

**Chapter 9 – Airport Land Use Compatability**



## Chapter 9 – Airport Land Use Compatibility

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### Introduction

This chapter describes land use associated with Bandon State Airport and its surroundings, land use controls, Oregon State guidance for land use compatibility planning, protection of airports, and jurisdictional responsibilities.

### Government Roles in Airport Land Use

#### FEDERAL

The Federal Aviation Administration (FAA) discourages incompatible land use in the vicinity of airports, but has no authority to regulate off airport land use. Land use regulation, including comprehensive planning, zoning, and the issuance of building or other development permits is a local responsibility. The FAA has a technical advisory role (development review) based on its interest in protecting the airspace associated with an airport as part of the national airspace system. It is noted that the FAA approach to land use compatibility is based primarily on safety (hazards, obstructions to protected airspace, etc.), but relies on local jurisdictions to determine appropriate land uses and development densities in the vicinity of airports.

The FAA effectively regulates on-airport land use through approval of the Airport Layout Plan (ALP) and requiring compliance with FAA Airport Improvement Program (AIP) grant assurances for federally-obligated airports. For land use, the grant assurances require sponsors to take measures to maintain airport land use compatibility and protect the aeronautical function of an airport by restricting the location of non-aviation land uses. It is recognized however, that airport sponsors do not necessarily control land use

regulation for areas surrounding their airport. It is common to have multiple jurisdictions in close proximity, including cities and counties, and cases where airport owners have no local land use authority (e.g., port districts, state airport agencies, etc.).

Under **14 Code of Federal Regulations (CFR), Part 77**, the FAA has the authority to review proposed construction through its 7460-1 (Notice of Proposed Construction or Alteration) process. The FAA review addresses compatibility for both on and off airport based on the potential for creating a “hazard to air navigation” associated with obstructions/penetrations in defined airspace. FAA airspace reviews include **FAR Part 77** surfaces; Terminal Instrument Procedures (TERPS) surfaces, visual runway traffic patterns, and visual navigation aid (e.g., VASI, PAPI, etc.) protected airspace. When a proposed structure significantly penetrates navigable airspace, the FAA will issue a letter objecting to the proposed action (determination of presumed hazard to air navigation) for the consideration of local authorities. When proposed actions do not present a hazard to air navigation, a “no objection” finding is issued. It is important to note that this analysis is based on an obstruction evaluation and is not intended to address general land use compatibility in terms of noise exposure or proximity to an airport or runway, assuming no conflict exists with applicable airport design standards. The FAA recommends that local jurisdictions include the following language in their development codes: *“Nothing in this chapter shall diminish the responsibility of project proponents to submit a Notice of Construction or Alteration to the Federal Aviation Administration if required in accordance with FAR Part 77, Objects Affecting Navigable Airspace.”*

**FAR Part 150, Airport Noise Compatibility Planning** provides guidance for land use compatibility around airports. The 1990 Airport Noise and Capacity Act (ANCA), defines the federal policy on the regulation of airport noise (operating curfews, aircraft restrictions, etc.), with the intent of standardizing noise controls throughout the national system.

## STATE

The State of Oregon has created a set of **Oregon Administrative Rules (OAR)**, contained in **Chapter 660, Department of Land Conservation and Development; Division 12, Transportation Planning and Division 13, Airport Planning** to address airport protection and function. Local government shall follow State rules as described in **OAR 660** for planning and managing public-use airports. Division 12 states that local governments shall participate and develop a Transportation System Plan with “measures to protect public use airports by controlling land uses within airport noise corridors and imaginary surfaces, and by limiting physical hazards to air navigation.” **Division 13** states, *“the policy of the State of Oregon is to encourage and support the continued operation and vitality of Oregon’s airports.”* It includes “rules that are intended to promote a convenient and economic system of airports in the State and for land use planning to reduce risks to aircraft operations and nearby land uses.” A summary of these requirements is provided below:

- **660-013-0030 Preparation and Coordination of Aviation Plans** states “A city or county with planning authority for one or more airports, or areas within safety zones or compatibility zones described in this division, shall adopt comprehensive plan and land use regulations for airports consistent with the requirements of this division and ORS 836.600 through 836.630.”
- **660-013-0040 Aviation Facility Planning Requirements** provides a list of planning requirements including a map showing location of airport boundary, a map or description of existing and planned facilities, a projection of future aeronautical needs, etc.
- **660-013-0070 Local Government Safety Zones for Imaginary Surfaces** specifies that “local governments shall adopt an Airport Safety Overlay Zone to promote aviation safety by prohibiting structures, trees and other objects of natural growth from penetrating airport imaginary surfaces.”
- **660-13-0080 Local Government Land Use Compatibility Requirements for Public Use Airports** provides a list of requirements including prohibiting new residential development and public assemble uses within the Runway Protection Zone (RPZ) and limits establishment of uses within the noise impact boundary.
- **660-013-0100 Airport Uses at Non-Towered Airports** requires local government to adopt land use regulations that authorize a range of defined airport uses within the airport boundary of non-towered airports.
- **660-013-0140 Safe Harbors** defines “safe harbor” requirements that maybe used by local government to rely of existing comprehensive plans land use regulations, Airport Master Plans and Airport Layout Plans.
- **660-013-155 Planning Requirements for Small Airports** specifies that airports are to be subject to the planning and zoning requirements within ORS 836.

**Division 13** implements **Oregon Revised Statutes (ORS) 836.600** through **836.630**, which promotes land use planning to reduce unnecessary risk to aircraft operations. Several key statutes that are important in land use planning are summarized below:

- **836.608 Airport operation as matter of state concern (local planning documents to recognize airport location, limitations on use and expansion of facility)** requires local governments to recognize airport locations within planning documents. It also establishes limitations on use and a process in which airports can add new land uses on their property.

- **836.610 Local government land use plans and regulations to accommodate airport zone and uses (funding; rules)** requires local governments to amend their land use regulations and comprehensive plans in accordance to 836.616 and 836.619.
- **836.616 Rules for airport uses and activities** identifies types of permitted land uses and activities on airport property and requires local government to meet standards for safe land uses near airports.
- **836.623 Local compatibility and safety requirements more stringent than state requirements (criteria, water impoundments, report to federal agency, and application to certain activities)** allows local governments to adopt land use compatibility and safety requirements that are more stringent than the minimum required by Land Conservation and Development Commission rules. It provides rules which limit the size of water impoundments near airports in an effort to reduce wildlife attractants.

## LOCAL LAND USE AUTHORITY

Establishing compatible land uses around airports is the responsibility of local governing agencies with planning and zoning authority. The FAA and airport management (ODA) may provide recommendations on land use issues, while discouraging incompatible land uses around airports.

Coos County has land use authority for Bandon State Airport and its immediate surroundings. The airport is located outside Bandon's city limits, but within Bandon's Urban Growth Boundary (UGB). Coos County and the City of Bandon have established airport overlay zoning to ensure long-term land use compatibility with the airport.

However, it does not appear that the city and county have established a formal consultation process for coordinated review of proposed development, zoning changes, or approval of conditional uses in the vicinity of the airport, or within the Bandon UGB. A coordinated review process is recommended, particularly within the Bandon UGB, to ensure consistency in local land use.

## Comprehensive Plan Land Use Designations

A comprehensive plan is a policy document which defines local priorities and guides long term growth and development, consistent with state law.

## COOS COUNTY

Coos County's comprehensive plan land use designation for Bandon State Airport is Industrial. The Industrial *"designation applies to sites potentially needed for industrial development. Use of the designation is not restricted to urban growth areas."*

Coos County's Comprehensive Plan acknowledges that improvements to Bandon State Airport would increase the airports importance as a valuable economic resource to the county's transportation system. Coos County's transportation goal is to *"strive to provide and encourage a transportation system that promotes safety and convenience for citizens and travelers and that strengthens the local and regional economy by facilitating the flow of goods and services."*

Coos County's transportation goal contains strategies for Bandon State Airport, which include:<sup>1</sup>

- Strategy 8-*"Coos County shall cooperate with the City of Bandon and the State of Oregon Aeronautics Division in ensuring that the Bandon State Airport meets Federal Aviation Administration Planning Grant conditions regarding airport safety and compatibility."*

*"This strategy shall be implemented by adopting an "Airport Operations" zone for the property encompassing the Bandon State Airport boundaries and the "Primary and Secondary Safety Zones,"... the AO zone shall restrict activities to those that are airport-related and shall be designed to limit the height of structures in the zone to promote safe aircraft operations."*

- Strategy 11-*"Coos County shall cooperate with the Oregon State Aeronautics Division and the Federal Aviation Administration by developing an Airport Surfaces Overlay Zoning District to prevent the creation or establishment of hazards to air navigation. The Overlay Zoning District shall apply to the Bandon, Lakeside and Powers State Airports and shall encompass the primary surface, approach surface, transitional surfaces, horizontal surface and conical surfaces..."*

## CITY OF BANDON

The City of Bandon has included policies in their comprehensive plan to protect Bandon State Airport from encroachment or other incompatible land uses. As noted earlier, the airport and the adjacent industrially-zoned parcels are located within the Bandon UGB, which could eventually lead to annexation by the city.

Section I subsection Goal 12-Transportation, provides policies for the city's transportation system, including those that promote and protect aviation in the region.<sup>2</sup>

- Policy 3-*"It shall be the policy of the city to encourage continued commercial, certificated regional air service to the region."*
- Policy 7-*"It shall be the policy of the city to protect the Bandon State Airport from encroachment by incompatible uses. The land areas at the runway ends shall not be developed."*

<sup>1</sup> Coos County Comprehensive Plan, Volume 1 Part 1, Chapter 5.19 Transportation (1985)

<sup>2</sup> City of Bandon Comprehensive Plan, Section I, Transportation (2010)

*“The city will coordinate its planning and land use activities with Aeronautics Division and will comply with the Federal Standards for Airports.”*

## Airport Zoning

Zoning ordinances are the primary implementation tool used in land use planning to ensure consistency between long term (comprehensive planning) and development within a community or county.

### COOS COUNTY

Bandon State Airport is zoned “Airport Operations” (AO). The Coos County ordinance provides the following description for the zone: *“The purpose of the Airport Operations ‘AO’ district is to recognize those areas devoted to or most suitable for immediate operational facilities necessary for commercial and non-commercial aviation. It is also intended to provide areas for those activities directly supporting or dependent upon aircraft or air transportation when such activities, in order to function, require a location within or immediately adjacent to primary flight operations and passenger or cargo service facilities. In addition, the ‘AO’ district is intended to provide areas for certain open space uses for airfield grounds maintenance and as a buffer to minimize potential dangers from, and conflicts with, the use of aircraft.”*

The AO zone permits a wide range of aeronautical uses to include air cargo warehousing and distribution; air operation facilities; aero school and club; aero sales; and repair and storage facilities. In addition, the AO zone permits a limited amount of non-aeronautical uses around the airport.<sup>3</sup>

### CITY OF BANDON

As noted earlier, Bandon State Airport is located south of Bandon’s city limits, but within the Urban Growth Boundary (UGB). The City of Bandon Comprehensive Plan provides the following description: *“In 1991, the city modified the Urban Growth Area by adding 129 acres of Industrial zoned property near the airport.”* The *“Bandon Plan suggests light industrial development in the vicinity of the Bandon Airport. Such a classification would pose minimal conflict with adjacent uses and would provide areas suitable for those types of firms, which would derive particular benefit from being located near the airport.”*

The City of Bandon identified the airport area as one of the six locations where industrial land uses are occurring, and made it the third highest priority for boundary expansion through annexation. The city views the airport area as the *“best site for future industrial development”* due to the following site characteristics:<sup>4</sup>

- *Adjacent to Highway 101;*
- *Existing industrial land;*

<sup>3</sup> Coos County Zoning and Land Development Ordinance, Chapter IV- Zoning; Article 4.1 Zoning-General, Article 4.2-Uses.

<sup>4</sup> City of Bandon Comprehensive Plan, Chapter 3 Land Use (1991)

- *Flat, vacant land;*
- *No flood hazard, no known geological hazard;*
- *Buildable land estimated at 130 acres;*
- *Current zoning allows for industrial uses compatible with airport operations; and*
- *No existing or allowed residential uses.*

## Airport Vicinity Zoning

### COOS COUNTY

Coos County has jurisdiction for the land immediately surrounding the airport; areas located in the Bandon city limits are located north of the airport. The land west of the airport (east of Highway 101) is zoned Industrial (IND). The industrial zoning for this area provides a high degree of land use compatibility with airport operations. Zoning for other nearby areas include Forest (F) and Exclusive Farm Use (EFU); areas of Rural Residential (RR) zoning (typically 2 to 5-acre parcels) are located northwest of the airport and immediately adjacent to the airport near its northeast corner. Areas of Commercial (C-1) and RR zoning are located west of Highway 101, due west of the airport. The current mixture of resource, industrial, commercial and low-density residential zoning provides a reasonable level of land use compatibility for airport operations. Any future zoning changes that could increase the density of nearby residential areas should be carefully considered as it could adversely impact airport operations through a reduced level of land use compatibility.

### CITY OF BANDON

The southern edge of Bandon city limits is located approximately .5 miles northwest of the airport at its nearest point, with the primary southern boundary located approximately 2 miles north of the airport. The zoning in the area located nearest the airport (.5 to 1.5 miles northwest of the runway) includes General Commercial (C2), Controlled Development (CD) and Residential (R).

**Figure 9-1**, located at the end of the chapter, depicts existing zoning in the vicinity of the airport.

## Airport Overlay Zones

Coos County and City of Bandon have adopted airport overlay zones that are intended to protect the airspace associated with Bandon State Airport from obstructions. The city and county overlay zones do not share common definitions or geometry which creates the potential for variation in protection, particularly where jurisdictional lines meet.

### COOS COUNTY

Coos County established an airport overlay zone designated “Airport Surfaces (AS) Floating” zone to provide special considerations for areas around the airport. *“The purpose of the Airport Surfaces Floating zone is to protect public health, safety and welfare. It is recognized that obstruction to aviation have a potential for endangering the lives and property of users of selected airports, and property of occupant land in the airport’s vicinity; an obstruction may affect future instrument approach minimums; and obstructions may reduce the area available for the landing, take-off and maneuvering of aircraft, thus tending to destroy or impair the utility of the airport and the public investment therein.”*

Coos County created “Airport Sub-Zones” within the Airport Surfaces Floating zone to protect the airspace around Bandon, Lakeside, and Powers State Airports. These sub-zones include an Approach Zone, Transition Zone, Horizontal Conical Zone, and Primary Surface Zone with airport specific dimensions and limitations.<sup>5</sup>

A copy of Coos County’s Airport Surfaces (AS) Floating zone (Section 4.6.300-345) is included in **Appendix C**.

#### CITY OF BANDON

The City of Bandon created an “Airport Overlay” (AO) zone intended to *“prevent the establishment of airspace obstructions in airport approaches and surrounding area through height restrictions and other land use controls as deemed essential to protect the health, safety and welfare of the people of the City of Bandon and Coos County.”* The Airport Overlay zone applies to the land lying beneath the airport imaginary surfaces for Bandon State Airport.<sup>6</sup> The zoning ordinance contains limitations to restrict public assembly, glare producing materials, noise sensitive developments, and structures that penetrate Part 77 surfaces.

A copy of the City of Bandon’s Airport Overlay (AO) zone is included in **Appendix D**.

**Table 9-1** compares Coos County’s Airport Surfaces Floating Zone and City of Bandon’s Airport Overlay Zone imaginary surface dimensions with FAR Part 77 standards for the existing “Larger than Utility” Visual runway and future “Larger than Utility” Non-Precision runway.

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<sup>5</sup> Coos County Zoning and Land Development Ordinance, *Article 4.6 Overlay Zones* (1985)

<sup>6</sup> Bandon Municipal Code, Title 17, *Chapter 17.88 Airport Overlay Zone* (2009)

**TABLE 9-1: AIRPORT OVERLAY ZONE AND FAR PART 77 IMAGINARY SURFACES COMPARISON**

IMAGINARY SURFACES	COOS COUNTY AIRPORT SURFACES FLOATING ZONE	CITY OF BANDON AIRPORT OVERLAY ZONE	FAR PART 77 LARGER THAN UTILITY VISUAL	FAR PART 77 LARGER THAN UTILITY NON-PRECISION
Horizontal Surface	9,000 feet	5,000 feet	5,000 feet	10,000 feet
Conical Surface <ul style="list-style-type: none"> <li>• Slope</li> <li>• Horizontal Distance</li> </ul>	- -	20:1 4,000 feet	20:1 4,000 feet	20:1 4,000 feet
Primary Surface	500 feet	500 feet	500 feet	500 feet
Approach Surface <ul style="list-style-type: none"> <li>• Slope</li> <li>• Width</li> <li>• Horizontal Distance</li> </ul>	- 1,400 feet 3,000 feet	20:1 1,250 feet 5,000 feet	20:1 1,500 feet 5,000 feet	34:1 3,500 feet 10,000 feet
Transitional Surface <ul style="list-style-type: none"> <li>• Slope</li> <li>• Horizontal Distance</li> </ul>	- 1,050 feet	7:1 5,000 feet	7:1 5,000 feet	7:1 10,000 feet

## Transportation System Plan

### COOS COUNTY

The Coos County Transportation System Plan (TSP) provides goals and objectives with guiding principles for planning and managing Coos County’s transportation system. An essential goal for Coos County airports is to *“protect and enhance airport facilities by developing regulations to reduce hazards and promote compatible land uses in surrounding areas and coordinating with the Oregon Department of Aviation, Southwest Oregon Regional Airport, other regional, local and remote aviation facilities, and affected cities.”*

The “Air Facilities” section of Chapter 3 in the TSP describes the four public use airports operating in Coos County and identifies Bandon State Airport as a Category 4-Community General Aviation Airport.

Chapter 6 of the TSP contains an “Airport Plan,” which incorporates any needed changes and improvements to airport facilities. The Airport Plan states *“conversations with county and city staff suggest that no future access and roadway needs have been identified for these facilities.”*<sup>7</sup>

<sup>7</sup> Coos County Transportation System Plan (2011)

## CITY OF BANDON

The City of Bandon Transportation System Plan (TSP) (Volume 6) establishes how existing plans and implementing measures will need to be revised to carry out the preferred alternative. Section 1 defines the city's transportation goals, objectives and policies for the city limits and urban growth area. The city's transportation goal is *"a transportation system meeting the complete needs of individuals, businesses, and institutions for the transport of people and goods, by multiple means, in a safe, efficient, and economical manner."* The TSP's objectives and policies that apply to Bandon State Airport include:<sup>8</sup>

- Objective 9, *"to protect and enhance the development and operation of the Bandon State Airport."*
- Policy 23, *"the function of the Bandon State Airport shall be protected through the application of appropriate land use designations to assure that future land uses are compatible with continued operation of the airport."*

Section 6 includes an "Airport Plan" describing Bandon State Airport's location and facilities. The Airport Plan states, *"the airport overlay zone in the zoning ordinance applies to any land impacted by the airport. The city's airport overlay zone would be amended, as necessary, to be consistent with the rules and guidance of the State's Aeronautics Division. Bandon will cooperate with Coos County and the state to assure that all development that occurs around the airport is compatible with the functions of the airport."*<sup>9</sup>

## Summary and Recommendations

Coos County and the City of Bandon have taken steps to be proactive in ensuring the longevity and continued growth of Bandon State Airport. There are no known incompatible land uses or activities around the airport at this time. Maintaining effective land use controls around the airport will be crucial in protecting the airport and ensuring the long-term aeronautical viability of the site.

The following recommendations and actions are presented for Coos County and City of Bandon consideration:

- Update the existing Coos County Airport Surfaces Floating zone to be consistent with FAR Part 77 Imaginary Surface dimensions and language.
- Ensure effective coordination between Coos County and the City of Bandon in planning and development of the airport and surrounding areas.
- If the airport is annexed into the City of Bandon in the future, creating an airport-specific zone that clearly defines a range of permitted and conditional uses normally associated with general aviation airports is recommended.

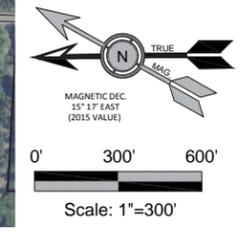
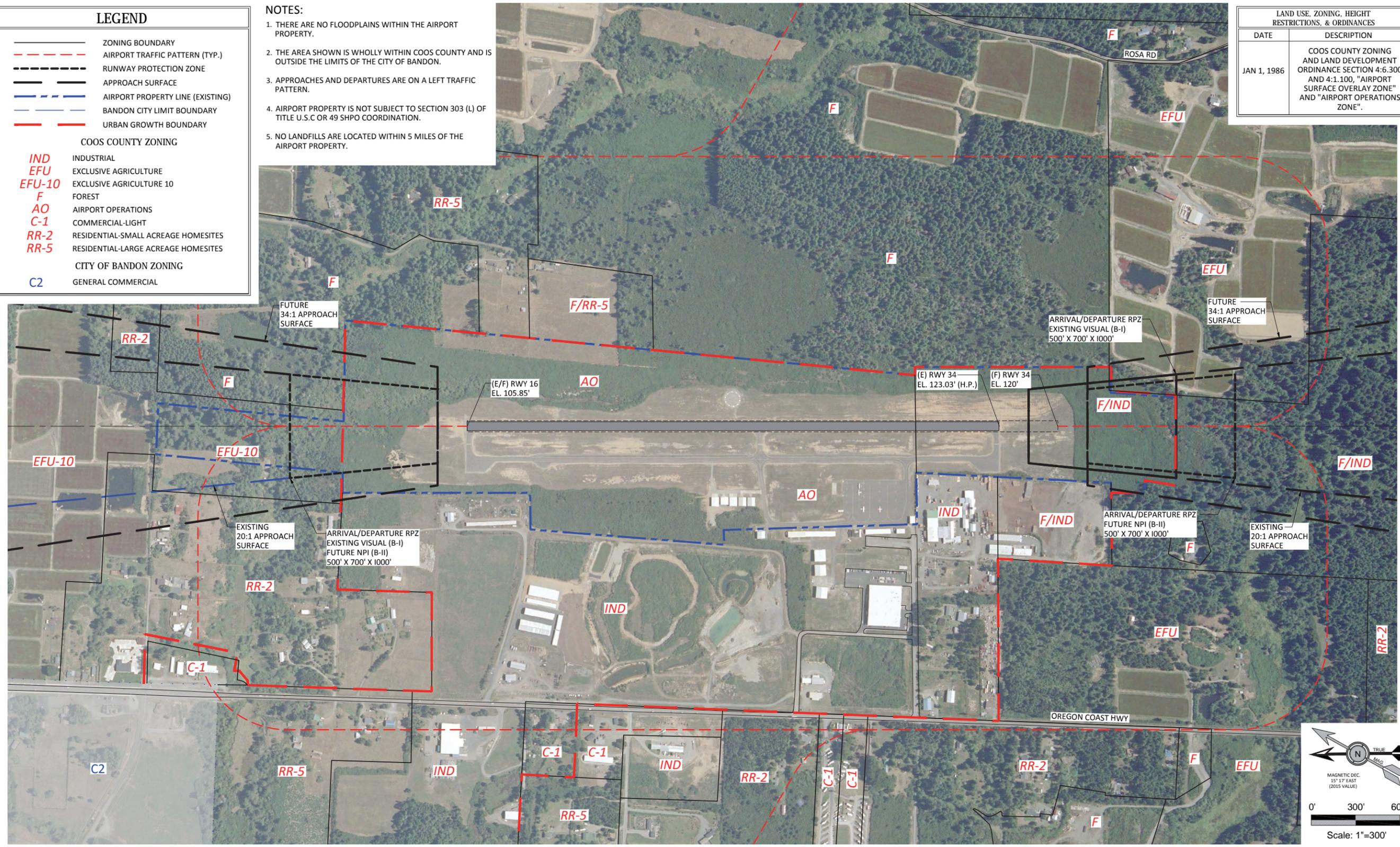
<sup>8</sup> City of Bandon Transportation System Plan, Volume 6, Section 1 (2000)

<sup>9</sup> City of Bandon Transportation System Plan, Volume 6, Section 6 (2000)

LEGEND	
	ZONING BOUNDARY
	AIRPORT TRAFFIC PATTERN (TYP.)
	RUNWAY PROTECTION ZONE
	APPROACH SURFACE
	AIRPORT PROPERTY LINE (EXISTING)
	BANDON CITY LIMIT BOUNDARY
	URBAN GROWTH BOUNDARY
COOS COUNTY ZONING	
IND	INDUSTRIAL
EFU	EXCLUSIVE AGRICULTURE
EFU-10	EXCLUSIVE AGRICULTURE 10
F	FOREST
AO	AIRPORT OPERATIONS
C-1	COMMERCIAL-LIGHT
RR-2	RESIDENTIAL-SMALL ACREAGE HOMESITES
RR-5	RESIDENTIAL-LARGE ACREAGE HOMESITES
CITY OF BANDON ZONING	
C2	GENERAL COMMERCIAL

- NOTES:**
1. THERE ARE NO FLOODPLAINS WITHIN THE AIRPORT PROPERTY.
  2. THE AREA SHOWN IS WHOLLY WITHIN COOS COUNTY AND IS OUTSIDE THE LIMITS OF THE CITY OF BANDON.
  3. APPROACHES AND DEPARTURES ARE ON A LEFT TRAFFIC PATTERN.
  4. AIRPORT PROPERTY IS NOT SUBJECT TO SECTION 303 (L) OF TITLE U.S.C OR 49 SHPO COORDINATION.
  5. NO LANDFILLS ARE LOCATED WITHIN 5 MILES OF THE AIRPORT PROPERTY.

LAND USE, ZONING, HEIGHT RESTRICTIONS, & ORDINANCES	
DATE	DESCRIPTION
JAN 1, 1986	COOS COUNTY ZONING AND LAND DEVELOPMENT ORDINANCE SECTION 4:6.300 AND 4:1.100, "AIRPORT SURFACE OVERLAY ZONE" AND "AIRPORT OPERATIONS ZONE".



## Chapter 10 – Planning for Compliance & Solid Waste Recycling Plan



## Chapter 10 – Planning for Compliance & Solid Waste Recycling Plan

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### Introduction

This chapter discusses the elements associated with the operation and management of Bandon State Airport, as a federally-obligated airport. The Federal Aviation Administration (FAA) encourages airport sponsors to establish and implement programs that promote sound operating practices and ongoing compliance with regulatory requirements. The FAA currently recommends that compliance be addressed during the airport planning process through the review of airport plans and documents including: the approved Airport Layout Plan, Exhibit "A" Property Map, any airport ordinance, any applicable zoning ordinance, airport rules and regulations, airport minimum standards, airport budgets, leases, easements, permits, and other documents.

