Florence Municipal Airport Airport Layout Plan Update





FLORENCE MUNICIPAL AIRPORT AIRPORT MASTER PLAN UPDATE

FINAL REPORT

FEBRUARY 2010

Prepared for

City of Florence, Oregon

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Table of Contents

Chapter One	
Introduction	1-1
Summary of Preliminary Findings	
Summary of Conclusions & Recommendations	1-4
Chapter Two	
Inventory of Existing conditions	2-1
Airport Locale	2-1
Airport History	2-3
Geography/Geology	2-3
Climate	
Airfield Facilities	2-4
Landside Facilities	2-13
Airport Support Facilities	2-17
Airspace and Navigational Aids	
Airport Service Area	
Land Use Planning and Zoning	

Chapter Three

Aviation Activity Forecasts	3-1
Population and Economic Data	3-1
Aviation Activity Forecasts	3-6
Existing Forecasts	3-12
Updated Aviation Forecasts	3-14

Chapter Four

Airport Facility Requirements	4-1
Organization of Materials	4-1
Summary of Airport Conformance with FAA Standards	4-2
Airport Facility Requirements Evaluation	4-5
Airport Design Standards	4-10
FAR Part 77 Surfaces	4-20
Airside Requirements	4-26
Landside Facilities	4-32
Facility Requirements Summary	4-37

Chapter Five

Airport Development Alternatives	5-1
Preliminary Development Alternatives	5-2

Chapter Six	
Financial and Development Program	6-1
Airport Development Schedule and Cost Estimates	6-2
Capital Funding Sources	6-9
Chapter Seven	
Airport Layout Plan Drawings	7-1
Chapter Eight	
Environmental Review	8-1
Airport Noise Analysis	8-1
Air and Water Quality	8-10
Appendix A	A-1
Glossary of Aviation Terms	G-1

List of Tables

Table 2-1: Airport Data	2-6
Table 2-2: Runway & Taxiway Data	2-9
Table 2-3: Airport Lighting	2-11
Table 2-4: Summary of Airfield Pavement Condition	2-12
Table 2-5: Aircraft Apron Data	2-13
Table 2-6: Existing Buildings	2-16
Table 2-7: Navigational Aids and Related Items	2-20
Table 2-8: Airspace/Instrument Routes/Local Obstructions	2-21
Table 2-9: Public Use Airports in Vicinity	2-23
Table 2-10: Surrounding Land Use & Zoning	2-24
Table 3-1: Historic Area Population	3-2
Table 3-2: Local Population Distribution	3-3
Table 3-3: Population Forecasts	3-4
Table 3-4: FAA Long Range Forecast Assumptions	3-7
Table 3-5: Based Aircraft Summary	3-10
Table 3-6: ODA RENS Aircraft Activity Counts	3-11
Table 3-7: 1997 Airport Layout Plan Forecasts	3-12
Table 3-8: 2007 ODA & FAA TAF Forecasts	3-13
Table 3-9: Existing & Updated Aviation Forecasts	3-19
Table 3-10: Summary of Preferred Aviation Forecasts	3-20
Table 4-1: Florence Municipal Airport Land Use configuration	4-6
Table 4-2: Typical Aircraft & Design Categories	4-8
Table 4-3: Airport Design Standards Summary	4-11

Table 4-4: Runway 15/33 Current Conformance with FAA Design Standards &	
FAR Part 77 Airspace Surfaces	4-13
Table 4-5: FAR Part 77 Airspace Surfaces – Florence Municipal Airport	4-21
Table 4-6: FAA-Recommended Runway Lengths	4-28
Table 4-7: Summary of Recommended Airfield Pavement Maintenance	4-30
Table 4-8: Apron and Hangar Facility Requirements Summary	4-35
Table 4-9: Facility Requirements Summary ARC: B-I (Small)	4-38
Table 5-1: Comparison of Planning Level Cost Elements (runway)	5-5
Table 6-1: 20-Year Capital Improvement Program	5-7
Table 8-1: Land Use Compatibility with DNL	8-7
Table 8-2: Required Ratios* for Wetland Mitigation	8-11

Table of Figures

Figure 2-1: Location Map	2-2
Figure 2-2: Airport Existing Facilities	2-5
Figure 2-3: Area Airspace	2-22
Figure 3-1: Based Aircraft Forecasts	3-21
Figure 3-2: Aircraft Operations Forecasts	3-21
Figure 4-1: Conformance Items	4-3
Figure 4-2: Conformance Items	4-4
Figure 4-3: ARC	4-9
Figure 4-4: FAR Part 77 Diagram	4-22
Figure 4-5: FAR Part 77 Diagram	4-23
Figure 5-1: Runway Options A & B	5-9
Figure 5-2: Runway Option C	5-10
Figure 5-3: Apron Option A	5-11
Figure 5-4: Apron Option B	5-12
Figure 5-5: North Landside Option A	5-13
Figure 5-6: North Landside Option B	5-14
Figure 5-7: Preferred Runway Option	5-20
Figure 5-8: Terminal Area	5-21
ALP Drawings	7-2
Figure 8-1: Noise Contours	8-9





Florence Municipal Airport

CHAPTER ONE INTRODUCTION

The preparation of this document may have been supported, in part, through the Airport Improvement Program financial assistance from the Federal Aviation Administration as provided under Title 49, United States Code, section 47104. The contents do not necessarily reflect the official views or policy of the FAA. Acceptance of this report by the FAA does not in any way constitute a commitment on the part of the United States to participate in any development depicted therein nor does it indicate that the proposed development is environmentally acceptable with appropriate public laws.

Introduction

The City of Florence is preparing an updated Airport Master Plan and Airport Layout Plan (ALP) drawing set for Florence Municipal Airport (6S2) in cooperation with the Federal Aviation Administration (FAA).

Funding for the project is being provided through an FAA Airport Improvement Program (AIP) grant (95%) with a local match (5%) provided by the City. The AIP is a dedicated fund administered by FAA with the specific purpose of maintaining and improving the nation's public use airports. The AIP is funded exclusively through fees paid by users of general aviation and commercial aviation.

The purpose of the Master Plan is to define the current, short-term and long-term needs of the airport through a comprehensive evaluation of conditions and Federal Aviation Administration (FAA) airport planning and design standards. The Master Plan will provide specific guidance in making the improvements necessary to maintain a safe and efficient airport that is economically, environmentally, and socially sustainable. The Master Plan will:

- Provide an updated assessment of existing facilities and activity;
- Forecast airport activity measures (based aircraft, aircraft operations, etc.) for the current 20-year planning period.
- Examine previous ALP recommendations as appropriate, to meet the current and projected airport facility needs, consistent with FAA airport design standards;

February 2010

- Determine current and future facility requirements for both demand-driven development and conformance with FAA design standards.
- Update/prepare the airport layout plan, airspace plan, and land-use plan for the airport to reflect updated planning; and
- Develop an Airport Capital Improvement Program (ACIP) that will prioritize improvements and estimate project development costs and funding eligibility for the 20-year planning period.

