Fresno Chandler Executive Airport Land Use Compatibility Plan

Revised September 15, 2014
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SECTION A

LAND USE COMPATIBILITY PLAN
CHAPTER 1: INTRODUCTION – SCOPE OF THE PLAN

1.1 Authority and Purpose

Requirements for creation of airport land use commissions were first established under the California State Aeronautics Act (Public Utilities Code Section 21670, et seq.) in 1967. The fundamental purpose of the Airport Land Use Commission (ALUC or Commission) is to promote land use compatibility around airports and is expressed in the statute as:

“… to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public’s exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses.”

The statutes give ALUC’s the following powers and duties, subject to limitations, by which to accommodate the following:

- Assist local agencies in ensuring compatible land uses in the vicinity of airports to the extent that land in the vicinity of the airport is not already devoted to incompatible uses.
- Coordinate planning at the state, regional and local level, so as to provide for the orderly development of air transportation, while at the same time protect public health, safety and welfare;
- Prepare and adopt airport land use compatibility plans.

The State Aeronautics Act (Public Utilities Code, Section 21670 et seq.) requires preparation of an airport land use compatibility plan for nearly all public-use airports in the State of California (Section 21675). Compatibility Plans specifically provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission and safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general.

1.2 Airport Identification

The airport addressed by this plan is Fresno Chandler Executive Airport (FCH). Prior to 2005, FCH was known as the Fresno Chandler Downtown Airport. However, the official Federal Aviation Administration (FAA) identifier has remained FCH.
1.3 Geographic Coverage

The policies of this Compatibility Land Use Plan (CLUP or Plan) apply to all land within the Airport Environs Plan. The Airport Influence Area (AIA) is depicted in Figure 1 and consists of all land within Safety Compatibility Zones 1 through 6.

1.4 Jurisdictions Affected

The jurisdiction affected by this Land Use Compatibility Plan is the City of Fresno.

1.5 Limitations of the Plan

There are important limitations to an ALUC’s authority. ALUC’s have no authority over either existing land uses (Section 21670(a)(2)) or the operation of airports (Section 21674(e)). Once a local agency has made its general plan consistent with the ALUC plan, the ALUC’s authority to review projects within that jurisdiction is narrowly limited. The only actions for which review remains mandatory are proposed adoption or amendment of general plans, specific plans, rezone applications, text amendments to the zoning ordinance, and building regulations affecting land within an AIA. Submittal of individual projects for ALUC review is voluntary.

CHAPTER 2: AIRPORT INFORMATION

2.1 Planning Status

This plan supersedes and updates the previous plan, adopted in March 1999 and is based on the City of Fresno’s Fresno Chandler Executive Airport Master and Environs Specific Plan, adopted in April 1999. This revised CLUP standardizes the document format and incorporates the March 2011, FAA approved, Airport Layout Plan (ALP) depicting current and future conditions at FCH in accordance and consistent with the 1999 Airport Master Plan (AMP).

2.2 Airport Layout Plan

Refer to Sheet 1 of 6, FAA approved ALP.

2.3 Airport Activity

Fresno Chandler Executive Airport is owned and operated by the City of Fresno. The single runway (12-30) is 3,626 feet long and 75 feet wide with a full-length parallel taxiway. The airport elevation is 279.7 feet above Mean Sea Level (MSL).
FCH is officially designated by the Federal Aviation Administration as a general aviation reliever airport for Fresno Yosemite International Airport and is used primarily for general aviation. The current mix of aircraft based at the airport consists of 237 single engine aircraft, 6 multi-engine aircraft, one turbine-powered aircraft and 3 helicopters. There are 9 general aviation related businesses at FCH, offering services such as fueling, aircraft maintenance and restoration, flight instruction, charter services and rentals.

