

**COMPREHENSIVE AIRPORT
LAND USE PLAN
ORLAND HAIGH FIELD AIRPORT**



**Glenn County Airport Land Use Commission
Glenn County
Planning & Planning Works Agency
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Adopted February 27, 1991

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I. INTRODUCTION:

A. COMMISSION:

The seven member Glenn County Airport Land Use Commission was established by the Glenn County Board of Supervisors as required by Article 3.5 of the California Public Utilities Code. Section 21670 (a) (2) of this Code states the following:

(2) It is the purpose of this article 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 devoted to incompatible uses.

Section 21670 (b) of the Public Utilities Code states the following:

.....every county, in which there is, located an airport which is not served by a scheduled airline, but is operated for the benefit of the general public, shall establish an airport land use commission..... Each commission shall consist of seven (7) members to be selected as follows:

- (1) Two representing the cities....
- (2) Two representing the county
- (3) Two having expertise in aviation
- (4) One representing the general public.

The Glenn County Airport Land Use Commission is established according the Chapter 22.10 of the Glenn County Code which was adopted by the Glenn County Board of Supervisors in 1985 (Ordinance No. 830).

B. PLAN:

The Glenn County Airport Land Use Commission (ALUC) is responsible for preparing a comprehensive airport land use plan for the area around the Orland Airport according to Public Utilities Code Section 21675. As part of the Plan, the Commission may develop building height restrictions, specify land uses, and determine building standards within the airport planning area.

This Plan will determine the criteria which the Glenn County Airport Land Use Commission will use in evaluating general and specific plans, zoning ordinances, building regulation or amendments to this Airport Land Use Plan. Also, this Plan is intended to give public agencies and the general public an explanation of the nature and extent of the Commission's involvement in airport land use planning.

The commission functions primarily in a review capacity. Proposals for the adoption or amendment of general and specific plans, zoning ordinances, building regulation, and airport master plans are to be referred to the Commission prior to final action being taken by the appropriate governing body (City Council or Board of Supervisors). This is required by Section 21676 b of the California Public Utilities Code.

This Plan will present policies addressing land use compatibility with the airport's noise, airspace protection, safety and general nuisance impacts. Standards and criteria are necessary to insure that no new land use or expansion of an existing land use is permitted within any part of an airport's area of influence which may result in a hazard to aircraft using the airport or result in any aircraft related hazard to the health or safety of persons on the ground. Standards should also address lands needed for airport facilities and airport related land uses. The Airport Land Use Commission has no authority to enforce removal of pre-existing land uses which do not conform to the criteria and standards outlined in this document.

C. GOAL AND OBJECTIVES:

The overall goal for preparation of the Orland Airport Comprehensive Land Use Plan is as follows:

Goal:

To provide for the orderly growth of the Orland Airport and the area surrounding the airport within the identified planning boundary, and to safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general.

The principal objectives of the Land Use Plan are as follows:

Objectives:

1. To provide the County of Glenn and the City of Orland with comprehensive land use policies designed to protect the viability and growth-potential of the airport, and to contribute to the safe and efficient use of the airport by ensuring compatible land uses in the vicinity of the airport.
2. To include a long-range master plan for the airport that reflects the anticipated growth of the airport during the next 20 years.

II. ORLAND HAIGH FIELD AIRPORT:

A. LOCATION:

Orland Haigh Field Airport is located on 390 acres owned by the County of Glenn on County Road "P" approximately 0.6 miles east of the City of Orland. The Airport Master Plan was prepared in 1989 by Hodges & Shutt consulting firm.

B. FACILITIES

The Orland Airport has a 3,000 foot square asphalt mat on which most of the facilities are located. Runway #15/33 is 4500 feet long, 60 feet wide, paved, and lighted. In 1990 a new overlay was added to this Runway and a parallel taxi-way was constructed.

C. AIRCRAFT:

In 1988, there were 55 aircraft based at the Orland Airport. Except for several sailplanes and ultra-lights, all of the aircraft are light, single-engine airplanes. The Master Plan forecasts Orland Haigh Field Airport to have 80 based aircraft in 2008 for the Orland Airport is based on the potential to attract aircraft from other airports by the construction of new hanger facilities.

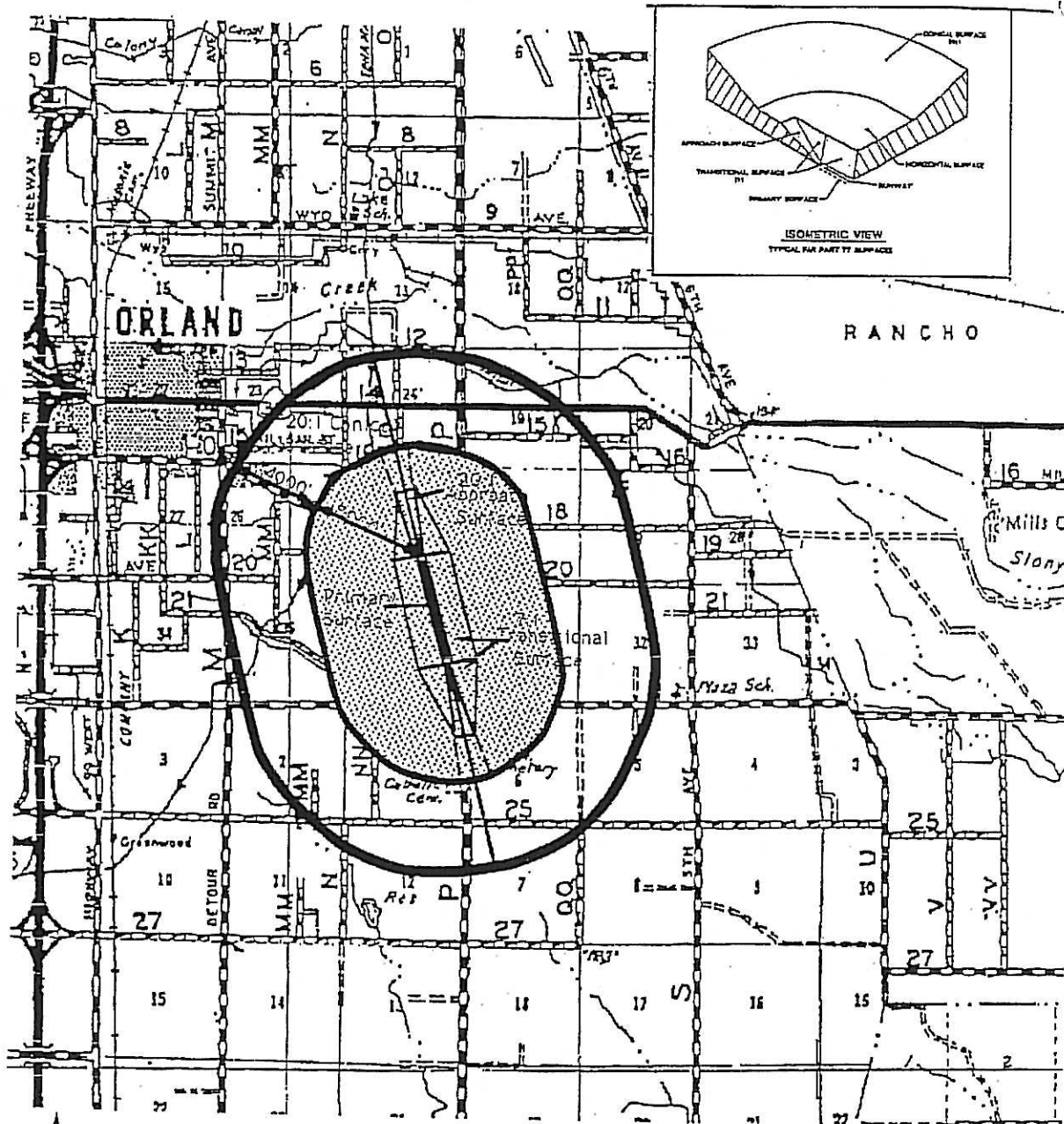
III. PLANNING AREA BOUNDARIES:

Public Utilities Code Section 21675 (c) states the following:

- (c) The planning boundaries shall be established by the commission after hearing and consultation with the involved agencies.

On November 29, 1989, the Glenn County Airport Land Use Commission adopted the Orland Airport Land Use Planning Area Boundaries shown on Map 1.

Map #1 ORLAND AIRPORT LAND USE PLANNING BOUNDARY



N
Airport Land Use Planning Boundary

IV. GENERAL POLICIES: This high growth rater projected

Within the boundaries of the airport planning area the Airport Land Use Commission recognizes that its authority and jurisdiction is limited by the California Public Utilities Code. General policies regarding the scope of the Commission shall be as follows:

1. For the purposes of referral to the Glenn County Airport Land Use Commission, a "Proposed Project" shall include the following:
 - a) adoption of general and specific plans
 - b) amendment of general and specific plans
 - c) adoption and/or amendment of zoning ordinances
 - d) adoption of building regulations
 - e) adoption of airport layout and master plans
 - f) Conditional Use Permits and Tentative Parcel or Subdivision Map approvals— Airport Land Use Commission review of these actions will not be required if the jurisdiction has amended its general plan to be consistent with this Airport Land Use Plan.
 - g) Projects which conflict with any policies contained in this plan shall be referred to the Commission prior to an action taken by local advisory and governing bodies.
2. Evaluation of projects shall primarily be based on the land use compatibility policies set forth in this Plan. Where an overlap occurs among noise, airspace protection, safety, and general nuisance zones, all policies applicable to the particular location shall be considered.
3. All proposed projects within the Planning Area Boundary listed in Item #1 above shall be referred to the Glenn County Airport Land Use Commission.
4. The Commission may, at its own discretion request information and review any project occurring within the airport's referral area. Such projects, however, need not be routinely submitted to the Commission for review.
5. The Airport Land Use Commission has no jurisdiction over airport operations which include the number and type of aircraft taking off and landing, time of aircraft activity and airport traffic pattern used.
6. A copy of any Notice of Construction or Alteration submitted to the Federal Aviation Administration in accordance with FAR (Federal Aviation Regulations) Part 77, Subpart

B, shall concurrently be submitted to the Airport Land Use Commission for review regardless of where in the County the object involved is proposed to be located.

V. LAND USE SAFETY COMPATIBILITY:

A. GENERAL DISCUSSION:

Areas near airports are exposed to various levels of accident potential depending on the type of aircraft using the airport, the frequency of aircraft over-flights, and local weather conditions. Historically, the risk of being killed or injured on the ground near an airport is quite small.

While many airports in the State have not experience a serious aircraft accident resulting in major property damage or loss of life, this fortunate situation does not alter the basic accident probabilities. Perhaps the most difficult ALUC planning responsibility is the determination of land use measures around airports that are appropriate to the level of risk involved and the potential for injury or property damage should an accident occur. Airport Land Use Commissions have established a variety of safety zones around airports and land use controls within these safety zones to minimize the impact of a crash.

The purpose for establishing land use restrictions in safety zones is to minimize the number of people exposed to aircraft crash hazards. The two (2) principal methods for reducing the risk of injury and property damage on the ground are as follows:

1. limit the number of persons in an area, and
2. limit the area covered by structures occupied by people so that there is a higher chance of aircraft landing (in a controlled situation) or crashing (in an uncontrolled situation) on vacant land.

There are few practical methods available for permitting increased population in safety zones without increasing safety risks. Each additional person in a safety zone becomes subject to a certain crash hazard risk by virtue of being located in the safety zone.

It must be remembered that an aircraft crash is a high consequence event. This is why a number of safety studies do not attempt to estimate accident probabilities in specific areas, but rather address the acceptability of different land use densities and lot coverage restrictions assuming a crash did occur.

The primary method of addressing land use compatibility in the vicinity of the Orland Airport shall be though the delineation of safety zones and the establishment of land use criteria within those zones. The safety zones identified in this Plan are formulated primarily through use of the Master Plan's depiction of FAA clear zone and "imaginary" approach surfaces that extend outward from the airport's existing and proposed runways.