### Oregon Department of Aviation Compliance

Oregon Department of Aviation (ODA) maintains a high degree of control over the operation of Bandon State Airport. ODA meets all applicable financial reporting and record keeping requirements. They employ a variety of “best practices” including: periodic review of market rates and fees, land appraisals, formal procurement and contracting practices, coordination with adjacent land owners (Avigation easements), local government (land use planning, zoning), state government (airport overlay zoning, environmental agencies, etc.), and tribal government.

ODA has one existing Ingress/Egress agreement commonly referred to as a “Through-the-Fence” (TTF) agreement in place with Bandon Aero Club, Inc. This agreement includes four conventional hangars, one

fixed base operator and maintenance hangar, one double-sided T-hangar, one single-sided multi-unit hangar, and one pilot lounge, located on the west side of the airport adjacent to the main apron. A section on FAA TTF Compliance is provided later in this chapter. There are no known compliance issues associated with airport development, tenant leases, land leases, or other items.

## FAA Compliance Summary

A management program based on the FAA's "Planning for Compliance" guidelines and the adoption of airport management "Best Practices" is recommended to address FAA compliance requirements and avoid noncompliance, which could have significant consequences.

Airport management "Best Practices" are developed to provide timely information and guidance related to good management practices and safe airport operations for airport managers and sponsors. The practices outlined herein are designed for use by ODA for evaluating and improving their current and future operation and management program.

Airport sponsors must comply with various federal obligations through agreements and/or property conveyances, outlined in **FAA Order 5190.6B**, Airport Compliance Manual. The contractual federal obligations that a sponsor accepts when receiving federal grant funds or transfer of federal property can be found in a variety of documents including:

- Grant agreements issued under the Federal Airport Act of 1946, the Airport and Airway Development Act of 1970, and Airport Improvement Act of 1982. Included in these agreements are the requirement for airport sponsors to comply with:
  - Grant Assurances
  - Advisory Circulars
  - Application commitments
  - FAR procedures and submittals
  - Special conditions
- Surplus airport property instruments of transfer;
- Deeds of conveyance;
- Commitments in environmental documents prepared in accordance with FAA requirements;
- Separate written requirements between a sponsor and the FAA.

Land use compliance and compatible land use planning is often a significant compliance issue for airports. Compliance and suggested best practices are discussed under the following subheadings in this chapter:

- Airport Compliance with Federal and State Grant Assurances
- Environmental Compliance
- Airport User Compliance
- Other Airport Operational Policies and Procedures

### AIRPORT COMPLIANCE WITH GRANT ASSURANCES

As a recipient of federal airport improvement grant funds, the Oregon Department of Aviation is contractually bound to various sponsor obligations referred to as "Grant Assurances" that have been compiled by the FAA. These obligations, presented in detail in federal grants and state statutes and administrative codes, document the commitments made by the Oregon Department of Aviation to fulfill the intent of the grantor (FAA) resulting from acceptance of federal funding for airport improvements. Failure to comply with the grant assurances may result in a finding of noncompliance and/or forfeiture of future funding. Grant assurances and their associated requirements are to protect the significant investment made by the FAA to preserve and maintain the nation's airports as a valuable national transportation asset, as mandated by Congress.

### FAA GRANT ASSURANCES

The FAA's Airport Compliance Program defines the interpretation, administration, and oversight of federal sponsor obligations contained in grant assurances. Currently **FAA Order 5190.6B**, Airport Compliance Manual, defines policies and procedures for the Airport Compliance Program. Although it is not regulatory or controlling with regard to airport sponsor conduct, it establishes the policies and procedures for FAA personnel to follow in carrying out the FAA's responsibilities for ensuring compliance by the sponsor.

**Order 5190.6B** states: the FAA Airport Compliance Program is, "...designed to monitor and enforce obligations agreed to by airport sponsors in exchange for valuable benefits and rights granted by the United States in return for substantial direct grants of funds and for conveyances of federal property for airport purposes. The Airport Compliance Program is designed to protect the public interest in civil aviation. Grants and property conveyances are made in exchange for binding commitments (federal obligations) designed to ensure that the public interest in civil aviation will be served. The FAA bears the important responsibility of seeing that these commitments are met. This order addresses the types of commitments, how they apply to airports, and what FAA personnel are required to do to enforce them."

To better understand the intent of the FAA Compliance Program, it is important to understand the FAA's goals for a national airport system. The national airport system is currently known as the National Plan of Integrated Airport Systems (NPIAS), which has historic origins dating back to the 1946 Federal Airports Act. The airport system has evolved through several legislative updates in concert with changes in the organization and scope of the FAA. The NPIAS was adopted as part of the Airport and Airway Development

Act of 1982, replacing the National Airspace System Plan (NASP), created by earlier legislation. There are approximately 2,500 general aviation airports and 800 commercial service airports in the NPIAS.

According to the FAA, cooperation between the FAA, state, and local agencies should result in an airport system with the following attributes:

- Airports should be safe and efficient, located at optimum sites, and be developed and maintained to appropriate standards;
- Airports should be operated efficiently both for aeronautical users and the government, relying primarily on user fees and placing minimal burden on the general revenues of the local, state, and federal governments;
- Airports should be flexible and expandable, able to meet increased demand and accommodate new aircraft types;
- Airports should be permanent, with assurance that they will remain open for aeronautical use over the long-term;
- Airports should be compatible with surrounding communities, maintaining a balance between the needs of aviation and the requirements of residents in neighboring areas;
- Airports should be developed in concert with improvements to the air traffic control system;
- The airport system should support national objectives for defense, emergency readiness, and postal delivery;
- The airport system should be extensive, providing as many people as possible with convenient access to air transportation, typically not more than 20 miles of travel to the nearest NPIAS airport; and
- The airport system should help air transportation contribute to a productive national economy and international competitiveness.

FAA Airport Improvement Program (AIP) grant assurances are summarized and categorized by airport function (highlighted in blue) in **Table 10-1**.

**TABLE 10-1: SUMMARY OF FAA AIP GRANT ASSURANCES (AIRPORT SPONSOR ASSURANCES 3/2014)**

GRANT ASSURANCE NO.	GENERAL AIRPORT	PROJECT PLANNING / DESIGN & CONTRACTING	AIRPORT OPERATIONS AND LAND USE	DAY TO DAY AIRPORT MANAGEMENT	PROJECT CONSTRUCTION	LEASES & FINANCIAL	OTHER
1. General Federal Requirements							
2. Responsibility and Authority of the Sponsor							
3. Sponsor Fund Availability							
4. Good Title							
5. Preserving Rights and Powers							
6. Consistency with Local Plans							
7. Consideration of Local Interest							
8. Consultation with Users							
9. Public Hearings							
10. Metropolitan Planning Organization							
11. Pavement Preventative Maintenance							
12. Terminal Development Prerequisites							
13. Accounting System, Audit, and Record Keeping Requirements							
14. Minimum Wage Rates							

GRANT ASSURANCE NO.	GENERAL AIRPORT	PROJECT PLANNING / DESIGN & CONTRACTING	AIRPORT OPERATIONS AND LAND USE	DAY TO DAY AIRPORT MANAGEMENT	PROJECT CONSTRUCTION	LEASES & FINANCIAL	OTHER
15. Veteran's Preference							
16. Conformity to Plans and Specifications							
17. Construction Inspection and Approval							
18. Planning Projects							
19. Operations and Maintenance							
20. Hazard Removal and Mitigation							
21. Compatible Land Use							
22. Economic Nondiscrimination							
23. Exclusive Rights							
24. Fee and Rental Structure							
25. Airport Revenues							
26. Reports and Inspections							
27. Use by Government Aircraft							
28. Land for Federal Facilities							
29. Airport Layout Plans							
30. Civil Rights							

GRANT ASSURANCE NO.	GENERAL AIRPORT	PROJECT PLANNING / DESIGN & CONTRACTING	AIRPORT OPERATIONS AND LAND USE	DAY TO DAY AIRPORT MANAGEMENT	PROJECT CONSTRUCTION	LEASES & FINANCIAL	OTHER
31. Disposal of Land							
32. Engineering and Design Services							
33. Foreign Market Restrictions							
34. Policies, Standards and Specifications							
35. Relocation and Real Property Acquisition							
36. Access by Intercity Bus							
37. Disadvantaged Business Enterprises							
38. Hangar Construction							
39. Competitive Access							

While sponsors should understand and comply with all grant assurances, there are several assurances that are common and recurring issues for airport sponsors throughout the country. These are summarized in more detail below. A complete description of current AIP grant assurances is provided in **Appendix E**. It is important to note that the assurances (and corresponding numbers) are applied to non-airport sponsors undertaking noise compatibility program projects and planning agency sponsors. These can also be found in the Airport Improvement Program (AIP) under Grant Assurances.

As the airport sponsor, ODA is responsible for the direct control and operation of Bandon State Airport. Familiarity with proper monitoring and implementation of sponsor obligations and FAA grant assurances, in particular, are keys to maintaining compliance. FAA Order 5190.6B and ongoing communication with the [FAA Northwest Mountain Region Compliance Office](#) are both excellent resources when addressing policy and compliance.

## DURATION

The terms, conditions, and assurance of a grant agreement with the FAA remain in effect for the useful life of a development project, which is typically 20 years from the receipt of the last grant. However, terms, conditions, and assurances associated with land purchased with federal funds do not expire.

The airport sponsor should have a clear understanding of and comply with all assurances. The following sections described were excerpted (without revision) from published FAA guidance for more detail.

### Project Planning, Design and Contracting

#### *Sponsor Fund Availability (Assurance #3)*

Once a grant is given to an airport sponsor, the receiving sponsor commits to providing the funding to cover their portion of the total project cost. Currently this amount is ten percent of the total eligible project cost, although it may be higher depending on the particular project components or makeup. Once the project has been completed, the receiving airport also commits to having adequate funds to maintain and operate the airport in the appropriate manner to protect the investment in accordance with the terms of the assurances attached to and made a part of the grant agreement.

#### *Consistency with Local Plans (Assurance #6)*

All projects must be consistent with city and county comprehensive plans, transportation plans, zoning ordinances, development codes, and hazard mitigation plans. The airport sponsor and planners should familiarize themselves with local planning documents before a project is considered to ensure that all projects follow local plans and ordinances.

In addition to understanding local plans, airport sponsors should be proactive in order to prevent noncompliance with this assurance. The airport sponsor should assist in the development of local plans that incorporate the airport and consider its unique aviation related needs. Sponsor efforts should include the development of goals, policies, and implementation strategies to protect the airport as part of local plans and ordinances.

#### *Accounting System Audit and Record Keeping (Assurance #13)*

All project accounts and records must be made available at any time. Records should include documentation of cost, how monies were actually spent, funds paid by other sources, and any other financial records associated with the project at hand. Any books, records, documents, or papers that pertain to the project should be available at all times for an audit or examination.

## General Airport

### *Good title (Assurance #4)*

The airport owner must have a Good Title to affected property when considering projects associated with land, buildings, or equipment. Good Title means the sponsor can show complete ownership of the property without any legal questions, or show it will soon be acquired.

### *Preserving Rights and Powers (Assurance #5)*

No actions are allowed, which might take away any rights or powers from the sponsor, which are necessary for the sponsor to perform or fulfill any conditions set forth by the assurance included as part of the grant agreement. If there is an action taken or activity permitted that might hinder any of those rights or powers it should be discontinued. An example of an action that can adversely affect the rights and powers, of the airport is a Through-the-Fence (TTF) activity. TTF activities allow access to airport facilities from off-airport users. In many instances, the airport sponsor cannot control the activities of those operating off the airport resulting in less sponsor control. This loss of control can potentially have an adverse impact to airport users. For example, TTF activities often do not pay the same rates and charges as on-airport users, resulting in an unfair competitive advantage for businesses and users located off-airport.

### *Airport Layout Plan (ALP) (Assurance #29)*

The airport should at all times keep an up-to-date ALP, which should include current and future boundaries, facilities/structures, locations of non-aviation areas, and existing improvements. No changes should be made at the airport to hinder the safety of operations; also no changes should be made to the airport that are not in conformity with the ALP. Any changes of this nature could adversely affect the safety, utility, or efficiency of the airport. If any changes are made to the airport without authorization the alteration must be changed back to their original condition or the airport will have to bear all costs associated with moving or changing the alteration to an acceptable design or location. Additionally no federal participation will occur for improvement projects not shown on an approved ALP.

### *Disposal of Land (Assurance #31)*

Land purchased with the financial participation of an FAA Grant cannot be sold or disposed of by the airport sponsor at their sole discretion. Disposal of such lands are subject to FAA approval and a definitive process established by the FAA. If airport land is no longer considered necessary for airport purposes, and the sale is authorized by the FAA, the land must be sold at fair market value. Proceeds from the sale of the land must either be repaid to the FAA, reinvested into another eligible airport improvement, or noise compatibility project. Land disposal requirements typically arise when a community is building a new

airport and the land on which the airport was located is sold with the proceeds used to offset costs of the new airport. In general, land purchased with FAA funds is rarely sold by a sponsor.

### Airport Operations and Land Use

#### *Pavement Preventative Maintenance (Assurance #11)*

Since January 1995, the FAA has mandated that it will only give a grant for airport pavement replacement or reconstruction projects if an effective airport pavement maintenance-management program is in place. The program should identify the maintenance of all pavements funded with federal financial assistance. The report provides a pavement condition index (PCI) rating (0 to 100) for various sections of aprons, runways, and taxiways; including, a score for overall airport pavements.

#### *Operations and Maintenance (Assurance #19)*

All federally funded airport facilities must operate at all times in a safe and serviceable manner. The airport sponsor should not allow for any activities which inhibit or prevent this. The airport sponsor must always promptly mark and light any hazards on the airport, and promptly issue Notices to Airmen (NOTAMs) to advise of any conditions which could affect safe aeronautical use. Exceptions to this assurance include when temporary weather conditions make it unreasonable to maintain the airport. Further, this assurance does not require the airport sponsor to repair conditions which have happened because of a situation beyond the control of the sponsor.

#### *Compatible Land Use (Assurance #21)*

Land uses around an airport should be planned and implemented in a manner which ensures surrounding development and activities are compatible with the airport. To ensure compatibility, the sponsor is expected to take appropriate action, to the extent reasonable, including the adoption of zoning laws to guide land use in the vicinity of airports under their jurisdiction. Incompatible land use around airports represents one of the greatest threats to the future viability of airports.

### Day to Day Airport Management

#### *Economic Non-Discrimination (Assurance #22)*

Any reasonable aeronautical activity offering service to the public should be permitted to operate at the airport as long as the activity complies with airport established standards for that activity. Any contractor agreement made with the airport will have provisions making certain the person, firm, or corporation will not be discriminatory when it comes to services rendered as well as rates or prices charged to customers. Provisions include:

- All FBOs on the airport should be subject to the same rate fees, rentals, and other charges.
- All persons, firms, or corporations operating aircraft can work on their own aircraft with their own employees.
- If the airport sponsor at any time exercises the rights and privileges of this assurance, they will be under all of the same conditions as any other airport user would be.
- The sponsor can establish fair conditions, which need to be met by all airport users to make the airport safer and more efficient.

The sponsor can prohibit any type, kind, or class of aeronautical activity if it is for the safety of the airport. An example of an activity which may be considered for prohibition is sky diving. It is important to point out that the FAA will review such prohibitions and will make the final determination as to whether or not a particular activity type is deemed unsafe at the airport based on current operational dynamics.

#### *Exclusive Rights (Assurance #23)*

Exclusive rights at an airport are often a complicated subject usually specific to individual airport situations. The assurance states the sponsor “will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public...” However, there are exceptions to this rule. If the airport sponsor can prove that permitting a similar business would be unreasonably costly, impractical, or result in a safety concern, the sponsor may consider granting an exclusive right. To deny a business opportunity because of safety, the sponsor must demonstrate how that particular business will compromise safety at the airport. Exclusive rights are very often found in airport relationships with fixed base operators (FBO), but exclusive rights can also be established with any other business at the airport that could assist in the operation of an aircraft at the airport. If an unapproved exclusive rights agreement exists, it must be dissolved before a future federal grant can be awarded to the airport.

If a sponsor is contemplating denial of a business use at the airport, it is strongly encouraged that they contact their FAA Airports District Office (ADO) in order to ensure that they have all necessary information and that denial of access is not going to be seen as unjust discrimination. For more in depth information on exclusive rights reference **Advisory Circular 150/5190-6**, "[Exclusive Rights at Federally Obligated Airports](#).”

## Leases and Finances

### *Fee and Rental Structure (Assurance #24)*

Simply put, the fee and rental structure at the airport must be implemented with the goal of generating enough revenue from airport related fees and rents to become self-sufficient in funding day to day operational needs. The airport sponsor should routinely monitor its fee and rental structure to ensure reasonable fees are being charged to meet this goal. Common fees charged by airports include fuel flowage, tie-down, landing fees, and hangar rent.

### *Airport Revenue (Assurance #25)*

All airport revenue and local taxes on aviation fuel should be used toward the operating costs of the airport, the local airport system, or other local facilities that are owned by the same owner of the airport, which will directly affect air transportation passengers or property, or for noise mitigation on or off airport property. In other words, revenue generated by airport activities must be used to support the continued operation and maintenance of the airport. Use of airport revenue to support or subsidize other non-aviation activities or functions of the sponsor is not allowed and is considered revenue diversion. Revenue diversion is a significant compliance issue subject to cause scrutiny by the FAA.

## **Other FAA Compliance Requirements**

### **OTHER FEDERAL CONTRACTING AND PROCUREMENT DOCUMENTS**

When an airport sponsor accepts an FAA Airport Improvement Program (AIP) grant, they agree to adhere to all applicable federal contracting and procurement requirements. Advisory circulars are required for use in AIP funded projects. Included in each grant request is a federal funding checklist that identifies the requirements an airport should consider before accepting the grant. The following items are noted in the checklist:

- ALPs should be up to date
- Exhibit A Property Map may need to be updated if acquiring additional property
- Land Inventory may need to be updated if you have recently acquired land with federal assistance
- Airports must hold good title to the airport landing area
- Appropriate signage and markings must be in place
- Runway Protection Zone and approach surface deficiencies must be identified and steps to address deficiencies must be noted
- Runway Safety Areas must meet FAA standards if planning a runway project
- Disadvantaged Business Enterprise program goals must be met on projects of more than \$250,000

- Procedures should be in place to handle bid protests
- Open AIP grant projects need to be identified
- Project closeout forms must be submitted within 90 days of work completion
- A “Certification of Economic Justification” must be included for routine pavement maintenance projects
- A “Revenue Generating Facility Eligibility Evaluation” must be completed for hangar construction or fueling facilities
- A “Reimbursable Agreement” and “Non-Fed Coordination” must be completed for navigational aid projects
- A “Relocation Plan” must be completed if a project requires residences or businesses to be relocated

### SPECIAL CONDITIONS

In addition to the standard grant assurances discussed above, the state or the FAA may require “Special Conditions” to individual grants which supplement or expand the standard grant assurances. Special Conditions are unique to an individual airport and can be project or administrative in nature. Airport sponsors need to be aware of such conditions that may be applied to their airport.

### MULTIJURISDICTIONAL CHALLENGES

In some instances, airports are jointly owned and operated by more than one airport sponsor. In other instances, airports may be located within multiple jurisdictions. While the official airport sponsor is ultimately responsible for adherence with the grant assurance, the actions, or inactions, of surrounding jurisdictions can and do affect the airport sponsor’s ability in meeting its obligations. This is particularly true with land use compatibility issues around airports. As a result, it is important in either circumstance that all jurisdictions affected by the airport understand the operational needs and complexities of having an airport within its jurisdiction. Mutual agreements addressing airport operational or land use protection needs, or other cooperative measures, are recommended by all jurisdictions to both protect the functionality of the airport as well as the safety and well-being of airport users and neighbors.

### FAA THROUGH-THE-FENCE (TTF)

Bandon State Airport has one active Through-the-Fence user (Bandon Aero Club, Inc.) with an existing Ingress/Egress agreement. A copy of this agreement is provided in **Appendix F**. The TTF activity is located on the west side of the airport with an access point connecting to the main apron. The off-airport aviation facilities include five conventional hangars (aircraft storage, FBO, and maintenance hangar), one double-sided T-hangar, one multi-unit hangar, and one pilot lounge building.

Through-the-Fence access is discouraged by the FAA due to concerns over land use compatibility, security, safety, and economic inequity (economic discrimination) between on- and off-airport users. Economic

discrimination is “an unjust economic advantage or disadvantage for one airport user versus another by charging one more or less than another, and therefore creating an advantage or disadvantage.” However, when Through-the-Fence use exists or is proposed, the FAA requires airport sponsors to develop access plans and establish agreements consistent with FAA grant assurances. To maintain economic parity within the agreements, Through-the-Fence users are typically required to compensate the airport owner for the access in a way that is comparable to an equivalent on-airport user.

### FAA Through-the-Fence Policies

“On March 14, 2011, the FAA amended Grant Assurance 5, Preserving Rights and Powers, to prohibit new residential through-the-fence access arrangements and published an interim policy to address existing residential through-the-fence access. The interim policy required all AIP grant-eligible airport sponsors to certify their status. Those sponsors with existing access agreements were directed to depict their residential through-the-fence access points on their airport layout plan (ALP) and develop access plans to address<sup>1</sup>:

- General Authority for Control of Airport Land and Access;
- Safety of Airport Operations;
- Recovery of Costs of Operating the Airport;
- Protection of Airport Airspace; and
- Compatible Land Uses Around the Airport.”

“On February 14, 2012, the FAA Modernization and Reform Act of 2012 was signed into law (P.L. 112-95), Section 136 of this law states:

...a sponsor of a general aviation airport shall not be considered to be in violation of this subtitle, or to be in violation of a grant assurance made under this section or under any other provisions of law as a condition for the receipt of Federal financial assistance for airport development, solely because the sponsor enters into an agreement that grants to a person that owns residential real property adjacent to or near the airport access to the airfield of the airport for the following:

- (A) Aircraft of person
- (B) Aircraft authorized by the person

In addition, this law outlines specific conditions and limitations that must be in the access agreement. Beginning on October 1, 2014, an airport sponsor with an existing residential through-the-fence access agreement will be required to demonstrate evidence of compliance with this law. Specifically, these airport sponsors are required to update their airport layout plans to depict points of residential through-the-fence

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<sup>1</sup> FAA Compliance Guidance Letter 2013-01-FAA Review of Existing and Proposed Residential Through-the-Fence Access Agreements (July 16, 2013)

access and provide a copy or copies of their access agreements to demonstrate the sponsor’s compliance with the law.”

## Solid Waste and Recycling Plan

### INTRODUCTION

This section of the chapter discusses the solid waste generation at the Airport and what recycling options are utilized. The layout of this section is outlined below:

### Waste Audit

- 10.2.2 Recycling Feasibility
- 10.2.3 Plan to Minimize Solid Waste Generation
- 10.2.4 Operational and Maintenance Requirements
- 10.2.5 Waste Management Contracts
- 10.2.6 Potential for Cost Savings or Revenue Generation
- 10.2.7 Future Development and Recommendations

### Waste Audit

Due to the size of the Bandon State Airport minimal waste is generated on site. Specific sources of waste on site include private hangars, Bandon Aviation FBO, and Kehl Fire Station. The tenants are individually responsible for waste generated by their operations. Les County Sanitary Service currently provides trash and recycling hauling service for the Bandon Aero Club. Aero Club trash is picked up every other Thursday in a 2-yard frontload container and hauled to the Beaver Hill disposal site. Comingled recycling generated by the Aero Club is provided except for glass, and also serviced every other Thursday in a 2-yard container.

### WASTE DISPOSAL

Each individual tenant is also responsible for disposal and recycling of their own waste as stipulated in their leases with the Oregon Department of Aviation (ODA). Les County Sanitary Service services the Airport area and would be the contractor each tenant will contract with for waste and recycling hauling to the Beaver Hill transfer station located about 20 miles NE of the airport. No State or Federal requirements apply to the waste generated. Les County Sanitary Service provides comingled recycling including aluminum, tin cans, plastic containers, paper, and cardboard. They do not provide service for glass, or other non-standard recyclables. These items would need to be transported by individual tenants to the Beaver Hill disposal site, which accepts glass as well as non-standard recyclables such as flower pots, oil, antifreeze, batteries, phones electronic waste, and paint. The only items not accepted at the Beaver Hill disposal site are household hazardous wastes.

## CONSTRUCTION WASTE

Construction waste is the responsibility of the Contractor for each specific project. Projects identified on the 5-year CIP are listed in Table 10-2 below.

### 2016

Waste resulting from projects in 2016 would be debris generated by the tree removal and asphalt pavement waste generated by the reconstruction of the apron and taxiway and any clearing/grubbing associated with that project. The waste produced would have to be removed at the Contractor's expense.

### 2017

No demolition or construction waste is anticipated in 2017 because these projects would be new construction.

### 2018

Waste resulting from projects in 2018 would be generated by the construction of the gravel road and vehicle parking area and any clearing and grubbing associated with those projects. The waste produced would have to be removed at the Contractor's expense.

### 2019

No demolition or construction waste is anticipated in 2019 because these projects would be new construction.

### 2020

Demolition and construction waste would result from removed asphalt pavement and any clearing and grubbing associated with the taxiway extension. The waste produced would have to be removed at the Contractor's expense.

**TABLE 10-2: SUMMARY OF FUTURE PROJECTS**

SHORT-TERM	PROJECT
2016	Tree Clearing - RWY 16 RPZ (Avigation Easement)
	Runway - Sealcoat/Repaint Markings
	Parallel Taxiway and Mid-Field Exit Taxiway - Sealcoat/Repaint Markings
	Main Apron, South Entrance Taxiway, North Taxilane-Sealcoat/Repaint Markings
	Apron and Taxilane Reconstruction (off-airport)
2017	Install Automated Weather Observation System (AWOS)
	Install Vehicle Automated Gate and Fencing (Airport Entrance from Kehl Rd)
2018	Phase 1 Landside Improvements (Hangar Area) - Gravel Road and Vehicle Parking
	Phase 1 Landside Improvements (Hangar Area) - Extend Electrical Service (underground)
2019	Relocate Segmented Circle and Install New Windcone
	Parallel Taxiway Edge Reflectors (Replacement)
2020	Phase 2 Landside Improvements - Taxiway Extension and Taxiway Removal

**RECYCLING FEASIBILITY**

Recycling services currently available at the Airport are: aluminum, tin cans, plastic containers, paper, and cardboard. The Beaver Hill transfer station, however, can facilitate items beyond those provided at the Airport, and the Coos County website provides a list of local contacts for other recyclable items. The list below outlines material and recycle locations for Coos County.