The most recent FAA-approved ALP for Florence Municipal Airport was completed in 1997.¹ The 1997 ALP and associated drawings, and updated aerial photography for the airport will be used as primary information sources for preparing the updated ALP.

National Airport System

Florence Municipal Airport is included in the National Plan of Integrated Airport Systems (NPIAS). Participation in the NPIAS is limited to public use airports that meet specific FAA activity criteria. NPIAS airports are eligible for federal funding of improvements through FAA programs such as the current Airport Improvement Program (AIP). There are more than 3,300 NPIAS airports, of which more than 75 percent are general aviation airports similar to Florence. Three other Lane County communities (Eugene, Creswell and Cottage Grove) also have NPIAS airports, although the nearest is located 60 driving miles from Florence. Along the coast, Newport and North Bend have the NPIAS airports closest to Florence Municipal Airport (45 to 50 driving miles from Florence).

The FAA has recognized NPIAS airports as being vital to serving the public needs of air transportation. In doing so, the FAA recognizes that access to the nation's air transportation system is not limited to commercial air service. The FAA requires that all NPIAS airports periodically update their airport plans to maintain effective long-term planning. This project will enable the City to meet the FAA's requirement to maintain an up-to-date plan.

State Airport System

Florence Municipal Airport is identified as a "Category IV - Local General Aviation Airport" in the 2007 Oregon Aviation System Plan. Category IV airports have the following functional description "These airports support primarily single-engine, general aviation aircraft, but are capable of accommodating smaller twin-engine general aviation aircraft. These airports support local air

¹ Airport Layout Plan Report and ALP drawings (dated October, 1997). Aron Faegre & Associates and Century West Engineering.

transportation needs and special use aviation activities." The system plan evaluation of defined performance criteria indicates that Florence Municipal Airport meets or exceeds all "minimum criteria" for Category IV airports except low-intensity taxiway edge lighting (LITL).

Public Involvement

The public involvement element of the planning process provided opportunities for all interested individuals, organizations, or groups to participate in the project. A planning advisory committee (PAC) was formed for the project, which performed a local review function and provided input into the planning process. The PAC reviewed and commented on draft work products and provided local knowledge and expertise to the planning process. Several project meetings were held to provide information to interested citizens and allow the PAC, the Consultant, City staff, ODA representatives, and FAA to meet and discuss key project issues.

SUMMARY OF PRELIMINARY FINDINGS

- 1. Florence Municipal Airport is owned and operated by City of Florence, Oregon.
- 2. The Airport is located approximately 1 mile north of Florence, between U.S. Highway 101 and the Pacific Ocean. Surface access to the Airport is provided by Kingwood Street, which has several connections (9th, 10th, 27th Streets; Airport Road, etc.) to Highway 101. The Airport is located within the Florence city limits.
- 3. The Airport consists of approximately 139.77 acres owned in fee, as noted on the current Exhibit "A" airport property plan.
- 4. The Airport is included in the National Plan of Integrated Airport System (NPIAS), making it eligible for federal funding through the Federal Aviation Administration (FAA).
- 5. The Airport has a "Local General Aviation" service level designation in the current Oregon State Aviation System Plan.
- 6. The Airport has one runway that is oriented in a generally northwest-southeast direction. The runway (15/33) is paved and lighted with basic (visual) markings. Runway 15/33 is 3,000 feet by 60 feet and is served by a full-length parallel taxiway located on its east side.
- 7. The published pavement strength for Runway 15/33 is 12,500 pounds for aircraft with single wheel landing gear (FAA 5010 and A/FD data).
- 8. The airfield facilities are capable of accommodating small single-engine or light twin-engine weighing less than 12,500 pounds, generally consistent with aircraft included FAA Airport Design Group I (ADG-I). ADG I aircraft have wingspans less than 49 feet.

February 2010

- 9. Airfield lighting currently includes an airport rotating beacon, medium-intensity runway edge lighting (MIRL), threshold lights, and a 2-light precision approach path indicator (PAPI) on Runway 33. The runway lighting is pilot-activated (radio) and the PAPI operates continuously. The rotating beacon operates on a photo-cell switch.
- 10. All landside facilities (aircraft parking, hangars, etc.) at the airport are located on the east side of Runway 15/33. The Airport has a single paved aircraft apron located near the middle of runway that accommodates aircraft fueling, the fixed base operator (FBO), and aircraft parking.
- 11. In summer 2008, the airport had 24 conventional hangars (various sizes) located on the east side of the runway. 22 hangars are located north of the main apron and 2 larger hangars are located south of the apron.
- 12. The Airport operates under day and night visual flight rules (VFR) and does not currently have instrument approach capabilities. The airport is equipped with a federally funded Automated Weather Observation System (AWOS).
- 13. Aviation fuel is available at the Airport through the FBO (Florence Aviation). Current airport directories indicate that 100LL AVGAS and Jet Fuel are available.
- 14. The most recent estimates of activity for Florence Municipal Airport are included in the February 2008 Oregon Aviation System Plan Forecast Update: 31 based aircraft and 5,162 operations in 2005. The current FAA 5010 form lists 31 based aircraft and 7,000 annual operations (for the 12 months ending 7/12/05).

SUMMARY OF CONCLUSIONS & RECOMMENDATIONS

- 1. All federally-funded projects are subject to the environmental regulations contained in the National Environmental Policy Act (NEPA), including property acquisition, major facilities rehabilitation, and new construction.
- 2. A regular schedule of pavement maintenance (vegetation control, crack filling, fog seals, slurry seals, patching, etc.) should be conducted on airfield pavements to maximize the useful life and optimize life cycle maintenance expenditures. Runway and taxiway markings should be periodically repainted to maintain good visibility.
- 3. Current and future design standards for Runway 15/33 are based on FAA airport reference code (ARC) B-I (small) for "utility" runways (per FAR Part 77). Future airspace planning for Runway 15/33 is based on visual approach capabilities (see recommendation number 4, below). New hangar developments and aircraft parking aprons should be designed to conform to FAA taxilane/taxiway and airspace clearing standards.

