protection of the public interest of the people of the state of California. Residents of property near such airports should therefore be prepared to accept the inconvenience, annoyance, or discomfort from normal aircraft operations. Residents also should be aware that the current volume of aircraft activity may increase in the future in response to [Insert County name] County population and economic growth. Any subsequent deed conveying this parcel or subdivisions thereof shall contain a statement in substantially this form.