The three (3) primary airport safety areas are as follows:

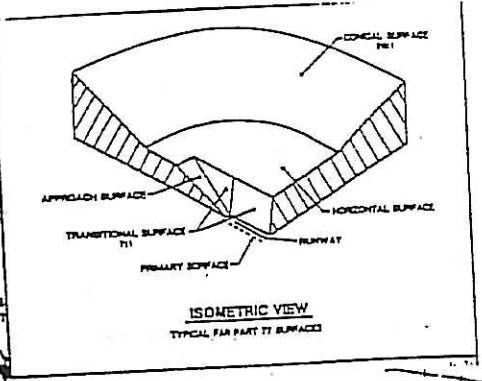
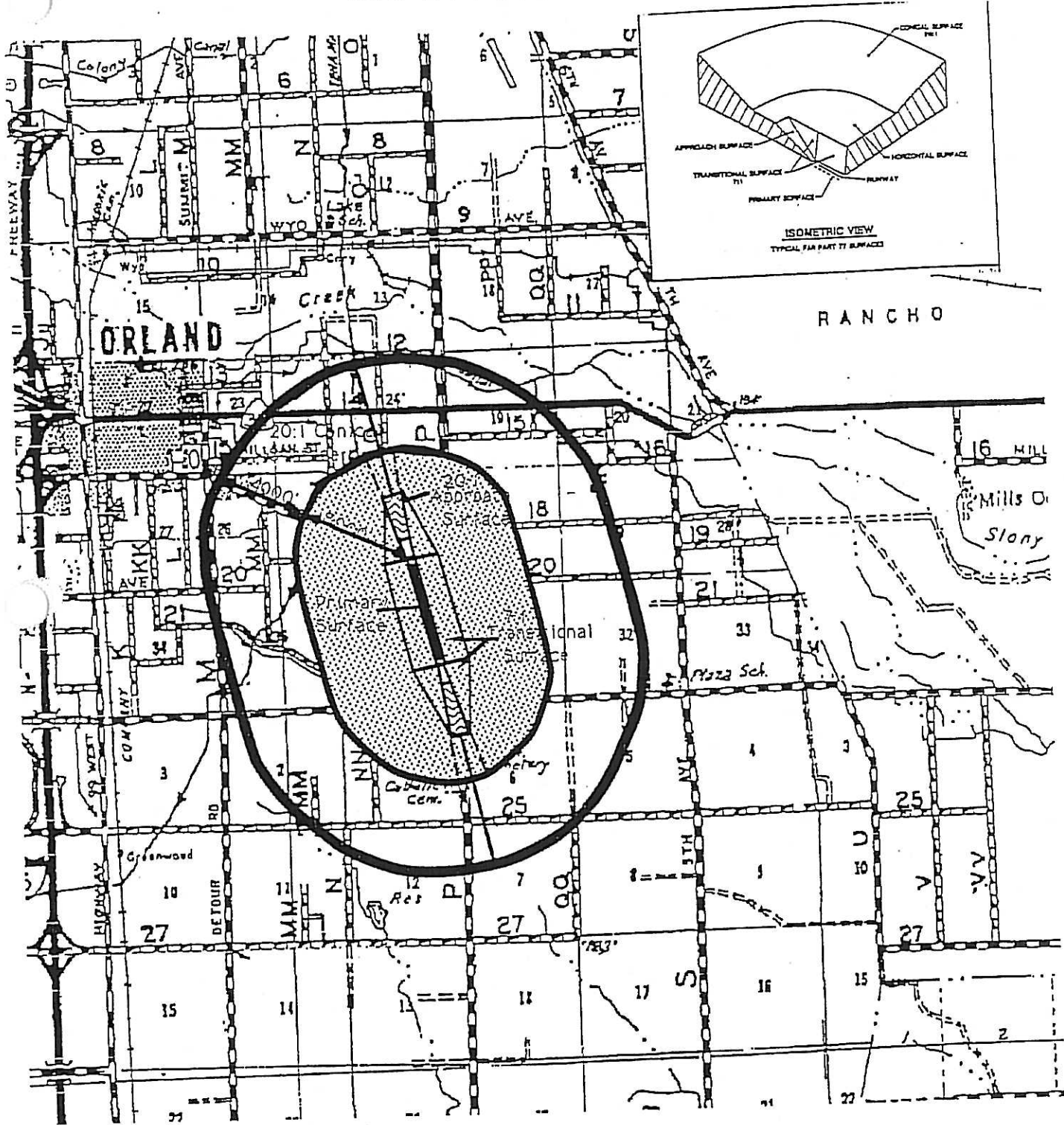
1. Clear Zone Safety Areas
2. Approach Zone Safety Areas
3. Over-flight Safety Area




The safety areas designated in this airport land use plan are indicated on Map 2 are addressed in detail.

B. CLEAR ZONE SAFETY AREAS:

Clear Zones are the trapezoidal (fan-shaped) areas which lie on the ground underneath the imaginary runway approach surfaces and include all of the area out to a point where the approach surface reaches 50 feet above the ground level. The Clear Zones indicated in this airport land use plan area are consistent with the Master Plan. Clear Zones for Runways #15/33 have an inner width of 250 feet, an outer width of 450 feet and a length of 1000 feet.

Map #2 SAFETY AREAS



-  Approach Zone Safety Areas
-  Clear Zone Safety Areas
-  Overflight Safety Areas

Scale: 1"=4500'

Clear Zones are the most restrictive areas in the vicinity of an airport since they are subject to the greatest danger. Clear zones should be kept essentially clear. Undeveloped land is the best use. No residential use can be allowed. Agriculture which does not attract birds is compatible unless it includes structures. Park and recreational uses are satisfactory if they don't attract large groups of people. Transportation facilities are not a serious problem as long as height restrictions are heeded. Power lines are a serious danger. Wherever possible, the Clear Zone should be free of any construction or obstacle and should be minimally used by people.

The Federal Government requires that airport owners have an "adequate property interest" in the clear zone area in order that the requirements of FAR Par 77 can be met and the area protected from future encroachments. Adequate property interest may be in the form of ownership in fee simple (the most preferred) or lease (provided it is long term) or any other demonstration of legal ability to prevent future obstructions in the runway Clear Zone.

Policies:

The Clear Zone Safety Areas for the Orland Haigh Field Airport Land Use Plan are indicated on Map 2 as Safety Area 1. Land Use Guidelines are set forth in Table 1.

C. APPROACH ZONE SAFETY AREAS:

The approach zone safety areas in the Airport Land Use Plan are consistent with the FAR Part 77 approach surfaces indicated in the Master plan. According to the Orland Haigh Field Airport Master Plan Report.

The existing circling non-precision approach at Orland Haigh Field is treated as a visual(20:1) slope approach for the purpose of Federal Aviation Regulations Part 77 approach surface requirements. County Road 200 at the runway's north end lies within the primary surface which extends 200 feet beyond the runway end. There are no more distant obstacles. Power lines 30 feet high along County Road 24 are the critical obstacles within the Runway 33 approach, but are some 30 feet below the approach surface.