- 4. A nonprecision instrument approach is recommended for Florence Municipal Airport. The development of a satellite-based Wide Area Augmentation System (WAAS) approach (or other comparable platform) is recommended, with circling procedures developed for both ends of Runway 15/33 if FAA obstruction clearance standards for the procedure design can be met. The recommendation to develop a circling procedure is consistent with the visual designation for Runway 15/33.
- 5. A 400-foot extension at the north end of Runway 15/33 is recommended based on the runway length required to accommodate 100 percent of the small airplane fleet at Florence. The parallel taxiway will also be extended. The runway and parallel taxiway extension will not require property acquisition. The project will require the removal of approximately 203,000 cubic yards (cy) of the sand dune located beyond the north end of the runway. The runway extension and obstruction removal project is anticipated to be conducted in phases (depending on funding availability):
 - a. Phase 1. Construct the 400-foot north runway extension with a 200-foot displaced threshold for obstruction clearance. FAA threshold clearance siting criteria contained in <u>Advisory Circular (AC) 150/5300-13 (as amended)</u>, <u>Appendix 2, Runway End Siting Requirements</u> will be applied to provide an unobstructed 20:1 obstacle clearance surface (OCS) for Runway 15 without requiring any terrain removal. The runway length available for takeoff on Runway 15 and 33 and for landing on Runway 33 is 3,400 feet; the runway length available for landing on Runway 15 is 3,200 feet. Extend the parallel taxiway to connect to the new runway end; extend runway edge lights; add/realign precision approach slope indicator (PAPI).
 - b. **Phase 2.** Eliminate the 200-foot displaced threshold for Runway 15 by removing approximately 87,100 CY of material from the sand dune to accommodate an unobstructed visual 20:1 OCS at the runway end. Modify existing runway lighting and PAPI aiming angle, as required. The useable runway length for all aircraft operations is 3,400 feet.
 - c. **Phase 3.** Remove approximately 116,200 CY of additional material from the sand dune to accommodate an unobstructed FAR Part 77 visual 20:1 approach surface to Runway 15. Modify PAPI aiming angle, as required. Phase 2 and 3 terrain removal may be consolidated into a single phase depending on the availability of funding.
- The 1997 Airspace Plan depicts a 20:1 visual obstacle clearance surface (OCS) for Runway 33. The areas located beyond the south end and along the west side of the runway should be surveyed to verify the location and elevation of terrain and/or tree obstructions and develop an action plan for removal, if necessary.

- 7. The main apron will be reconfigured and expanded southward to increase current aircraft parking capacity, improve aircraft circulation within the apron, and meet FAA design standards. The expanded apron capacity appears to be adequate to accommodate projected demand until late in the 20-year planning period. The primary improvements include:
 - a. The existing aircraft fueling island will be relocated to the northwest corner of the apron to provide adequate clearance between fueling and taxiing aircraft and improve efficiency of aircraft fueling operations The existing primary access taxilane through the main apron will be realigned.
 - b. The existing 4-foot fencing located along the rear of the apron will be relocated approximately 15 feet east to meet object free area clearance standards for the main taxilane that runs along the back of the apron. The fencing will be upgraded with standard 8-foot chain link fencing and will connect to the western corners of the airport FBO/terminal buildings. The fencing installed around the AWOS will be eliminated in conjunction with the terminal area fencing upgrade to accommodate straightening the existing north-south access taxiway. The shifted taxilane will allow one additional tiedown per row to be provided on the expanded apron.
 - c. Two drive-through parking positions will be provided for multi-engine aircraft. The parking positions will accommodate aircraft that are not designed to use light aircraft tiedowns (multi-engine piston, single- and multi-engine turboprops, small business jets, etc.) including medevac and corporate aircraft.
 - d. 18 light airplane tiedowns will be provided in four east-west rows with direct taxilane access. The aircraft tiedowns are configured to meet FAA design standards for taxilane object free area clearance, for both the main taxilane and the taxilanes serving each tiedown row.
 - e. A helicopter parking pad will be constructed on the south side of the existing access taxiway that borders the south end of the expanded apron. The parking pad will be constructed of Portland Cement Concrete (PCC) and will be used by medevac helicopters and other itinerant rotorcraft.
 - f. The terminal area has one site capable of accommodating a 3-unit executive hangar or two or three small/medium conventional hangars located south of the main apron.
- 8. The segmented circle, which is located south of the main apron, will be relocated to the west side of the runway to accommodate the apron expansion.

February 2010

- 9. The north hangar area is capable of accommodating hangar demand during the current planning period and beyond. The preferred alternative includes space reserved for development of additional conventional hangars, T-hangars and aircraft apron. As currently planned, the north landside area provides storage capacity for approximately 60 additional aircraft:
 - a. Eleven (11) conventional hangar spaces with current taxilane access. One vacant hangar site (2-C) located at the north end of the main apron is reserved for commercial use. Two rows of T-hangars and two additional hangar taxilanes located immediately north of existing hangar development. The physical limits of the site will accommodate one 8-unit T-hangar (or multiple smaller T-hangars) per row. The first T-hangar will utilize the northern-most existing hangar taxilane with a new taxilane constructed to access the north side of the T-hangar. The second T-hangar row and north-side taxilane would be developed based on demand.
 - b. An aircraft parking apron and reserve area is located north of the planned T-hangar rows. As conceptual configured, the apron has three rows of tiedowns (27 spaces total), which significantly exceeds forecast demand for parking. It is anticipated that the north apron would be constructed in phases, only in the event that the capacity of terminal apron becomes inadequate
 - c. Six additional conventional hangar spaces are located beyond the north apron.
 - d. Existing airport fencing and gates will be modified at the 27th Street connection to the airport, with controlled access provided via pedestrian and automated vehicle gates located adjacent to the apron. Public vehicle parking and a passenger pick-up/drop off area will be provided adjacent to the apron (outside the fence). An automated access vehicle gate is recommended to provide tenant access to the north hangar area from the 27th Street connection.
- 10. The City of Florence and Lane County should maintain airport overlay zoning based on the FAR Part 77 airspace surfaces (height and hazard) depicted in the updated Airport Layout Plan.
- 11. The City of Florence and Lane County should ensure through their comprehensive planning/zoning that development of lands in the vicinity of the airport is compatible with airport activities to the greatest extent possible.
- 12. It is recommended that any proposed changes in land use or zoning in the vicinity of the airport (within the boundaries of the FAR Part 77 airspace surfaces) be coordinated with Oregon Department of Aviation to ensure consistency with Oregon airport land use planning requirements.

- 13. The City of Florence should require all development proposals involving construction of structures on the airport to complete and submit <u>FAA Form 7460-1 Notice of Proposed</u> <u>Construction or Alteration</u>, prior to approval of ground leases. Any development proposal that receives an objection by FAA should not be approved without first addressing FAA concerns.
- 14. City of Florence and/or Lane County planning and building officials should require that applicants for proposed development within the boundaries of the airport's FAR Part 77 imaginary surfaces (as defined by the Airport Airspace Plan) verify through coordination with the FAA Seattle Airports District Office (ADO) whether submittal of FAA Form 7460-1 is required for their proposal. This determination should be required prior to approval/issuance of building permits, approval of plats, binding site plans, etc. Any development proposal that receives an objection by FAA should not be approved without first addressing FAA concerns.
- 15. The City of Florence and FAA should approve/adopt the Airport Master Plan and Airport Layout Plan drawings in a timely manner to guide future airport development.
- 16. The City of Florence should initiate the recommended improvements and major maintenance items in a timely manner, requesting funding assistance under FAA and other federal or state funding programs for all eligible capital improvements.