**TABLE 10-3: RECYCLABLE OPTIONS**

MATERIAL	RECYCLE LOCATION
Aluminum	Airport & Beaver Hill
Glass Bottles	Beaver Hill
Plastic Containers	Airport, Beaver Hill
Paper	Airport, Beaver Hill
Tin Cans	Airport, Beaver Hill
Vehicle Batteries	Beaver Hill, Public Disposal, Battery X-Change
Cell Phone, Rechargeable Batteries, and Chargers	Beaver Hill, Wal-Mart, Teletron, Farr’s True Value
Electronic Waste	Beaver Hill, Goodwill, Public Disposal

## CURRENT PRACTICES

According to OAR 340-090-0040, cities with a population greater than 4,000 residents must maintain some sort of recycling option. The population of Bandon was estimated to be 3,100 by Portland State University, as referenced on the City of Bandon’s website. The U.S. Census Bureau lists the official 2010 population of Bandon as 3,066. With a population below the 4,000 resident threshold, the City is not required to provide receptacles, weekly collection service, or an education and promotion program to its residents. It is the responsibility of individual residents to dispose of recyclable waste.

Airport hangar tenants (as stipulated in their ODA leases) are individually responsible for waste disposal and recycling for their hangars and have the opportunity to take advantage of commingled recycling services offered by Les County Sanitary Service. Disposal of glass or any non-standard recyclables (glass bottles, vehicle batteries, cell phones, rechargeable batteries, chargers, and other electronic waste) is the responsibility of the individual tenants. These non-standard recyclables can be delivered to the appropriate locations listed in Table 10-3 above.

## Plan to Minimize Solid Waste Generation

Coos County can implement programs to reduce solid waste generation and earn “credits” toward recovery rates mandated by the state of Oregon. In 1997, House Bill 3456 created three programs that a wasteshed—in this case, Coos County can choose to implement:

- Waste Prevention Program
- Reuse Program
- Residential Composting Program

A two percent “credit” can be obtained for each program by creating an education or promotional campaign and adhering to at least two components listed by the Oregon Department of Environmental Quality (ODEQ). Credits of up to six percent can be deducted from the County’s state mandated material recovery and waste generation rate if the County participates in all three programs – resulting in a two percent credit for each program implemented. Coos County has not implemented any of these programs as yet. The County is required to maintain a 30 percent recovery rate as set forth in Oregon Chapter 459A – Reuse and Recycling, 2013 Edition. During the most recent year for which DEQ has compiled wasteshed recovery rates - 2013, Coos County achieved a calculated 40.3% waste recovery rate (2013 Oregon Material Recovery and Waste Generation Rates Report).

## METHODS TO REDUCE SOLID WASTE

There are very limited opportunities to reduce solid waste generation because little waste is produced at the Bandon State Airport. However, the Airport should still establish a goal to reduce the amount of solid waste generated. While the Airport is not responsible for waste generated by hangar tenants, informational brochures on recycling opportunities developed by Coos County could be distributed to all the hangar tenants to encourage them to recycle their waste. To track the amount of waste generated after implementing new policies, the FBO manager could make a note of the amount of waste generated each time waste is removed from the pilot's lounge (bi-weekly).

## PHYSICAL CONSTRAINTS

Coos County has a relatively rural population and the current practice of contracting with Les County Sanitary Service is the most effective option. There have not been any efforts by any cities or the County to encourage and promote recycling (SWMP 2005).

## Operational and Maintenance Requirements

Operational and maintenance requirements at the Airport are minimal. The Oregon Department of Aviation is responsible for costs associated with mowing the grass. The infield lawn is not watered and the grass is typically only mowed twice per year. When the grass is mowed, the clippings are left in place. Grass clippings typically return to the lawn approximately 25% of the total lawn's fertilizer needs and create a healthy turf environment (Starbuck 1999). The Coos County Solid Waste Management Plan recommends promotion of programs that encourage "leaving grass clippings generated by lawn mowing on-site rather than bagging the clippings for disposal or composting." The current practice is consistent with this recommendation.

## Waste Management Contracts

Janitorial and hangar leases provided by ODA are shown in **Appendix G** and were reviewed for information regarding waste and recycling. No hauling or landfill contracts are available.

The hangar lease dictates that tenants "shall maintain the grounds and premises in and around the rental area in a reasonably neat, clean, and orderly condition." Although tenants are responsible for their own waste from the hangar, no mention for the opportunity for recycling is included in the lease. Proceeds from rent are used for general airport maintenance and cleaning services. The janitorial services contract dictates that a contractor will perform cleaning and maintenance services at the Airport once a week. The janitorial services contract does not include any stipulation for recycling.

To promote additional recycling opportunities, language could be added to the hangar lease that encourages the tenant to utilize the south-transfer recycling center less than a half-mile from the Airport and to be conscientious of any waste generated in the hangar.

## Potential for Cost Savings or Revenue Generation

The potential for cost savings is limited since individual tenants are responsible for costs associated with solid waste disposal and recycling.

Revenue generation is also limited due to the small amount of waste generated. Any potential for additional revenue would accrue to the individual tenants since they contract with the waste disposal and recycling provider.

## Future Development and Recommendations

### FUTURE DEVELOPMENT

Future development projects at the Airport include tenant improvements, landside and airside facility development, and rehabilitation projects. The demolition and waste associated with each of these projects would be the responsibility of the Contractor performing the work. It is assumed that the demolition waste would be taken to the Beaver Hill Transfer Station.

A periodic review of the Airport's solid waste plan needs to be implemented to allow for any unforeseen future development. For example, if glass recycling would become available and feasible for the Airport, then the Airport would need to reevaluate that option based on current practices.

### RECOMMENDATIONS

#### Immediate

An immediate recommendation would be to continue with the existing practice of leaving lawn clippings, which saves money on disposal fees at the transfer station while preserving the aesthetics of the infield area.

#### Short-Term

A short-term recommendation would be to add a statement into hangar leases advising tenants of the recycling options available at the Beaver Hill transfer station and to encourage tenants to recycle and minimize waste. Additionally, informational brochures on recycling opportunities developed by the County could be distributed to all of the hangar tenants to encourage them to recycle their waste.

### Ongoing

An ongoing recommendation would be to reevaluate the Airport's solid waste plan, especially after development has occurred. Any increase in hangars, while not currently foreseen may increase the amount of waste generated.

### Modifications to Specifications

Language in construction contract documents could be added that encourages Contractors to recycle waste at the Beaver Hill disposal site and to minimize waste caused by construction activities as much as practical.

## References

Coos County. No date. "Solid Waste" Website: <http://www.co.coos.or.us/departments/solidwaste.aspx>

Final Solid Waste Management Plan - Coos County (SWMP). June 21, 2006.

Coos County Solid Waste Disposal Alternatives Report, October 2012.

Coos County and Curry County, Oregon - Final Household Hazardous Waste Management Plan  
March 28, 2008 Website: [http://www.co.coos.or.us/Portals/0/SolidWaste/Coos-Curry\\_HHW\\_FinalPlan\\_3-28-08.pdf](http://www.co.coos.or.us/Portals/0/SolidWaste/Coos-Curry_HHW_FinalPlan_3-28-08.pdf)

Coos County Solid Waste Ordinance (Solid Waste Ordinance). No date. Website:  
<http://www.co.coos.or.us/Portals/0/County Code and Ordinances/Content/article7.pdf>

Oregon Department of Environmental Quality (ODEQ). No date. "Waste Prevention and Reduction."  
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Starbuck, Christopher J. Department of Horticulture. University of Missouri-Columbia. 1999. "Grass Clippings, Compost and Mulch: Questions and Answers." Website.  
<http://extension.missouri.edu/explorepdf/agguides/hort/g06958.pdf>

## RECYCLING OPTIONS

[http://www.co.coos.or.us/Portals/0/Waste%20Management/recyclable\\_items\\_accepted\\_bh.pdf](http://www.co.coos.or.us/Portals/0/Waste%20Management/recyclable_items_accepted_bh.pdf)

[http://www.co.coos.or.us/Portals/0/Solid%20Waste/recycling\\_drop\\_off\\_locations\\_misc.pdf](http://www.co.coos.or.us/Portals/0/Solid%20Waste/recycling_drop_off_locations_misc.pdf)

### **HOUSEHOLD HAZARDOUS WASTE MANAGEMENT PLAN**

[http://www.co.coos.or.us/Portals/0/Solid%20Waste/Coos-Curry\\_HHW\\_FinalPlan\\_3-28-08.pdf](http://www.co.coos.or.us/Portals/0/Solid%20Waste/Coos-Curry_HHW_FinalPlan_3-28-08.pdf)

### **POPULATION**

<http://www.cityofbandon.org/general/page/about-bandon>

### **RECYCLING ALTERNATIVES PLAN BEAVER HILL**

<http://www.co.coos.or.us/Portals/0/Coos%20County%20SW%20Disposal%20Alternatives%20Final%20Report.pdf>

### **WASTE REDUCTION AND REUSE**

<http://www.co.coos.or.us/Portals/0/Waste%20Management/wastereduction.pdf>

**Appendix A**



# memorandum

date March 10, 2015  
to W. Matt Rogers, P.E.  
from Susan Cunningham  
subject **Bandon State Airport**

The Bandon State Airport is located within the Urban Growth Boundary of the City of Bandon, but outside of the City Limits. The Airport is located in Township 29 South, Range 14 West, Section 6, Willamette Meridian (43 degrees 05' 14" N, 124 degrees -24' 34" W). The Airport mainly serves general aviation. Surrounding land use is mainly industrial and open space, with a limited amount of rural residential and aquiculture.

The Airport consists of a north-south runway with parallel taxiway and apron on the southwest end. The Oregon Department of Aviation is currently in the process of updating the Airport Master Plan. The Master Plan is considering both airside (taxiway and runway extension) and landside (apron redevelopment) improvements. The airside improvements would include a 300 foot extension of the taxiway and runway. Landside improvements would include redevelopment of the apron area to accommodate additional hangers and industrial uses. Re-aligning the public access road is also being considered.

This technical memorandum documents wetlands and other water bodies, and the fish, wildlife, plant and wetland resources that could occur in the study area for the project. Species evaluated in this memorandum are those listed as endangered or threatened, proposed for listing, or candidate for listing under the Endangered Species Act (16 US 1531, et seq.), as amended, that could occur in the project vicinity in Coos County. Additionally, Oregon state listed plant species were included.

The study area for this project is defined as the area on the airport that would be directly affected by the proposed project. The study area is not limited to the actual work site of the project area. The terrestrial study area is generally considered to extend approximately one-half mile from the area of potential impacts. This distance represents the most commonly recognized limit of concern for disturbance to terrestrial species for typical construction activities.

## **Wetlands, Water Resources, and Floodplains**

Wetlands are under the jurisdiction of both Oregon Department of State Lands (DSL) and the US Army Corps of Engineers (Corps). Both agencies use the Corps of Engineers Wetland Delineation Manual (Experimental Laboratory 1987) and the Arid West Wetland Delineation Supplement Manual (Corps of Engineers 2008) for determining what a wetland is and the extent of a wetland. An area is determined to be a wetland if it has a dominance of hydrophytic vegetation (plants that grow in wet conditions), hydric soils, and positive wetland hydrology.

W. Matt Rogers, P.E.  
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The National Wetland Inventory shows Johnson Creek on the north and east side of the Airport, a series of agricultural areas off the southeast corner of the property, and an un-named tributary of Johnson Creek on the east side of the property. A Local Wetlands Inventory was conducted by Pacific Habitat Services and adopted and approved by DSL in 2005. Both the mainstem of Johnson Creek (denoted as JOH 3-E) and the un-named tributary of Johnson Creek (denoted as JOH-17) were determined to be jurisdictional wetlands that could occur in the project. A portion of Johnson Creek has been previously delineated (WD 93-0205). Wetland delineations are valid for a period of 5 years. Since the delineation is over 5 years old, the wetland boundaries would need to be verified if any development were to occur in the vicinity of the wetland. The area where the runway extension is proposed should be delineated for wetlands since it comes within close proximity to Johnson Creek.

Additionally, the mainstem of Johnson Creek (JOH 3-E) was determined to be a Locally Significant Wetland. Chapter 17.102 of the Bandon Zoning Code provides protection for identified significant wetlands within the City of Bandon as designated under Statewide Planning Goal 5. This chapter also (1) ensures reasonable economic use of property while protecting valuable natural resources within the City of Bandon; and (2) establishes clear and objective standards to protect these resources. A request to deviate the requirements of this chapter may be submitted for consideration by the Planning Commission. A variance request may be approved as long as equal or better protection of the wetland will be ensured through a plan for restoration, enhancement, or similar means, and if applicable permits from DSL and the Corps are obtained. In no case shall activities prohibited in Section 17.102.020(E) occupy more than 25% of the wetland. Granting of a variance requires that the property owner submit findings that:

1. the proposed development requires deviation from the wetland standards; and
2. strict adherence to the wetland standards would effectively preclude a use of the parcel that could be reasonably expected to occur in the zone, and
3. that the property owner would be precluded a substantial property right enjoyed by the majority of the property owners in the vicinity.

In all cases, the Planning Commission shall determine whether the proposal is seeking the minimum intrusion into the wetland necessary for the proposal.

### **State and Federal Sensitive, Threatened and Endangered Species**

Species lists were obtained from the U.S. Fish and Wildlife Service (USFWS) website (February 24, 2015). Species listed under ESA addressed in this Memorandum are displayed in **Table 1**. There is no designated Critical Habitat for any species within the study area.

The Oregon Biodiversity Information Center (ORBIC) database was also queried to obtain records of known sensitive, threatened and endangered plant and animal species within a 2 mile radius of the Airport (ORBIC 2015). There are no records of any listed species occurring on Airport property.

The Airport is within the Johnson Creek watershed. Fish species known to occur in Johnson Creek are cutthroat trout, Pacific Lamprey, and sculpin. None of these species are currently listed.

**Table 1. ESA Species Listed by the USFWS Lists That Could Potential Occur in the Project Area**

Species Common Name (Scientific Name)	Federal Endangered Species Act Status	Actual Occurrence in Action Area
Marbled murrelet ( <i>Brachyramphus marmoratus</i> ) Population: CA, OR, WA	Threatened	There are documented occurrences of marbles murrelets within a 2 mile radius of the airport (ORBIC 2015). There is no suitable habitat within the project area.
Northern spotted owl ( <i>Strix occidentalis caurina</i> ) Population: Entire	Threatened	There are documented occurrences of northern spotted owls within a 2 mile radius of the airport (ORBIC 2015). There is no suitable habitat within the project area.
Western snowy plover ( <i>Charadrius nivosus ssp. nivosus</i> ) Population: Pacific coastal population	Threatened	No documented occurrences and no suitable habitat within the project area (ORBIC 2015).
Western lily ( <i>Lilium occidentale</i> )	Endangered	No documented occurrence (ORBIC 2015) but <b>potential suitable habitat within the project area.</b>
Silvery phacelia ( <i>Phacelia argentea</i> )	Species of Concern State Threatened	No documented occurrences and no suitable habitat within the project area (ORBIC 2015).
Pink sandverbena ( <i>Abronia umbellata ssp. breviflora</i> )	Species of Concern State Endangered	No documented occurrences and no suitable habitat within the project area (ORBIC 2015).
Fisher ( <i>Martes pennanti</i> ) Population: West coast DPS	Proposed Threatened	There are documented occurrences of northern spotted owls within a 2 mile radius of the airport (ORBIC 2015). There is no suitable habitat within the project area.

The **marbled murrelet** is a small, chubby seabird that has a very short neck. They spend the majority of their lives on the ocean, but come inland to nest. They generally nest in old-growth forests, characterized by large trees, multiple canopy layers, and moderate to high canopy closure. These forests are generally located close enough to the marine environment for the birds to fly to and from nest sites. Threats include loss of habitat, predation, gill-net fishing operations, oil spills, marine pollution, and disease (USFWS website accessed March 6, 2015). The airport does not contain any areas of old growth forest that would be suitable for the marbled murrelet and there are no documented occurrences of marbled murrelets within the project area (ORBIC 2015). The project area is outside designated critical habitat for the marbled murrelet (USFWS, website accessed March 6, 2015). The project would have no effect on this species.

**Northern spotted owl** live in forests characterized by dense canopy closure of mature and old-growth trees, abundant logs, standing snags, and live trees with broken tops. Although they are known to nest, roost, and feed in a wide variety of habitat types, spotted owls prefer older forest stands with variety multi-layered canopies of several tree species of varying size and age, both standing and fallen dead trees, and open space among the lower branches to allow flight under the canopy (USFWS website accessed March 6, 2015). Critical habitat was first designation came in 1992 and was revised in 2008. A new final rule designating critical habitat was published in

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December 2012. The USFWS issued a recovery plan for the spotted owl in 2008 and revised it in 2011. The airport does not contain any areas of old growth forest that would be suitable for the spotted owl and there are no documented occurrences of spotted owls within the project area (ORBIC 2015). The project area is outside designated critical habitat for the spotted owl (USFWS, website access March 6, 2015). The project would have no effect on this species.

The Pacific coast population of the **western snowy plover** breeds primarily on coastal beaches from southern Washington to southern Baja California, Mexico. The population breeds above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries (U.S. Fish and Wildlife Service 2001). In Oregon, snowy plovers historically nested at 29 locations on the coast (USDI Fish and Wildlife Service 2006). Currently, there are only 10 nesting locations, one of which is the Bandon State Natural Area which is designated as critical habitat. The airport does not contain habitat that would be suitable for the snowy plover and there are no documented occurrences of snowy plovers within the project area (ORBIC 2015). The project area is outside designated critical habitat for the snowy plover (USFWS, website access March 6, 2015). The project would have no effect on this species.

The **western lily** grows at the edges of sphagnum bogs and in forest or thicket openings along the margins of ephemeral ponds and small channels. It also grows in coastal prairie and scrub near the ocean where fog is common. Associated species often include: Sitka spruce, beach pine, Port Orford-cedar, crabapple, willow, wax myrtle, western rhododendron, evergreen huckleberry, salal, Labrador tea, Douglas' spiraea, blackberry, Pacific reedgrass, blackberry, sedge, gentian, sphagnum moss, and in some cases, the Darlingtonia pitcher-plant. The primary long-term natural threat to western lily is competitive exclusion by shrubs and trees as a result of succession in bogs and coastal prairie/scrub. Human activities such as clearing and draining of wetlands, development of cranberry agriculture, urban development pressure, and alteration of natural hydrological processes are also major factors. A large population was recently eliminated near Bandon by unauthorized cranberry development (USFWS 2015). There are five known locations of western lily within a 2-mile radius of the Airport all on private property. Two of these populations were reported as extirpated by the USFWS in 2009 (ORBIC 2015). Although there are no documented occurrences of western lily in the project area (ORBIC 2015), there may be suitable habitat along the wetland fringe of Johnson Creek.

**Silvery phacelia** occurs along the coast, occupying open sand above the high tide line, open and partly stabilized sand dunes further inland, and coastal bluffs. Silvery phacelia occurs near the coast in Coos and Curry counties, Oregon, and neighboring Del Norte County, California, from the vicinity of Bandon, Oregon, south to the vicinity of Crescent City, California (Oregon Department of Agriculture). There is one historic collection of the species from Clatsop County, Oregon in 1933, but there have been no reports of silvery phacelia from that area since then. The majority of occurrences are in Oregon. The primary threat to silvery phacelia is invasion by non-native plant species, particularly European beachgrass (*Ammophila arenaria*) and gorse (*Ulex europaea*). Residential and recreational coastal development is another serious threat, which can cause habitat fragmentation or extirpation of silvery phacelia populations. Off-road vehicle use, equestrian and pedestrian use, grazing and trampling by livestock, collection of the species for horticultural purposes, and loss of pollinators are other factors that may negatively impact this species (USFWS 2015). There are three known locations of silvery phacelia within a 2-mile radius of the Airport (ORBIC 2015). These plants are along the partially stabilized part of the dune. The closest population is in the Bandon State Natural Area (ORBIC 2015).

The airport does not contain habitat that would be suitable for the slivery phacelia. The project would have no effect on this species.

**Pink sandverbena** is limited to a few populations in northern California and Oregon. Habitat destruction caused by human activity and exotic plant invasion are the main causes for population decline (Center for Plant Conservation 2015). The endangered western snowy plover appears correlated with the state of pink sandverbena. Both of these species require open sandy beaches, and evidence suggests that the snowy plover uses this sandverbena for forage and cover. Pink sandverbena inhabits open sandy beaches, typically at or below the zone of driftwood accumulation and away from sand dominated by introduced European beachgrass (*Ammophila arenaria*) (Kaye 1997). Approximately six populations have been observed in Oregon since the mid-1980s (Center for Plant Conservation, 2015). There are two known locations of pink sandverbena within a 2-mile radius of the Airport. These plants are along the partially stabilized part of the dune. The closest population is in the Bandon State Natural Area. The airport does not contain habitat that would be suitable for the pink sandverbena. The project would have no effect on this species.

**Fishers** once occurred throughout much of Canada, the northern United States, and the western United States. Fisher populations declined historically primarily due to loss of habitat from timber harvesting and trapping. The West Coast Distinct Population Segment includes the states of Washington, Oregon, and California. Fishers are known to occur in Oregon and California and were re-introduced into the Olympic Peninsula of Washington in January and March of 2008 (USFWS 2015). Fishers use forest habitats with dense canopy closure, large diameter live trees (conifers and hardwoods) and snags with cavities and other deformities, large diameter down wood, multiple canopy layers. Mature and late-successional coniferous or mixed forests that contain key habitat and structural components provide the most suitable fisher habitat because they provide abundant potential den sites and preferred prey species. The physical structure of the forest (abundant structures for den and rest sites, complexity and diversity of trees and shrubs) and prey associated with these forest conditions are thought to be the critical features that explain fisher habitat use, rather than specific forest types. The West Coast native population of fishers currently inhabits forested areas from sea level along the California/Oregon Coast to approximately 1,970 to 8,530 ft in the Trinity and Klamath/Siskiyou Mountains in northern California and southern Oregon, and Sierra Nevada in California. The airport does not contain any areas of mature or old growth forest that would be suitable for the fisher and there are no documented occurrences of fishers within the project area (ORBIC 2015). The project would have no effect on this species.

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**Appendix B**



**CHAPTER IV**

**ZONING**

## CHAPTER IV - ZONING

### ARTICLE 4.1. ZONING-GENERAL

#### SECTION 4.1.100. Establishment of Zoning Districts.

This Ordinance shall divide the lands within the County into the following zoning districts for the following intended purposes:

#### A. PRIMARY DISTRICTS

##### 1. **Exclusive Agriculture (EFU)**

The purpose of the "EFU" district is to preserve the integrity and encourage the conservation of agricultural lands within Coos County and thereby comply with the provisions of ORS 215; to minimize conflicts between agricultural practices and non-farm uses by limiting any development to uses distinguished as dependent upon or accessory to supporting agricultural or forestry production and which qualify such farm lands for special tax relief pursuant to the provisions of Oregon Revised Statutes. This zone is also for the cultivation and marketing of specialty crops, horticultural crops and other intensive farm uses.

##### 2. **(RESERVED)**

##### 3. **Forest (F)**

The purpose of the "F" district is to designate forest lands and protect them for forest uses, except where findings establish that certain limited non-forest uses may be allowed. Some of the areas covered by the "F" zone are exclusive forest lands, while other areas include a combination of mixed farm and forest uses.

##### 4. **(RESERVED)**

##### 5. **(RESERVED)**

##### 6. **Rural Residential (RR-5)**

The purpose of the "RR-5" district is to provide for acreage homesites outside of Urban Growth Boundaries (UGB), where a moderate intensity of land development is appropriate, but where urban services and facilities may not be available. The "RR-5" district provides for the orderly development of rural land so as to encourage the continued existence of rural family life and to provide a transition of densities between urban development and exclusive agricultural or forestry uses.

**7. Rural Residential (RR-2)**

The purpose of the “RR-2” district is to provide for small acreage homesites outside of Urban Growth Boundaries, where a moderate intensity of land development is appropriate, but where urban services and facilities may not be available or necessary. The “RR-2” district provides for continued existence of rural family life and to provide a transition of densities between urban development and exclusive agricultural and forestry uses.

**8. Rural Center (RC)**

The purpose of the “RC” district is:

- a. to provide for the development of rural commercial, tourist commercial, residential and services facilities, necessities, convenience and supplies ancillary to nearby agricultural, forestry, recreational and rural residential uses and activities; and
- b. to conserve energy by providing for needed commercial outlets in rural areas already “committed” as residential/commercial nodes.

New commercial uses that are consistent with the objectives of the “RC” district are those uses which are needed for the convenient shopping needs of the nearby rural population, and are compatible, or can be made compatible, with surrounding properties.

**9. Urban Residential (UR-1)**

The purpose of the “UR-1” district is to provide for urban residential areas that are exclusively limited to conventional single family dwellings. Detached conventional single family dwellings clustered in planned unit developments are consistent with the objectives of the “UR-1” district. This district shall only be used within Urban Growth Boundaries and Urban Unincorporated Community boundaries.

**10. Urban Residential (UR-2)**

The purpose of the “UR-2” district is to provide for urban residential areas that are designed to accommodate single family dwellings, mobile homes and two family dwellings. Clustered planned unit developments, including multi-family dwellings, are consistent with the objectives of the “UR-2” district.

The “UR-2” district shall only be used within Urban Growth Boundaries and Urban Unincorporated Community boundaries.

**11. Urban Residential – Multi-family (UR-M)**

The purpose of the “UR-M” district is to provide for high density urban residential areas necessary to accommodate opportunities for the construction of multiple-family dwellings, primarily necessary to meet the needs of low and moderate income families.

The “UR-M” district shall only be used within Urban Growth Boundaries and Urban Unincorporated Community boundaries.

**12. Commercial (C-1)**

The purpose of the “C-1” district is:

- a. to provide for needed commercial retail and service opportunities within Urban growth Boundaries;
- b. to recognize existing commercial uses outside Urban Growth Boundaries.

**13. Industrial (IND)**

The purpose of the “IND” district is to provide an adequate land Base necessary to meet industrial growth needs and to encourage diversification of the area’s economy accordingly. The “IND” district may be located without respect to Urban Growth Boundaries, as consistent with the Comprehensive Plan. The “IND” designation is appropriate for industrial parcels that are needed for development prior to the year 2000, as consistent with the Comprehensive Plan.

**14. South Slough (SS)**

The purpose of the “SS” district is to complement the primary management objectives and the primary scientific objectives of the South Slough Estuarine Sanctuary (SSES). This district is intended to maintain the integrity of the sanctuary by preserving the area for long-term scientific and educational uses.

**15. Minor Estuary and Shorelands (MES)**

The purpose of the “MES” district is to regulate uses within the inventoried minor estuaries and adjacent shorelands within unincorporated Coos County. The estuaries within the district are treated as “natural management units” per LCDC Goal 16.

**16. Recreation (REC)**

The purpose of the “REC” district is to accommodate recreational uses of areas with high recreational or open space value.

The district applies solely to areas designated as “Recreation” in the Comprehensive Plan, which include state, county and other municipal parks, the Oregon Dunes National Recreation Area, as well as private lands currently developed as golf courses.