CHAPTER 3: COMPATIBILITY POLICIES & CRITERIA

3.1 Noise

The purpose of noise compatibility policies is to avoid establishment of new noise-sensitive land uses and exposure of the users to levels of aircraft noise that can disrupt activities involved. The noise contours established for the purpose of evaluating noise compatibility of land use are depicted on Figure 1. The state law (Public Utilities Code Section 21675(a)) requires that noise contours reflect the anticipated growth of the airport during at least the next 20 years. The 1999 FCH AMP provides the activity forecast used in the contour calculations.

(1) Airport land use noise compatibility shall be evaluated in terms of the Community Noise Equivalent Level (CNEL), as defined in Title 21, Subchapter 6, of the California Code of Regulations (noise standards). Wherever used in this plan, the term CNEL shall be assumed to be an annual average.

(2) The maximum noise exposure which shall be considered normally acceptable for residential areas is 65 db CNEL. The residential area criterion establishes the baseline from which noise compatibility for other land uses shall be evaluated.

(3) The relative acceptability or unacceptability of particular land uses with respect to the noise levels to which they would be exposed is indicated in the "Airport Land Use Noise Compatibility Criteria" matrix, Table 1. These criteria shall be the principal determinants of whether a proposed land use is compatible with the noise impact from FCH. Special circumstances which would affect the specific proposal's noise sensitivity (e.g., the extent or lack of outdoor activity) shall also be taken into account.

(4) A condition for approval of a proposed land use identified on table one as “Conditional” for a given noise environment shall be that the building intended for habitation or occupation provide a satisfactory degree of noise attenuation. Table 2 sets forth the permitted
interior noise levels. If the structure can reduce the noise exposure to the outlined noise levels, the use may be deemed compatible.

(5) New residential development and new schools shall be prohibited within the 65 CNEL contour of FCH unless it is determined that there is no feasible alternative to such development of the subject property and provided that the following conditions are met:

(a) The record property owner grants an avigation easement to the City of Fresno.

(b) The record property owner executes an agreement in favor of the City of Fresno, whereby the property owner shall indemnify, hold harmless and defend the City, and every officer and employee thereof from any and all loss, liability, damages, costs, suits or claims arising out of the location of the development within the 65 CNEL contour.

(c) New residential structures shall incorporate noise insulation in compliance with Title 24 of the California Code of Regulations such that interior noise levels are reduced to no more than 45 db CNEL.

(6) An acoustical analysis shall be required prior to the approval of a special permit (site plan or conditional use permit) for any new residential use, transient lodging, school, library, hospital, nursing home, day nursery, church, auditorium or a concert hall located within a 65 or greater CNEL contour. For single family residential proposals, an acoustical analysis shall be required as a condition of subdivision map approval, said analysis to be submitted prior to the issuance of building permits. The acoustical analysis shall be completed in a manner consistent with Title 24 of the California Code of Regulations. A special permit for the uses listed above shall not be approved unless the acoustical analysis demonstrates that interior noise levels attributable to exterior sources does not exceed 45 db CNEL in any habitable room with windows and doors closed. In quantifying aircraft noise exposure of the project site, the acoustical analysis shall include consideration of engine run up noise where applicable. A single report may suffice for all similar proposals within the same CNEL contour.

(7) Within the 70 CNEL contour, new or redeveloped schools, hospitals, nursing homes, libraries, day nurseries, churches, auditoriums, and amphitheaters shall be prohibited. New residential uses (excluding transient lodging) shall be prohibited, except as provided for in Policy No. (8), below.
(8) Existing residential uses lying within the 70 CNEL contour, that conform to the land use designations of this plan, may be remodeled in such a way that does not increase the floor space of the residence, or rebuilt if destroyed by fire, explosion or other catastrophic means. A use is considered to be destroyed if the cost of reconstruction, repairing or rebuilding would exceed fifty percent of the reasonable replacement value of the building immediately prior to destruction.

(9) When applying the noise compatibility criteria listed in Table 1 to a given location, the basis for evaluation shall be the maximum CNEL contour shown in the Compatibility Plan.