Florence Municipal Airport

CHAPTER TWO INVENTORY OF EXISTING CONDITIONS

Introduction

This chapter documents existing conditions at the airport for the purpose of providing an accurate information base to support updated planning. Existing airfield facilities were examined during onsite inspections to update facility inventory data collected in prior planning efforts. A new aerial photograph was recently flown for the airport for use in this project. Data from a variety of sources are used in this evaluation:

- Florence Municipal Airport– Individual Airport Report (Oregon Department of Aviation, 2008)
- Florence Municipal Airport 2002 Pavement Management Report
- **1997 Airport Layout Plan Report** (Aron Faegre & Century West)
- FAA Airport Master Record Form (5010-1)
- FAA Terminal Area Forecasts
- Soils Survey of Florence and Lane County Area, Oregon (NRCS, 2008)
- Realization 2020 Comprehensive Plan for the City of Florence, Oregon
- City of Florence Zoning Ordinance
- Lane County Comprehensive Plan and Zoning Ordinance
- FAA Airport/Facility Directory (A/FD), Klamath Falls Sectional Aeronautical Chart

AIRPORT LOCALE

Florence Municipal Airport is located near the southern end of the Florence city limits, on approximately 139.77 acres. It is owned and operated by the City of Florence. A location map is provided in **Figure 2-1**. Airport elevation is recorded at approximately 51 feet above mean sea level (MSL). Surface access is provided via Kingwood Street, which runs along the east side of the airport with several street connections to U.S. Highway 101.



Florence is located in Lane County on the Oregon coast, approximately 60 miles west of Eugene, at the junction of State Highway 126 and U.S. Highway 101. U.S. Highway 101 is a major north-south travel route that extends through Oregon north to Washington and south to California. Highway 126 is a primary east-west travel route across western Oregon, extending from Florence, through Eugene, to Prineville. Lane is one of only two Oregon Counties to connect the Pacific Ocean with the Cascade mountain range.

AIRPORT HISTORY

The existing Florence Municipal Airport site was initially constructed by the City of Florence in 1946. The runway and parallel taxiway were first paved in 1968 and the runway was reconstructed and widened to 60 feet in 1985. The parallel taxiway and aircraft apron were added in 1989. Recently, the north end of the runway was reconfigured to eliminate a 100-foot displaced threshold, following removal/lowering of a portion of the large sand dune located within the Runway 15 approach.

Other airport improvements include renovations to the FBO building, auto parking, two fencing projects (13,300 linear feet combined) and automated vehicle gate, taxilanes and utilities for the north hangar development, an above ground fuel storage tank, an automated weather observation system (AWOS) and a new airport rotating beacon. Since the 1997 Airport Layout Plan study was completed, twelve new privately-owned hangars have been constructed at the airport. Five older hangars previously located near the south end of the runway have been removed.

GEOGRAPHY/GEOLOGY

Florence is located on the Pacific central coast of Oregon, adjacent to the western foothills of the Coast Range. The terrain surrounding the airport rises from sea level to more than 2,000 feet within ten miles. Among the most prominent topographical features are Mount Grayback (10 nautical miles east-southeast), which reaches 2,255 feet and Roman Nose Mountain (17 nm east-southeast), which reaches 2,880 feet. The airport is located in low lying area approximately one mile east of the ocean. Sand dunes, which run along the coast, border the airport to the west and north. The local area is characterized by coastal dunes, low-lying lakes, and forest lands. Florence is located at the mouth of the Siuslaw River. The Oregon Dunes National Recreational Area extends southward from Florence along the Pacific coast until reaching Coos Bay. Numerous state parks and waysides are also located along Highway 101. The Siuslaw National Forest extends along the Pacific coast, north and south of Florence.

February 2010

The <u>Soil Survey of Florence, Oregon, Part of Lane County</u>² indicates that predominate soil type in the vicinity of Florence Airport is **Yaquina loamy fine sand**. The eastern and southern sections of the airport also include areas of **Waldport fine sand**, with 0 to 12 percent as well as 12 to 30 percent slopes.

CLIMATE

Weather conditions play an important role in the planning and development of the airport. Temperature and wind direction directly affect runway length and alignment; cloud coverage and precipitation affect visibility and are primary determinants for navigational aids and lighting.

The Oregon central coast is characterized by wet, mild winters and dry, moderately warm summers. The nearest National Weather Service observation station is located at Honeyman State Park (Station # 353995), approximately 5 miles south of Florence.³ Based on data collected between 1971 and 2007 (36 years), annually precipitation averages 70.11 inches, with nearly half occurring during the three-month period from November through January. Annual snowfall accumulation averages less than 1 foot. The mean maximum temperature in July or August (warmest months) is 69.3 degrees Fahrenheit, and the mean minimum temperature in December (coldest month) is 50.2 degrees Fahrenheit.

AIRFIELD FACILITIES

Historically, Florence Municipal Airport serves predominantly small single-engine and twin-engine aircraft associated with transient and locally-based general aviation aircraft activity. The airport also accommodates a limited amount of turbine aircraft activity associated with business aviation aircraft (turboprop or small business jet), occasional military or government-related activity, and limited helicopter operations. Florence and the central Oregon coast have long attracted a large number of visitors and in recent years the number of year-round or seasonal area residents has steadily increased. Both the area population and the number of based aircraft at the airport have increased since the last airport plan was completed in 1997. **Figure 2-2** illustrates existing facilities at the airport. All landside facilities at the airport (aircraft parking, hangars, fuel, etc.) are located on the east side of the runway. **Table 2-1** summarizes airport data.

² USDA, Natural Resources Conservation Service (NRCS), 2006.