To assure public safety, uses in the approach safety zone should not attract large groups of people. Residential uses should be prohibited or strictly limited if possible. Where residential development is inevitable or already in place, low density is preferred with multi-family development, retirement homes or other residential institutions being excluded. Commercial uses are generally compatible except hospitals and rest homes.

Industrial uses can be compatible, although they must be "carefully" reviewed for potential operation hazards, electrical interference, high intensity lighting, bird attractions, smoke, glare or other interference. Recreational uses can be acceptable on a conditional basis, excepting public assembly and other high intensity uses. Resource production, including agriculture, is generally compatible. In the case of recreational development and aggregate extraction, ponds may attract birds which could pose a safety hazard.

POLICIES:

The Approach Zone Safety Areas for the Orland Haigh Field Airport Land Use Plan are indicated on Map 2 as Safety Area 2 as Safety Area 2. Land Use Guidelines are set forth in Table 1.

D. OVER-FLIGHT SARETY AREAS

The Over-flight Zone is the relatively large where aircraft maneuver to enter or leave the pattern and is usually defined by the FAR Part 77 horizontal surface. The Glenn County Airport Land Use Commission, however, has adopted an Over-flight Zone which takes in land beneath the horizontal and conical surfaces defined by Far Par 77. This Over-flight Zone is depicted on Map 2.

Land use compatibility within the over-flight zone for general aviation airports is more difficult to define than clear zones and approach zones. Hazards are low compared to areas closer to runways. However, there is a measurable accident potential in airport traffic pattern areas. Mid-air collisions are more prevalent in this area. Large assemblages of people should not be located beneath the airport traffic pattern because of the potential for injury if there were a crash. Specific types of land uses that are discouraged or that have been suggested for relocation outside airport traffic patterns are as follows:

schools,
hospitals,
spectator sports areas,
auditoriums, and
amphitheaters.

Table 1 sets forth the land use guidelines of this Plan for the Over-flight Safety Areas. The principal concept is that most normal uses can be allowed, but high density residential, retail commercial uses which would attract large groups of people should be considered used which would attract large groups of people should be considered on an individual basis to ensure compatibility with airport flight patterns. For example, a high density residential subdivision directly unacceptable, but such a use in another location within the Over-flight Zone could, as far as airport issues are concerned, be determined to be acceptable.

Policies:

1. The Over-flight Safety Area for the Orland Airport Land Use Plan is indicated on Map 2 as Safety Area 3. Land Use Guidelines are set forth in Table 1.

E. GENERAL POLICY:

It is a policy of the Airport Land Use Commission for the Orland Airport that the following guidelines be applied in the planning zoning and project review of land use within the recognized airport safety areas. The functions of the guidelines are to identify uses which are acceptable or unacceptable and to describe which are acceptable or unacceptable and to describe certain criteria under which certain uses might be acceptable.

It should be noted that consideration of the land uses addressed herein , as well as similar land uses that have not been specifically addressed, should be guided by a commitment to the overall purpose of airport land use policies which is as follows:

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.

Land use or land use characteristics which may affect safe air navigation or which, because of their nature and proximity to an airport, may pose high risks to the land users shall be avoided in the vicinity of an airport.

Land uses which attract concentrations of birds are a concern because of the agricultural uses near the Orland Airport. In applying the safety Compatibility Criteria to agricultural areas, attention should be given to whether a particular type of agricultural use commonly attracts birds.

LAND USE COMPATIBILITY GUIDELINES

TABLE ONE, PART ONE, CLEAR ZONE SAFETY AREAS

The following land use guidelines shall be applied to the Clear Zone Safety Areas depicted on Map 2 as Safety Area 1.

GENERAL GUIDELINES:

Residential	No
Commercial/Retail	No
Industrial/manufacturing	No
<u>Transportation</u>	
Highways, streets	Yes (1)
Auto Parking Lots	No
<u>Communications, Utilities</u>	Yes (2) (3)
<u>Public and Quasi-Public Services</u>	No
<u>Outdoor Recreation</u>	No
<u>Resource Production, Extraction, and Open Space</u>	
Agriculture	Yes (3)
Forestry Activities and Related Services	No
Mining Activities	No
Open Space Uses (e.g. grazing)	Yes

- (1) Highways and streets with moving traffic are considered compatible. Intersections which would result in a relatively high density of standing traffic in clear zones are discouraged.
- (2) No above-grade transmission lines.
- (3) No structures permitted.

TABLE ONE, PART TWO, APPROACH ZONE SAFETY AREAS

The following land use guidelines shall be applied to the Approach zone Safety Areas depicted on Map 2 as Safety Area 2.

LAND USE GUIDELINES

<u>Subdivisions</u>	Yes (1) (3)
<u>Residential</u>	
Single Family	Yes (1) (2) (3)
Multiple Family	No
Mobile Home Parks	No
Hotels, Motels	No
<u>Commercial/Retail</u>	
General Retail, Merchandise	Yes ((2) (3)
Wholesale Trade	Yes (3)
Building Materials, Retail	Yes (3)
Restaurants, Bars	No
Small-scale repair	Yes (3)
Professional offices	Yes (2) (3)
<u>Industrial/Manufacturing</u>	
Chemical, Petroleum, Rubber, Plastics	No
Miscellaneous Manufacturing	Yes (3)
Warehousing, Storage of nonflammables	Yes (3)
<u>Transportation</u>	Yes
<u>Communications, Utilities</u>	Yes (3)
<u>Public and Quasi-Public Services</u>	
Cemeteries	Yes (3)
Other Public and Quasi-Public Services and Facilities (e.g. schools, hospitals)	No
<u>Outdoor Recreation Facilities</u>	
Playgrounds, Neighborhood Parks	No
Spectator Sports, arenas	No
Auditoriums, Amphitheaters	No
Motocross	Yes (3)
Riding Stables	No
<u>Resource Production, Extraction and Open Space</u>	Yes (3)

TABLE ONE, PART TWO, NOTES

- (1) Density of residential use shall not exceed one dwelling unit per five (5) acres. This means that there shall not be more than one dwelling unit per five (5) acres even in a "Cluster" of Planned Unit Development (PUD).
- (2) Not within 2000 feet from the Clear Zone.
- (3) Projects must be reviewed on an individual basis. The threshold for review of "large concentration" is on the order of 10 people per acre for nonresidential uses.