(10) If a noise analysis, including noise monitoring, indicates that project noise exposure may be higher or lower than indicated by the Airport Land Use Noise Compatibility Criteria, Table 1, due to site-specific conditions or changes in Airport/aircraft operations, the noise exposure used for project evaluation may be adjusted at the discretion of the City of Fresno.

3.2 Overflight

Noise from individual aircraft can be intrusive and annoying in locations beyond the limits of the mapped noise contours. Sensitivity to aircraft overflights varies from one person to another. 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.

(1) The overflight compatibility of proposed land uses within the AIA shall be evaluated in accordance with the policies set forth in this section.

(2) Except when overriding circumstances exist, a condition for approval of any residential development proposal (i.e., zone change, subdivision map, conditional use permit, site plan review) within the AIA, as defined herein, shall be the dedication of an avigation easement to the City of Fresno.

(3) An Avigation Easement and Agreement shall be required for all development proposals (commercial, industrial or residential) within the 65 CNEL contour. The avigation easement shall contain the following property rights:
(a) Right-of-flight at any altitude above acquired easement surfaces.

(b) Right to generate noise, vibrations, fumes, dust and fuel particle emissions.

(c) Right-of-entry to remove, mark, or light any structures or growths above easement surfaces.

(d) Right to prohibit creation of electrical interference, unusual light sources, and other hazards to aircraft flight.

(e) Right to prevent erection or growth of all objects above acquired easement surfaces.

The easement surfaces acquired shall be based on Part 77 of the Federal Aviation Regulations except that no easement surface less than 35 feet above ground shall be acquired.

(4) A Covenant shall be required as a further condition for approval of residential development proposals within the AIA and all development proposals within the 65 CNEL contour. The Council of the City of Fresno shall, except where overriding circumstances exist, require the property owner(s) to record a covenant providing the following:

(a) That it is understood by the owners and owners' successors in interest that the real property in question lies close to the Fresno Chandler Executive Airport and that the operation of the airport and the landing and take-off of aircraft may generate high noise levels which will affect the habitability and quiet enjoyment of the property.

(b) That the owners covenant to accept and acknowledge the operation of the Fresno Chandler Executive Airport.

(5) The above avigation easement, covenants, conditions and restrictions shall be recorded in the office of the Fresno County Clerk/Recorder and shall run with the land and shall be binding upon the present and subsequent owners of the property.

(6) Effective January 1, 2004, California state statutes (Business and Professional 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 AIA. Buyer notification shall be accomplished by the use of real estate
disclosure statements for property within the AIA. The disclosure statements shall notify the buyers of property located within the AIA of Fresno Chandler Executive Airport and that aircraft overflights may affect the habitability and quiet enjoyment of the property.

3.3 Safety

The intent of land use safety compatibility is to minimize the risks associated with an off-airport aircraft accident or emergency landing. Risks both to people and property on the ground in the vicinity of the airport and to people on board aircraft are considered. The safety compatibility of land use development is outlined in Table 3. The zone boundaries are based upon general aviation aircraft accident location data contained in the California Airport Land Use Planning Handbook (“Caltrans Handbook”) along with data regarding the runway configuration and aircraft operational procedures at FCH.

1. Land uses or land use characteristics which may affect safe air navigation or, because of their nature and proximity to an airport, may be incompatible with the airport shall be avoided in the vicinity of FCH.

2. The criteria which shall be used to evaluate whether a land use is acceptable with respect to its airport proximity are set forth in Table 3, entitled Airport Land Use Safety Compatibility Criteria. The indicated Safety Compatibility Zones (SCZs), as defined in the Caltrans Handbook, shall be used.

NOTE: Within SCZs 3 and 4 the following shall apply:

(a) Existing development that conforms to existing zoning regulations in effect prior to February 1987 may be rebuilt in the event it is destroyed by fire or Act of God

(b) The regulations identified in the Caltrans Handbook, are not intended to take development rights such that the economic viable use of land is unduly restricted. Therefore, development of vacant property or redevelopment of property in accordance with the zoning regulations in effect prior to February 20, 1987 shall not be prohibited on the basis of the restrictions set forth in Table 3. This provision shall not apply to schools, hospitals, nursing homes, churches, auditoriums, concert halls, amphitheaters or other uses that would result in a large concentration of people.