³ Western Regional Climate Center (WRCC) Data, 2008



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	EXISTING	FUTURE
CILITIES		
ILDINGS	··········	
NWAY		
ILDING RESTRICTION LINE (BRL)	BRL (E)	
CRAFT PARKING LINE (APL)	APL (E)	
RPORT PROPERTY LINE		
NWAY SAFETY AREA (RSA)		
JECT FREE AREA (OFA)		
STACLE FREE ZONE (OFZ;		
XIWAY OBJECT FREE AREA (TOFA)		
NWAY PROTECTION ZONE (RPZ;		
PORT REFERENCE POINT (ARP;	0	
JUAL GUIDANCE INDICATORS		
ND INDICATOR	P I	
GMENTED CIRCLE WIND INDICATOR	- P -	
NCE	— x — x —	
ACON	*	
Reshold lights	000 000	
EES/BRUSH		

TABLE 2-1: AIRPORT DATA

Airport Name / Designation	Florence Municipal Airport (6S2)
Airport Owner	City of Florence, Oregon
Date Established	1946 (date of initial property acquisition)
Airport Category	 National Plan of Integrated Airport Systems (NPIAS): General Aviation FAA Airport Reference Code (ARC): B-I (small) (as noted on the 1997 ALP) Oregon Aviation System Designation: Category IV – Local General Aviation Airport
Airport Acreage	139.77 acres (in fee). (as depicted on current Exhibit "A" Property Plan)
Airport Reference Point (ARP) Coordinates	N 43º 58' 58.14" W 124º 06' 40.93"
Airport Elevation	50.8 feet above Mean Sea Level (MSL)
Airport Traffic Pattern Configuration / Altitude	Left Traffic (Rwy 33); Right Traffic (Rwy 15) Approximately 850 feet MSL



Runways & Taxiways

 Table 2-2 summarizes existing runway and taxiway facilities at Florence Municipal Airport.

<u>Runway</u>

Florence Municipal Airport has a single paved and lighted runway designed to accommodate small aircraft. The runway (15/33) is oriented in a northwest-southeast alignment with a published length of 3,000 feet and width of 60 feet. Runway 15/33 has an asphalt surface, basic visual markings, and is in good condition. The effective gradient of the runway is 0.357 percent, with the high point (surveyed 50.8 feet MSL) located at its north end. Runway 15/33 has a published weight bearing capacity of 12,500 pounds for aircraft equipped with single-wheel landing gear.

In recent years, the sand dune located north of the runway has been lowered to eliminate an obstruction to the Runway 15 approach that required a 100-foot displaced threshold, which has now been eliminated. The 1997 Airspace Plan identified two obstructions (sand dune and trees) penetrating the Runway 33 approach. More detailed obstruction evaluation will be required to document current approach surface penetrations.

Runway markings consist of runway end numbers (excellent condition) and centerline stripes (very good condition). All runway markings are in white paint.

The turf area located between the runway and parallel taxiway (approximately 1,200 feet between the two interior exit taxiways) is used by some tail-wheel aircraft for takeoff and landing. Local pilots indicate that some areas are uneven and could be improved by grading and re-seeding.

Taxiways and Taxilanes

Florence Municipal Airport has a system of taxiways and taxilanes that provide aircraft access to airside and landside facilities. Runway 15/33 is served by a full length parallel taxiway on its east side that is connected with four 90-degree exit taxiways. The parallel taxiway is 35 feet wide and the exit taxiways vary in width from 30 to 40 feet. The runway to parallel taxiway separation (measured from centerline to centerline) is 175 feet. An aircraft holding/run-up area is located at the south end of the parallel taxiway, adjacent to the Runway 33 threshold.

The taxiway does not have reflective edge markers or lighting, although the location of each exit taxiway along the runway is identified with edge lights with blue lenses. The taxiway exits at each end of the runway have two fixtures located on the interior side; the taxiway exits located near the middle of the runway have two sets of fixtures (each with two lights) located on each side which identify the exit from both directions along the runway.

The airport has seven taxiway/taxilane connections to the parallel taxiway that provide access to adjacent landside facilities. The north hangar area has five east-west taxilanes (varying from 245 to 258 feet long) serving the adjacent hangar rows that extend eastward from the parallel taxiway. The northern-most taxilane initially extends beyond the north end of the parallel taxiway approximately 225 feet, before extending to the east. The main apron is located just north of mid-runway and has one direct connection to the parallel taxiway (at the north end of the apron). The apron has three east-west taxilanes that are connected a north-south taxilane located along the back of the apron, adjacent to the aircraft fueling area and the fixed base operator (FBO) buildings. An access taxiway extends southward from the apron's north-south taxilane and connects to the parallel taxiway near mid-runway. The taxiway (700 feet by 30 feet) serves two large hangars.

The parallel taxiway, access taxiway, hangar taxilanes and apron taxilanes are all marked with centerline stripes. The two exit taxiways located near the middle of the runway have lead-in lines extending from runway to the taxiway centerline. Aircraft hold lines are located on each exit taxiway (125 feet from runway centerline). All taxiway and taxilane markings are in yellow paint and are in very good to excellent condition.





TABLE 2-2:RUNWAY & TAXIWAY DATA

Runway 15/33	
Dimensions	3,000 x 60 feet
Effective Gradient	0.357%
Surface/Condition	Asphalt/Good
Weight Bearing Capacity	12,500 pounds (single wheel landing gear)
Marking	Basic (Visual) white paint: runway numbers, centerline stripe
Lighting	Medium Intensity Runway Edge Lighting (MIRL) ; Threshold Lights Precision Approach Path Indicator (PAPI) - Runway 33 Airport Beacon; Lighted Wind Cone
Signage	Unlighted Aircraft Holding Position Signs (4) at Taxiway Connections to Runway
Other Items	Segmented circle and lighted wind cone (east side of runway)
Wind Coverage	N/A
Helipad	
	N/A
Taxiways	
Parallel Taxiway	3,000 x 35 feet (asphalt surface); Four 90-degree Exit Taxiways (30 to 40 feet wide); A/C Hold Area (@ Rwy 33 end); centerline stripe and A/C Hold Lines on all connections to runway.
Hangar Taxilanes	Five Taxilanes (asphalt surface; 20 or 25 feet wide, 245 to 258 feet long) North taxilane section (beyond north end of parallel taxiway) 223 feet long, 35 feet wide. Centerline stripes on all hangar taxilanes.
Access Taxiway	700 x 30 feet (asphalt surface) extending from south end of main apron to runway (near midpoint). Access to two large hangars. Centerline stripe.

Airport Lighting

Florence Municipal Airport accommodates day and night operations in visual flight rules (VFR) conditions. All airport lighting systems appear to be in good condition and function normally.

Florence Municipal Airport has the following types of lighting systems:

- Airport Lighting airport identification
- Runway Lighting runway identification
- Visual Guidance Indicators (VGI) visual landing aid
- Other Lighting miscellaneous

<u>Airport Lighting</u>: The airport has a rotating beacon mounted on a tower support near the fixed base operator building and the aircraft apron on the east side of the runway. The beacon operates on a photo-cell switch and reportedly functions normally. The beacon was replaced in 2002 and is in good condition. A lighted wind cone is located on the east side of the runway near mid-field, in the segmented circle, east of the parallel taxiway.

<u>Runway Lighting</u>: Runway 15/33 is equipped with medium intensity runway lighting (MIRL) system that includes edge lights and threshold lights. The MIRL is pilot-activated using the common traffic advisory frequency (CTAF) 122.8 MHz. As noted earlier, several edge light fixtures located at taxiway exits have blue lenses installed, providing a visual indication of taxiway exit locations along the runway. The threshold lights consist of two sets of three fixtures near each corner of the runway ends. The fixtures have split lenses (green/red) indicating the beginning and end of the runway. The runway lights reportedly function normally and appear to be in good condition.

