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# California Airport Land Use Planning Handbook Heliport Guidelines

**AERONAUTICS LAW  
PUBLIC UTILITIES CODE  
Division 9, Part 1, Chapter 4  
Article 3  
REGULATION OF AIRPORTS  
(excerpts)**

**21661.5. City Council or Board of Supervisors and ALUC Approvals**

- (a) No political subdivisions, any of its officers or employees, or any person may submit any application for the construction of a new airport to any local, regional, state, or federal agency unless the plan for construction is first 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 unless the plan is submitted to the appropriate commission exercising powers pursuant to Article 3.5 (commencing with Section 21670) of Chapter 4 of Part 1 of Division 9, and acted upon by that commission in accordance with the provisions of that article.
- (b) A county board of supervisors or a city council may, pursuant to Section 65100 of the Government Code, delegate its responsibility under this section for the approval of a plan for construction of new helicopter landing and takeoff areas, to the county or city planning agency.

**21664.5 Amended Airport Permits; Airport Expansion Defined**

- (a) An amended airport permit shall be required for every expansion of an existing airport. An applicant for an amended airport permit shall comply with each requirement of this article pertaining to permits for new airports. The department may by regulation provide for exemptions from the operation of this section pursuant to Section 21661, except that no exemption shall be made limiting the applicability of subdivision (e) of Section 21666, pertaining to environmental considerations, including the requirement for public hearings in connection therewith.
- (b) As used in this section, "airport expansion" includes any of the following:
  - (1) The acquisition of runway protection zones, as defined in Federal Aviation Administration Advisory Circular 150/1500-13, or of any interest in land for the purpose of any other expansion as set forth in this section.
  - (2) The construction of a new runway.
  - (3) The extension or realignment of an existing runway.
  - (4) Any other expansion of the airport's physical facilities for the purpose of accomplishing or which are related to the purpose of paragraph (1), (2), or (3).
- (c) This section does not apply to any expansion of an existing airport if the expansion commenced on or prior to the effective date of this section and the expansion met the approval, on or prior to that effective date, of each governmental agency that required the approval by law.

be given to providing safety zones lateral to the runway if these areas are not fully contained within the boundaries of the military facility.

The safety compatibility criteria suggested in AICUZ guidelines tend to represent *minimum standards* (more so with respect to noise than safety). Also, the criteria are formatted using a detailed listing of land uses types. ALUCs may choose to use the AICUZ guidelines directly. Alternatively, the safety compatibility guidelines indicated in this *Handbook* may be appropriate, particularly where the ALUC utilizes this format for safety compatibility criteria at other airports within its jurisdiction. In either case, the specific criteria should be reviewed and revised as necessary to fit the operational characteristics of the specific airfield and the land use characteristics of the surrounding area. Moreover, PUC Section 21675 (b) requires that the ALUC adopt an ALUCP that is "consistent with the safety and noise standards in the [AICUZ] prepared for that military airport." For additional guidance on collaboration between ALUCs, local jurisdictions, and military leadership for the purposes of compatibility planning, see the *California Advisory Handbook for Community and Military Compatibility Planning*, which is published by the Governor's Office of Planning and Research (OPR).

### **Guidelines for Heliports**

Very little information is available upon which to base safety compatibility guidelines for heliports. No useful compilation of data on the location of helicopter accidents in the proximity of heliports is known to exist. The only significant policy guidance is contained in the FAA *Heliport Design Advisory Circular (AC 150/5390-2B)*, issued on September 30, 2004. The primary concerns of that document are with respect to the design of the touchdown and liftoff pad itself and requirements for obstruction free approach/departure paths.

The one additional FAA safety -related guideline—described as applicable only to public-use facilities—is for creation of heliport protection zones. These zones, equivalent to runway protection zones at airports, extend 280 feet from the edge of the final approach and takeoff area. As with runway protection zones, the helipad protection zone should be clear of incompatible objects and any land uses involving a congregation of people.

Establishment of heliport protection zones is a desirable safety -compatibility objective for all heliports. There are practical limitations to doing so, however. One is that, even when approach/departure routes are formally defined and approved, the highly maneuverable capabilities of helicopters means that their actual routes may differ. The other is that, except for facilities on an airport, the heliport protection zone is likely to extend onto adjacent property.

To the extent that is practical, buildings (particularly ones higher than the heliport itself) and congregations of people should be avoided within helipad protection zones. Once a heliport is established, the facility owner, local land use jurisdictions, and ALUC should take action to preserve compatible uses in the heliport protection zones and, even more critically, to prevent obstructions to the approach/departure surfaces.