Industrial projects must be reviewed to preclude smoke, electronic interference, lights and/or glare which may constitute operational hazards to aircraft.

A finding, supported by facts in the record, must be made for any project approval stating the following:

Approval of the project is consistent with the need to protect public health, safety and welfare by ensuring the orderly expansion of the airport and the adoption of land use measures that minimize the public's exposure to substantial noise and safety hazards within areas around public airports.

TABLE ONE, PART THREE, OVERFLIGHT ZONE SAFETY AREAS

The following land use guidelines shall be applied to the Over-flight Safety Area depicted on Map 2 as Safety Area 3.

LAND USE GUIDELINES

Residential on lots of five (5) acres or more in size only.

Single Family	Yes (1)
Multiple Family	Yes (1)
Mobile Home Parks	Yes (1)
Hotels, Motels	Yes (2)

Commercial/Retail Yes (2)

Industrial/Manufacturing

Warehousing, Storage of nonflammables	Yes
All others	Yes (2)

Public and Quasi-Public Services

Cemeteries	Yes
Schools, Hospitals	Yes (2)
Other Public and Quasi-Public Services and Facilities	Yes (2)

Outdoor Recreation Facilities Yes (2)

Resource Production, Extraction and

<u>Open Space</u>	Yes
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Subdivisions Yes (2)

- (1) Density of residential use shall not exceed unit per five (5) acres. This means that there shall not be more than one (1) dwelling unit per five (5) acres even in a "Cluster" or Planned Unit Development (PUD).
- (2) Projects must be reviewed on an individual basis. A finding, supported by facts in the record must be made for any project approval stating the following:
Approval of the project is consistent with the need to protect public health, safety and welfare by ensuring the orderly expansion of the airport and the adoption of land use measures that minimize the public's exposure to substantial noise and safety hazards within areas around public airports.

VI. NOISE COMPATIBILITY

Noise contours are based on the Community Noise Equivalent Level (CNEL) as defined in Title 21 of the California Code of Regulations. The Noise contours for the Orland Airport are shown in Map 3. These noise contours were developed as part of the Orland Airport Master Plan.

The history Preferred measures are those that restrict residential land use within the traffic pattern. Land use restrictions may include prohibiting residential development underneath the traffic pattern or limiting development to low density uses.

The maximum noise exposure which shall be considered normally acceptable for residential areas is 60 dBA CNEL. According to the Orland Airport Master Plan Report.

The Airport's over-flight impacts are concentrated along the typical or median traffic pattern flight tracks. It is important to recognize, however, that over-flight impacts can be expected to occur in any part of the airport vicinity where aircraft fly at or below the 1,000-foot Above Ground Level (AGL) traffic pattern altitude while approaching or departing the runway. Essentially all such operations take place within a mile of the Airport.

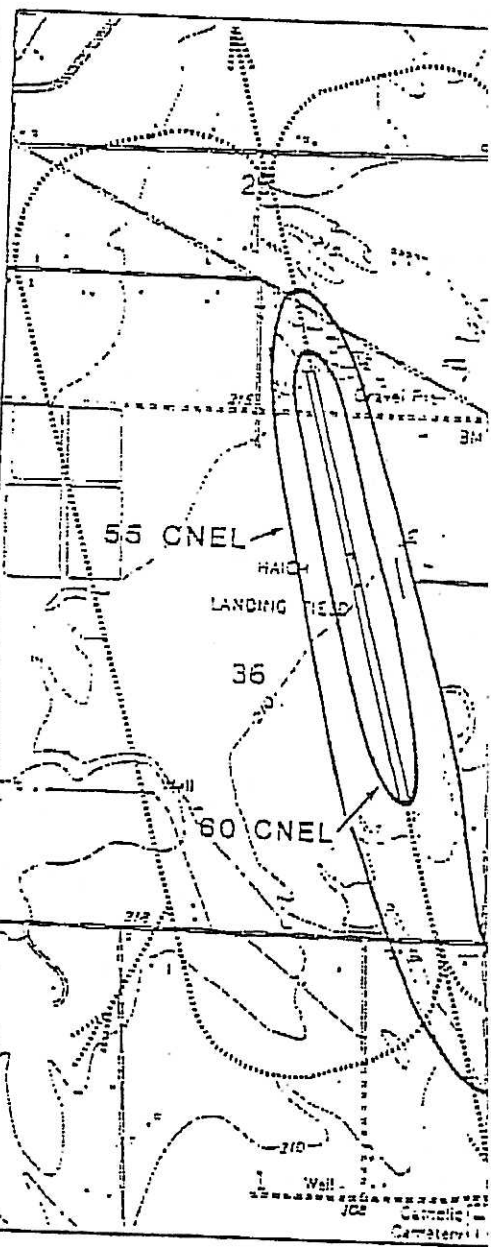
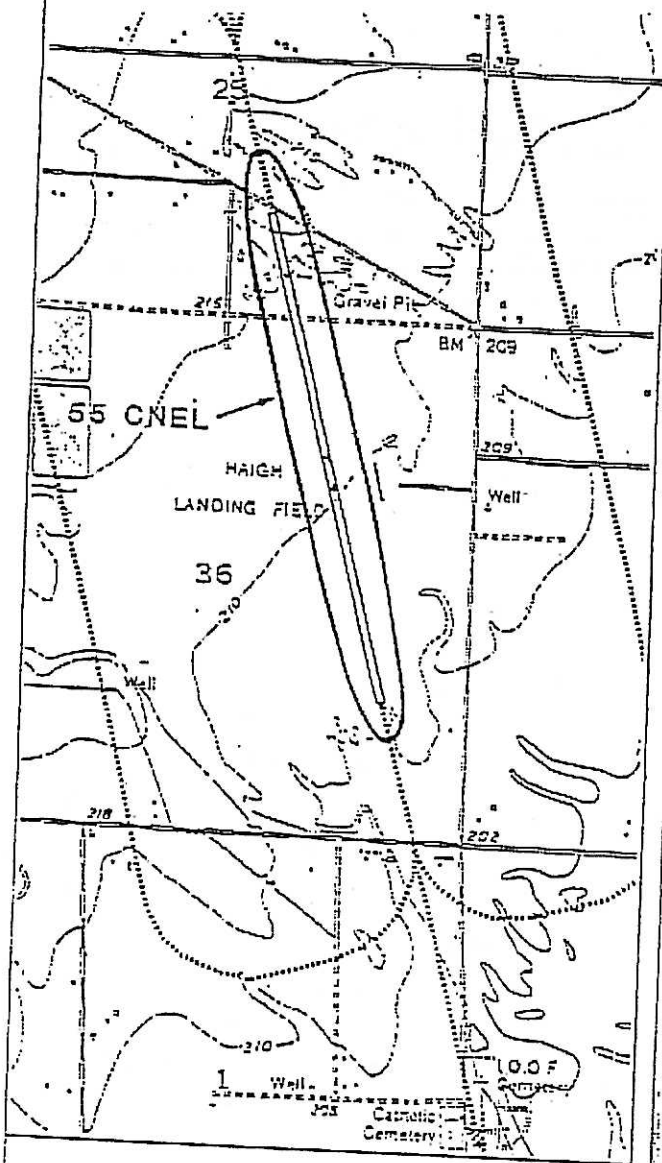
As development is proposed in the area between 60 and 65 dBA (CNEL) noise contours, Glenn County should evaluate the impact of aircraft noise on proposed development and consider noise reduction measures, aviation noise easements and buyer-renter notification.