<u>Visual Guidance Indicators</u>: Runway 33 is equipped with a 2-light Precision Approach Path Indicator (PAPI). The PAPI for Runway 33 operates continuously and has a standard 3-degree glide path. The PAPI is the standard visual guidance indicator (VGI) for general aviation runways. The PAPI projects light along a standard glide path to a runway end, with red and white colored lights indicating the aircraft's vertical position (above, below, or on glide path) relative to the glide path. The system reportedly functions normally and is in good condition. Runway 15 is not currently equipped with a PAPI.

<u>Other Lighting</u>: Limited flood light is located near the apron and fueling area. Some hangars also have exterior wall-mounted flood lights.

The airport has four mandatory instruction signs (red background with white letters/numbers) marking the aircraft holding positions at each of the taxiway connections with the runway. The signs

February 2010

are located to coincide with the painted aircraft hold lines on the taxiways. The signs are reflective (not internally illuminated) and are in good condition.

Table 2-3 summarizes existing airfield lighting at Florence Municipal Airport.

TABLE 2-3: AIRPORT LIGHTING

Component	Туре	
Runway 15/33	Medium Intensity Runway Edge Lighting (MIRL); Threshold Lights	Good
Taxiway Lighting	No Edge Lights or Reflectors	N/A
	Taxiway Location Lights on Runway at each Exit Taxiway	Good
Lighted Airfield Signage	None (reflective signage)	N/A (Unlighted Signs– Good)
Runway Approach Lighting	None	N/A
Visual Guidance Indicators	2-Light PAPI w/ 3-degree glide path (Rwy 33)	Good
Airport Lighting	Lighted Wind Cone; Rotating Beacon	Good

Airfield Pavement Condition

As part of the Oregon Continuous Aviation System Plan, the Oregon Department of Aviation (ODA) manages a program of pavement evaluation and maintenance for Oregon's airports. This evaluation provides standardized pavement condition index (PCI) ratings⁴, pavement features and current conditions. Through the use of MicroPAVER computer software, current pavement condition ratings are entered into the system with the specifics of each pavement section. The program is able to predict the future condition of the pavements if no action is taken (i.e., rate of deterioration) while also identifying the recommended measures needed to extend the useful life of the pavement section.

According to the pavement maintenance plan's project history map, the majority of airfield pavements at Florence Municipal Airport were constructed between 1985 and 1989.⁵ The aircraft access taxiway located south of the main apron and the four northern-most stub taxilanes located in the north hangar area have been constructed since 1997.

Table 2-4 summarizes airfield pavement conditions for Florence Municipal Airport based on the data contained in the airport's 2002 pavement study. In the 2002 inspection, all airfield pavements were rated "very good" or "excellent" with the exception of two hangar taxilanes in the north

⁴ PCI Rating Scale 0 to 100 (failed to excellent).

⁵ Florence Municipal Airport March 2003 Pavement Management Report (field survey completed in May 2002).

hangar area. The first stub taxiway located north of the main apron was rated "good" and the eastern 90 feet of the second stub taxiway north of the apron was rated "fair." The numerical ratings for all pavements ranged from 55 to 100, with an average of 85 (very good). The 2002 pavement inspection indicates "The primary distresses observed during the inspection were weathering/raveling, longitudinal and transverse cracking, patching, depression, and oil spillage."

TABLE 2-4:
SUMMARY OF AIRFIELD PAVEMENT CONDITION
(2002 PCI DATA)

Pavement	Section Design/Age	2002 PCI Rating ¹	2002 Condition
Runway 15/33	2" Asphalt (AC) Surface (1985); 6" Aggregate Base (1985)	82	Very Good
Parallel Taxiway & Mid-Runway Exit Taxiways (4)	Unknown AC and Unknown Base (1989); some sections constructed in 1985 (2" AC Surface, 6" Aggregate Base)	92 (Parallel) 71-85 (Exits)	Excellent Very Good
South A/C Holding Area on Parallel Taxiway	Unknown AC and Unknown Base (1989)	93	Excellent
Tiedown Apron and Connecting Taxiway	Unknown AC and Unknown Base (1989)	78	Very Good
Aircraft Fueling Area	Unknown AC and Unknown Base (1985)	71	Very Good
South Aircraft Access Taxiway (south of apron)	2" AC (2000); 6" Crushed Aggregate Base w/ Geotextile Fabric (2000)	96	Excellent
North Hangar Taxilanes (5)	Unknown AC and Unknown Base (1989- 2002) Taxilane designs indicate 2"AC, 8" Aggregate Base (typ.)	South to North Txl #1: 69 Txl #2: 76/55 Txl #3 &4: 100 Txl #5: not rated	Fair to Excellent
North Hangar Taxilane (north extension of parallel taxiway)	Unknown AC and Unknown Base (2002) Taxilane designs indicate 2"AC, 8" Aggregate Base (typ.)	100	Excellent

1. The Pavement Condition Index (PCI) scale ranges from 0 to 100, with seven general condition categories ranging from "failed" to "excellent."

The condition of the airfield pavements observed during site visits conducted for this project in Fall 2008 was generally consistent with the 2002 evaluations, factoring in six additional years of use and recent pavement maintenance projects. During the recent site inventory for the master plan update, evidence of recent crackfilling was observed, with small areas of vegetation growth observed in cracks on the apron. The northern section of the main apron and the connecting taxiway to the parallel taxiway were recently seal coated and are in good condition. Small areas of edge cracking and distress were observed on some taxiway sections.

The 2002 study indicated that the airfield pavements (runway, taxiways, apron) totaled 440,504 square feet (10.11 acres). It is noted that the northern-most taxilane in the north hangar area was constructed since the 2002 PCI inspection and is not included in the area calculation and it has not

been rated. Based on the age and condition of the pavement, it would normally be rated "very good" or "excellent." A limited crack fill and slurry seal project was conducted at the airport in 2006 for various pavement sections including the north end of the main apron and connecting taxiway.

LANDSIDE FACILITIES

Aircraft Apron

Florence Municipal Airport has one aircraft apron located near the middle of Runway 15/33 on its east side. The apron accommodates aircraft parking, aircraft fueling, and it provides access to the fixed base operator (FBO) building. The apron is approximately 320 feet by 165 feet, with 12 aircraft tie-downs. An additional paved area (approximately 102 feet by 72 feet) adjacent to the fuel storage tank and fuel pumps at the northeast corner of the main apron. The two apron sections have an overall area of approximately 70,890 square feet (7,877 square yards). The apron is connected to the parallel taxiway at the north end by a single taxiway. The hangar access taxiway that extends from the south end of the apron connects to the parallel taxiway approximately 1,250 feet south of apron taxiway connection.