### ***Guidelines for Private Airports***

Since personal use airports are not subject to the *Handbook*, responsibility for airport land use compatibility planning falls to local government. When preparing general or specific plans, local governments should consider potential safety issues with regards to development near existing personal use airports, and deliberate on, at a minimum, the safety guidance appropriate for the environment in which the airport is located (as outlined in Chapter 4 of this *Handbook*).

### **3.2.4 Airspace Protection**

Relatively few aircraft accidents are caused by land use conditions that are hazards to flight. The potential exists, however, and protecting against it is essential to airport land use safety compatibility.

#### ***Airspace Protection Policy Foundations***

##### ***FAA Guidance***

##### **FAR Part 77 Airspace Surfaces**

To help ensure protection of the airspace essential to the safe operation of aircraft at and around airports, the FAA has established a process that requires project sponsors to inform the agency about proposed construction that could affect navigable airspace. The standards by which the FAA conducts these aeronautical studies are set forth in FAR Part 77, Objects Affecting Navigable Airspace. Specifically, FAR Part 77 establishes standards for:

- ◆ **FAA Notification.** Notifying the FAA about any proposed construction or alteration of objects—whether permanent, temporary, or of natural growth—that could be a hazard to flight;
- ◆ **Imaginary Surfaces.** Defining an airport’s airspace, referred to as ‘imaginary surfaces’; and
- ◆ **Aeronautical Studies.** Determining obstructions to navigable airspace and the potential hazardous effects of such obstructions on the safe and efficient use of that airspace.

##### ***Limits on Federal Authority under FAR Part 77***

The FAA's authority to protect the navigable airspace from obstructions and other hazards, including existing and proposed structures, is predominantly derived from Title 49 U.S.C. Section 44718. However, Section 44718 does not provide specific authority for the FAA to regulate or control of off-airport real property. Nevertheless, the FAA does have authority to require that sponsors of new objects that could be airspace obstructions submit notice to the agency prior to the construction as outlined below. Persons failing to comply with the provisions of FAR Part 77 are subject to civil penalty under Section 902 of the Federal Aviation Act of 1958, as amended and pursuant to 49 U.S.C. Section 46301(a).

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*Primary responsibility for preventing hazardous obstructions to airport airspace rests with state and local governments and the airport operator.*

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The best source of data from which ALUCs can develop an ALUCP for a military airport normally is the AICUZ study, which the U.S. Department of Defense requires for each base. In fact, PUC Section 21675 (b) requires that ALUCs adopt ALUCPs for military airports that are "consistent with the safety and noise standards in the [AICUZ] prepared for that military airport." AICUZ studies contain analyses of noise, accident potential, and height restrictions impacts of aircraft operations. For each of these impacts, a set of land use compatibility criteria are indicated. These criteria are merely recommendations to local land use jurisdictions—other than through acquisition of property, the military has no powers to enforce them.

AICUZ compatibility criteria tend to be minimal in terms of the degree of protection from incompatible land uses which they afford. ALUCs and local jurisdictions can and should consider setting higher standards in their own respective compatibility planning. Ensuring a high degree of land use compatibility around military airports is particularly prudent given the economic importance which major bases have to the surrounding communities and the fact that land use compatibility is one of the factors considered in the government's assessment of which bases to maintain in operation.

### **3.4.5 Heliports**

Compatibility planning for heliports presents another uncommon set of circumstances for ALUCs. As discussed in Chapter 2, the first consideration is to decide which heliports should have ALUCPs. The State Aeronautics Act requires all public-use heliports not located on an airport and all special-use heliports to obtain a Heliport Permit. A public-use heliport would be considered a public airport, and would require an ALUCP. A special-use heliport, most notably those at hospitals, would not require an ALUCP, but the ALUC has the option to prepare one. Any ALUCP prepared for a heliport needs to take into account the unique operational characteristics of helicopters. Because of the steep approach and departure profiles which helicopters normally fly, they are effectively operating in an en route manner once beyond a short distance from the heliport (FAR Part 77 airspace surfaces extend just 4,000 feet from the landing pad). Within the immediate vicinity of a heliport, helicopter noise impacts can be relatively intensive on a single-event scale. However, except for the few heliports which experience a high volume of operations, cumulative noise impact contours are very small. Also, the limited accident data available for helicopters suggests that significant safety concerns are generally confined to within a few hundred feet of the landing pad. Perhaps most important with respect to safety is the necessity of keeping established approach/ departure corridors clear of obstructions.

Given this combination of factors, some restrictions on land use development is appropriate within the immediate vicinity of public-use and special-use heliports. However, except where warranted by high activity levels, more extensive restrictions are normally unnecessary.