New recreational developments in this district shall be oriented to the open space nature of the land. The type and intensity of recreational developments in this district must be conditioned by environmental considerations set forth in the County’s Coastal Shoreland/Dune Lands Comprehensive Plan policies where such developments are allowed in these coastal resource areas.

**17. Controlled Development (CD-5)**

The purpose of the “CD-5” district is to recognize the scenic and unique quality of selected areas within Urban Growth Boundaries, to enhance and protect the unique “village atmosphere”, to permit a mix of residential, commercial and recreational uses and to exclude those uses which would be inconsistent with the purpose of this district, recognizing tourism as a major component of the County’s economy.

**18. Controlled Development (CD-10)**

The purpose of the “CD-10” district is to recognize the scenic and unique quality of selected areas within Urban Growth Boundaries, to enhance and protect the unique “village atmosphere”, to permit a mix of residential, commercial and recreational uses and to exclude those uses which would be inconsistent with the purpose of this district, recognizing tourism as a major component of the County’s economy.

**19. Airport Operation (AO)**

The purpose of the Airport Operation “AO” district is to recognize those areas devoted to or most suitable for immediate operational facilities necessary for commercial and non-commercial aviation. It is also intended to provide areas for those activities directly supporting or dependent upon aircraft or air transportation when such activities, in order to function, require a location within or immediately adjacent to primary flight operations and passenger or cargo service facilities. In addition, the “AO” district is intended to provide areas for certain open space uses for airfield grounds maintenance and as a buffer to minimize potential dangers from, and conflicts with, the use of aircraft.

**20. Bandon Dunes Resort (BDR)**

The purpose of the Bandon Dunes Resort (BDR) zone is to implement an exception to the Statewide Planning Goals and a Master Plan for a destination resort that have been adopted as part of the Coos County Comprehensive Plan. [OR 96-04-006PL 9/11/96]

**B. OVERLAY ZONES**

**1. Floodplain (/FP)**

The purpose of the Floodplain Floating Zone is to protect public health and safety. The secondary aim is to improve the general welfare by reducing economic loss due to interruption of businesses and industry or damage to homes on other property. Development in a floodplain may constitute a “public nuisance” by reducing the flow-carrying capacity of the channel and thus endangering others.

**2. Airport Surfaces (/AS)**

The purpose of the airport Surfaces Floating Zone is to protect public health, safety and welfare. It is recognized that obstruction to aviation have a potential for endangering the lives and property of users of selected airports, and property of occupant of land in the airport’s vicinity; an obstruction may affect future instrument approach minimums; and obstructions may reduce the area available for the landing, take-off and maneuvering of aircraft, thus tending to destroy or impair the utility of the airport and the public investment therein.

**C. CREMP SHORELAND SEGMENTS**

**Segment #:**

**#11 (Natural Resource Management)** This segment shall be managed to protect the natural resources of this area (including a large fresh-water marsh), and for undeveloped outdoor recreation activities in conjunction with the Bullards Beach State Park. A designated dredged material site is located at the south end of this segment, and shall be protected from pre-emptive uses.

**#12 (Recreation)** This segment is part of Bullards Beach State Park and managed for outdoor recreation activities and facilities, as consistent with the plan of the State Parks Division and the recreational needs of the State and its visitors.

- #13** **(Forestry)** This segment shall be managed for forest uses, with special attention being given to protecting riparian vegetation.
- #14** .....for development of a dock and storage area for bulk material loading or similar low-intensity industrial use. Due consideration shall be given to minimizing noise or visual impacts on the adjacent State Park, and to protection of archaeological resources (see Policy #18).
- #15** This segment shall be managed to conserve the natural resources of this low-lying forested wetland area with special attention being given to protecting the riparian vegetation adjacent to the Bandon Marsh.
- #16** .....to continue its use as a mill or for other industrial uses, utilizing the existing dock and water access.
- #17** .....to conserve the natural resources of this low-lying forested wetland area, with special attention being given to protecting the riparian vegetation adjacent to the tidal marsh in Aquatic Segment #16.
- #18** .....to provide water access for residential lots fronting the river and for water-front residential development provided flood-protection and riparian vegetation requirements are met (see Policies #27 and #23).
- #19** .....to conserve this forested area, with special attention being given to protecting riparian vegetation.
- #20** .....to develop this area of historic water-front development for industrial and commercial uses connected with boat building, repair, port operations, moorage and other water-dependent or related uses.
- #22** .....to conserve this area of forested wetland for forest use, with special attention being given to protecting the riparian vegetation adjacent to the marsh in Aquatic Segment #20.
- #23** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other non-farm uses as are conditionally permitted in ORS 215.213. Mitigation shall also be permitted, and designated mitigation sites shall be protected against pre-emptory uses.
- #24** .....for recreational uses connected with the Rocky Point Boat Ramp, and other uses as permitted by the uses/activities matrix.

- #25** .....for the continuation of rural residential uses, provided flood protection requirements are met. (See Policy #27)
- #26** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other non-farm uses as are conditionally permitted in ORS 215.213. Mitigation shall also be permitted and designated mitigation sites shall be projected against pre-emptory uses.
- #27** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such farm uses as are conditionally permitted in ORS 215.213.
- #28** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #29** .....for the protection of its natural resource values as a mitigation site which shall be protected from pre-emptory uses.
- #30** .....to provide water access for residential lots fronting the river and for water-front residential development provided flood-protection and riparian vegetation requirements are met (see Policies #27 and #23).
- #31** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other farm uses as conditionally permitted in ORS 215.213.
- #32** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #33** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #34** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other farm uses as are conditionally permitted in ORD 215.213.
- #35** .....for forest uses and practices, subject to any special regulations the Oregon Department of Forestry may adopt for forest lands in the coastal shorelands area. Any development shall be subject to Policy #27a, addressing mass movement hazards.
- #36** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other farm uses as are conditionally permitted in ORS 215.213.

- #37** .....for the continuation of farm use as defined in ORS 215.203(2)(a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #38** .....for forest uses and practices, subject to any special regulations the Oregon Department of forestry may adopt for forest lands in the Coastal Shorelands area. Any development shall be subject to Policy #27a, addressing mass movement hazards.
- #39** .....for recreational uses connected with the Riverton Boat Ramp and other uses as permitted by the uses/activities matrix.
- #40** .....for general industrial, commercial or other development particularly uses which utilize the water-frontage of the site. However, continuation and expansion of existing non-water-dependent/related uses shall be allowed.
- #41** .....for the continuation of farm use as defined in ORS 215.203 (2)(a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #42** ..... for the continuation of farm use as defined in ORS 215.203 (2)(a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #43** ..... for the continuation of farm use as defined in ORS 215.203 (2)(a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #44** ..... for the continuation of farm use as defined in ORS 215.203 (2)(a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #45** .....for the continuation of industrial use including development of water access if necessary.
- #47** ..... for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #50** .....to provide water access for residential lots fronting the river and for water-front residential developments provided flood-protection and riparian vegetation requirements are met (see Policies #27 and #23).

- #51** .....for recreational uses connected with the Coquille Boat Ramp and other uses as permitted by the uses/activities matrix.
- #52** .....for the continuation and development industrial use, including the development of water access as necessary.
- #53** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and other such farm uses as are conditionally permitted in ORS 215.213.
- #54** .....for the continuation and development of industrial use, including the development of water access as necessary.
- #55** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and for such other farm uses as are conditionally permitted in ORS 215.213.
- #56** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #57** .....for the continuation of residential and commercial uses as consistent with the rural center function of Arago, provided flood protection requirements are met. (see Policy #27)
- #58** .....for recreational uses connected with the Coquille Boat Ramp and other uses as permitted by the Uses/Activities matrix.
- #59** .....for the continuation and development of industrial use, including the development of water access as necessary.
- #60** .....for the continuation of farm use as defined in ORS 215.203 (2) (a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #61** .....to provide water access for residential lots fronting the river and for water-front residential development provided flood-protection and riparian vegetation requirements are met (see Policies #27 and #23).
- #62** ..... for the continuation of farm use as defined in ORS 215.203 (2)(a) and such other farm uses as are conditionally permitted in ORS 215.213.
- #63** .....to provide water access for residential lots fronting the river and for water-front residential development provided flood-protection

and riparian vegetation requirements are met (see Policies #27 & #23).

**#73** ..... for the continuation of farm use as defined in ORS 215.203 (2)(a) and such other farm uses as are conditionally permitted in ORS 215.213.

**#74** .....for the continuation of rural residential uses, provided flood-protection requirements are met (see Policy #27).

**#75** .... for the continuation of farm use as defined in ORS 215.203 (2)(a) and such other farm uses as are conditionally permitted in ORS 215.213.

**D. CREMP Aquatic Units.** The CREMP zoning districts shall have the same boundaries as the Coquille River Estuary Management Plan unit boundaries and shall be so designated.

**#8** This unit shall be managed to conserve and enhance the aquatic resources of the main river channel, while allowing such minor alterations as are necessary for shallow draft navigation.

**#10** .....to protect and enhance the natural resources of the Bandon Marsh as a wildlife refuge.

**#11** .....to protect and enhance the natural resources of these intertidal marshes for the purposes of estuarine production.

**#12** .....to conserve, and enhance the natural resources of these intertidal flats for the purposes of estuarine production.

**#13** .....to protect and enhance the natural resources of this intertidal flat for the purposes of estuarine production.

**#14** .....for dredging and bulkheading as necessary to develop a dock for bulk material shipping.

**#15** .....to conserve and enhance the natural resources of this intertidal area while allowing for the development of recreational docking or a small marina, including dredging as necessary.

**#16** .....to protect and enhance the natural resources of this intertidal marsh for the purposes of estuarine production.

**#17** .....to conserve and enhance the natural resources of this intertidal area while allowing for the continuation of recreational and

commercial docking facilities and maintenance dredging as necessary.

**#18** .....for the development of docking, boat building and repair and similar water dependent uses, including dredging and fill as necessary.

**#19** .....for the dredging and fill as necessary to develop a major recreational marina with ancillary services and facilities.

**#20** .....to conserve and enhance the natural resources of this intertidal marsh for the purposes of estuarine production, while allowing the continuation of existing grazing use.

**#21** .....to conserve and enhance to aquatic resources of the main river channel and fringing intertidal areas, while allowing such minor alterations as are necessary for the continuation of recreational boating and other shallow draft navigation. Removal of snags, old pilings and other obstructions from the river, and bank stabilization shall also be encouraged.

**#22** .....to conserve and enhance the natural resources, of these fringing intertidal marshes for the purposes of estuarine production.

**#23** .....to conserve and enhance the natural resources of Randolph Slough for the purposes of estuarine production.

**#24** .....to conserve and enhance the natural resources of this small intertidal marsh for the purposes of estuarine production.

**#25** .....to conserve and enhance the natural resources of the tidal portion of Bear Creek for the purposes of estuarine production.

**SECTION 4.1.200. Zoning District Maps.** The location and boundaries of the zoning districts designated in Section 4.1.100 are indicated on the Coos County Zoning Map, Coquille River Estuary Zoning Map and the Coos Bay Estuary Zoning Map. These zoning maps and their explanatory information are hereby adopted as part of this Ordinance. The zoning map may consist of several sheets or pages, which shall be listed on a cover page together with the date and name of each page. The zoning map shall be certified by the Board of Commissioners and County Clerk as being the official zoning map. The certification of the official zoning map shall appear on the cover page of the collection of zoning maps. There shall be only one official zoning map which shall be located in the office of the County Clerk as long as this Ordinance remains in effect.

**SECTION 4.1.300. Amendment of Zoning District Map.** Whenever it is necessary to amend the zoning map to conform with an approved rezoning or with an

amendment to the text of this Ordinance or as final land use actions of incorporated cities may require, the Planning Director shall so change the map, making such changes in red ink and annotating the map and the cover sheet to show the Ordinance or other number and the date of the change. (ORD 85-08-011L)

**SECTION 4.1.400. Interpretation of Zoning District Boundaries.** Due to the transposition of boundary lines from the Comprehensive Plan Maps (scale: 2" = 1 mile) to the Official Zoning Maps (scale 1"=800'), zoning district boundaries were drawn to the nearest 10 acres. Whenever an uncertainty exists as to the boundary of a zone as shown on the official zoning map, the following rules of interpretation shall apply:

1. Boundaries indicated as approximately following the centerlines of streets, highways, or alleys shall be construed to follow such centerlines;
2. Boundaries indicated as approximately following platted or surveyed lines shall be construed to follow such plat or survey lines;
3. Boundaries indicated as approximately following city limits shall be construed to follow such city limits;
4. Boundaries indicated as following railroad lines or public utility easements shall be construed to follow such line;
5. Boundaries indicated as following the centerlines of streams, rivers, canals, or other bodies of water shall be construed to follow those centerlines;
6. Boundaries indicated as approximately following the shorelines of water bodies shall be construed to follow the mean high water line (MHWL) or the line of non-aquatic vegetation, whichever is higher;
7. Boundaries indicated as approximately following ridge tops and other topographical features shall be construed to follow those features;
8. Boundaries indicated as approximately parallel to, or as extensions of features indicated in subsections 1 through 7, shall be so construed;
9. Where a public street or alley is officially vacated, the zone requirements applicable to the property in which the vacated area becomes a part shall apply;
10. Boundaries not intended to follow the above-listed features shall indicate where possible distances to reference points and other lines so they can be located on the ground;

11. Where physical features existing on the ground are at variance with those shown on the official zoning map, or in other circumstances not covered by subsections 1 through 10 above, the Planning Director shall interpret the zone boundaries, and if need be, may refer the matter to the Hearings Body for its interpretation pursuant to Section 1.1.700 of this Ordinance.

**SECTION 4.1.450. Interpretation of Coastal Shorelands Boundary.** When a development action is proposed in the immediate vicinity of the Coastal Shorelands Boundary (CSB) and when such proposed development action relies on a precise interpretation of the CSB, the Planning Director shall establish the precise location of the CSB using the seven criteria specified in the Coastal Shorelands goal. Establishment of the exact location may require an on-site inspection. If the location of the CSB as shown on the Plan maps or Coastal Shorelands Inventory map is subsequently found to be inaccurate or misleading, the Planning Director shall make the appropriate minor adjustments to the maps and provide a copy of any map revision to the County Clerk's office.

**SECTION 4.1.500. Unzoned or Multi-zoned Land.**

1. Any land which is unzoned or multi-zoned through inadvertence or oversight shall be reviewed by the Planning Director, and a recommendation of the appropriate zoning shall be made to the Hearings Body which shall make a recommendation to the Board of Commissioners, pursuant to the provisions of Section 1.1.700 of this Ordinance.
2. The Board of Commissioners, at a regular, special, or emergency meeting, shall determine the appropriate zone district pursuant to the provisions of Chapter 4 of this Ordinance.
3. Hearings required in Section 1.2.400 shall comply with the provisions of Article 5.7 of this Ordinance.
4. The Planning Director shall amend the zoning map to conform to the decision of the Board of Commissioners in accordance with the procedures set out in Section 4.1.300 of this Ordinance.

**SECTION 4.1.600. (Reserved)**

**SECTION 4.1.700. Errors in Zoning District Maps.**

1. The Planning Director shall periodically compare zone maps on file with the official zoning map and the action taken by the Board of Commissioners or Hearings Body to assure the maps conform therewith.

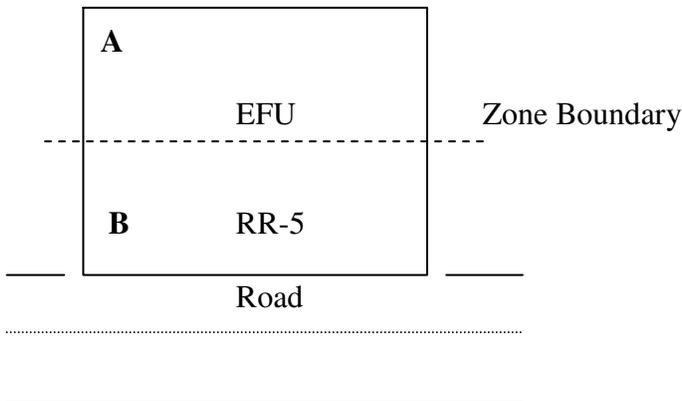
2. When errors in transcription, interpretation, or clerical mistakes are found, the Planning Director shall have the authority to correct those errors pursuant to Section 4.1.300 (Amendment of Map).

**SECTION 4.1.800. Special Considerations Maps.** The location of special hazards and resources are indicated on the Coos County Special Considerations Maps prepared for each volume (I, II, and III) of the Comprehensive Plan. These Special Considerations Maps are hereby adopted as part of this Ordinance. The Special Considerations Maps may consist of several sheets or pages, which shall be listed on a cover page together with the date and name of each page. The Special Considerations Maps are not a substitute for the detailed spatial information presented on the inventory maps. The Special Considerations Maps are merely index guides designed as zoning counter implementation tools that indicate when a special policy consideration applies in a general area, thereby requiring inspection of the detailed plan inventory maps. The Special Considerations Maps must and shall at all times accurately reflect the detail presented on the inventory maps (but at a more general scale). See Articles 4.7 and 4.8.

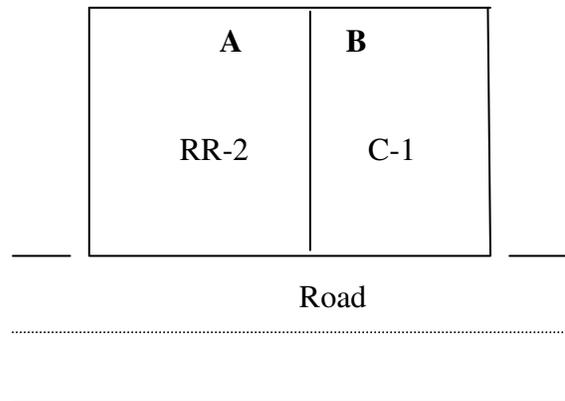
**SECTION 4.1.900. Split Zoning.** Split zoning occurs when a contiguous ownership is divided into two or more zoning districts.

1. For the purpose of establishing uses, each portion of the total contiguous ownership within an individual zoning district may be used for any use permitted by the applicable zoning district subject to Section 3.3.100.

Example 1



Example 2



In the example above, “A” may be used for any use allowed by the applicable zoning district irrespective of portions “B”. Likewise, portions “B” may be used for any use allowed by the applicable zoning district irrespective of portions “A”.

2. For the purpose of land division, the ownership of each portion of the total contiguous ownership within an individual zoning district may be transferred to another ownership, subject to:
  - A. A partition or subdivision submittal; and
  - B. Any required applicable findings; and
  - C. In addition to any other required findings, lands subject to the EFU or F zones shall be subject to the provisions of this section only if finding is made that the division of resource land shall be appropriate for the continuation of the existing commercial resource enterprise of the area.  
[OR-92-07-012PL]

**Appendix C**



Title 17

ZONING

Chapters:

17.04	Introductory Provisions
17.08	Establishment of Zones
17.12	Residential 1 (R-1) Zone
17.16	Residential 2 (R-2) Zone
17.20	Controlled Development 1 (CD-1) Zone
17.24	Controlled Development 2 (CD-2) Zone
17.28	Controlled Development 3 (CD-3) Zone
17.32	Controlled Development Residential 1 (CD-R1) Zone
17.36	Controlled Development Residential 2 (CD-R2) Zone
17.40	Old Town Commercial (C-1) Zone
17.44	General Commercial (C-2) Zone
17.48	Marine Commercial (C-3) Zone
17.52	Light Industrial (LI) Zone
17.54	Woolen Mill Overlay Zone (WM) <i>(Repealed by Ord 1604)</i>
17.56	Heavy Industrial (HI) Zone
17.60	Public Facilities and Parks (PF) Zone
17.64	Water (W) Zone
17.68	Natural Resource and Open Space (NR) Zone
17.72	Historic-Cultural Overlay (HC) Zone
17.76	Shoreland Overlay (SO) Zone
17.77	Beaches and Dunes Overlay (BDO) Zone
17.84	Architectural Review Overlay (AR) Zone
17.88	Airport Overlay (AO) Zone
17.90	Signs
17.92	Conditional Uses
17.94	Commercial Design Standards
17.96	Off-Street Parking and Loading
17.98	Outdoor Lighting Regulations
17.100	Planned Unit Development
17.102	Wetland Protection Standards
17.103	Riparian Corridor Protection
17.104	Supplementary Provisions
17.108	Nonconforming Uses and Structures
17.112	Variances
17.116	Zone Changes and Amendments
17.118	Annexation
17.120	Administration and Enforcement
17.124	Appeals

Ordinance History: No. 868, 972, 1073, 1090, 1103, 1125, 1127, 1130, 1140, 1141, 1153, 1154, 1175, 1186, 1188, 1192, 1195, 1201, 1213, 1223, 1226, 1227, 1228, 1236, 1237, 1240, 1265, 1275, 1291, 1301, 1305, 1308, 1313, 1314, 1316, 1320, 1329, 1336, 1363, 1365, 1377, 1387, 1410, 1418, 1446, 1448, 1452, 1458, 1459, 1464, 1471, 1504, 1524, 1532, 1533, 1538, 1543, 1546, 1547, 1551, 1565, 1567, 1572, 1580, 1581, 1582, 1591, 1592, 1593, 1594, 1604, 1609

## Chapter 17.88

### AIRPORT OVERLAY (AO) ZONE

#### Sections:

17.88.010	Purpose.
17.88.020	Compliance.
17.88.030	Special definitions.
17.88.040	Permitted uses.
17.88.050	Conditional uses.
17.88.060	Procedures.
17.88.070	Limitations.

#### 17.88.010 Purpose.

The airport overlay zone (AO) is intended to prevent the establishment of air space obstructions in airport approaches and surrounding area through height restrictions and other land use controls as deemed essential to protect the health, safety and welfare of the people of the city of Bandon and Coos County.

In order to carry out the provisions of this overlay zone there is created and established an airport overlay zone, which includes all of the land lying beneath the airport imaginary surfaces as they apply to the Bandon State Airport in Coos County. Such zones are shown on the current airport approach and clear. zone maps, which are made a part of this title. (Ord. 1336 § 6.600, 1994)

#### 17.88.020 Compliance.

In addition to complying with the provisions of the primary zoning district, uses and activities shall comply with the provisions of this overlay zone. In the event of any conflict between any provisions of this overlay zone and the primary zoning districts, the more restrictive provision shall apply.

#### 17.88.030 Special definitions.

As used in this chapter:

“Airport approach safety zone” means a surface longitudinally centered on the extended runway center line and extending outward and upward from each end of the primary surface. The inner edge of the approach surface is the same width as the primary surface and extends to a width of one thousand two hundred fifty (1,250) feet. The airport approach safety zone extends for a horizontal distance of five thousand (5,000) feet at a slope of twenty (20) feet outward for each foot upward (20:1).

“Airport hazard” means any structure, tree or use of land which exceeds height limits established by the airport imaginary surfaces.

“Airport imaginary surfaces” means those imaginary areas in space which are defined by the airport approach safety zone, transitional zones, horizontal zone, clear zone and conical surface and in which any object extending above these imaginary surfaces is an obstruction.

Clear Zone. The “clear zone” extends from the primary surface to a point where the approach surface is fifty (50) feet above the runway end.

Conical Surface. The “conical surface” extends twenty (20) feet outward for each one foot upward (20:1) for four thousand (4,000) feet beginning at the edge of the horizontal surface (five thousand (5,000) feet from the center of each end of the primary surface of each visual and utility runway at one hundred fifty (150) feet above the airport elevation) and upward extending to a height of three hundred fifty (350) feet above the airport elevation.

“Horizontal surface” means a horizontal plane one hundred fifty (150) feet above the

established airport elevation, the perimeter of which is constructed by swinging arcs of five thousand (5,000) feet from the center of each end of the primary surface of the runway and connecting the adjacent arcs by lines tangent to those arcs.

“Noise sensitive areas” means within one thousand five hundred (1,500) feet of the airport or within established noise contour boundaries exceeding fifty-five (55) Ldn.

“Place of public assembly” means a structure or place which the public may enter for such purposes as deliberation, education, worship, shopping, entertainment, amusement, awaiting transportation or similar activity.

“Primary surface” means a surface longitudinally centered on a runway. When the runway has a specially prepared hard surface, the primary surface extends two hundred (200) feet beyond each end of the runway. The width of the primary surface is five hundred (500) feet.

Transitional Zones. “Transitional zones” extend seven feet outward for each one foot upward (7:1) beginning on each side of the primary surface, and from the sides of the approach surfaces thence extending upward to a height of one hundred fifty (150) feet above the airport elevation (horizontal surface).

“Utility runway” means a runway that is constructed and intended to be used by propeller-driven aircraft of twelve thousand five hundred (12,500) pounds maximum gross weight or less.

#### 17.88.040 Permitted uses.

Permitted uses within the airport approach safety zone include:

- A. Farm use, excluding the raising and feeding of animals which would be adversely affected by aircraft passing overhead;
- B. Landscape nursery, cemetery or recreation areas which do not include buildings or structures;
- C. Roadways, parking areas and storage yards located in such a manner that vehicle lights will not make it difficult for pilots to distinguish between landing lights and vehicle lights or result in glare, or in any way impair visibility in the vicinity of the landing approach. Approach surfaces must clear these by a minimum of fifteen (15) feet;
- D. Pipeline;
- E. Underground utility wire.

#### 17.88.050 Conditional uses.

Conditional uses within the airport approach safety zone include:

- A. A structure or building accessory to a permitted use;
- B. Single-family dwellings, mobile home, manufactured dwelling, duplexes and multi-family dwellings, when authorized in the primary zoning district, provided the landowner signs and records in the deed and mortgage records of Coos County a hold harmless agreement and aviation and hazard easement and submits them to the airport sponsor and Bandon planning commission;
- C. Commercial and industrial uses, when authorized in the primary zoning district, provided the use does not result in the following:
  - 1. Creating electrical interference with navigational signals or radio communications between the airport and aircraft,
  - 2. Making it difficult for pilots to distinguish between airport lights or others,
  - 3. Impairing visibility,
  - 4. Creating bird strike hazards,
  - 5. Endangering or interfering with the landing, taking off or maneuvering of aircraft intending to use the airport,
  - 6. Attracting a large number of people;
  - 7. Building and uses of a public works, public service or public utility nature.

17.88.060 Procedures.

An applicant seeking a conditional use under Section 17.88.050, shall follow procedures set forth in the conditional use section of the city zoning ordinance (Chapter 17.92). Information accompanying the application shall also include the following:

- A. Property boundary lines as they relate to the airport imaginary surfaces;
- B. Location and height of all existing and proposed buildings, structures, utility lines and roads; and
- C. A notice shall be provided to the Department of Transportation, Aeronautics Division, for conditional use applications within five thousand (5,000) feet of the sides or ends of the runway. The applicant shall furnish a statement from the Oregon Aeronautics Division indicating that the proposed use will not interfere with operation of the landing facility.