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 Table 2 "Airport Land Use Noise Compatibility Criteria". Of course, proposed land uses shall also be compatible with the height and safety criteria.

One of the conditions for approval of a land use which is "marginally acceptable" or "normally unacceptable" for the given noise environment is that the proposed building must provide a satisfactory degree of noise attenuation. Table 3 shows the maximum acceptable interior noise levels for commonly occurring noise exposure to the indicated level. the proposed use may be acceptable of noise complaints around general aviation airports suggests that some land use regulation measures are required under the traffic pattern and within the 55 CNEL contour.

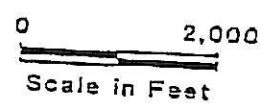
CURRENT AND YEAR 2000 60 DBA CNEL NOISE CONTOURS

EXISTING - 1988



PROJECTED - 2008

..... Typical Flight Tracks



NOISE IMPACT AREAS

TABLE 2

AIRPORT/LAND USE NOISE COMPATIBILITY CRITERIA

LAND USE CATEGORY	CNEL or LDN, DBA $\frac{1}{2}$				
	50-55	55-60	60-65	65-70	70-75
<u>Residential</u>					
single family detached and duplexes	+	0	-	--	--
multi-family and transient lodging	++	+	0	-	--
manufactured homes	+	-	-	--	--
<u>Public</u>					
Schools, libraries, hospitals, nursing homes	+	0	-	-	--
churches, auditoriums, concert halls	+	0	0	-	-
transportation, parking, cemeteries	++	++	++	+	0
<u>Commercial and Industrial</u>					
offices, retail trade	++	+	0	0	-
service commercial	++	++	+	0	0
wholesale trade, warehousing, light industrial					
general manufacturing, utilities, extractive industry	++	++	++	+	+
<u>Agricultural and Recreational</u>					
cropland	++	++	++	++	+
livestock breeding	++	+	0	0	-
parks, playgrounds, zoos	++	+	+	0	-
golf courses, riding stables, water recreation	++	++	+	0	-
outdoor spectator sports	++	0	-	--	-
amphitheaters	+	0	-	--	--

1/ See Map 2 for location of contours.
Table 2 Continued

INTERPRETATION/CONDITIONS

LAND USE ACCEPTABILITY

The activities associated with the specified land use can be carried out with essentially no interference from the noise exposure.

++ Clearly Acceptable

Noise is a factor to be considered in that slight interference with outdoor activities may occur. Conventional construction methods will eliminate most noise intrusions upon indoor activities.

+ Normally Acceptable

The indicated noise exposure will cause moderate interference with outdoor activities and with indoor activities when windows are open. The land use is acceptable on the conditions that outdoor activities are minimal and construction features which provide sufficient noise attenuation are used (e.g., installation of air conditioning so that windows can be kept closed). Under other circumstances, the land use should be discouraged.

0 Marginally Acceptable

Noise will create substantial interference with both outdoor and indoor activities. Noise intrusion upon indoor activities can be mitigated by requiring special noise insulation construction. Land uses which have conventionally constructed structures and/or involve outdoor activities which would be disrupted by noise should generally be avoided.

- Normally Unacceptable

Unacceptable noise intrusion upon land activities will occur. Adequate structural noise insulation is not practical under most circumstances. The indicated land use should be avoided unless strong overriding factors prevail and it should be prohibited if outdoor activities are involved.

-- Clearly Unacceptable

TABLE 3

INTERIOR NOISE LEVEL

Maximum Acceptable Interior Noise Levels for Commonly
Individual Noise Events from Exterior Sources

Generalized Land Use (Occupancy)	Acceptable Noise Level (dBA)	Based for Criterion
A. RESIDENTIAL-SINGLE AND MULTI-FAMILY DWELLINGS		
1. Living Areas		
a. Daytime	60	Conversation-5-ft.- normal voice
b. Nighttime	55	Conversation -10 ft.- normal voice
2. Sleeping areas	50	Sleeping
B. EDUCATIONAL FACILITIES, ETC.		
1. Concert Hall	25	Intrusion of Noise spoil artistic effect
2. Legitimate Theater	30	Intrusion of Noise spoil artistic effect
3. School Auditorium	35	Minimize intrusion int artistic performance
4. School Classroom	55	Speech communication 20 ft. - raised voice
5. School Laboratory	60	Speech communication 50 ft. - normal voice
6. Church Sanctuaries	45	Speech Communication 50 ft. - raised voice
7. Library	55	Speech communication 3 ft. - normal voice
C. RECREATIONAL FACILITIES		
1. Motion Picture Theater	45	Minimize intrusion int artistic performance
2. Sports Arena	75	Conversation-2 ft.- raised voice
3. Bowling Alley	75	Conversation-2 ft.- raised voice

Table 3 continued-----

D. COMMERCIAL MISCELLANEOUS			
1.	Hotel, Motel Sleeping	50	Sleeping
2.	Hospital Sleeping	50	Sleeping
3.	Executive Offices, Conference rooms	55	Speech communication- 12 ft. normal voice
4.	Staff Offices	60	Speech communication- 6 ft. normal voice
5.	Sales, Secretarial	65	Satisfactory telephone use
6.	Restaurants	65	Conversation-4 ft. normal voice
E. LIGHT INDUSTRIAL			
1.	Office Areas	See D-3,4,5	See D-3,4,5
2.	Laboratory	60	Speech Communication 6 ft. normal voice
3.	Machine Shop	75	Speech communication 3 ft. normal voice
4.	Assembly, Construction	75	Speech communication 2 ft. raised voice
F. HEAVY INDUSTRIAL			
1.	Office Areas	See D-3,4,5	See D-3,4,5
2.	Machine Shop	75	Speech Communication 3 ft. raised voice
3.	Assembly, Construction	75	Speech Communication 2 ft. raised voice

Source: Adapted from Table 2 in "Noise Insulation Problems in Building" Paul S. Vaneklasen & Associates, January, 1973

Note: These are maximum levels for individual events and are measured in CNEL values.