3. Land uses which attract wildlife that pose a hazard to aviation activities are a special concern adjacent to airports. Examples of land use which may attract hazardous wildlife include landfills and
bodies of standing water. In reviewing a project for safety compatibility, the most current version of the FAA Advisory Circular AC No. 150/5200-33 (Hazardous Wildlife Attractants On or Near Airports) shall be considered. The review area identified in this circular is outlined as the boundary within 10,000 feet of the Airport Operations Area.

3.4 Airspace Protection

The objective of airspace protection policies is to ensure that structures and other uses of the land do not cause hazards to aircraft in flight in the airport vicinity. Hazards to flight include physical obstructions to the navigable airspace, wildlife hazards (particularly bird strikes) and land use characteristics that create visual or electronic interference with aircraft navigation or communication. Boundaries of this zone represent the imaginary surfaces defined for the airport in accordance with Federal Aviation Regulations (FAR) Part 77.

(1) No structure, tree, or other object shall be permitted to exceed the height limits established in accordance with Part 77, Subpart C, of the FAR. This criterion applies unless, in the case of a proposed object or growing tree, one or more of the following conditions exist:

(a) The object would be substantially shielded by existing permanent structures or terrain in a manner such that it clearly would not affect the safety of air navigation;

(b) The FAA has conducted an aeronautical study and either determined that the object would not result in a hazard to air navigation or made recommendations for the object's proper marking and lighting as an obstruction, and FAA recommendations, if any, are properly implemented;

(c) The object is otherwise exempted from the requirements of FAR Part 77.

In the case of an existing object, this criterion also applies unless the object exceeded the prescribed height limits prior to February 20, 1987, in which case marking and lighting may still be required.

(2) No object shall be permitted to be erected that, because of height or other factors, would result in an increase in the minimum ceiling or visibility criteria for an existing or proposed instrument approach procedure to any runway.

(3) The FAR Part 77 surfaces depicted on the Airspace Protection Surfaces (Sheet 2 through Sheet 6 of the Airport Layout Plans)
shall be used in conjunction with the above airspace policies to determine whether the height of an object is acceptable.

CHAPTER 4: COMPATIBILITY ZONE MAPS

4.1 Noise Contours

The 1999 FCH AMP provides the activity forecast used in the contour calculations. Refer to Figure 1 Environs for the Noise Contours at FCH.

4.2 Safety Zones

The Caltrans Handbook, October 2011, provides guidance for Safety Zone Configuration. These zones are delineated based on the type of airport, size of airport, and operational characteristic. Refer to Figure 1 Environs Plan and Figure 2 dimensional layout for the Safety Compatibility Zones at FCH.

4.3 Airspace Protection Surfaces

Part 77 of the FAR, *Objects Affecting Navigable Airspace*, establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. Refer to Sheet 2 through Sheet 6 of the Airport Layout Plans for the Airspace Protection Surfaces.

4.4 Airport Layout Plan

The Airport Layout Plan (ALP) is an FAA approved document that depicts planned development at the airport. Refer to Sheet 1 of the Airport Layout Plans for the 2011 FAA approved ALP. For evaluation purposes the most recent ALP on file with FAA shall be used.