17.88.070 Limitations.

- A. To meet the standards and reporting requirements established in FAA Regulations, Part 77, no structures shall penetrate into the airport imaginary surfaces as defined above under Section 17.88.030.
- B. No structure of public assembly shall be permitted in the airport approach safety zone.
- C. No structure or building shall be allowed within the clear zone.
- D. Whenever there is a conflict in height limitations prescribed by this overlay zone and the primary zoning district, the lowest height limitation fixed shall govern, provided, however, that the height limitations here imposed shall not apply to such structures customarily employed for aeronautical purposes.
- E. No glare-producing materials shall be used on the exterior of any structure located within the airport approach safety zone.
- F. In noise-sensitive areas (within one thousand five hundred (1,500) feet of an airport or within established noise contour boundaries of fifty-five (55) Ldn and above for identified airports) where noise levels are a concern, a declaration of anticipated noise levels shall be attached to any building permit or development approval. In areas where the noise level is anticipated to be fifty-five (55) Ldn and above, prior to issuance of a building permit for construction of noise-sensitive land use (real property normally used for sleeping or normally use as schools, churches, hospital or public libraries), the permit application shall be required to demonstrate that a noise abatement strategy will be incorporated into the building design which will achieve an indoor noise level equal to or less than forty-five (45) Ldn. The planning and building department will review building permits for noise sensitive developments.

**Appendix D**





## **ASSURANCES**

### **Airport Sponsors**

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#### **A. General.**

1. These assurances shall be complied with in the performance of grant agreements for airport development, airport planning, and noise compatibility program grants for airport sponsors.
2. These assurances are required to be submitted as part of the project application by sponsors requesting funds under the provisions of Title 49, U.S.C., subtitle VII, as amended. As used herein, the term "public agency sponsor" means a public agency with control of a public-use airport; the term "private sponsor" means a private owner of a public-use airport; and the term "sponsor" includes both public agency sponsors and private sponsors.
3. Upon acceptance of this grant offer by the sponsor, these assurances are incorporated in and become part of this grant agreement.

#### **B. Duration and Applicability.**

1. **Airport development or Noise Compatibility Program Projects Undertaken by a Public Agency Sponsor.**

The terms, conditions and assurances of this grant agreement shall remain in full force and effect throughout the useful life of the facilities developed or equipment acquired for an airport development or noise compatibility program project, or throughout the useful life of the project items installed within a facility under a noise compatibility program project, but in any event not to exceed twenty (20) years from the date of acceptance of a grant offer of Federal funds for the project. However, there shall be no limit on the duration of the assurances regarding Exclusive Rights and Airport Revenue so long as the airport is used as an airport. There shall be no limit on the duration of the terms, conditions, and assurances with respect to real property acquired with federal funds. Furthermore, the duration of the Civil Rights assurance shall be specified in the assurances.

2. **Airport Development or Noise Compatibility Projects Undertaken by a Private Sponsor.**

The preceding paragraph 1 also applies to a private sponsor except that the useful life of project items installed within a facility or the useful life of the facilities developed or equipment acquired under an airport development or noise compatibility program project shall be no less than ten (10) years from the date of acceptance of Federal aid for the project.

### 3. **Airport Planning Undertaken by a Sponsor.**

Unless otherwise specified in this grant agreement, only Assurances 1, 2, 3, 5, 6, 13, 18, 25, 30, 32, 33, and 34 in Section C apply to planning projects. The terms, conditions, and assurances of this grant agreement shall remain in full force and effect during the life of the project; there shall be no limit on the duration of the assurances regarding Airport Revenue so long as the airport is used as an airport.

## **C. Sponsor Certification.**

The sponsor hereby assures and certifies, with respect to this grant that:

### 1. **General Federal Requirements.**

It will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance and use of Federal funds for this project including but not limited to the following:

#### **Federal Legislation**

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- a. Title 49, U.S.C., subtitle VII, as amended.
- b. Davis-Bacon Act - 40 U.S.C. 276(a), et seq.<sup>1</sup>
- c. Federal Fair Labor Standards Act - 29 U.S.C. 201, et seq.
- d. Hatch Act – 5 U.S.C. 1501, et seq.<sup>2</sup>
- e. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 Title 42 U.S.C. 4601, et seq.<sup>1 2</sup>
- f. National Historic Preservation Act of 1966 - Section 106 - 16 U.S.C. 470(f).<sup>1</sup>
- g. Archeological and Historic Preservation Act of 1974 - 16 U.S.C. 469 through 469c.<sup>1</sup>
- h. Native Americans Grave Repatriation Act - 25 U.S.C. Section 3001, et seq.
- i. Clean Air Act, P.L. 90-148, as amended.
- j. Coastal Zone Management Act, P.L. 93-205, as amended.
- k. Flood Disaster Protection Act of 1973 - Section 102(a) - 42 U.S.C. 4012a.<sup>1</sup>
- l. Title 49, U.S.C., Section 303, (formerly known as Section 4(f))
- m. Rehabilitation Act of 1973 - 29 U.S.C. 794.
- n. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- o. Americans with Disabilities Act of 1990, as amended, (42 U.S.C. § 12101 et seq.), prohibits discrimination on the basis of disability).
- p. Age Discrimination Act of 1975 - 42 U.S.C. 6101, et seq.
- q. American Indian Religious Freedom Act, P.L. 95-341, as amended.
- r. Architectural Barriers Act of 1968 -42 U.S.C. 4151, et seq.<sup>1</sup>
- s. Power plant and Industrial Fuel Use Act of 1978 - Section 403- 2 U.S.C. 8373.<sup>1</sup>
- t. Contract Work Hours and Safety Standards Act - 40 U.S.C. 327, et seq.<sup>1</sup>
- u. Copeland Anti-kickback Act - 18 U.S.C. 874.1
- v. National Environmental Policy Act of 1969 - 42 U.S.C. 4321, et seq.<sup>1</sup>
- w. Wild and Scenic Rivers Act, P.L. 90-542, as amended.
- x. Single Audit Act of 1984 - 31 U.S.C. 7501, et seq.<sup>2</sup>
- y. Drug-Free Workplace Act of 1988 - 41 U.S.C. 702 through 706.

- z. The Federal Funding Accountability and Transparency Act of 2006, as amended (Pub. L. 109-282, as amended by section 6202 of Pub. L. 110-252).

### **Executive Orders**

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- a. Executive Order 11246 - Equal Employment Opportunity<sup>1</sup>
- b. Executive Order 11990 - Protection of Wetlands
- c. Executive Order 11998 – Flood Plain Management
- d. Executive Order 12372 - Intergovernmental Review of Federal Programs
- e. Executive Order 12699 - Seismic Safety of Federal and Federally Assisted New Building Construction<sup>1</sup>
- f. Executive Order 12898 - Environmental Justice

### **Federal Regulations**

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- a. 2 CFR Part 180 - OMB Guidelines to Agencies on Governmentwide Debarment and Suspension (Nonprocurement).
- b. 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. [OMB Circular A-87 Cost Principles Applicable to Grants and Contracts with State and Local Governments, and OMB Circular A-133 - Audits of States, Local Governments, and Non-Profit Organizations].<sup>4, 5, 6</sup>
- c. 2 CFR Part 1200 – Nonprocurement Suspension and Debarment
- d. 14 CFR Part 13 - Investigative and Enforcement Procedures 14 CFR Part 16 - Rules of Practice For Federally Assisted Airport Enforcement Proceedings.
- e. 14 CFR Part 150 - Airport noise compatibility planning.
- f. 28 CFR Part 35- Discrimination on the Basis of Disability in State and Local Government Services.
- g. 28 CFR § 50.3 - U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964.
- h. 29 CFR Part 1 - Procedures for predetermination of wage rates.<sup>1</sup>
- i. 29 CFR Part 3 - Contractors and subcontractors on public building or public work financed in whole or part by loans or grants from the United States.<sup>1</sup>
- j. 29 CFR Part 5 - Labor standards provisions applicable to contracts covering federally financed and assisted construction (also labor standards provisions applicable to non-construction contracts subject to the Contract Work Hours and Safety Standards Act).<sup>1</sup>
- k. 41 CFR Part 60 - Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and federally assisted contracting requirements).<sup>1</sup>
- l. 49 CFR Part 18 - Uniform administrative requirements for grants and cooperative agreements to state and local governments.<sup>3</sup>
- m. 49 CFR Part 20 - New restrictions on lobbying.
- n. 49 CFR Part 21 – Nondiscrimination in federally-assisted programs of the Department of Transportation - effectuation of Title VI of the Civil Rights Act of 1964.
- o. 49 CFR Part 23 - Participation by Disadvantage Business Enterprise in Airport Concessions.

- p. 49 CFR Part 24 – Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.<sup>1 2</sup>
- q. 49 CFR Part 26 – Participation by Disadvantaged Business Enterprises in Department of Transportation Programs.
- r. 49 CFR Part 27 – Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance.<sup>1</sup>
- s. 49 CFR Part 28 – Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities conducted by the Department of Transportation.
- t. 49 CFR Part 30 - Denial of public works contracts to suppliers of goods and services of countries that deny procurement market access to U.S. contractors.
- u. 49 CFR Part 32 – Governmentwide Requirements for Drug-Free Workplace (Financial Assistance)
- v. 49 CFR Part 37 – Transportation Services for Individuals with Disabilities (ADA).
- w. 49 CFR Part 41 - Seismic safety of Federal and federally assisted or regulated new building construction.

### **Specific Assurances**

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Specific assurances required to be included in grant agreements by any of the above laws, regulations or circulars are incorporated by reference in this grant agreement.

### **Footnotes to Assurance C.1.**

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- <sup>1</sup> These laws do not apply to airport planning sponsors.
- <sup>2</sup> These laws do not apply to private sponsors.
- <sup>3</sup> 49 CFR Part 18 and 2 CFR Part 200 contain requirements for State and Local Governments receiving Federal assistance. Any requirement levied upon State and Local Governments by this regulation and circular shall also be applicable to private sponsors receiving Federal assistance under Title 49, United States Code.
- <sup>4</sup> On December 26, 2013 at 78 FR 78590, the Office of Management and Budget (OMB) issued the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards in 2 CFR Part 200. 2 CFR Part 200 replaces and combines the former Uniform Administrative Requirements for Grants (OMB Circular A-102 and Circular A-110 or 2 CFR Part 215 or Circular) as well as the Cost Principles (Circulars A-21 or 2 CFR part 220; Circular A-87 or 2 CFR part 225; and A-122, 2 CFR part 230). Additionally it replaces Circular A-133 guidance on the Single Annual Audit. In accordance with 2 CFR section 200.110, the standards set forth in Part 200 which affect administration of Federal awards issued by Federal agencies become effective once implemented by Federal agencies or when any future amendment to this Part becomes final. Federal agencies, including the Department of Transportation, must implement the policies and procedures applicable to Federal awards by promulgating a regulation to be effective by December 26, 2014 unless different provisions are required by statute or approved by OMB.

<sup>5</sup> Cost principles established in 2 CFR part 200 subpart E must be used as guidelines for determining the eligibility of specific types of expenses.

<sup>6</sup> Audit requirements established in 2 CFR part 200 subpart F are the guidelines for audits.

**2. Responsibility and Authority of the Sponsor.**

a. Public Agency Sponsor:

It has legal authority to apply for this grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

b. Private Sponsor:

It has legal authority to apply for this grant and to finance and carry out the proposed project and comply with all terms, conditions, and assurances of this grant agreement. It shall designate an official representative and shall in writing direct and authorize that person to file this application, including all understandings and assurances contained therein; to act in connection with this application; and to provide such additional information as may be required.

**3. Sponsor Fund Availability.**

It has sufficient funds available for that portion of the project costs which are not to be paid by the United States. It has sufficient funds available to assure operation and maintenance of items funded under this grant agreement which it will own or control.

**4. Good Title.**

a. It, a public agency or the Federal government, holds good title, satisfactory to the Secretary, to the landing area of the airport or site thereof, or will give assurance satisfactory to the Secretary that good title will be acquired.

b. For noise compatibility program projects to be carried out on the property of the sponsor, it holds good title satisfactory to the Secretary to that portion of the property upon which Federal funds will be expended or will give assurance to the Secretary that good title will be obtained.

**5. Preserving Rights and Powers.**

a. It will not take or permit any action which would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in this grant agreement without the written approval of the Secretary, and will act promptly to acquire, extinguish or modify any outstanding rights or claims of right of others which would interfere with such performance by the sponsor. This shall be done in a manner acceptable to the Secretary.

- b. It will not sell, lease, encumber, or otherwise transfer or dispose of any part of its title or other interests in the property shown on Exhibit A to this application or, for a noise compatibility program project, that portion of the property upon which Federal funds have been expended, for the duration of the terms, conditions, and assurances in this grant agreement without approval by the Secretary. If the transferee is found by the Secretary to be eligible under Title 49, United States Code, to assume the obligations of this grant agreement and to have the power, authority, and financial resources to carry out all such obligations, the sponsor shall insert in the contract or document transferring or disposing of the sponsor's interest, and make binding upon the transferee all of the terms, conditions, and assurances contained in this grant agreement.
- c. For all noise compatibility program projects which are to be carried out by another unit of local government or are on property owned by a unit of local government other than the sponsor, it will enter into an agreement with that government. Except as otherwise specified by the Secretary, that agreement shall obligate that government to the same terms, conditions, and assurances that would be applicable to it if it applied directly to the FAA for a grant to undertake the noise compatibility program project. That agreement and changes thereto must be satisfactory to the Secretary. It will take steps to enforce this agreement against the local government if there is substantial non-compliance with the terms of the agreement.
- d. For noise compatibility program projects to be carried out on privately owned property, it will enter into an agreement with the owner of that property which includes provisions specified by the Secretary. It will take steps to enforce this agreement against the property owner whenever there is substantial non-compliance with the terms of the agreement.
- e. If the sponsor is a private sponsor, it will take steps satisfactory to the Secretary to ensure that the airport will continue to function as a public-use airport in accordance with these assurances for the duration of these assurances.
- f. If an arrangement is made for management and operation of the airport by any agency or person other than the sponsor or an employee of the sponsor, the sponsor will reserve sufficient rights and authority to insure that the airport will be operated and maintained in accordance Title 49, United States Code, the regulations and the terms, conditions and assurances in this grant agreement and shall insure that such arrangement also requires compliance therewith.
- g. Sponsors of commercial service airports will not permit or enter into any arrangement that results in permission for the owner or tenant of a property used as a residence, or zoned for residential use, to taxi an aircraft between that property and any location on airport. Sponsors of general aviation airports entering into any arrangement that results in permission for the owner of residential real property adjacent to or near the airport must comply with the requirements of Sec. 136 of Public Law 112-95 and the sponsor assurances.

**6. Consistency with Local Plans.**

The project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.

**7. Consideration of Local Interest.**

It has given fair consideration to the interest of communities in or near where the project may be located.

**8. Consultation with Users.**

In making a decision to undertake any airport development project under Title 49, United States Code, it has undertaken reasonable consultations with affected parties using the airport at which project is proposed.

**9. Public Hearings.**

In projects involving the location of an airport, an airport runway, or a major runway extension, it has afforded the opportunity for public hearings for the purpose of considering the economic, social, and environmental effects of the airport or runway location and its consistency with goals and objectives of such planning as has been carried out by the community and it shall, when requested by the Secretary, submit a copy of the transcript of such hearings to the Secretary. Further, for such projects, it has on its management board either voting representation from the communities where the project is located or has advised the communities that they have the right to petition the Secretary concerning a proposed project.

**10. Metropolitan Planning Organization.**

In projects involving the location of an airport, an airport runway, or a major runway extension at a medium or large hub airport, the sponsor has made available to and has provided upon request to the metropolitan planning organization in the area in which the airport is located, if any, a copy of the proposed amendment to the airport layout plan to depict the project and a copy of any airport master plan in which the project is described or depicted.

**11. Pavement Preventive Maintenance.**

With respect to a project approved after January 1, 1995, for the replacement or reconstruction of pavement at the airport, it assures or certifies that it has implemented an effective airport pavement maintenance-management program and it assures that it will use such program for the useful life of any pavement constructed, reconstructed or repaired with Federal financial assistance at the airport. It will provide such reports on pavement condition and pavement management programs as the Secretary determines may be useful.

**12. Terminal Development Prerequisites.**

For projects which include terminal development at a public use airport, as defined in Title 49, it has, on the date of submittal of the project grant application, all the safety equipment required for certification of such airport under section 44706 of Title 49, United States Code, and all the security equipment required by rule or regulation, and

has provided for access to the passenger enplaning and deplaning area of such airport to passengers enplaning and deplaning from aircraft other than air carrier aircraft.

**13. Accounting System, Audit, and Record Keeping Requirements.**

- a. It shall keep all project accounts and records which fully disclose the amount and disposition by the recipient of the proceeds of this grant, the total cost of the project in connection with which this grant is given or used, and the amount or nature of that portion of the cost of the project supplied by other sources, and such other financial records pertinent to the project. The accounts and records shall be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act of 1984.
- b. It shall make available to the Secretary and the Comptroller General of the United States, or any of their duly authorized representatives, for the purpose of audit and examination, any books, documents, papers, and records of the recipient that are pertinent to this grant. The Secretary may require that an appropriate audit be conducted by a recipient. In any case in which an independent audit is made of the accounts of a sponsor relating to the disposition of the proceeds of a grant or relating to the project in connection with which this grant was given or used, it shall file a certified copy of such audit with the Comptroller General of the United States not later than six (6) months following the close of the fiscal year for which the audit was made.

**14. Minimum Wage Rates.**

It shall include, in all contracts in excess of \$2,000 for work on any projects funded under this grant agreement which involve labor, provisions establishing minimum rates of wages, to be predetermined by the Secretary of Labor, in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 276a-276a-5), which contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.

**15. Veteran's Preference.**

It shall include in all contracts for work on any project funded under this grant agreement which involve labor, such provisions as are necessary to insure that, in the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in Section 47112 of Title 49, United States Code. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

**16. Conformity to Plans and Specifications.**

It will execute the project subject to plans, specifications, and schedules approved by the Secretary. Such plans, specifications, and schedules shall be submitted to the Secretary prior to commencement of site preparation, construction, or other performance under this grant agreement, and, upon approval of the Secretary, shall be incorporated into this grant agreement. Any modification to the approved plans,

specifications, and schedules shall also be subject to approval of the Secretary, and incorporated into this grant agreement.

**17. Construction Inspection and Approval.**

It will provide and maintain competent technical supervision at the construction site throughout the project to assure that the work conforms to the plans, specifications, and schedules approved by the Secretary for the project. It shall subject the construction work on any project contained in an approved project application to inspection and approval by the Secretary and such work shall be in accordance with regulations and procedures prescribed by the Secretary. Such regulations and procedures shall require such cost and progress reporting by the sponsor or sponsors of such project as the Secretary shall deem necessary.

**18. Planning Projects.**

In carrying out planning projects:

- a. It will execute the project in accordance with the approved program narrative contained in the project application or with the modifications similarly approved.
- b. It will furnish the Secretary with such periodic reports as required pertaining to the planning project and planning work activities.
- c. It will include in all published material prepared in connection with the planning project a notice that the material was prepared under a grant provided by the United States.
- d. It will make such material available for examination by the public, and agrees that no material prepared with funds under this project shall be subject to copyright in the United States or any other country.
- e. It will give the Secretary unrestricted authority to publish, disclose, distribute, and otherwise use any of the material prepared in connection with this grant.
- f. It will grant the Secretary the right to disapprove the sponsor's employment of specific consultants and their subcontractors to do all or any part of this project as well as the right to disapprove the proposed scope and cost of professional services.
- g. It will grant the Secretary the right to disapprove the use of the sponsor's employees to do all or any part of the project.
- h. It understands and agrees that the Secretary's approval of this project grant or the Secretary's approval of any planning material developed as part of this grant does not constitute or imply any assurance or commitment on the part of the Secretary to approve any pending or future application for a Federal airport grant.

**19. Operation and Maintenance.**

- a. The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal,

state and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes. It will suitably operate and maintain the airport and all facilities thereon or connected therewith, with due regard to climatic and flood conditions. Any proposal to temporarily close the airport for non-aeronautical purposes must first be approved by the Secretary. In furtherance of this assurance, the sponsor will have in effect arrangements for-

- 1) Operating the airport's aeronautical facilities whenever required;
  - 2) Promptly marking and lighting hazards resulting from airport conditions, including temporary conditions; and
  - 3) Promptly notifying airmen of any condition affecting aeronautical use of the airport. Nothing contained herein shall be construed to require that the airport be operated for aeronautical use during temporary periods when snow, flood or other climatic conditions interfere with such operation and maintenance. Further, nothing herein shall be construed as requiring the maintenance, repair, restoration, or replacement of any structure or facility which is substantially damaged or destroyed due to an act of God or other condition or circumstance beyond the control of the sponsor.
- b. It will suitably operate and maintain noise compatibility program items that it owns or controls upon which Federal funds have been expended.

**20. Hazard Removal and Mitigation.**

It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.

**21. Compatible Land Use.**

It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.

**22. Economic Nondiscrimination.**

- a. It will make the airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds and classes of aeronautical activities, including commercial aeronautical activities offering services to the public at the airport.
- b. In any agreement, contract, lease, or other arrangement under which a right or privilege at the airport is granted to any person, firm, or corporation to conduct or

to engage in any aeronautical activity for furnishing services to the public at the airport, the sponsor will insert and enforce provisions requiring the contractor to-

- 1) furnish said services on a reasonable, and not unjustly discriminatory, basis to all users thereof, and
  - 2) charge reasonable, and not unjustly discriminatory, prices for each unit or service, provided that the contractor may be allowed to make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers.
- c. Each fixed-based operator at the airport shall be subject to the same rates, fees, rentals, and other charges as are uniformly applicable to all other fixed-based operators making the same or similar uses of such airport and utilizing the same or similar facilities.
  - d. Each air carrier using such airport shall have the right to service itself or to use any fixed-based operator that is authorized or permitted by the airport to serve any air carrier at such airport.
  - e. Each air carrier using such airport (whether as a tenant, non-tenant, or subtenant of another air carrier tenant) shall be subject to such nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges with respect to facilities directly and substantially related to providing air transportation as are applicable to all such air carriers which make similar use of such airport and utilize similar facilities, subject to reasonable classifications such as tenants or non-tenants and signatory carriers and non-signatory carriers. Classification or status as tenant or signatory shall not be unreasonably withheld by any airport provided an air carrier assumes obligations substantially similar to those already imposed on air carriers in such classification or status.
  - f. It will not exercise or grant any right or privilege which operates to prevent any person, firm, or corporation operating aircraft on the airport from performing any services on its own aircraft with its own employees [including, but not limited to maintenance, repair, and fueling] that it may choose to perform.
  - g. In the event the sponsor itself exercises any of the rights and privileges referred to in this assurance, the services involved will be provided on the same conditions as would apply to the furnishing of such services by commercial aeronautical service providers authorized by the sponsor under these provisions.
  - h. The sponsor may establish such reasonable, and not unjustly discriminatory, conditions to be met by all users of the airport as may be necessary for the safe and efficient operation of the airport.
  - i. The sponsor may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve the civil aviation needs of the public.

### **23. Exclusive Rights.**

It will permit no exclusive right for the use of the airport by any person providing, or intending to provide, aeronautical services to the public. For purposes of this paragraph, the providing of the services at an airport by a single fixed-based operator shall not be construed as an exclusive right if both of the following apply:

- a. It would be unreasonably costly, burdensome, or impractical for more than one fixed-based operator to provide such services, and
- b. If allowing more than one fixed-based operator to provide such services would require the reduction of space leased pursuant to an existing agreement between such single fixed-based operator and such airport. It further agrees that it will not, either directly or indirectly, grant or permit any person, firm, or corporation, the exclusive right at the airport to conduct any aeronautical activities, including, but not limited to charter flights, pilot training, aircraft rental and sightseeing, aerial photography, crop dusting, aerial advertising and surveying, air carrier operations, aircraft sales and services, sale of aviation petroleum products whether or not conducted in conjunction with other aeronautical activity, repair and maintenance of aircraft, sale of aircraft parts, and any other activities which because of their direct relationship to the operation of aircraft can be regarded as an aeronautical activity, and that it will terminate any exclusive right to conduct an aeronautical activity now existing at such an airport before the grant of any assistance under Title 49, United States Code.

### **24. Fee and Rental Structure.**

It will maintain a fee and rental structure for the facilities and services at the airport which will make the airport as self-sustaining as possible under the circumstances existing at the particular airport, taking into account such factors as the volume of traffic and economy of collection. No part of the Federal share of an airport development, airport planning or noise compatibility project for which a grant is made under Title 49, United States Code, the Airport and Airway Improvement Act of 1982, the Federal Airport Act or the Airport and Airway Development Act of 1970 shall be included in the rate basis in establishing fees, rates, and charges for users of that airport.

### **25. Airport Revenues.**

- a. All revenues generated by the airport and any local taxes on aviation fuel established after December 30, 1987, will be expended by it for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport. The following exceptions apply to this paragraph:
  - 1) If covenants or assurances in debt obligations issued before September 3, 1982, by the owner or operator of the airport, or provisions enacted before September 3, 1982, in governing statutes controlling the owner or operator's financing, provide for the use of the revenues from any of the airport owner or

operator's facilities, including the airport, to support not only the airport but also the airport owner or operator's general debt obligations or other facilities, then this limitation on the use of all revenues generated by the airport (and, in the case of a public airport, local taxes on aviation fuel) shall not apply.

- 2) If the Secretary approves the sale of a privately owned airport to a public sponsor and provides funding for any portion of the public sponsor's acquisition of land, this limitation on the use of all revenues generated by the sale shall not apply to certain proceeds from the sale. This is conditioned on repayment to the Secretary by the private owner of an amount equal to the remaining unamortized portion (amortized over a 20-year period) of any airport improvement grant made to the private owner for any purpose other than land acquisition on or after October 1, 1996, plus an amount equal to the federal share of the current fair market value of any land acquired with an airport improvement grant made to that airport on or after October 1, 1996.
  - 3) Certain revenue derived from or generated by mineral extraction, production, lease, or other means at a general aviation airport (as defined at Section 47102 of title 49 United States Code), if the FAA determines the airport sponsor meets the requirements set forth in Sec. 813 of Public Law 112-95.
- b. As part of the annual audit required under the Single Audit Act of 1984, the sponsor will direct that the audit will review, and the resulting audit report will provide an opinion concerning, the use of airport revenue and taxes in paragraph (a), and indicating whether funds paid or transferred to the owner or operator are paid or transferred in a manner consistent with Title 49, United States Code and any other applicable provision of law, including any regulation promulgated by the Secretary or Administrator.
  - c. Any civil penalties or other sanctions will be imposed for violation of this assurance in accordance with the provisions of Section 47107 of Title 49, United States Code.