The apron tiedowns are configured in three east-west rows that are accessed from the taxilane that runs through the apron. The northern and middle rows each have five tiedowns in a tail-to-tail configurations facing north and south; the southern row has two tail-in tiedown positions facing north. Two additional tiedowns originally located in the southern row have been eliminated to accommodate the south access taxiway. The taxilanes serving each tiedown row extend from the back of the apron to the front and do not connect to the parallel taxiway. **Table 2-5** summarizes existing apron facilities at the airport.

TABLE 2-5: AIRCRAFT APRON DATA

Tiedown Apron	Approximately 320 x 165' (7,288 square yards) Surface: Asphalt 12 Aircraft Tiedowns (with concrete anchors)
Fueling Apron	Approximately 102 x 72' (588 square yards) Surface: Asphalt

Congestion on the apron can occur particularly along the main taxilane that runs through the apron. The east end of the northern row of tiedowns and the aircraft fueling station are each located within about 25 feet of the taxilane centerline and aircraft located at the fuel island can partially block access to a nearby hangar located at the northeast corner of the apron. The northern tiedown row is often used by transient twin-engine or other business aircraft since it can be accessed directly from the taxilane that enters the north end of the apron. The apron does not have any drive-through parking positions for larger aircraft, so the ability to taxi through tiedown rows is a consideration when choosing a parking position. The apron configuration will be reviewed during the facility requirements evaluation for conformance with FAA design standards.

Ameriflight, a UPS contractor, operates a daily flight (5 days per week) to Florence with a Piper Navajo Chieftan. The twin-engine piston aircraft arrives in the morning and leaves in the late afternoon. During the day, the aircraft often parks at east end of northern tiedown row, opposite the fuel pumps. The distance from the wingtip of the aircraft to the main taxilane centerline that runs along the back of the apron was measured at approximately 26 feet during a recent site visit. An aircraft loading or unloading in front of the FBO building can also partially block the rear taxilane.







Hangars and Airport Buildings

Florence Municipal Airport currently has 24 hangars, 2 FBO buildings (main building and storage building), and a mobile home. All existing hangars are conventional hangars, including one threeunit hangar. There are no T-hangars currently located at the airport. Five older hangars previously located near the south end of the runway have been removed, as recommended in the 1997 airport layout plan. All airport buildings are located on the east side of the runway.

The main FBO building is located adjacent to the aircraft apron and fueling facilities. The building has a pilot and passenger waiting area, restrooms and office space used by the airport manager. The FBO building was substantially renovated in late 2008 in conjunction with a change in airport management. A small storage building is located adjacent immediately north of the main building.

The majority (22) of existing hangars are located in the north hangar area. The area is configured with six east-west hangar rows and five stub taxilanes that are perpendicular to the parallel taxiway. The hangar rows include a single south-facing row (identified here as Row 1) adjacent to the north end of the apron and five double rows (north and south facing hangars) adjacent to each of the five stub taxilanes. Based on typical hangar configurations, there are currently 14 undeveloped hangar sites with existing taxilane access in the north hangar area.

Two large conventional hangars are located south of the main apron, adjacent (east) to the access taxiway that extends from the south end of the apron to the parallel taxiway. Both hangars have west-facing doors. The northern hangar (3-unit conventional) has a small apron area between the building and access taxiway; the large hangar (single unit) has a small apron located adjacent to the south end of the access taxiway. All hangars on the airport appear to be in good condition and well maintained. 12 of the airport's 24 hangars have been constructed and five older hangars removed since the plan update was completed in 1997. Existing airport buildings are summarized in **Table 2-6** and depicted in **Figure 2-2** earlier in the chapter.

Bldg. No.	Building	Bldg. No.	Building
1	FBO Office/Pilot Lounge/Restroom	15	Conventional Hangar North hangar area – Row 3 (north side)
2	FBO Storage Building	16	Conventional Hangar North hangar area – Row 3 (north side)
3	Mobile Home Airport Caretaker Residence	17	Conventional Hangar North hangar area – Row 3 (north side)
4	Conventional Hangar North hangar area – Row 1 (facing apron)	18	Conventional Hangar North hangar area – Row 4 (south side)
5	Conventional Hangar North hangar area – Row 1 (facing apron)	19	Conventional Hangar North hangar area – Row 4 (north side)
6	Conventional Hangar North hangar area – Row 2 (south side)	20	Conventional Hangar North hangar area – Row 4 (north side)
7	Conventional Hangar North hangar area – Row 2 (south side)	21	Conventional Hangar North hangar area – Row 4 (north side)
8	Conventional Hangar North hangar area – Row 2 (south side)	22	Conventional Hangar North hangar area – Row 5 (south side)
9	Conventional Hangar North hangar area – Row 2 (south side)	23	Conventional Hangar North hangar area – Row 5 (north side)
10	Conventional Hangar North hangar area – Row 2 (north side)	24	Conventional Hangar North hangar area – Row 5 (north side)
11	Conventional Hangar North hangar area – Row 2 (north side)	25	Conventional Hangar North hangar area – Row 5 (north side)
12	Conventional Hangar North hangar area – Row 2 (north side)	26	3-Unit Conventional Hangar Adjacent to South Access Taxiway
13	Conventional Hangar North hangar area – Row 2 (north side)	27	Large Conventional Hangar Adjacent to South Access Taxiway
14	Conventional Hangar North hangar area – Row 3 (south side)	28	Portable Toilet Adjacent to Aircraft Fueling Area

TABLE 2-6: EXISTING BUILDINGS





February 2010

AIRPORT SUPPORT FACILITIES

Aircraft Fuel

The airport has a double wall aboveground fuel storage tank that is partitioned to store 6,000 gallons of 100LL aviation gasoline (AVGAS) and 4,000 gallons of Jet Fuel. The fuel pumps are located near the northeast corner of the apron, with a buried fuel lines (approximately 50 feet) extending from the tanks to the pump island. The system is equipped with cardlock system to allow 24-hour self fueling. The fuel system is in good condition and no mechanical problems have been identified.

The fuel pump island location is located approximately 25 feet from the northeast corner of the apron taxilane. Aircraft fueling can occur on all sides of the island, but aircraft being fueled on the south or west side of the pumps may partially block the main taxilane on the apron, particularly if an aircraft occupies the nearest tiedown position (north row, eastern-most tiedown), which is located approximately 25 feet from the taxilane centerline at its nearest point. Access to adjacent hangar "3-C" (see photos below) can also be limited by fueling aircraft.





Century West Engineering

Local pilots report that during prolonged periods of rain, ponding can occur around the fuel island. This situation causes concern about the potential fire hazard of spilled fuel mixing with the accumulated water, which could ignite and quickly engulf an aircraft. The drainage around the fueling island will be reviewed to identify potential improvements.