CHAPTER 5: PROCEDURAL POLICIES

5.1 Types of Actions Reviewed by the Airport Land Use Commission (ALUC)

The following types of actions must be referred to the ALUC for review when the affected property is located in the Airport influence Area (AIA – see Figure 1 Environs Plan):

a) Adoption or amendment of general plans, community plans and specific plans
b) Rezoning applications or text amendments to the zoning ordinance
c) Airport Master Plans
d) Building Regulations
The following types of local actions do NOT require ALUC review:

   e) Conditional Use Permits and site Plan Reviews
   f) Variances
   g) Subdivision or Parcel Maps

5.2 Types of Actions that Require Consistency with Airport Land Use Compatibility Plan Policies:

The following types of local actions require consistency with the plan policies included in this document when the affected property is located in the AIA:

   a) Rezoning applications
   b) Conditional use permits, and site plan reviews
   c) Variances
   d) Subdivision maps and parcel maps

Interpretation Guidelines:

   a) If a parcel of land is partially within the AIA, the entire parcel is considered to be subject to the land use consistency requirements of this plan.

   b) In the event that it cannot be precisely determined from the AIA Map whether a parcel of land is within the AIA, the determination in this regard shall be made by the Director of the Development and Resource Management Department. The Director’s Determination shall be final.

5.3 Project Information

Project review materials, must be submitted to acting staff of the Fresno County Airport Land Use Commission (ALUC). A project description, including relevant land use information as well as detailed geographical location maps, site plans, architectural drawings are required for a review request.

5.4 Timing Review

Time is a factor with regard to the project review process in two ways:

   a) Timing of Project Submittal. Plans and projects shall be referred to the ALUC at the earliest reasonable point in time so that the Commission’s review can be duly considered by the local jurisdiction prior to formalizing its actions. Depending upon the type of plan or project and the normal scheduling of meetings, ALUC review can be done before, after, or concurrently with review by the local planning commission and other
advisory bodies, but must be accomplished before final action by the decision making bodies.

b) Response Time Requirement. The ALUC must respond within 60 days of referral to local agency requests for a consistency determination on plans or projects for which submittal is mandatory. However, this response period does not begin until such time as all information necessary for accomplishment of the project review has been submitted to the Commission.

5.5 ALUC Action Choices

ALUC choices of action on a land use plan or project submitted for review may either be consistent or inconsistent with the compatibility plan. Although the Aeronautics Act (Sections 21676(a) and 21676.5(a)) mentions only the above two choices of action, the Fresno County ALUC has decided to allow a third option: consistent with conditions. When a finding of consistency with conditions is made, the conditions should be limited in scope and described in a manner which allows compliance to be clearly assessed.

5.6 Overruling an ALUC Decision

Various sections of the airport land use commission statutes provide for local agencies to overrule ALUC decisions on land use matters and airport master plans. The overruling process involves the three following mandatory steps:

a) The holding of the public hearing (and as a courtesy it is recommended to inform the ALUC of such hearing);

b) The making of specific findings that the action proposed is consistent with the purposes of the ALUC statute; and

c) Approval of the proposed action by a two-thirds vote of the agency’s governing body
CHAPTER 6: INITIAL REVIEW OF GENERAL PLAN CONSISTENCY

The Caltrans Handbook specifically outlines that to be fully consistent with the compatibility plan, a general plan must not have any direct conflicts with the compatibility plan; and must delineate a mechanism or process for ensuring that individual land use development proposals comply with the ALUC criteria.

The City of Fresno FCH Airport Land Use Compatibility Plan is an amendment to an existing specific plan (The Fresno-Chandler Downtown Airport Master and Environs Specific plan, 1999). It does not change the planned land use designations in the 2025 Fresno General plan or the applicable community plans, specific plans or redevelopment plans, nor does it change zoning designations within the scope of the plan area. It simply updates noise contours and safety zone configurations while maintaining the noise and safety-related land use policies that must be applied to property within the AIA. As such, it is a refinement of the 2025 Fresno General Plan, the Edison Community Plan and applicable redevelopment plans within the AIA.