## **3.5 ACCOUNTING FOR EXISTING DEVELOPMENT**

The State Aeronautics Act gives ALUCs authority to conduct compatibility planning for areas around public airports only "to the extent that these areas are not already devoted to incompatible uses." This phrase is generally accepted to mean that the commissions have no authority over existing development. In formulation of ALUCP policies, several facets of this limitation are important to take into account.

*have the authority to change the 180-day time limit, ALUCs can decline to bring a judicial action against a local government for taking extra time.*

### **Ordinances and Regulations**

ALUC review of county or city proposals to adopt or amend zoning, building, and other land use ordinances and regulations is required in instances where those ordinances and regulations implicate compatibility criteria and policies.

The SAA explicitly requires ALUC review of these policy instruments during the period prior to when the local plan has been made consistent with the ALUCP or has been adopted by overruling the commission (PUC Section 21676(b)). Subsequent to when a county or city has taken action to amend its local plans, review of proposed new or revised zoning ordinances and building regulations remains mandatory because of their direct linkage to the local plans. Components of zoning ordinances and building regulations are normally essential to implementation of compatibility criteria and thus to the achievement of consistency between the local plans and the ALUCP. In effect, these instruments become extensions of the local plans and, with respect to ALUC review requirements, must be treated in the same manner.

**As discussed later in this chapter, careful ALUC review of the relevant ordinances and regulations in conjunction with the assessment of local plans for consistency with the ALUCP is essential.**

This review requirement especially applies when a proposed new or revised zoning ordinance or building regulation would have general applicability throughout the community or at least to lands within the airport influence area. ALUC reviews of parcel-specific changes to zoning or other regulations are also required when the parcels are within the airport influence area. This is true even when a local plan amendment is not involved. Again, the rationale for reviews being mandatory is that a determination that a local plan is consistent with the ALUCP almost always depends upon the details, including parcel-specific details, found in implementing zoning ordinances and building regulations.

### **Airport Plans**

ALUC review of three categories of airport plans is mandatory under state law: (1) adoption or amendment of an airport master plan (AMP); (2) proposed construction and establishment of a new airport; and (3) adoption or amendment of airport expansion plan. This review requirement is not affected by, and is independent of, any previous action by the local jurisdiction regarding its local plans.

- ◆ **Airport Master Plans**—PUC Section 21676(c) mandates 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 such proposed change to the airport land use commission.” The commission must then determine whether the proposed AMP is consistent or inconsistent with the adopted ALUCP for that airport.
- ◆ **Construction Plans for New Airports**—The requirement for review of construction plans for new airports arises not out of the airport land use commission portion of the SAA (Chapter 4, Article 3.5), but from the regulation of airports portion of the law (Chapter 4, Article 3). Section 21661.5 of this article 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:

**Also sometimes subject to ALUC review are proposals for non-aviation development of airport property, which is discussed in the following section.**

- 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
- Submitted to and acted upon by the appropriate airport land use commission.

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*As used in this section of the law and in the section (discussed below) applying to airport expansion, construction plans should be thought of as construction proposals. These sections are not intended to require ALUC review of the actual engineering construction drawings, but only the overall layout plan.*

*Also, in the context of aeronautics law, a heliport is considered to be a type of airport. Plans for the construction or expansion (as discussed below) of new heliports, including hospital heliports (a type of special-use facility), therefore, are subject to ALUC review.*

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- ◆ Airport Expansion Plans—PUC Section 21664.5 applies the above review requirements to any airport expansion project that entails amendment of an Airport Permit issued by the California Department of Transportation. Airport expansion is defined to include:
  - The construction of a new runway;
  - The extension or realignment of an existing runway; and
  - The acquisition of runway protection zones or any interest in land for the purpose of the above.

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*Of note, state-issued airport permits are required only for public-use or special-use facilities. Agricultural and certain other restricted-use airports are exempt from permitting requirements (see California Code of Regulations Section 3533) and, therefore, not subject to ALUC review.*

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### 6.2.3 Other Actions Potentially Subject to ALUC Review

#### *Individual Land Use Development Projects*

Historically, state law required that all local plans, projects, and other actions affecting the vicinity of an airport be submitted to the responsible commission for review. For airports located in growing areas, this process proved to be burdensome. Therefore, the law was amended to place emphasis on general and specific plans as the levels of local planning at which compatibility between airports and their surroundings should primarily be addressed. The current law greatly limits the need for ALUC review of local actions once the ALUC has adopted an ALUCP and local plans have been made consistent with it.