## **26. Reports and Inspections.**

It will:

- a. submit to the Secretary such annual or special financial and operations reports as the Secretary may reasonably request and make such reports available to the public; make available to the public at reasonable times and places a report of the airport budget in a format prescribed by the Secretary;
- b. for airport development projects, make the airport and all airport records and documents affecting the airport, including deeds, leases, operation and use agreements, regulations and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request;
- c. for noise compatibility program projects, make records and documents relating to the project and continued compliance with the terms, conditions, and assurances of this grant agreement including deeds, leases, agreements, regulations, and other instruments, available for inspection by any duly authorized agent of the Secretary upon reasonable request; and

- d. in a format and time prescribed by the Secretary, provide to the Secretary and make available to the public following each of its fiscal years, an annual report listing in detail:
  - 1) all amounts paid by the airport to any other unit of government and the purposes for which each such payment was made; and
  - 2) all services and property provided by the airport to other units of government and the amount of compensation received for provision of each such service and property.

**27. Use by Government Aircraft.**

It will make available all of the facilities of the airport developed with Federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by Government aircraft in common with other aircraft at all times without charge, except, if the use by Government aircraft is substantial, charge may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used. Unless otherwise determined by the Secretary, or otherwise agreed to by the sponsor and the using agency, substantial use of an airport by Government aircraft will be considered to exist when operations of such aircraft are in excess of those which, in the opinion of the Secretary, would unduly interfere with use of the landing areas by other authorized aircraft, or during any calendar month that –

- a. Five (5) or more Government aircraft are regularly based at the airport or on land adjacent thereto; or
- b. The total number of movements (counting each landing as a movement) of Government aircraft is 300 or more, or the gross accumulative weight of Government aircraft using the airport (the total movement of Government aircraft multiplied by gross weights of such aircraft) is in excess of five million pounds.

**28. Land for Federal Facilities.**

It will furnish without cost to the Federal Government for use in connection with any air traffic control or air navigation activities, or weather-reporting and communication activities related to air traffic control, any areas of land or water, or estate therein, or rights in buildings of the sponsor as the Secretary considers necessary or desirable for construction, operation, and maintenance at Federal expense of space or facilities for such purposes. Such areas or any portion thereof will be made available as provided herein within four months after receipt of a written request from the Secretary.

**29. Airport Layout Plan.**

- a. It will keep up to date at all times an airport layout plan of the airport showing
  - 1) boundaries of the airport and all proposed additions thereto, together with the boundaries of all offsite areas owned or controlled by the sponsor for airport purposes and proposed additions thereto;
  - 2) the location and nature of all existing and proposed airport facilities and structures (such as runways, taxiways, aprons, terminal buildings, hangars and

roads), including all proposed extensions and reductions of existing airport facilities;

- 3) the location of all existing and proposed nonaviation areas and of all existing improvements thereon; and
  - 4) all proposed and existing access points used to taxi aircraft across the airport's property boundary. Such airport layout plans and each amendment, revision, or modification thereof, shall be subject to the approval of the Secretary which approval shall be evidenced by the signature of a duly authorized representative of the Secretary on the face of the airport layout plan. The sponsor will not make or permit any changes or alterations in the airport or any of its facilities which are not in conformity with the airport layout plan as approved by the Secretary and which might, in the opinion of the Secretary, adversely affect the safety, utility or efficiency of the airport.
- b. If a change or alteration in the airport or the facilities is made which the Secretary determines adversely affects the safety, utility, or efficiency of any federally owned, leased, or funded property on or off the airport and which is not in conformity with the airport layout plan as approved by the Secretary, the owner or operator will, if requested, by the Secretary (1) eliminate such adverse effect in a manner approved by the Secretary; or (2) bear all costs of relocating such property (or replacement thereof) to a site acceptable to the Secretary and all costs of restoring such property (or replacement thereof) to the level of safety, utility, efficiency, and cost of operation existing before the unapproved change in the airport or its facilities except in the case of a relocation or replacement of an existing airport facility due to a change in the Secretary's design standards beyond the control of the airport sponsor.

### **30. Civil Rights.**

It will promptly take any measures necessary to ensure that no person in the United States shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in any activity conducted with, or benefiting from, funds received from this grant.

- a. Using the definitions of activity, facility and program as found and defined in §§ 21.23 (b) and 21.23 (e) of 49 CFR § 21, the sponsor will facilitate all programs, operate all facilities, or conduct all programs in compliance with all non-discrimination requirements imposed by, or pursuant to these assurances.
- b. Applicability
  - 1) Programs and Activities. If the sponsor has received a grant (or other federal assistance) for any of the sponsor's program or activities, these requirements extend to all of the sponsor's programs and activities.
  - 2) Facilities. Where it receives a grant or other federal financial assistance to construct, expand, renovate, remodel, alter or acquire a facility, or part of a facility, the assurance extends to the entire facility and facilities operated in connection therewith.

- 3) Real Property. Where the sponsor receives a grant or other Federal financial assistance in the form of, or for the acquisition of real property or an interest in real property, the assurance will extend to rights to space on, over, or under such property.

c. Duration.

The sponsor agrees that it is obligated to this assurance for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the assurance obligates the sponsor, or any transferee for the longer of the following periods:

- 1) So long as the airport is used as an airport, or for another purpose involving the provision of similar services or benefits; or
- 2) So long as the sponsor retains ownership or possession of the property.

d. Required Solicitation Language. It will include the following notification in all solicitations for bids, Requests For Proposals for work, or material under this grant agreement and in all proposals for agreements, including airport concessions, regardless of funding source:

“The **(Name of Sponsor)**, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises and airport concession disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.”

e. Required Contract Provisions.

- 1) It will insert the non-discrimination contract clauses requiring compliance with the acts and regulations relative to non-discrimination in Federally-assisted programs of the DOT, and incorporating the acts and regulations into the contracts by reference in every contract or agreement subject to the non-discrimination in Federally-assisted programs of the DOT acts and regulations.
- 2) It will include a list of the pertinent non-discrimination authorities in every contract that is subject to the non-discrimination acts and regulations.
- 3) It will insert non-discrimination contract clauses as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a sponsor.
- 4) It will insert non-discrimination contract clauses prohibiting discrimination on the basis of race, color, national origin, creed, sex, age, or handicap as a

covenant running with the land, in any future deeds, leases, license, permits, or similar instruments entered into by the sponsor with other parties:

- a) For the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
  - b) For the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.
- f. It will provide for such methods of administration for the program as are found by the Secretary to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the acts, the regulations, and this assurance.
- g. It agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the acts, the regulations, and this assurance.

### **31. Disposal of Land.**

- a. For land purchased under a grant for airport noise compatibility purposes, including land serving as a noise buffer, it will dispose of the land, when the land is no longer needed for such purposes, at fair market value, at the earliest practicable time. That portion of the proceeds of such disposition which is proportionate to the United States' share of acquisition of such land will be, at the discretion of the Secretary, (1) reinvested in another project at the airport, or (2) transferred to another eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order, (1) reinvestment in an approved noise compatibility project, (2) reinvestment in an approved project that is eligible for grant funding under Section 47117(e) of title 49 United States Code, (3) reinvestment in an approved airport development project that is eligible for grant funding under Sections 47114, 47115, or 47117 of title 49 United States Code, (4) transferred to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport, and (5) paid to the Secretary for deposit in the Airport and Airway Trust Fund. If land acquired under a grant for noise compatibility purposes is leased at fair market value and consistent with noise buffering purposes, the lease will not be considered a disposal of the land. Revenues derived from such a lease may be used for an approved airport development project that would otherwise be eligible for grant funding or any permitted use of airport revenue.
- b. For land purchased under a grant for airport development purposes (other than noise compatibility), it will, when the land is no longer needed for airport purposes, dispose of such land at fair market value or make available to the Secretary an amount equal to the United States' proportionate share of the fair market value of the land. That portion of the proceeds of such disposition which is proportionate to the United States' share of the cost of acquisition of such land will, (1) upon application to the Secretary, be reinvested or transferred to another

eligible airport as prescribed by the Secretary. The Secretary shall give preference to the following, in descending order: (1) reinvestment in an approved noise compatibility project, (2) reinvestment in an approved project that is eligible for grant funding under Section 47117(e) of title 49 United States Code, (3) reinvestment in an approved airport development project that is eligible for grant funding under Sections 47114, 47115, or 47117 of title 49 United States Code, (4) transferred to an eligible sponsor of another public airport to be reinvested in an approved noise compatibility project at that airport, and (5) paid to the Secretary for deposit in the Airport and Airway Trust Fund.

- c. Land shall be considered to be needed for airport purposes under this assurance if (1) it may be needed for aeronautical purposes (including runway protection zones) or serve as noise buffer land, and (2) the revenue from interim uses of such land contributes to the financial self-sufficiency of the airport. Further, land purchased with a grant received by an airport operator or owner before December 31, 1987, will be considered to be needed for airport purposes if the Secretary or Federal agency making such grant before December 31, 1987, was notified by the operator or owner of the uses of such land, did not object to such use, and the land continues to be used for that purpose, such use having commenced no later than December 15, 1989.
- d. Disposition of such land under (a) (b) or (c) will be subject to the retention or reservation of any interest or right therein necessary to ensure that such land will only be used for purposes which are compatible with noise levels associated with operation of the airport.

**32. Engineering and Design Services.**

It will award each contract, or sub-contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping or related services with respect to the project in the same manner as a contract for architectural and engineering services is negotiated under Title IX of the Federal Property and Administrative Services Act of 1949 or an equivalent qualifications-based requirement prescribed for or by the sponsor of the airport.

**33. Foreign Market Restrictions.**

It will not allow funds provided under this grant to be used to fund any project which uses any product or service of a foreign country during the period in which such foreign country is listed by the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in procurement and construction.

**34. Policies, Standards, and Specifications.**

It will carry out the project in accordance with policies, standards, and specifications approved by the Secretary including but not limited to the advisory circulars listed in the Current FAA Advisory Circulars for AIP projects, dated \_\_\_\_\_ (the latest approved version as of this grant offer) and included in this grant, and in accordance

with applicable state policies, standards, and specifications approved by the Secretary.

**35. Relocation and Real Property Acquisition.**

- a. It will be guided in acquiring real property, to the greatest extent practicable under State law, by the land acquisition policies in Subpart B of 49 CFR Part 24 and will pay or reimburse property owners for necessary expenses as specified in Subpart B.
- b. It will provide a relocation assistance program offering the services described in Subpart C and fair and reasonable relocation payments and assistance to displaced persons as required in Subpart D and E of 49 CFR Part 24.
- c. It will make available within a reasonable period of time prior to displacement, comparable replacement dwellings to displaced persons in accordance with Subpart E of 49 CFR Part 24.

**36. Access By Intercity Buses.**

The airport owner or operator will permit, to the maximum extent practicable, intercity buses or other modes of transportation to have access to the airport; however, it has no obligation to fund special facilities for intercity buses or for other modes of transportation.

**37. Disadvantaged Business Enterprises.**

The sponsor shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any DOT-assisted contract covered by 49 CFR Part 26, or in the award and performance of any concession activity contract covered by 49 CFR Part 23. In addition, the sponsor shall not discriminate on the basis of race, color, national origin or sex in the administration of its DBE and ACDBE programs or the requirements of 49 CFR Parts 23 and 26. The sponsor shall take all necessary and reasonable steps under 49 CFR Parts 23 and 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts, and/or concession contracts. The sponsor's DBE and ACDBE programs, as required by 49 CFR Parts 26 and 23, and as approved by DOT, are incorporated by reference in this agreement. Implementation of these programs is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the sponsor of its failure to carry out its approved program, the Department may impose sanctions as provided for under Parts 26 and 23 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1936 (31 U.S.C. 3801).

**38. Hangar Construction.**

If the airport owner or operator and a person who owns an aircraft agree that a hangar is to be constructed at the airport for the aircraft at the aircraft owner's expense, the airport owner or operator will grant to the aircraft owner for the hangar a long term lease that is subject to such terms and conditions on the hangar as the airport owner or operator may impose.

### 39. **Competitive Access.**

- a. If the airport owner or operator of a medium or large hub airport (as defined in section 47102 of title 49, U.S.C.) has been unable to accommodate one or more requests by an air carrier for access to gates or other facilities at that airport in order to allow the air carrier to provide service to the airport or to expand service at the airport, the airport owner or operator shall transmit a report to the Secretary that-
  - 1) Describes the requests;
  - 2) Provides an explanation as to why the requests could not be accommodated; and
  - 3) Provides a time frame within which, if any, the airport will be able to accommodate the requests.
- b. Such report shall be due on either February 1 or August 1 of each year if the airport has been unable to accommodate the request(s) in the six month period prior to the applicable due date.

**Appendix E**



**BANDON STATE AIRPORT  
INGRESS/EGRESS AGREEMENT**

The State of Oregon, acting by and through its Department of Aviation, hereinafter referred to as AVIATION, hereby grants to Bandon Aero Club, Inc., hereinafter referred to as PERMITTEE, right of ingress to and egress from the Bandon State Airport, Coos County, Oregon, on the terms and conditions described in this agreement.

**Definitions**

"Airport" - The Bandon State Airport.

"Public Use Area" - All portions of the Airport as are available for public use as permitted by AVIATION, as such may change from time to time.

"Adjacent Property" - That certain contiguous parcel of improved real property owned by PERMITTEE and located adjacent to the Airport, as depicted on the attached Exhibit "A".

"Point of Ingress/Egress" - The point where the Airport's taxiway adjoins and abuts the Adjacent Property, as depicted on the attached Exhibit "A".

"Based Aircraft" - Lawfully registered aircraft listing Bandon State Airport on the aircraft registration and required to be registered.

**Recitals**

- A. AVIATION owns and operates Bandon State Airport for the benefit of the public.
- B. PERMITTEE owns the Adjacent Property from which aircraft access the airport. Ownership of the Adjacent Property is held by Tenants in Common. At the time that the Tenants in Common form a duly registered legal entity to be named as PERMITTEE, this agreement will be amended to change the named PERMITTEE to that entity.
- C. PERMITTEE desires to obtain rights of ingress/egress to the airport for itself and its employees, agents, contractors, unit owners, and invitees; AVIATION is willing to allow such rights of ingress/egress, on the terms set forth in this agreement.

**SECTION 1**

**Grant, Scope, Term, Representatives**

1.1 **Grant** AVIATION grants to PERMITTEE non-exclusive rights of ingress and egress at the Point of Ingress/Egress, to and from the public use area of the airport; provided, however, that AVIATION reserves the rights to (i) deny access to anyone at the Point of Ingress/Egress if it determines that the entry poses a risk to the efficient operation of the Airport, and (ii) to relocate the Point of Ingress/Egress upon sixty (60) days' written notice to PERMITTEE, including for the purpose of accommodating third parties or others to whom AVIATION grants ingress/egress

rights. This grant is contingent upon the continued ownership and operation of the Airport by AVIATION, and upon the continued compliance by PERMITTEE with all of the conditions of this agreement.

1.2 **No Rights in Real Property** PERMITTEE acknowledges that the rights granted pursuant to this agreement are personal to the parties herein and do not create any real property rights and shall neither burden the Airport nor benefit the Adjacent Property.

1.3 **Term** This agreement will be in full force and effect for a period of five years, commencing on June 1, 2005 and ending on May 31, 2010.

1.4 **Authorized Representative** Upon signing this agreement, PERMITTEE hereby names as authorized representative to act in each of their behalf to carry out their responsibilities and obligations under the terms of this agreement the signatories identified on the signature page of this agreement. Such representatives may be changed at any time, by written notice as set forth in Section 3.21 of this agreement.

## SECTION 2

### Payment for and Use of Airport Access

#### 2.1 Consideration

##### Ingress/Egress Fee

(b) PERMITTEE shall pay to AVIATION the greater of the following amounts:

(A) A fee for each aircraft based on the adjacent property which is the subject of this permit. The per aircraft fee is based on aircraft weight at the rate shown on the attached Exhibit "B". AVIATION, however, reserves its right to review and adjust the consideration payable to AVIATION annually. Payment is due on the 25th of each month for the previous month, i.e., payments for the month of January 2006 will be due on February 25, 2006; or

(B) \$275.

Payment shall be accompanied by a detailed report listing each based aircraft showing aircraft class, N-number, aircraft type, and the hangar or tiedown number where the aircraft is stored. A report summarizing this information by class shall also be provided.

#### 2.2 Penalties

(A) For any charges or fees due to ODA, a Tenant shall pay a penalty for late or delinquent payments of no less than 10 percent per month on any past due balance calculated from the date the amount is due until the close of the business day upon which the delinquent payment is received by ODA.

(B) In the event that any check to AVIATION for payment under this lease is returned to AVIATION by PERMITTEE'S bank unpaid for any cause, PERMITTEE shall pay AVIATION a fifty dollar (\$50.00) fee in addition to the amount of the check and any administrative charge due under the above paragraph.

2.3 Possession and Use PERMITTEE is granted the non-exclusive right to use, in a lawful manner and in common with others, all of the Public Use Area, as such may change from time to time, including but not limited to, landing, taxiing, parking areas and other common use facilities.

2.4 Posting Point of Ingress/Egress PERMITTEE shall post and control all of the Point of Ingress/Egress to prevent use by persons not allowed under this agreement. Signs shall be placed on PERMITTEE'S property. Such signs shall be placed as not to interfere with or be an obstruction to taxiing aircraft. AVIATION shall have the right to require PERMITTEE to add signs or replace or remove signs which AVIATION determines to be inadequate, improper or a safety hazard.

2.5 Prohibited Uses of Airport PERMITTEE shall not use or permit to be used any portion of the Airport or other state-owned property for storage of non-aviation related personal property except in areas allowed and designated by AVIATION. PERMITTEE understands that if state-

owned airport property is used for such storage, AVIATION may demand and compel its removal upon forty-eight (48) hour notice. If such personal property is not removed within the specified time after such demand, then AVIATION may remove the same and charge the cost of the removal to PERMITTEE. PERMITTEE agrees that its use of the Airport, and that of its employees, agents, unit owners, and contractors shall be confined to the Public Use Area and the Point of Ingress/Egress shall allow use only by aircraft meeting the Airport's design criteria. No automobiles, bicycles, trucks, motorcycles or other power driven vehicles, pedestrians, or animals, shall be allowed on the Airport Public Use Area or the Point of Ingress/Egress except for vehicles authorized by AVIATION.

Any dangerous articles or magnetized materials being transported by or under the control of PERMITTEE over AVIATION' property shall be done in strict accordance with Title 49 of the Code of Federal regulations (49 CFR). AVIATION reserves the right at any time to prohibit said transporting of any or all dangerous articles or magnetized materials as defined in 49 CFR, a copy of which is available upon request at AVIATION' office.

2.6 **Assignment** This agreement shall not be assigned; however, AVIATION acknowledges that PERMITTEE is a group of Tenants in Common, each owning improvements and a portion of the entire property. Furthermore, each Tenant in Common has exclusive use of a hangar unit, and pays a portion of the access fee paid by PERMITTEE. Additionally, each Tenant in Common shall be permitted to transfer their interest, subject to bylaws of the Tenants in Common Agreement. AVIATION shall be notified in writing at the completion of each transfer of the name, address and aircraft N-number of each transferee.

2.7 **No Exclusive Right** Nothing herein contained shall be construed to grant or authorize the granting of an exclusive right forbidden by Section 308 of the Federal Aviation Act of 1958.

**SECTION 3**  
**Duty to Comply**

3.1 **Records** PERMITTEE shall keep proper books of account and other records pertaining to its operation. The books and records shall be available at all times during normal business hours to AVIATION and its authorized representatives including the Oregon Secretary of State's Office and the federal government, which may inspect all such books and records to ascertain compliance with the terms and conditions of this agreement.

3.2 **AVIATION Entry onto Premises** Subject to advance notice unless an emergency exists, representatives of AVIATION may enter the ingress/egress area at any time for the purpose of determining compliance with the terms and conditions of this agreement.

3.3 **Airport Regulations** PERMITTEE'S exercise of its rights under this agreement is subject to all existing and future regulations adopted by the State Aviation Board relative to the operation of the Bandon State Airport, and PERMITTEE agrees to comply with all of the provisions of such regulations. The flights conducted at this airport shall conform to all applicable Federal Aviation Regulations, Oregon AVIATION Laws, and traffic patterns as established at the Airport.

3.4 **Construction or Alteration** PERMITTEE agrees that no structure, building or other facility which violates the airport imaginary surfaces as defined in Federal Aviation Regulations (FAR), Part 77, shall be constructed or permitted to be constructed on the Adjacent Property. PERMITTEE further agrees that notice of any and all proposed construction or alteration shall be submitted through AVIATION to the Federal Aviation Administration (FAA) on FAA Form 7460-1 "Notice of Proposed Construction or Alteration" as prescribed in FAR Part 77.17. AVIATION shall retain the right to require its prior written approval of any construction on the Adjacent Property by PERMITTEE. AVIATION shall not unreasonably withhold its approval.

3.5 **Protection of the Airport's Imaginary Surfaces** AVIATION shall have the right to take any action it considers necessary to protect the Airport's imaginary surfaces, as defined by FAR, Part 77, against obstructions, together with the right to prevent PERMITTEE from erecting, or permitting to be erected, any building or other structure on the airport which, in the opinion of AVIATION, would limit the usefulness of the Airport or constitute a hazard to aircraft.

3.6 **Access and Automobile Parking** No motor vehicle belonging to PERMITTEE and its unit owners, except aircraft shall be allowed on the airport runway, taxiway, or adjacent airport land, except in areas specifically designated for motor vehicle use.

3.7 **Maintenance** PERMITTEE shall maintain the Point of Ingress/Egress, as shown on Exhibit "A", in a safe condition at all times. PERMITTEE shall maintain the adjacent property in a reasonably clean and neat fashion, and shall not permit the accumulation of rubbish, junk, aircraft or automobile parts or any other material.

3.8 **Hazardous Substances** For purposes of this agreement, the following are collectively included as Hazardous Substances: environmentally hazardous or toxic materials, substances, compounds, mixtures, wastes, oils or any other substances defined as a pollutant or contaminant by any federal, state or local law, rule or regulations. PERMITTEE represents, warrants and covenants that it has not and shall not nor shall it allow anyone else, either willfully or negligently to store, dispose of, or release any Hazardous Substance on any portion of the Airport property. PERMITTEE shall indemnify and hold AVIATION harmless from any and all claims, losses, damage, cleanup costs, attorney fees and other expenses resulting from the presence of any Hazardous Substances in, on, upon or under the Point of Ingress/Egress or any portion of the adjacent property or the airport if such damage to the airport results from PERMITTEE'S actions or failure to act. All costs associated with the use of Hazardous Substances or petroleum products, including but not limited to costs of cleanup, removal, remediation, and compliance with federal, state and local environmental requirements, shall be the primary responsibility of PERMITTEE. All Hazardous Substances and petroleum products shall be used, handled, cleaned up, removed and remediated in accordance with federal, state and local requirements.

3.9 **Recycle Requirements** PERMITTEE shall store and recycle petroleum products and dispose of Hazardous Substances in accordance with the Oregon Department of Environmental Quality's rules and regulations, as such may change, and which are available by contacting the Oregon Department of Environmental Quality.

3.10 **Compliance with Law** PERMITTEE shall observe and obey all laws, ordinances, rules and regulations promulgated by any lawful authority of the United States, the State of Oregon, or any municipal subdivision having authority over or jurisdiction of the premises, including, but not limited to safety, health, sanitary, fire, electrical and building codes, zoning and state and local comprehensive plans and criminal laws, relating to its use of the Airport and Adjacent Property under this Agreement.

3.11 **Organized Public Activities** In the event that any organized public activity using the airport's airspace or aircraft operational areas is planned by PERMITTEE at the Bandon State Airport, PERMITTEE shall request approval from AVIATION in writing not less than thirty (30) days prior to any scheduled activity. PERMITTEE shall submit to AVIATION an application containing the pertinent facts relative to this activity, and based on the information presented, AVIATION will, at its sole discretion with due regard to airport operational benefit, issue an approval or denial of said activity. After notice is received by AVIATION, conditional obligations of the PERMITTEE shall be determined and transmitted to PERMITTEE by AVIATION if AVIATION determines that the nature of the scheduled activity requires changed or added

obligations for safe conduct of the activity. Should AVIATION grant approval of the planned activity, PERMITTEE'S obligations shall include, but shall not be limited to the following:

3.11.1 execute a "Hold Harmless and Indemnity Agreement" holding the State of Oregon, Department of Aviation, free and harmless from any accident, incident or, violation of the Federal Aviation Regulations or Oregon State Laws, in connection with the scheduled activity;

3.11.2 make available a Unicom radio and a fully qualified operator thereof, advising aircraft traffic that the scheduled activity is in progress;

3.11.3 remove all debris and litter resulting from the scheduled activity within twenty-four (24) hours of the activity's completion. The airport shall be returned to the same condition as it was prior to the scheduled activity;

AVIATION requests that upon becoming aware of any fly-in, air show, or organized public activity contemplated or planned by others, PERMITTEE notify AVIATION immediately.

3.12 **Insurance** Prior to execution of this agreement, PERMITTEE shall buy, at his own expense, and keep in effect during the term of this lease, as a minimum, general liability insurance for personal injury, property damage and contractual liability insurance covering all of PERMITTEE'S activities under this agreement. Coverage limits shall not be less than \$100,000 per person for personal injury, \$100,000 for property damage and \$500,000 total for all claims arising out of a single accident or occurrence. When said policy contains an aggregate limit, PERMITTEE shall provide an additional \$1,000,000 excess insurance coverage.

The PERMITTEE shall include the State of Oregon, by and through its Department of Aviation, its officers, agents and employees, and the State Aviation Board as named insured on insurance policies issued to meet this provision, or shall furnish additional insured endorsement naming the same as additional insured to PERMITTEE 'S existing public liability and property damage insurance.

The above described insurance shall be provided by an insurance company authorized to do business in the State of Oregon and the policy shall contain a cross-liability clause in behalf of the State of Oregon, shall be in a form satisfactory to AVIATION and shall cover any and all losses due to maintenance, operations, use of the airport, or activities conducted or sponsored by the PERMITTEE, its sublessees, employees, agents or any contractors.

These limits of insurance shall be primary and exclusive of any carried by the State of Oregon and shall be exhausted first.

Upon executing the contract, PERMITTEE shall furnish to AVIATION for approval a Certificate of Insurance as evidence of the insurance coverages and limits required by this contract. Insurance coverages shall not be amended, altered, modified or canceled without at least thirty (30) days notice to AVIATION, and this shall be so stated in the Certificate of Insurance.

The parties agree that in the event the insurance limitations required herein are determined by legislation, court action or otherwise to be inadequate, the insurance requirements shall be adjusted within thirty days to comply with the new requirements.

Failure to keep required insurance in effect or failure to provide proof, upon request by AVIATION, of continuance of such insurance is grounds for default and termination pursuant to the provisions of Section IV, paragraphs 4.1 and 4.3.