NOISE POLICIES

1. Airport/land use noise compatibility shall be evaluated in terms of the Community Noise Equivalent Level (CNEL), as defined in Title 21 of the California Code of Regulations.
2. The maximum noise exposure which shall be considered normally acceptable for residential areas is 60 dBA CNEL.
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 2. These criteria shall be the principal determinants of whether a proposed land use is compatible with the noise impact from a nearby airport, but special circumstances which would affect the specific proposal's noise (e.g.) the extent or lack of outdoor activity) also shall be taken in account.

Caution: Land use compatibility is determined by comparing proposed land use against height, noise and safety guidelines. Proposed land uses must be compatible with each.

4. One of the conditions for approval of a land use which is "marginally acceptable" or "normally unacceptable" for the given noise environment is that the building must provide a satisfactory degree of noise attenuation. Table 3, sets forth the maximum acceptable interior noise levels for commonly occurring noises from exterior sources. If the structure can reduce the noise exposure to the indicated level, the use may be acceptable.

(Note that the interior noise criteria are measured in terms of maximum noise levels of individual events and not average noise levels as represented by CNEL values. Since maximum exterior individual event noise levels are greater than the CNEL value at a given location, the required noise reduction of the structure thus will be greater than the difference between the interior noise level criterion and the CNEL value.)

5. In applying the interior level criteria listed in Table 3, engine run-up noise shall be considered as a source of commonly occurring exterior noise.
6. When applying the noise compatibility criteria to a given location, the basis for evaluation shall be the maximum Community Noise Equivalent Level to which the location is or is forecast to be exposed. For the Orland Airport covered by this Policy Plan, the year 2000 contours shall be used. Year 2000 CNEL contours of 60 dBA are depicted in Map 3.
7. If a noise analysis, including noise monitoring, is conducted for a particular location and the results indicate that the maximum CNEL will be less than shown herein, the lower exposure level may be used for the land use evaluation at the discretion of the Airport Land Use Commission.

VII. HEIGHT RESTRICTIONS

A. INTRODUCTION

All Airport Land Use Commission plans contain recommendations for limiting the height of structures near airports. These recommendations have several purposes as follows:

1. To ensure that pilots operating aircraft near airports have a safe environment in which to fly.
2. To protect the safety of persons occupying these structures on the ground.
3. To ensure that neither the operation capability of the airport nor the usable runway length is adversely affected by obstructions in the surrounding airspace.
4. To protect the public's investment in airport facilities by controlling the height of buildings near the airport.

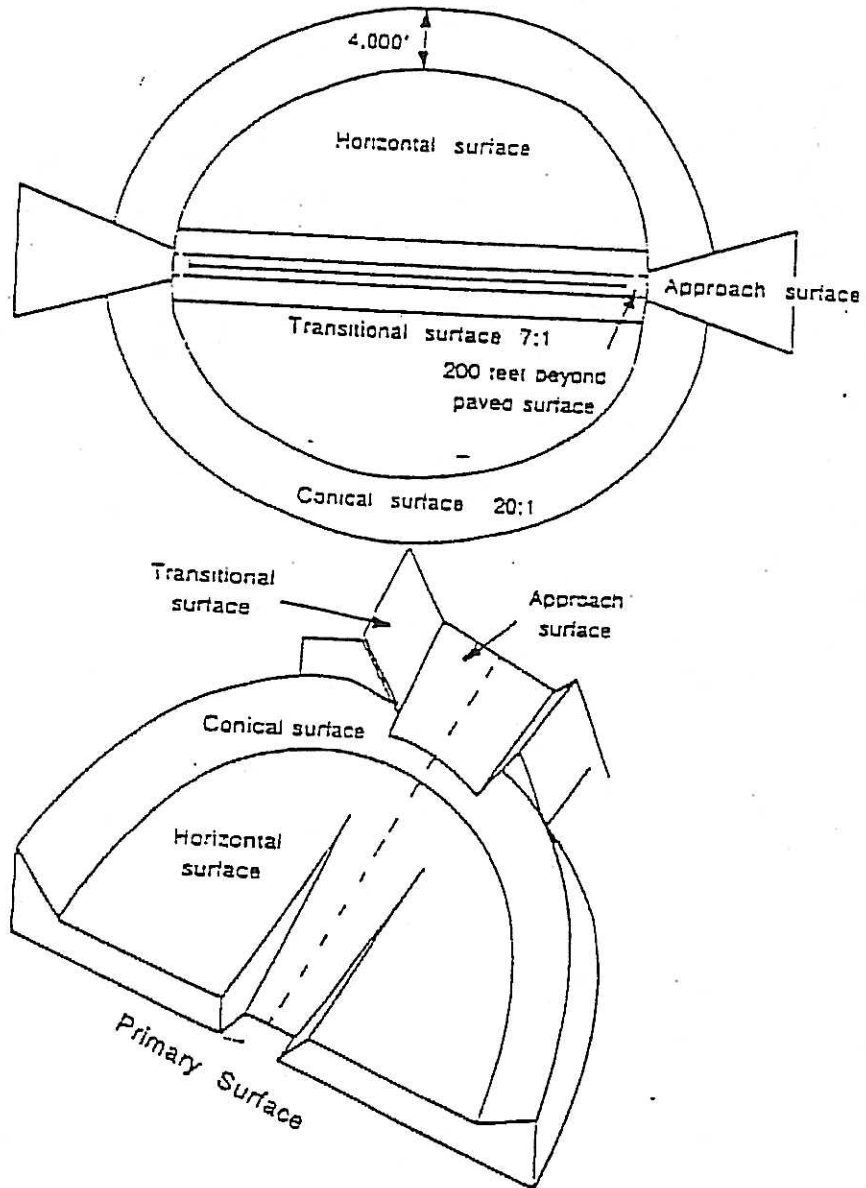
Federal Aviation Regulations Part 77 have been adopted by all ALUC's define height limits around airports. The principle purpose of Part 77 is to provide standards for determining "obstructions" in the navigable airspace. These Standards provide a reasonable and defensible balance between the needs of the airspace users and the rights of property owners beneath the flight pattern.