Airport land use commissions can require the review of “all actions, regulations, and permits” involving the vicinity of a public airport under only two circumstances:

- ◆ Prior to ALUC adoption of an ALUCP for the airport (PUC Section 21675.1(b)); and
- ◆ When a local jurisdiction has neither revised its local plan(s) to be consistent with the ALUCP nor overruled the commission (PUC Section 21676.5(a)).

- ◆ **Runway Layout**—Are any new runways or helicopter takeoff and landing areas proposed? Are changes in runway length, landing threshold locations, or type of approach procedures planned? What effect do any of these changes have on height limits placed on nearby property for the purposes of airspace protection?
- ◆ **Flight Tracks**—Will new or modified facilities or aircraft operating procedures result in different aircraft traffic patterns or other changes in where or how high aircraft typically fly when approaching, departing, or flying near the airport?
- ◆ **Noise Impacts**—Will changes in any of the above items result in significantly increased noise impacts on surrounding lands?

Plans for any other airport facilities or activities associated with aircraft operations also can be considered in the ALUC review. Proposals for new taxiways or aircraft parking facilities near noise-sensitive land uses, for example, may warrant examination. In most cases, however, these facilities and their use pose no significant off-airport implications.

Noise associated with aircraft engine maintenance and testing is not an ALUC concern. These functions are not activities essential to the operation of aircraft at a particular airport. Rather, they are industrial activities and, as such, should be addressed by the local land use jurisdiction in the same manner as other industrial noise sources.

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*As noted earlier in this chapter, an additional component of airport plans that ALUCs should review is proposed non-aviation development of airport property. Such uses include office buildings, industrial facilities, hotels, and other such uses that do not have a direct aeronautical function (see Glossary for definition of aviation-related use). The criteria against which such uses should be evaluated are the same as if the use were located on adjacent private property.*

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### **Construction or Expansion Plans for Airports without Previous ALUCPs**

When an ALUC reviews a plan for a new airport or heliport—or the expansion of an existing airport or heliport—in an existing land use setting, the basic issue is how will the airport fit into that setting. One way of looking at this issue is to ask: *Would the existing or planned land uses be considered compatible with the airport or heliport if the latter were already in existence?* If not, what features or mitigation measures are included in the airport or heliport proposal to mitigate the noise and safety impacts on surrounding land uses? Specific questions for ALUCs to consider might include:

- ◆ **Runway Layout**—Does the proposed layout of aircraft landing areas attempt to limit impacts on surrounding land uses to the extent practical?
- ◆ **Flight Tracks**—Will the aircraft traffic pattern be limited to a single side of the runway because of land use compatibility or other factors? Are any other flight track or operational restrictions proposed to minimize off-airport impacts?
- ◆ **Aircraft Activity Characteristics**—What type and volume of aircraft activity is projected for the facility over the next 20 years or more? Are these characteristics compatible with surrounding land uses?



- ◆ Property Acquisition—Will fee title and/or easements be acquired on highly impacted property?

When reviewing the plans for a new airport or airport expansion, it is important that ALUCs evaluate the adequacy of the facility design (in terms of federal and state standards) only to the extent that the design affects surrounding land use. Also, commissions must base their review on the proposed design. ALUCs do not have the authority to require alterations to the airport plan or to make different assumptions regarding the future airport role and airfield configuration than are indicated in the airport's plan.

## 6.5 JUDICIAL ACTION

### 6.5.1 Provisions under Aeronautics Law

The SAA (PUC Section 21679) explicitly provides for judicial action on ALUC matters only under very limited circumstances. Specifically, all of the following must apply:

- ◆ No ALUCP has been adopted for the airport by an ALUC (PUC Section 21679(a));
- ◆ The local general plan or any applicable specific plan does not accomplish the purposes of an ALUCP (PUC Section 21679(c));
  - The local jurisdiction action in question must be a zoning change, zoning variance, the issuance of a permit, or the adoption of regulation (PUC Section 21679(a));
  - The local action must affect the use of land within one mile of the boundary of a public airport in the county (PUC Section 21679(a));
  - The court proceedings must be initiated by an owner of land within two miles of the airport boundary or an organization with “a demonstrated interest in airport safety and efficiency” (PUC Section 21679(f)); and
  - The proceedings must be commenced within 30 days of the local jurisdiction action or as otherwise provided in state laws (PUC Section 21679(d)).

If all of these conditions prevail, the court may issue an injunction to postpone the effective date of the local action. The postponement remains in effect until the local jurisdiction does one of the following:

- ◆ Adopts a resolution finding that the action is consistent with the purposes of the ALUC statutes;
- ◆ Amends the action to make it consistent with the purposes of the article; or
- ◆ Rescinds the action.