Furthermore, there are no conflicts between the City of Fresno FCH Airport Land Use Compatibility Plan and the County of Fresno ALUC Compatibility Land Use Plan (CLUP) adopted in October 2014. As outlined by the Caltrans Handbook, consistency does not require being identical. It means only that the concepts, standards, physical characteristics, and resulting consequences of proposed action must not conflict with the intent of law or the compatibility plan to which the comparison is made. The two plans are virtually identical, with slight variation in Chapter 5 and 6 related to processing procedures and general plan consistency. Therefore, they meet the criteria of compatibility set forth in state law.
SECTION B

TABLES, FIGURES & AIRPORT LAYOUT PLAN
### TABLE 1
AIRPORT LAND USE NOISE COMPATIBILITY CRITERIA

<table>
<thead>
<tr>
<th>LAND USE CATEGORY</th>
<th>Exterior Noise Exposure (CNEL)</th>
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<tbody>
<tr>
<td></td>
<td>60-65</td>
</tr>
<tr>
<td><strong>Residential, Lodging, and Care</strong></td>
<td></td>
</tr>
<tr>
<td>*Residential (including single-family, multi-family)</td>
<td>0</td>
</tr>
<tr>
<td>Retirement homes, residential support facilities, hospitals, nursing homes, large child day care centers, adult day care facilities</td>
<td>0</td>
</tr>
<tr>
<td>*Hotels, motels, other transient lodging</td>
<td>0</td>
</tr>
<tr>
<td>*Mobile Homes</td>
<td>0</td>
</tr>
<tr>
<td><strong>Public and Institutional</strong></td>
<td></td>
</tr>
<tr>
<td>* Schools, libraries</td>
<td>0</td>
</tr>
<tr>
<td>*Places of worship, auditoriums, concert halls, theaters, indoor arenas</td>
<td>0</td>
</tr>
<tr>
<td>Cemeteries, Parking</td>
<td>+</td>
</tr>
<tr>
<td><strong>Commercial and Industrial</strong></td>
<td></td>
</tr>
<tr>
<td>Offices, service commercial, retail, shopping centers, restaurants</td>
<td>+</td>
</tr>
<tr>
<td>Wholesale, warehousing, research and development, light industrial</td>
<td>+</td>
</tr>
<tr>
<td>Extractive industry, industrial, manufacturing, utilities</td>
<td>+</td>
</tr>
<tr>
<td><strong>Agricultural, and Recreational</strong></td>
<td></td>
</tr>
<tr>
<td>Cropland</td>
<td>+</td>
</tr>
<tr>
<td>Nature preserves, Livestock breeding, Zoos</td>
<td>0</td>
</tr>
<tr>
<td>Regional parks, athletic fields, golf courses, outdoor spectator sports, water recreational facilities, horse stables</td>
<td>+</td>
</tr>
<tr>
<td>Amphitheaters</td>
<td>0</td>
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### TABLE 1 (cont.)

**AIRPORT LAND USE NOISE COMPATIBILITY CRITERIA**

**LEGEND**

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<thead>
<tr>
<th>Symbol</th>
<th>Land Use Acceptability</th>
<th>Interpretation/Conditions</th>
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<tr>
<td>+</td>
<td>Compatible</td>
<td>The activities associated with the specific land use may be carried out with essentially no interference from aircraft noise.</td>
</tr>
<tr>
<td>0</td>
<td>Conditional</td>
<td>The indicated noise exposure will cause interference with the activities. Building structure must be capable of attenuating noise to the indoor acceptable CNEL, standard construction methods will normally suffice. Indoor Uses: Noise exposure may cause moderate interference with indoor activities, extensive construction features required to make the indoor environment acceptable. Outdoor Uses: CNEL is acceptable for outdoor activities, although some noise interference may occur, caution should be exercised with regards to noise-sensitive uses.</td>
</tr>
<tr>
<td>-</td>
<td>Incompatible</td>
<td>Unacceptable noise interference upon these activities will occur indoor and outdoor. Adequate structural noise insulation is not practical under most circumstances. Severe noise interference makes outdoor activities unacceptable</td>
</tr>
<tr>
<td>*</td>
<td>Acoustical Analysis Required</td>
<td>An acoustical analysis shall be performed by an individual or firm experienced in Acoustical Engineering</td>
</tr>
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### TABLE 2
INTERIOR NOISE LEVEL REDUCTION (dBA)
CNEL RANGE (Annual Average)