Heights of new structures, trees and artificial embankments in the vicinity of the Orland Airport are limited by three dimensional boundaries known as "imaginary surfaces", shown in Map 4 and defined in Part 77 of the Federal Aviation Regulations as follows:

1. Primary Surface:
A surface longitudinally centered on a runway is called a primary surface. When the runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway, but when the runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of the runway.

MAP #4

IMAGINARY SURFACE BOUNDARIES



2. Horizontal Surface:

A horizontal surface is a horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs.

3. Conical Surface:

The conical surface extends outward and upward from the periphery of the horizontal surface at a slope of 20 to 1 for a horizontal distance of 4000 feet.

4. Approach surface:

A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface is called the approach surface.

5. Transitional surfaces:

The transitional surfaces extend outward and upward at right angles to the runway centerline and the runway centerline extended at a slope of 7 to 1 from the sides of the primary surface and from the sides of the approach surfaces.

B. SPECIFIC HEIGHT RESTRICTIONS:

The specific height restrictions for the Orland Airport will be adopted by the Board of Supervisors as part of the Glenn County Zoning Code. These regulations will be known as the Airport approach Combining District.

C. POLICIES:

1. The Glenn County Airport Land Use Commission shall restrict the development of new incompatible land uses within the airport height restriction areas as defined by Federal Aviation Regulations, Part 77 as shown in the Orland Haigh Field Airport Master Plan.
2. Any structure within or outside of the airport planning boundary which is determined to be a "hazard" by the FAA shall be recognized as not in conformance with this Airport Land Use Commission Plan.
3. The Glenn County Airport Land Use Commission shall review specific projects within the airport planning area which may pose an intrusion into navigable air space by exceeding recommended height limits.
4. The Airport Land Use Commission shall request that the FAA notify Glenn County of proposed projects that exceed obstructions in FAR, Part 77, and that will require an Aeronautical Study.

VII. GENERAL NUISANCE:

A. POLICIES:

1. Expect when overriding circumstances exist, a condition for approval of any residential subdivision or zoning change within the airport's planning area, as defined herein, shall

be the dedication of any aviation easement to the airport owner. The aviation easement shall contain the following property rights:

- a) Right-of-flight at any altitude above acquired easement surfaces.
 - b) Right to cause noise, vibrations, fumes, dust and fuel particle emission.
 - 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.
2. 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.
3. As a further condition for approval of a new residential subdivision or zoning change within the airport's planning areas, the local jurisdiction shall, except where overriding circumstances exist, require the property owners to agree to the following:
- a) That it is understood by the owners and owner's successors in interest that the real property in question lies close to an operating airport and that the operation of the airport and the landing and take-off of aircraft may generate high noise levels.
 - b) That the owners shall not initiate or support any action in any court or before any governmental agency if the purpose of the action is to interfere with, restrict, or reduce the operation of the airport or the use of an airport by any aircraft.
 - c) That the owners shall not protest or object to the operation of the airport or the landing or take-off of aircraft before any court or agency of government.
 - d) That the above easement and agreement shall run with the land and shall be binding upon the owners and subsequent owners of the property.
 - e) That the Commission encourages local governments to establish a "buyer notification statement" as a requirement for the transfer of title of any property located within the airport's planning area. This statement should indicate that the buyer is aware of the following:
 - 1) the proximity of an airport,
 - 2) the characteristics of the airport's current and projected activity,
 - 3) the likelihood of aircraft of the affected property.

IX. FUTURE FACILITY DEVELOPMENT:

A. POLICIES:

1. Future facility development at the Orland Airport shall conform to the Orland Airport Layout Plan as approved by the Airport Land Use Commission.

X. AIRPORT RELATED LAND USES:

A. POLICIES:

1. Airport related uses located at the Orland Airport shall be restricted to industrial, commercial and public facility uses contiguous to the airfield or immediately adjacent as long as county dedicated access to public roads and the runway is provided.
2. An airport related use is a use who by virtue of their specific type of aviation activity require the occupancy of a site at the airport with contiguous aircraft apron and direct access to the aircraft operating area. These uses shall be allowed at the airport.
3. A non-airport related use is a use by virtue of their general type of activity do not specifically require the occupancy of a site at the airport, and could function without being directly situated at the airport operating area. These uses shall not be permitted in any commercial or industrial area located at the Orland Airport except through the conditional use permit process in areas specified in the Airport Master Plan. Generally, non-airport related uses should not be contiguous to the runways.
4. Auto and boat repair shall not be permitted on the Orland Airport.

Glenn County Planning Department
125 South Murdock Avenue
Willows, California 95988

NEGATIVE DECLARATION

APPLICANT: County of Glenn

PROJECT: Comprehensive Airport land Use Plan
Orland Haigh Field Airport

APN: 047-180-002, 047-270-001, 047-090-015

ZONE: West of County Road "P", south of County Road
"200", east of Orland

ZONE: "AV" Airport Zone

LAND USE ELEMENT OF
THE GENERAL PLAN: "Public Facility"

FLOOD ZONE:

According to Federal Flood Insurance Rate Map 0375 this area is in Flood Zone "C", not subject to flooding.

FINDING FOR NEGATIVE DECLARATION:

1. That the Comprehensive Airport Land use Plan is required by Section 21675 of the California Public Utilities code.
2. That the Comprehensive Airport Land Use Plan will have no significant adverse impacts on the environment but is intended to protect the environment around the airport from incompatible development.
3. That the Comprehensive Airport Land Use Plan will not have any potential adverse effect on wildlife resources.

MITIGATING MEASURES: None

The proposed project cannot, or will not, have a significant effect on the environment. Negative Declaration Status is therefore granted for this project and an Environmental Impact Report is thereby not necessary.

Review by Planning Director February 15, 1991 _____

Granted by Airport Land Use Commission February 15, 1991 _____