3.13 **Responsible Party** PERMITTEE is responsible for any damage caused by its employees, agents, contractors, and unit owners, and PERMITTEE shall indemnify AVIATION from and against any and all costs, damage or liability actions resulting from the conduct of any of PERMITTEE'S unit owners, their invitees, lessees and assigns.

3.14 **No Waiver** The covenants of this agreement are continuing covenants, and the waiver, whether express or implied by AVIATION or PERMITTEE, of breaches of these covenants shall not be deemed a waiver of subsequent breaches thereof.

3.15 **Amendment** Any future agreement between the parties of this agreement hereinafter made shall be ineffective to modify or discharge this agreement, in whole or in part, unless such agreement is in writing and executed with the same formalities as this instrument.

3.16 **Subordination to Federal-State Agreements** The provisions of this agreement shall be subordinate to any existing or future agreement between AVIATION and the United States relative to the operation or maintenance of the Bandon State Airport, the execution of which has been or may be required as a condition precedent to the receipt of federal funds for the development of the airport. Failure of PERMITTEE to comply with any of the requirements of any existing or future agreement between AVIATION and the United States shall be cause for immediate termination of PERMITTEE'S rights hereunder. During a time of war or national emergency, AVIATION shall have the right to lease the landing area or any part thereof to the United States government for military or other federal government purposes, and, if such lease is executed, the provisions of this agreement, insofar as they are inconsistent with the provisions of the lease to the government, shall be suspended and reinstated at such time as the lease with the federal government is terminated. Suspended time shall be considered as part of the term of this lease and will not extend the expiration date of this agreement. The ingress/egress fee to be paid by PERMITTEE to AVIATION shall be waived during such time as any lease with the federal government is in effect.

3.17 **AVIATION' Right to Develop the Airport** AVIATION reserves its right to further alter, develop or improve the Airport in accordance with its duty to develop aviation within the State of Oregon as dictated by the demands of air traffic and aviation safety.

3.18 **Maintenance of Airport** AVIATION shall maintain the runways, public taxiways, and aircraft parking area. It is mutually understood that AVIATION retains sole authority to determine the methods and schedules by which any maintenance or necessary construction is to be performed. AVIATION shall have the right to close the airport whenever it deems it necessary for reasons of public safety or convenience. No advance notice shall be necessary when closure of the airport is by reason of weather, acts of God, or other unforeseen circumstances.

3.19 **Standard Notices** For any terms of this agreement which require notice, written notice sent certified mail with postage affixed and mailed to the address provided in the signature portion of this agreement shall be deemed sufficient. Notice shall be deemed received the third day after the mailing date. Either party may, by notice in writing to the other, change the address to which notices to that party are to be given.

3.20 **Authority** Any and all powers and authority conferred upon PERMITTEE by this agreement shall be strictly construed, and no other powers may be lawfully exercised by PERMITTEE without AVIATION' prior written consent. PERMITTEE shall not have any authority to act on behalf of AVIATION, or to bind AVIATION to any third party, contractually or otherwise, except as is expressly stated herein.

3.21 **No Agency** The parties hereto understand and agree that the requirements imposed on PERMITTEE by terms of this agreement shall not be construed to make PERMITTEE an officer, employee or agent of the State of Oregon, Department of Aviation, as those terms are used in ORS 30.265.

## SECTION 4

### Termination and Default

4.1 **Events of Default** Any one or more of the following events shall constitute a default under this agreement and entitle AVIATION to pursue the remedies set forth in this Section IV.

4.1.1. PERMITTEE fails to make payment when due of any ingress/egress fee when and as due, and such failure continues for more than ten (10) days.

4.1.2. PERMITTEE fails to comply with any of the covenants, agreements, terms or conditions contained in this agreement, and such failure continues for more than thirty (30) days after written notice is given to PERMITTEE by AVIATION, in the manner set forth in Section 3.19.

4.1.3. PERMITTEE files a voluntary petition of bankruptcy, or has filed against it an involuntary petition of bankruptcy or makes any assignment of its property for the benefit of creditors;

4.1.4. PERMITTEE abandons use of the Adjacent Property for more than fifteen (15) days; or

4.1.5. PERMITTEE fails to comply with all applicable federal and Oregon laws, and/or local permits, licenses or ordinances, including but not limited to the Oregon Uniform Trade Practices Act (ORS 646.605 to 646.652).

4.2 **Remedies** Upon the occurrence of any one or more Events of Default, and after giving PERMITTEE written notice as provided in 3.19, AVIATION may exercise any one or more of the following remedies, or any other remedy available under applicable law or in equity;

4.2.1 remove or occupy any property of either PERMITTEE or PERMITTEE'S unit owners located on any portion of the Airport;

4.2.2 deny PERMITTEE or PERMITTEE'S unit owners any of their rights under the terms of this agreement, including the rights of ingress and egress to and from the Point of Ingress/Egress;

4.2.3 recover all unpaid fees due under this agreement, and damages caused by the default including attorney fees, including an administrative fee equal to 10% of such past due fees or amounts; or

4.2.4 terminate this agreement, by written notice mailed to PERMITTEE at the addresses set forth in the signatures section of this agreement, and pursue all additional remedies available at law or in equity.

4.3 **Termination; Survival** Upon termination of this agreement, PERMITTEE shall immediately cease use of the access point between the Adjacent Property and the Airport. Unless

otherwise specified in this agreement, all fees, charges or liabilities owing or arising under this agreement shall survive termination of this agreement. This agreement shall terminate upon:

4.3.1 Mailing of AVIATION' termination notice, for any of the conditions and upon the procedure set forth in Section 4.2.4;

4.3.2 Mutual written agreement of AVIATION and PERMITTEE;

4.3.3 Sale of all or any portions of PERMITTEE'S interests in the Adjacent Property except as described in paragraph 2.6 and as otherwise provided herein.

4.3.4 Sixty (60) days' written notice to PERMITTEE from AVIATION that the State Aviation Board has determined to (i) close or sell the Airport, or (ii) require relocation of the Point of Ingress/Egress, or (iii) develop the airport; provided, however, that in the event of relocation of the Point of Ingress/Egress for good cause, AVIATION shall make a determination regarding relocating the Point of Ingress/Egress in a manner which would afford PERMITTEE access to the Public Use Area from the Adjacent Property. If AVIATION offers a substitute Point of Ingress/Egress not agreeable to PERMITTEE, PERMITTEE shall have ten (10) days to either accept or reject such offer in writing and, if it accepts, this agreement shall remain in full force and effect and PERMITTEE'S obligation to pay any fee under this agreement shall be waived for the amount of time PERMITTEE is required to suspend operation as a result of such relocation. Access at such relocated area shall be made available at the rate which is in effect in this agreement on the date relocation is completed, and shall remain in effect for the balance of that calendar year. If PERMITTEE rejects the offer, or fails to respond to the offer within ten (10) days, this agreement shall terminate without recourse against AVIATION.

4.4 **Declaration of Termination; and No Warranty of Non-interference by Entities Outside AVIATION' Control** The parties hereto understand and recognize that the actions of local governmental units, parties holding land or living adjacent to the Bandon State Airport, and governmental entities not subject to AVIATION' influence and control, may have, in the future, adverse impacts upon the number and character of flight and other operations at the airport. In such event, PERMITTEE has the option of declaring this agreement terminated on ninety (90) days' written notice to AVIATION and the provisions of SECTION 4.3, Termination, shall apply. PERMITTEE agrees to not seek to recover any damages from AVIATION.

4.5 **Non-Exclusive Rights and Remedies** The rights and remedies provided in the above provisions relating to default, including breach of contract, shall not be exclusive, and are in addition to any rights and remedies provided by law or in equity or otherwise under this agreement.

4.6 **Holding Over** Any holding over after the expiration of the term of this agreement, shall be allowed only with payment of rent at a monthly rate to be determined by AVIATION, but not

substantially exceeding the amount of the ingress/egress fee set forth in Section 2.1. Holding over creates a month-to-month tenancy subject to the terms and conditions of this agreement at the sufferance of AVIATION and is subject to termination on thirty (30) days' written notice by either of AVIATION or PERMITTEE.

IN WITNESS WHEREOF the parties hereto have affixed their signatures the day and year written below.

The State Aviation Board, by duly-adopted Delegation Order No. 1, dated October 12, 2000, has authorized the Director of the Department of Aviation to act in its behalf in approving and executing this agreement.

STATE OF OREGON by and through its Department of AVIATION

BY: Charles Riordan  
Charles Riordan, State Airport Manager

DATE 12-1-05

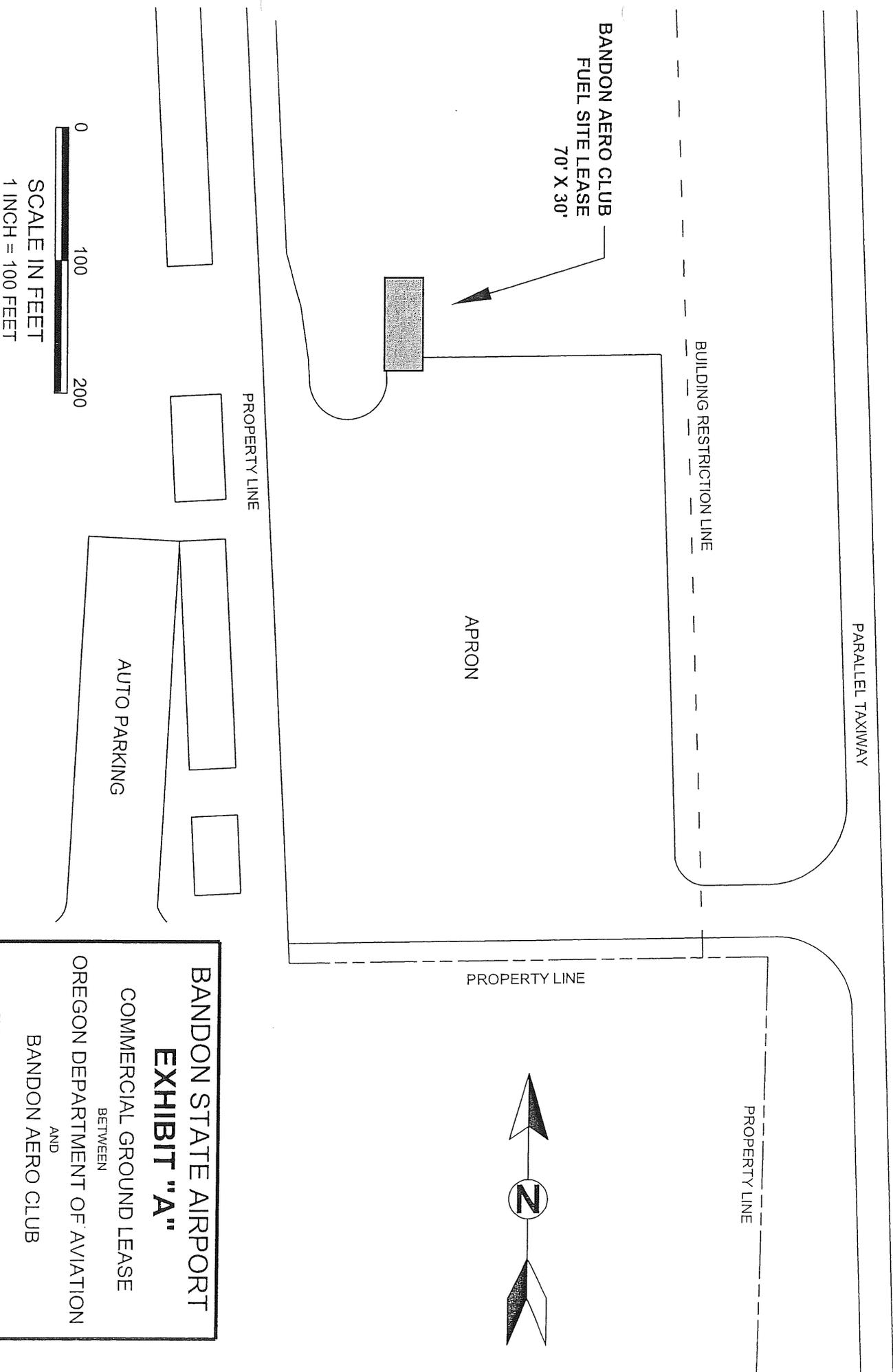
PERMITTEE: Bandon Aero Club

BY: Robert L. Thrush  
~~Dave Cameron~~ Robert L. Thrush  
BAC President

DATE 11-21-05

Mailing Address: P.O. Box 1007 Bandon, OR 97411

Telephone (Res) 541-347-5078 (bus) \_\_\_\_\_



0 100 200  
 SCALE IN FEET  
 1 INCH = 100 FEET

**BANDON STATE AIRPORT**  
**EXHIBIT "A"**  
 COMMERCIAL GROUND LEASE  
 BETWEEN  
 OREGON DEPARTMENT OF AVIATION  
 AND  
 BANDON AERO CLUB  
 DWN. BY: M.R. DECEMBER 4, 2000



EXHIBIT B  
PER AIRCRAFT WEIGHT BASED FEE

<u>Aircraft Weight Class</u>	<u>Weight Range</u>	<u>Monthly Fee Per Aircraft</u>
Class 1	Up to 5,000 lbs.	\$15.00
Class 2	5,001-10,000 lbs.	\$24.00
Class 3	10,001-20,000 lbs.	\$44.00
Class 4	20,001-30,000 lbs.	\$66.00
Class 5	30,001-40,000 lbs.	\$88.00
Class 6	40,001 lbs. and over	\$120.00

## Glossary of Terms



# GLOSSARY OF AVIATION TERMS

*The following glossary of aviation terms was compiled from a variety of aviation industry sources.*

**Above Ground Level (AGL)** – As measured above the ground; used to identify heights of built items (towers, etc.) on aeronautical charts in terms of absolute height above the ground.

**Accelerate Stop Distance Available (ASDA)** – The length of the takeoff run available plus the length of a stopway, when available.

**Agricultural Aviation** – The use of fixed-wing or rotor-wing aircraft in the aerial application of agricultural products (i.e., fertilizers, pesticides, etc.).

**Air Cargo** - All commercial air express and air freight with the exception of airmail and parcel post.

**Air Carrier/Airline** - All regularly scheduled airline activity performed by airlines certificated in accordance with Federal Aviation Regulations (FAR Part 121).

**Air Taxi** - Operations of aircraft "for hire" for specific trips, commonly referred to as aircraft available for charter (FAR Part 135).

**Aircraft Approach Category** - Grouping of aircraft based on the speed they are traveling when configured for landing (typically 1.3 times the aircraft stall speed in landing configuration). As a rule of thumb, slower approach speeds mean smaller airport dimensions and faster approach speeds require larger dimensions. The aircraft approach categories are:

- Category A - Speed less than 91 knots;
- Category B - Speed 91 knots or more but less than 121 knots
- Category C - Speed 121 knots or more but less than 141 knots
- Category D - Speed 141 knots or more but less than 166 knots
- Category E - Speed 166 knots or more

**Aircraft Holding Area** – An area typically located adjacent to a taxiway and runway end designed to accommodate aircraft prior to departure (for pre-takeoff engine checks, instrument flight plan clearances, etc.). Per FAA design standards, aircraft holding areas should be located outside the runway safety area (RSA) and obstacle free zone (OFZ) and aircraft located in the holding area should not interfere with normal taxiway use (taxiway object free area). Sometimes referred to as holding bays or "elephant ear." Smaller areas (aircraft turnarounds) are used to facilitate aircraft movement on runways

without exit taxiways or where back-taxiing is required.

**Aircraft Operation** - A landing or takeoff is one operation. An aircraft that takes off and then lands creates two aircraft operations.

**Aircraft Owners and Pilots Association (AOPA)** – A general aviation organization.

**Aircraft Parking Line (APL)** – A setback depicted on an ALP or other drawings that defines the minimum separation between aircraft parking areas and an adjacent runway or taxiway. The APL dimension reflects runway and taxiway clearances (object free area, etc.) and FAR Part 77 airspace surface clearance (transitional surface penetrations) for parked aircraft. Typically the tail height of the parked aircraft is used to determine adequate clearance for the transitional surface.

**Airplane Design Group** - A grouping of airplanes based on wingspan and tail height. As with Approach Category, the wider the wingspan, the bigger the aircraft is, the more room it takes up for operating on an airport. The Airplane Design Groups are:

- Group I: Up to but not including 49 feet or tail height up to but not including 20 feet.
- Group II: 49 feet up to but not including 79 feet or tail height from 20 up to but not including 30 feet.
- Group III: 79 feet up to but not including 118 feet or tail height from 30 up to but not including 45 feet.
- Group IV: 118 feet up to but not including 171 feet or tail height from 45 up to but not including 60 feet.
- Group V: 171 feet up to but not including 214 feet or tail height from 60 up to but not including 66 feet.
- Group VI: 214 feet up to but not including 262 feet or tail height from 66 up to but not including 80 feet.

**Airport** - A landing area regularly used by aircraft for receiving or discharging passengers or cargo, including heliports and seaplane bases.

**Airport Beacon (also Rotating Beacon)** – A visual navigational aid that displays alternating green and white flashes for a lighted land airport and white for an unlighted land airport.

# GLOSSARY OF AVIATION TERMS

**Airports District Office (ADO)** - The "local" office of the FAA that coordinates planning and construction projects. The Seattle ADO is responsible for airports located in Washington, Oregon, and Idaho.

**Airport Improvement Program (AIP)** - The funding program administered by the Federal Aviation Administration (FAA) with user fees which are dedicated to improvement of the national airport system. This program currently provides 95% of funding for eligible airport improvement projects. The local sponsor of the project (i.e., airport owner) provides the remaining 5% known as the "match."

**Airport Layout Plan (ALP)** - The FAA approved drawing which shows the existing and anticipated layout of an airport for the next 20 years. An ALP is prepared using FAA design standards. Future development projects must be consistent with the ALP to be eligible for FAA funding. ALP drawings are typically updated every 7 to 10 years to reflect significant changes, or as needed.

**Airport Reference Code (ARC)** - An FAA airport coding system that is defined based on the critical or design aircraft for an airport or individual runway. The ARC is an alpha-numeric code based on aircraft approach speed and airplane wingspan (see definitions in glossary). The ARC is used to determine the appropriate design standards for runways, taxiways, and other associated facilities. An airport designed to accommodate a Piper Cub (an A-I aircraft) requires less room than an airport designed to accommodate a Boeing 747 (a D-V aircraft).

**Airport Reference Point (ARP)** - The approximate mid-point of an airfield that is designated as the official airport location.

**Aircraft Rescue and Fire Fighting (ARFF)** - On airport emergency response required for certificated commercial service airports (see FAR Part 139).

**Airside** - The portion of an airport that includes aircraft movement areas (runways, taxiways, etc.).

**Airspace** - The area above the ground in which aircraft travel. It is divided into enroute and terminal airspace, with corridors, routes, and restricted zones established for the control and safety of air traffic.

**Alternate Airport** - An airport that is available for landing when the intended airport becomes unavailable. Required for instrument flight planning in the event that weather conditions at destination airport fall below approach minimums (cloud ceiling or visibility).

**Annual Service Volume (ASV)** - An estimate of how many aircraft operations an airport can handle based upon the number, type and configuration of runways, aircraft mix (large vs. small, etc.), instrumentation, and weather conditions with a "reasonable" amount of delay. ASV is a primary planning standard used to determine when a runway (or an airport) is nearing its capacity, and may require new runways or taxiways. As operations levels approach ASV, the amount of delay per operation increases; once ASV is exceeded, "excessive" delay generally exists.

**Approach End of Runway** - The end of the runway used for landing. Pilots generally land into the wind and choose a runway end that best aligns with the wind.

**Approach Light System (ALS)** - Configurations of lights positioned symmetrically beyond the runway threshold and the extended runway centerline. The ALS visually augments the electronic navigational aids for the runway.

**Approach Reference Code (APRC)** - The APRC is composed of three components: AAC, ADG, and visibility minimums. Visibility minimums are expressed as Runway Visual Range (RVR) values in feet of 1600, 2400, 4000, and 5000 (nominally corresponding to lower than 1/2 mile, lower than 3/4 mile but not lower than 1/2 mile, not lower than 3/4 mile, and not lower than one mile, respectively).

**Approach Surface (Also FAR Part 77 Approach)** - An imaginary (invisible) surface that rises and extends from the ends of a runway to provide an unobstructed path for aircraft to land or take off. The size and slope of the approach surface vary depending upon the size of aircraft that are accommodated and the approach capabilities (visual or instrument).

**Apron** - An area on an airport designated for the parking, loading, fueling, or servicing of aircraft (also referred to as tarmac and ramp).

**Aqueous Film Forming Foam (AFFF)** - A primary fire-fighting agent that is used to create a blanket that smothers flame or prevents ignition (fuel spills, etc.). AFFF is also used to foam runways during emergency landings.

**Asphalt or Asphaltic Concrete (AC)** - Flexible oil-based pavement used for airfield facilities (runways, taxiways, aircraft parking apron, etc.); also commonly used for road construction.

# GLOSSARY OF AVIATION TERMS

**Automated Surface Observation System (ASOS) and Automated Weather Observation System (AWOS)** – Automated observation systems providing continuous on-site weather data, designed to support aviation activities and weather forecasting.

**AVGAS** – Highly refined gasoline used in airplanes with piston engines. The current grade of AVGAS available is 100 Octane Low Lead (100LL).

**Avigation Easement** - A grant of property interest (airspace) over land to ensure unobstructed flight. Typically acquired by airport owners to protect the integrity of runway approaches. Restrictions typically include maximum height limitations for natural (trees, etc.) or built items, but may also address permitted land uses by the owner of the underlying land that are compatible with airport operations.

**Back-Taxiing** – The practice of aircraft taxiing on a runway before takeoff or after landing, normally, in the opposite direction of the runway's traffic pattern. Back-taxiing is generally required on runways without taxiway access to both runway ends.

**Based Aircraft** - Aircraft permanently stationed at an airport usually through some form of agreement with the airport owner. Used as a measure of activity at an airport.

**Capacity** - A measure of the maximum number of aircraft operations that can be accommodated on the runways of an airport in an hour.

**Ceiling** – The height above the ground or water to base of the lowest cloud layers covering more than 50 percent of the sky.

**Charter** - Operations of aircraft "for hire" for specific trips, commonly referred to an aircraft available for charter.

**Circle to Land or Circling Approach** – An instrument approach procedure that allows pilots to "circle" the airfield to land on any authorized runway once visual contact with the runway environment is established and maintained throughout the procedure.

**Commercial Service Airport** - An airport designed and constructed to serve scheduled or unscheduled commercial airlines. Commercial service airports are certified under FAR Part 139.

**Common Traffic Advisory Frequency (CTAF)** – A frequency used by pilots to communicate and obtain airport advisories at an uncontrolled airport.

**Complimentary Fire Extinguishing Agent** – Fire extinguishing agents that provide rapid fire suppression, which may be used in conjunction with principal agents (e.g., foam). Examples include sodium-based and potassium-based dry chemicals, Halocarbons, and Carbon dioxide. Also recommended for electrical and metal fires where water-based foams are not used. Complimentary agents are paired with principal agents based on their compatibility of use.

**Conical Surface** - One of the "FAR Part 77 "Imaginary" Surfaces. The conical surface extends outward and upward from the edge of the horizontal surface at a slope of 20:1 to a horizontal distance of 4,000 feet.

**Controlling Obstruction** – The highest obstruction relative to a defined plane of airspace (i.e., approach surface, etc.).

**Critical Aircraft** - Aircraft which controls one or more design items based on wingspan, approach speed and/or maximum certificated take-off weight. The same aircraft may not be critical to all design items (i.e., runway length, pavement strength, etc.). Also referred to as "design aircraft."

**Crosswind** - Wind direction that is not parallel to the runway or the path of an aircraft.

**Crosswind Runway** – An additional runway (secondary, tertiary, etc.) that provides wind coverage not adequately provided by the primary runway. Crosswind runways are generally eligible for FAA funding when a primary runway accommodates less than 95 percent of documented wind conditions (see wind rose).

**Decision Height (DH)** – For precision instrument approaches, the height (typically in feet or meters above runway end touchdown zone elevation) at which a decision to land or execute a missed approach must be made by the pilot.

**Declared Distances** – The distances the airport owner declares available for airplane operations (e.g., takeoff run, takeoff distance, accelerate-stop distance, and landing distance). In cases where runways meet all FAA design criteria without modification, declared distances equal the total runway length. In cases where any declared distances are less than full runway length, the dimension should be published in the FAA Airport/Facility Directory (A/FD).

**Departure Reference Code (DPRC)** – The DPRC represents aircraft that can take off from a runway while any aircraft are present on adjacent taxiways, under particular meteorological conditions with no special operational procedures necessary.

# GLOSSARY OF AVIATION TERMS

**Departure Surface** – A surface that extends upward from the departure end of an instrument runway that should be free of any obstacle penetrations. For instrument runways other than air carrier, the slope is 40:1, extending 10,200 feet from the runway end. Air carrier runways have a similar surface designed for one-engine inoperative conditions with a slope of 62.5: 1.

**Design Aircraft** - Aircraft which controls one or more design items based on wingspan, approach speed and/or maximum certificated takeoff weight. The same aircraft may not represent the design aircraft for all design items (i.e., runway length, pavement strength, etc.). Also referred to as “critical aircraft.”

**Displaced Threshold** – A landing threshold located at a point other than on the runway end, usually provided to mitigate close-in obstructions to runway approaches for landing aircraft. The area between the runway end and the displaced threshold accommodates aircraft taxi and takeoff, but not landing.

**Distance Measuring Equipment (DME)** – Equipment that provides electronic distance information to enroute or approaching aircraft from a land-based transponder that sends and receives pulses of fixed duration and separation. The ground stations are typically co-located with VORs, but they can also be co-located with an ILS.

**Distance Remaining Signs** – Airfield signs that indicate to pilots the amount of useable runway remaining in 1,000-foot increments. The signs are located along the side of the runway, visible for each direction of runway operation.

**DNL** - Day-night sound levels, a mathematical method of measuring noise exposure based on cumulative, rather than single event impacts. Night time operations (10pm to 7AM) are assessed a noise penalty to reflect the increased noise sensitivity that exists during normal hours of rest. Previously referred to as Ldn.

**Easement** – An agreement that provides use or access of land or airspace (see aviation easement) in exchange for compensation.

**Enplanements** - Domestic, territorial, and international revenue passengers who board an aircraft in the states in scheduled and non-scheduled service of aircraft in intrastate, interstate, and foreign commerce and includes in-transit passengers (passengers on board international flights that transit an airport in the US for non-traffic purposes).

**Entitlements** - Distribution of Airport Improvement Plan (AIP) funds by FAA from the Airport & Airways Trust Fund to commercial service airport sponsors based on passenger enplanements or cargo volumes and smaller fixed amounts for general aviation airports (Non-Primary Entitlements).