<table>
<thead>
<tr>
<th>GENERALIZED LAND USE</th>
<th>60-65</th>
<th>65-70</th>
<th>70-75</th>
</tr>
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<tbody>
<tr>
<td>Residential</td>
<td>AS</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Transient Lodging</td>
<td>AS</td>
<td>25'dBA</td>
<td>--</td>
</tr>
<tr>
<td>Schools, Hospitals and Nursing Homes</td>
<td>AS</td>
<td>25'dBA</td>
<td>--</td>
</tr>
<tr>
<td>Commercial</td>
<td>AS</td>
<td>AS</td>
<td>25dBA</td>
</tr>
<tr>
<td>Manufacturing&lt;sup&gt;2&lt;/sup&gt;</td>
<td>+</td>
<td>AS</td>
<td>25dBA</td>
</tr>
</tbody>
</table>

**Legend**

+ Uses normally acceptable.

-- Uses should not be permitted.

<sup>1</sup> Acoustical studies may indicate a need for additional insulation in noise sensitive living areas such as sleeping quarters and areas of the facility used at night for relaxing and conversing.

<sup>2</sup> Noise level reductions are for those portions of the buildings where the public is received, office areas, and noise sensitive areas where noise levels are low.

AS Acoustical studies shall be performed to determine if insulation should be added to sensitive occupancy areas.
## TABLE 3
### AIRPORT LAND USE SAFETY COMPATABILITY CRITERIA

<table>
<thead>
<tr>
<th>LAND USE CHARACTERISTIC</th>
<th>SAFETY ZONES</th>
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<tr>
<td>Residential Uses</td>
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<td>(C)</td>
<td>--</td>
<td>+</td>
<td></td>
<td></td>
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<tr>
<td>Other Uses in Structures</td>
<td>(D,E)</td>
<td>(E)</td>
<td>(E)</td>
<td>--</td>
<td>+</td>
<td></td>
<td></td>
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<tr>
<td>Other Uses Not in Structures</td>
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<td>(D)</td>
<td>+</td>
<td>+</td>
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<td>+</td>
<td></td>
</tr>
</tbody>
</table>

### SPECIAL CHARACTERISTICS (IN OR OUTSIDE OF STRUCTURES)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Zone 1</th>
<th>Zone 2</th>
<th>Zone 3</th>
<th>Zone 4</th>
<th>Zone 5</th>
<th>Zone 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distracting Lights or Glare</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>+</td>
</tr>
<tr>
<td>Sources of Smoke or Electrical Interference</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
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<td>+</td>
</tr>
<tr>
<td>Attractor of Birds</td>
<td>--</td>
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</tr>
</tbody>
</table>

### NOTES
1. See Figure 1, Safety Compatibility Zones.
2. Refer to Figure 2 for dimensional layout of the Safety Compatibility Zones.

### INTERPRETATION

+ Compatible: Use is acceptable with little or no risks.

( ) Conditional: Land use proposals that fall within this category must be reviewed on a case-by-case basis by Commission or jurisdiction having authority. The Commission or jurisdiction having authority may determine the use to be acceptable under conditions cited below.

A Density no greater than 1 dwelling unit per 3 acres.
B Density no greater than 2 dwelling units per acre.
C Density no greater than 5 dwelling units per acre.
D No uses attracting more than 10 persons per acre.
E No schools, hospitals, nursing homes, or similar uses.
F Characteristic cannot reasonably be avoided or located outside the indicated safety zone.

-- Incompatible: Use is unacceptable due to associated high risks.
ZONE 1-RUNWAY PROTECTION ZONE = 500'x700'x1,000'
ZONE 2-INNER APPROACH/DEPARTURE ZONE
ZONE 3-INNER TURNING ZONE
ZONE 4-OUTER APPROACH/DEPARTURE ZONE
ZONE 5-SIDELINE ZONE
ZONE 6-TRAFFIC PATTERN ZONE

RUNWAY CENTERLINE