**Experimental Aircraft** – See homebuilt aircraft.

**Federal Aviation Administration (FAA)** - The FAA is the branch of the U.S. Department of Transportation that is responsible for the development of airports and air navigation systems.

**FAR Part 77** - Federal Air Regulations (FAR) which establish standards for determining obstructions in navigable airspace and defines imaginary (airspace) surfaces for airports and heliports that are designed to prevent hazards to air navigation. FAR Part 77 surfaces include approach, primary, transitional, horizontal, and conical surfaces. The dimensions of surfaces can vary with the runway classification (large or small airplanes) and approach type of each runway end (visual, non-precision instrument, precision instrument). The slope of an approach surface also varies by approach type and runway classification. FAR Part 77 also applies to helicopter landing areas.

**FAR Part 139** - Federal Aviation Regulations which establish standards for airports with scheduled passenger commercial air service. Airports accommodating scheduled passenger service with aircraft more than 9 passenger seats must be certified as a “Part 139” airport. Airports that are not certified under Part 139 may accommodate scheduled commercial passenger service with aircraft having 9 passenger seats or less.

**Final Approach Fix (FAF)** – The fix (location) from which the final instrument approach to an airport is executed; also identifies beginning of final approach segment.

**Final Approach Point (FAP)** – For non-precision instrument approaches, the point at which an aircraft is established inbound for the approach and where the final descent may begin.

**Fixed Base Operator (FBO)** - An individual or company located at an airport providing aviation services. Sometimes further defined as a "full service" FBO or a limited service. Full service FBOs typically provide a broad range of services (flight instruction, aircraft rental, charter, fueling, repair, etc.) where a limited service FBO provides only one or two services (such as fueling, flight instruction or repair).

**Fixed Wing** - A plane with one or more "fixed wings," as opposed to a helicopter that utilizes a rotary wing.

# GLOSSARY OF AVIATION TERMS

**Flexible Pavement** – Typically constructed with an asphalt surface course and one or more layers of base and subbase courses that rest on a subgrade layer.

**Flight Service Station (FSS)** – FAA or contracted service for pilots to contact (on the ground or in the air) to get weather and airport information. Flight plans are also filed with the FSS.

**General Aviation (GA)** - All civil (non-military) aviation operations other than scheduled air services and non-scheduled air transport operations for hire.

**Glide Slope (GS)** – For precision instrument approaches, such as an instrument landing system (ILS), the component that provides electronic vertical guidance to aircraft.

**Global Positioning System (GPS)** - GPS is a system of navigating which uses multiple satellites to establish the location and altitude of an aircraft with a high degree of accuracy. GPS supports both enroute flight and instrument approach procedures.

**Helicopter Landing Pad (Helipad)** – A designated landing area for rotor wing aircraft. Requires protected FAR Part 77 imaginary surfaces, as defined for heliports (FAR Part 77.29).

**Helicopter Parking Area** – A designated area for rotor wing aircraft parking that is typically accessed via hover-taxi or ground taxiing from a designated landing area (e.g., helipad or runway-taxiway system). If not used as a designated landing area, helicopter parking pads do not require dedicated FAR Part 77 imaginary surfaces.

**Heliport** – A designated helicopter landing facility (as defined by FAR Part 77).

**Height Above Airport (HAA)** – The height of the published minimum descent altitude (MDA) above the published airport elevation. This is normally published in conjunction with circling minimums.

**High Intensity Runway Lights (HIRL)** - High intensity (i.e., very bright) lights are used on instrument runways to help pilots to see the runway when visibility is poor.

**High Speed (Taxiway) Exit** – An acute-angled exit taxiway extending from a runway to an adjacent parallel taxiway which allows landing aircraft to exit the runway at a higher rate of speed than is possible with standard (90-degree) exit taxiways.

**Hold Line (Aircraft Hold Line)** – Pavement markings located on taxiways that connect to runways, indicating where aircraft should stop before entering runway environment. At controlled

airports, air traffic control clearance is required to proceed beyond a hold line. At uncontrolled airports, pilots are responsible for ensuring that a runway is clear prior to accessing for takeoff.

**Hold/Holding Procedure** – A defined maneuver in controlled airspace that allows aircraft to circle above a fixed point (often over a navigational aid or GPS waypoint) and altitude while awaiting further clearance from air traffic control.

**Home Built Aircraft** - An aircraft built by an amateur from a kit or specific design (not an FAA certified factory built aircraft). The aircraft built under the supervision of an FAA-licensed mechanic and are certified by FAA as “Experimental.”

**Horizontal Surface** - One of the FAR Part 77 Imaginary (invisible) Surfaces. The horizontal surface is an imaginary flat surface 150 feet above the established airport elevation (typically the highest point on the airfield). Its perimeter is constructed by swinging arcs (circles) from each runway end and connecting the arcs with straight lines. The oval-shaped horizontal surface connects to other Part 77 surfaces extending upward from the runway and also beyond its perimeter.

**Initial Approach Point/Fix (IAP/IAF)** – For instrument approaches, a designated point where an aircraft may begin the approach procedure.

**Instrument Approach Procedure (IAP)** – A series of defined maneuvers designed to enable the safe transition between enroute instrument flight and landing under instrument flight conditions at a particular airport or heliport. IAPs define specific requirements for aircraft altitude, course, and missed approach procedures. See precision or non-precision instrument approach.

**Instrument Flight Rules (IFR)** - IFR refers to the set of rules pilots must follow when they are flying in bad weather. Pilots are required to follow these rules when operating in controlled airspace with visibility (ability to see in front of themselves) of less than three miles and/or ceiling (a layer of clouds) lower than 1,000 feet.

**Instrument Landing System (ILS)** - An ILS is an electronic navigational aid system that guides aircraft for a landing in bad weather. Classified as a precision instrument approach, it is designed to provide a precise approach path for course alignment and vertical descent of aircraft. Generally consists of a localizer, glide slope, outer marker, and middle marker. ILS runways are generally equipped with an approach lighting system (ALS) to maximize approach capabilities. A Category I ILS allows aircraft to descend as low as 200 feet above runway elevation with ½ mile visibility.

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**Instrument Meteorological Conditions (IMC)** - Meteorological conditions expressed in terms of visibility, distance from clouds, and ceiling less than minima specified for visual meteorological conditions.

**Instrument Runway** - A runway equipped with electronic navigational aids that accommodate straight-in precision or non-precision instrument approaches.

**Itinerant Operation** - All aircraft operations at an airport other than local, i.e., flights that come in from another airport.

**Jet Fuel** - Highly refined grade of kerosene used by turbine engine aircraft. Jet-A is currently the common commercial grade of jet fuel.

**Knot (Nautical Mile)** - one nautical mile = 1.152 statute miles.

**Landing Area** - That part of the movement area intended for the landing and takeoff of aircraft.

**Landing Distance Available (LDA)** - The length of runway which is available and suitable for the ground run of an airplane landing.

**Landside** - The portion of an airport that includes aircraft parking areas, fueling, hangars, airport terminal area facilities, vehicle parking and other associated facilities.

**Larger than Utility Runway** - As defined under FAR Part 77, a runway designed and constructed to serve large planes (aircraft with maximum takeoff weights greater than 12,500 pounds).

**Ldn** - Noise measurement metric (see DNL).

**Left Traffic** - A term used to describe which side of a runway the airport traffic pattern is located. Left traffic indicates that the runway will be to the pilot's left when in the traffic pattern. Left traffic is standard unless otherwise noted in facility directories at a particular airport.

**Large Aircraft** - An aircraft with a maximum takeoff weight more than 12,500 lbs.

**Light Sport Aircraft (LSA)** - A basic aircraft certified by FAA that can be flown by pilots with limited flight training (Sport Pilot certificates), but also provide lower cost access to basic aircraft for all pilot levels. LSA design limits include maximum a gross takeoff weight of 1,320 pounds (land planes) and a maximum of two seats.

**Local Area Augmentation System (LAAS)** - GPS-based instrument approach that utilizes ground-based systems to augment satellite coverage to provide vertical (glideslope) and horizontal (course) guidance.

**Local Operation** - Aircraft operation in the traffic pattern or within sight of the tower, or aircraft known to be departing or arriving from flight in local practice areas, or aircraft executing practice instrument approaches at the airport.

**Localizer** - The component of an instrument landing system (ILS) that provides electronic lateral (course) guidance to aircraft. Also used to support non-precision localizer approaches.

**LORAN C** - A navigation system using land based radio signals, which indicates position and ground speed, but not elevation. (See GPS)

**Localizer Performance with Vertical Guidance (LPV)** - Satellite navigation (SATNAV) based GPS approaches providing "near category I" precision approach capabilities with course and vertical guidance. LPV approaches are expected to eventually replace traditional step-down, VOR and NDB procedures by providing a constant, ILS glideslope-like descent path. LPV approaches use high-accuracy WAAS signals, which allow narrower glideslope and approach centerline obstacle clearance areas.

**Magnetic Declination** - Also called magnetic variation, is the angle between magnetic north and true north. Declination is considered positive east of true north and negative when west. Magnetic declination changes over time and with location. Runway end numbers, which reflect the magnetic heading/alignment (within 5 degrees +/-) occasionally require change due to declination.

**MALS** - **Medium-intensity Approach Lighting System with Runway alignment indicator lights.** An approach lighting system (ALS) which provides visual guidance to landing aircraft.

**Medevac** - Fixed wing or rotor-wing aircraft used to transport critical medical patients. These aircraft are equipped to provide life support during transport.

**Medium Intensity Runway Lights (MIRL)** - Runway edge lights which are not as intense as HIRLs (high intensity runway lights). Typical at medium and smaller airports which do not have sophisticated instrument landing systems.

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**Microwave Landing System (MLS)** - An instrument landing system operating in the microwave spectrum, which provides lateral and vertical guidance to aircraft with compatible equipment. Originally developed as the "next-generation" replacement for the ILS, the FAA discontinued the MLS program in favor of GPS-based systems.

**Minimum Descent Altitude (MDA)** – The lowest altitude in a non-precision instrument approach that an aircraft may descend without establishing visual contact with the runway or airport environment.

**Minimums** - Weather condition requirements established for a particular operation or type of operation.

**Missed Approach Procedure** – A prescribed maneuver conducted by a pilot when an instrument approach cannot be completed to a landing. Usually requires aircraft to climb from the airport environment to a specific holding location where another approach can be executed or the aircraft can divert to another airport.

**Missed Approach Point (MAP)** – The defined location in a non-precision instrument approach where the procedure must be terminated if the pilot has not visually established the runway or airport environment.

**Movement Area** - The runways, taxiways and other areas of the airport used for taxiing, takeoff and landing of aircraft, i.e., for aircraft movement.

**MSL** - Elevation above Mean Sea Level.

**National Plan of Integrated Airport Systems (NPIAS).** The NPIAS is the federal airport classification system that includes public use airports that meet specific eligibility and activity criteria. A "NPIAS designation" is required for an airport to be eligible to receive FAA funding for airport projects.

**Navigational Aid (Navaid)** - Any visual or electronic device that helps a pilot navigate. Can be for use to land at an airport or for traveling from point A to point B.

**Noise Contours** – Continuous lines of equal noise level usually drawn around a noise source, such as runway, highway or railway. The lines are generally plotted in 5-decibel increments, with higher noise levels located nearer the noise source, and lesser exposure levels extending away from the source.

**Non-directional Beacon (NDB)** - Non-Directional Beacon which transmits a signal on which a pilot may "home" using equipment installed in the aircraft.

**Non-Precision Instrument (NPI) Approach** - A non-precision instrument approach provides horizontal (course) guidance to pilots for landing. NPI approaches often involve a series of "step down" sequences where aircraft descend in increments (based on terrain clearance), rather than following a continuous glide path. The pilot is responsible for maintaining altitude control between approach segments since no "vertical" guidance is provided.

**Obstacle Clearance Surface (OCS)** – As defined by FAA, an approach surface that is used in conjunction with alternative threshold siting/clearing criteria to mitigate obstructions within runway approach surfaces. Dimensions, slope and placement depend on runway type and approach capabilities. Also known as Obstacle Clearance Approach (OCA).

**Obstruction** - An object (tree, house, road, phone pole, etc.) that penetrates an imaginary surface described in FAR Part 77.

**Obstruction Chart (OC)** - A chart that depicts surveyed obstructions that penetrate an FAR Part 77 imaginary surface surrounding an airport. OC charts are developed by the National Ocean Service (NOS) based on a comprehensive survey that provides detailed location (latitude/longitude coordinates) and elevation data in addition to critical airfield data.

**Parallel Taxiway** – A taxiway that is aligned parallel to a runway, with connecting taxiways to allow efficient movement of aircraft between the runway and taxiway. The parallel taxiway effectively separates taxiing aircraft from arriving and departing aircraft located on the runway. Used to increase runway capacity and improve safety.

**Passenger Facility Charge (PFC)** – A user fee charged by commercial service airports for enplaning passengers. Airports must apply to the FAA and meet certain requirements in order to impose a PFC.

**Pavement Condition Index (PCI)** – A scale of 0-100 that is used to rate airfield pavements ranging from failed to excellent based on visual inspection. Future PCIs can be predicted based on pavement type, age, condition and use as part of a pavement maintenance program.

**Pavement Strength or Weight Bearing Capacity** – The design limits of airfield pavement expressed in maximum aircraft weight for specific and landing gear configurations (i.e., single wheel, dual wheel, etc.) Small general aviation airport pavements are typically designed to accommodate aircraft weighing up to 12,500 pounds with a single-wheel landing gear.

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**Portland Cement Concrete (PCC)** – Rigid pavement used for airfield facilities (runways, taxiways, aircraft parking, helipads, etc.).

**Precision Approach Path Indicator (PAPI)** - A system of lights located by the approach end of a runway that provides visual approach slope guidance to aircraft during approach to landing. The lights typically show green if a pilot is on the correct flight path, and turn red if a pilot is too low.

**Precision Instrument Runway (PIR)** - A runway equipped with a "precision" instrument approach (descent and course guidance), which allows aircraft to land in bad weather.

**Precision Instrument Approach** – An instrument approach that provides electronic lateral (course) and vertical (descent) guidance to a runway end. A non-precision instrument approach typically provides only course guidance and the pilot is responsible for managing defined altitude assignments at designated points within the approach.

**Primary Runway** - That runway which provides the best wind coverage, etc., and receives the most usage at the airport.

**Primary Surface** - One of the FAR Part 77 Imaginary Surfaces, the primary surface is centered on top of the runway and extends 200 feet beyond each end. The width is from 250' to 1,000' wide depending upon the type of airplanes using the runway.

**Principal Fire Extinguishing Agent** – Fire extinguishing agents that provide permanent control of fire through a fire-smothering foam blanket. Examples include protein foam, aqueous film forming foam and fluoroprotein foam.

**Procedure Turn (PT)** - A maneuver in which a turn is made away from a designated track followed by a turn in an opposite direction to permit an aircraft to intercept the track in the opposite direction (usually inbound).

**Area Navigation (RNAV)** - is a method of instrument flight navigation that allows an aircraft to choose a course within a network of navigation beacons rather than navigating directly to and from the beacons. Originally developed in the 1960, RNAV elements are now being integrated into GPS-based navigation.

**Relocated Threshold** – A runway threshold (takeoff and landing point) that is located at a point other than the (original) runway end. Usually provided to mitigate nonstandard runway safety area (RSA) dimensions beyond a runway end. When a runway threshold is relocated, the published length of the runway is reduced and the pavement between the relocated threshold and to the original end of the

runway is not available for aircraft takeoff or landing. This pavement is typically marked as taxiway, marked as unusable, or is removed.

**Required Navigation Performance (RNP)** – A type of performance-based navigation system that allows an aircraft to fly a specific path between two 3-dimensionally defined points in space. RNP approaches require on-board performance monitoring and alerting. RNP also refers to the level of performance required for a specific procedure or a specific block of airspace. For example, an RNP of .3 means the aircraft navigation system must be able to calculate its position to within a circle with a radius of 3 tenths of a nautical mile. RNP approaches have been designed with RNP values down to .1, which allow aircraft to follow precise 3 dimensional curved flight paths through congested airspace, around noise sensitive areas, or through difficult terrain.

**Rigid Pavement** – Typically constructed of Portland cement concrete (PCC), consisting of a slab placed on a prepared layer of imported materials.

**Rotorcraft** - A helicopter.

**Runway** – A defined area intended to accommodate aircraft takeoff and landing. Runways may be paved (asphalt or concrete) or unpaved (gravel, turf, dirt, etc.), depending on use. Water runways are defined takeoff and landing areas for use by seaplanes.

**Runway Bearing** – The angle of a runway centerline expressed in degrees (east or west) relative to true north.

**Runway Design Code (RDC)** – The RDC is comprised of the AAC, ADG, and approach visibility minimums of a particular runway. The RDC provides the information needed to determine applicable design standards. The AAC is based on aircraft approach speed. The ADG is based on either the aircraft wingspan or tail height; (whichever is most restrictive) of the largest aircraft expected to operate on the runway and taxiways adjacent to the runway. The approach visibility minimums represent RVR values in feet of 1,200, 1,600, 2,400, 4,000, and 5,000 (corresponding to lower than 1/4 mile, lower than 1/2 mile but not lower than 1/4 mile, lower than 3/4 mile but not lower than 1/2 mile, lower than 1 mile but not lower than 3/4 mile, and not lower than 1 mile, respectively).

**Runway Designation Numbers** – Numbers painted on the ends of a runway indicating runway orientation (in degrees) relative to magnetic north. "20" = 200 degrees magnetic, which means that the final approach for Runway 20 is approximately 200 degrees (+/- 5 degrees).

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**Runway End Identifier Lights (REILs)** - Two high-intensity sequenced strobe lights that help pilots identify a runway end during landing in darkness or poor visibility.

**Runway Object Free Area (OFA)** – A defined area surrounding a runway that should be free of any obstructions that could interfere with aircraft operations. The dimensions for the OFA increase for runways accommodating larger or faster aircraft.

**Runway Protection Zone (RPZ)** – A trapezoid-shaped area located beyond the end of a runway that is intended to be clear of people or built items. The geometry of the RPZ often coincides with the inner portion of the runway approach surface. However, unlike the approach surface, the RPZ is a defined area on the ground that does not have a vertical slope component for obstruction clearance. The size of the RPZ increases as runway approach capabilities or aircraft approach speeds increase. Previously defined as “clear zone.”

**Runway Safety Area (RSA)** – A symmetrical ground area extending along the sides and beyond the ends of a runway that is intended to accommodate inadvertent aircraft passage without causing damage. The dimensions for the RSA increase for runways accommodating larger or faster aircraft. FAA standards include surface condition (compaction, etc.) and absence of obstructions. Any items that must be located within an RSA because of their function (runway lights, airfield signage, wind cones, etc.) must be frangible (breakable) to avoid significant aircraft damage.

**Segmented Circle** - A system of visual indicators designed to show a pilot in the air the direction of the traffic pattern at that airport.

**Small Aircraft** - An aircraft that weighs 12,500 lbs. or less.

**Straight-In Approach** – An instrument approach that directs aircraft to a specific runway end.

**Statute Mile** – 5,280 feet (a nautical mile = 6,080 feet).

**Stop and Go** – An aircraft operation where the aircraft lands and comes to a full stop on the runway before takeoff is initiated.

**T-Hangar** – A rectangular aircraft storage hangar with several interlocking "T" units that minimize building per storage unit. Usually two-sided with either bi-fold or sliding doors.

**Takeoff Distance Available (TODA)** – the length of the takeoff run available plus the length of clearway, if available.

**Takeoff Run Available (TORA)** – the length of runway available and suitable for the ground run of aircraft when taking off.

**Taxilane** – A defined path used by aircraft to move within aircraft parking apron, hangar areas and other landside facilities.

**Taxiway** – A defined path used by aircraft to move from one point to another on an airport.

**Threshold** – The beginning of that portion of a runway that is useable for landing.

**Taxiway Design Group (TDG)** – The TDG is based on the undercarriage dimensions of the aircraft. TDG is used to determine taxiway/taxilane width and fillet standards, and in some instances, runway to taxiway and taxiway/taxilane separation requirements.

**Threshold Lights** – Components of runway edge lighting system located at the ends of runways and at displaced thresholds. Threshold lights typically have split lenses (green/red) that identify the beginning and ends of usable runway.

**Through-the-Fence** – Term used to describe how off-airport aviation users (private airparks, hangars, etc.) access an airport “through-the-fence,” rather than having facilities located on airport property.

**Tiedown** - A place where an aircraft is parked and "tied down." Surface can be grass, gravel or paved. Tiedown anchors may be permanently installed or temporary.

**Touch and Go** – An aircraft operation involving a landing followed by a takeoff without the aircraft coming to a full stop or exiting the runway.

**Traffic Pattern** - The flow of traffic that is prescribed for aircraft landing and taking off from an airport. Traffic patterns are typically rectangular in shape, with upwind, crosswind, base and downwind legs and a final approach surrounding a runway.

**Traffic Pattern Altitude** - The established altitude for a runway traffic pattern, typically 800 to 1,000 feet above ground level (AGL).

**Transitional Surfaces** - One of the FAR Part 77 Imaginary Surfaces, the transitional surface extend outward and upward at right angles to the runway centerline and the extended runway centerline at a slope of 7:1 from the sides of the primary surface and from the sides of the approach surfaces.

**Universal Communications (UNICOM)** is an air-ground communication facility operated by a private agency to provide advisory service at uncontrolled airports.

# GLOSSARY OF AVIATION TERMS

**Utility Runway** – As defined under FAR Part 77, a runway designed and constructed to serve small planes (aircraft with maximum takeoff weights of 12,500 pounds or less).

**Vertical Navigation (VNAV)** – Vertical navigation descent data or descent path, typically associated with published GPS instrument approaches. The use of any VNAV approach technique requires operator approval, certified VNAV-capable avionics, and flight crew training.

**VOR - Very High Frequency Omnidirectional Range** – A ground based electronic navigational aid that transmits radials in all directions in the VHF frequency spectrum. The VOR provides azimuth guidance to aircraft by reception of radio signals.

**VORTAC** – VOR collocated with ultra-high frequency tactical air navigation (TACAN).

**Visual Approach Slope Indicator (VASI)** - A system of lights located by the approach end of a runway which provides visual approach slope guidance to aircraft during approach to landing. The lights typically show some combination of green and white if a pilot is on the correct flight path, and turn red if a pilot is too low.

**Visual Flight Rules (VFR)** - Rules that govern the procedures to conducting flight under visual conditions. The term is also used in the US to indicate weather conditions that are equal to or greater than minimum VFR requirements. In addition, it is used by pilots and controllers to indicate type of flight plan.

**Visual Guidance Indicator (VGI)** – Equipment designed to provide visual guidance for pilots for landing through the use of different color light beams. Visual Approach Slope Indicators (VASI) and Precision Approach Path Indicators (PAPI) defined above are examples.

**Waypoint** – A specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation.

**Wide Area Augmentation System (WAAS)** – GPS-based instrument approach that can provide both vertical (glideslope) and horizontal (course) guidance. WAAS-GPS approaches are able to provide approach minimums nearly comparable to a Category I Instrument Landing System (ILS).

**Wind Rose** - A diagram that depicts observed wind data direction and speed on a 360-degree compass rose. Existing or planned proposed runway alignments are overlain to determine wind coverage levels based on the crosswind limits of the design aircraft.

**Wind Cone** – A device located near landing areas used by pilots to verify wind direction and velocity. Usually manufactured with brightly colored fabric and may be lighted for nighttime visibility. Also referred to as “wind sock.”

## LIST OF ABBREVIATIONS

AC – Advisory Circular	MALS – Medium Intensity Approach Lighting System (MALS) with Runway Alignment Indicator Lights (RAIL)
AC – Asphaltic Concrete	MIRL – Medium Intensity Runway Lighting
ACM – Airport Certification Manual	MITL – Medium Intensity Taxiway Lighting
ADG – Airplane Design Group	MTOW – Maximum Takeoff Weight
ADO – Airport District Office	NAVAID – Navigation Aid
AGL – Above Ground Level	NDB – Non-Directional Beacon
AIP – Airport Improvement Program	NEPA – National Environmental Policy Act
ALP – Airport Layout Plan	NGS – National Geodetic Survey
ALS – Approach Lighting System	NPIAS – National Plan of Integrated Airport Systems
AOA – Airport Operations Area	OCS – Obstacle Clearance Surface
APL – Aircraft Parking Line	ODALS – Omnidirectional Airport Lighting System
APRC – Approach Reference Code	OFA – Object Free Area
ARC – Airport Reference Code	OFZ – Obstacle Free Zone
ARFF – Aircraft Rescue and Fire Fighting	PAPI – Precision Approach Path Indicator
ARP – Airport Reference Point	PCC – Portland Cement Concrete
ASDA – Accelerate-Stop Distance Available	PCI – Pavement Condition Index
ASV – Annual Service Volume	PCN – Pavement Condition Number
ATC – Air Traffic Control	POFZ – Precision Obstacle Free Zone
ATCT – Airport Traffic Control Tower	RAIL – Runway Alignment Indicator Lights
ASOS – Automated Surface Observation System	RDC – Runway Design Code
AWOS – Automated Weather Observation System	REIL – Runway End Identifier Lights
BRL – Building Restriction Line	RNAV – Area Navigation
CFR – Code of Federal Regulations	ROFA – Runway Object Free Area
CTAF – Common Traffic Advisory Frequency	ROFZ – Runway Obstacle Free Zone
DPRC – Departure Reference Code	RPZ – Runway Protection Zone
DME – Distance Measuring Equipment	RSA – Runway Safety Area
FAA – Federal Aviation Administration	RVR – Runway Visual Range
FAR – Federal Air Regulation	RVZ – Runway Visibility Zone
FBO – Fixed Base Operator	TDG – Taxiway Design Group
GIS – Geographic Information System	TSA – Taxiway Safety Area
GS – Glide Slope	TSA – Transportation Security Administration
GPS – Global Positioning System	TODA – Takeoff Distance Available
HIRL – High Intensity Runway Lighting	TOFA – Taxiway/Taxilane Object Free Area
IFR – Instrument Flight Rules	TORA – Takeoff Run Available
ILS – Instrument Landing System	TSS – Threshold Siting Surface
IMC – Instrument Meteorological Conditions	TVOR – Terminal Very High Frequency Omnidirectional Range
LDA – Landing Distance Available	UAS – Unmanned Aircraft Systems
LDA – Localizer Directional Aid	UGA – Urban Growth Area
LIRL – Low Intensity Runway Lighting	UGB – Urban Growth Boundary
LOC – Localizer	

## LIST OF ABBREVIATIONS

UHF – Ultra-High Frequency  
USDA – United States Department of Agriculture  
USGS – U. S. Geological Survey  
UNICOM – Universal Communications  
VASI – Visual Approach Slope Indicator  
VFR – Visual Flight Rules  
VGI - Visual Guidance Indicators  
VOR – Very High Frequency Omni-Directional Range



**OREGON**

BEND | 541.322.8962

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