Security

The airport boundary is fully fenced, with the exception of several airport-owned parcels located beyond the south end of the runway adjacent to Kingwood Street. Two fencing projects have been completed since the last master plan totaling approximately 13,300 linear feet of chain link fencing (7-foot fence with 1-foot barbed wire). A section of 4-foot chain link fencing is located along the rear of the apron, adjacent to the FBO building and vehicle parking area.

The airport has two controlled access points for the airfield, with automated (electronic keypad) gates. One gate is located near the entrance to the north hangar area on Airport Way, adjacent to the fuel storage tank. A second gate is located near Airport Way on the access road that serves the two large hangars south of the apron. Other swing gates are located near the FBO building (1 vehicle and 1 pedestrian) and in various locations on the airport perimeter fencing (locked - for airport use only). A gate is located at the vehicle entrance to the two large hangars located south of the main apron.



Utilities

Water, sewer and electrical service are available in the vicinity of the airport. The City of Florence provides water and sewer service; Central Lincoln PUD provides electrical service.

All electrical service on the airport is provided through buried lines that extend from service along Kingwood Street. Water service and sanitary sewer service enters the airport at the connection between Airport Way and Kingwood Street. The water service extends north and south approximately 1,800 feet along the entire length of the developed landside area. The system provides water to all existing hangar development areas and supports four fire hydrants. The sanitary sewer currently extends approximately 500 feet along Airport Way, connecting the FBO building, the 3-unit hangar located south of the apron, and the mobile home located east of the FBO building.

A stormwater drainage culvert extends from near the middle of the runway northeast toward Kingwood Street.

Vehicle Access and Parking

Surface access to the airport is provided via Kingwood Street, which runs along the east side of the airport. Several local streets (9th, 10th, 27th Streets; Airport Road) connect Kingwood Street to U.S. Highway 101. Airport Way connects to Kingwood Street and provides direct access to all landside facilities on the airport. All access roads on the airport are paved. A designated automobile parking area is located immediately south of the FBO building. Additional vehicle parking is available adjacent to individual hangars.

AIRSPACE AND NAVIGATIONAL AIDS

Florence Municipal Airport has no published instrument approaches and operates exclusively under visual flight rules (VFR) conditions. The airport has an automated weather observation system (AWOS-3) located on the east side of the runway, near midfield. The AWOS-3 provides automated weather information including temperature, dew point, altimeter, wind, visibility and cloud/ceiling cover.



The airspace surfaces for the runway have historically been protected based on visual approach capabilities for small aircraft.⁶ The traffic pattern for Runway 15/33 is located on the west side of the runway (left traffic for Runway 33, right traffic for Runway 15) to reduce flight activity over the town center and local schools. **Table 2-7** summarizes existing navigational aids and related items in the vicinity of Florence Municipal Airport.

Туре	Facilities		
Electronic Navigational Aids	None		
	Nearby Facilities:		
	 Eugene VORTAC (EUG) Frequency: 112.9 MHz - (39.7 nm ENE) Eugene ILS/DME (2) (I-EUG, I-ADE) Frequency: 109.5 and 110.35 MHz - (40 nm ENE) Frank NDB (MHW) Frequency: 260 KHz - (43 nm NE) Newport VORTAC (ONP) Frequency: 117.10 MHz - (36 nm N) Newport ILS (I-ONP) Frequency: 111.5 MHz - (36 nm N) North Bend VORTAC (OTH); Frequency: 112.10 MHz - (34.1 nm S) North Bend ILS (I-OTH) Frequency: 108.5 MHz - (34 nm S) Emire NDB (LOM); Frequency: 356 KHz - (35 nm S) 		
Instrument Approaches	None		
	Nearby Airports with IAP: Newport, North Bend, Eugene		
Weather Observation	• Florence AWOS-3 (on field) - 118.225 MHz (541) 997-8664		
	Nearby Facilities:		
	• Newport AWOS-3 (36 nm N) - 135.075 MHz (541) 756-0135		
	 Eugene ASOS (40 nm ENE) - 112.9 MHz (541) 461-3114 Southwest Regional (North Bend) AWOS-3 (34 nm S) - 135.075 MHz (541) 756-0135; HIWAS 112.1 MHz OTH 		
Communication	Unicom/Common Traffic Advisory Frequency (CTAF) (122.8 MHz)		

TABLE 2-7:
NAVIGATIONAL AIDS AND RELATED ITEMS

The potential for developing an instrument approach to Runway 15/33 is limited to some degree by close-in built items and terrain. In addition, the FAA has established a minimum runway length of 3,200 feet for developing new instrument approaches at general aviation airports. The future length for Runway 15/33 on the current airport layout plan is 3,430 feet, which would meet the FAA runway length standard. The proximity of rising terrain east of the airport may require both approach and missed approach procedures to be developed west of the extended centerline—largely over the ocean. If local interest exists in developing an instrument approach, the City of

⁶ FAR Part 77. Utility aircraft weighing less than 12,500 pounds.

Florence should submit a request to the FAA Flight Procedures Office in Seattle to conduct a preliminary evaluation of the technical feasibility for establishing an instrument approach to the airport. The future airspace planning required for the airport will be based on the approach capabilities (visual or instrument) planned.

Table 2-8 summarizes notable obstructions, special airspace designations and IFR routes in the vicinity of Florence Municipal Airport, as identified on the Klamath Falls and Seattle Sectional Aeronautical Charts. **Figure 2-3** depicts the airspace surrounding Florence Municipal Airport. A tower is identified on the current Klamath Falls Sectional approximately 1.5 nautical miles east-northeast of the airport (top elevation 284 feet MSL, 265 feet above ground level).

AIRSPACE ITEM	DESCRIPTION	Location	
Instrument Enroute Airways	Victor 27-182	Instrument route located directly over the airport. Minimum enroute altitude 4,500 feet MSL extending from Newport VORTAC to North Bend VORTAC	
Military Training Routes (MTR)	Low-altitude training routes Surface Upward	2 miles northwest of airport	
Electrical Transmission Line	Large overhead transmission lines; Towers +100 feet AGL	3 miles east of the airport	
Class E Airspace	1,200 feet AGL to 18,000 feet MSL associated with instrument enroute airway	Overhead	
Class E Airspace	700 feet AGL to 18,000 feet MSL associated with instrument approaches at nearby airports	 31 miles north of airport (southern limit of Newport Class E airspace); 19 miles east of airport (western limit of Eugene Class E airspace); 20 miles south of airport (northern limit of North Bend Airport Class E airspace) 	

 TABLE 2-8:

 AIRSPACE/INSTRUMENT ROUTES/LOCAL OBSTRUCTIONS

Florence Municipal Airport is located in an area of uncontrolled (Class G) airspace, which permits visual flight rules (VFR) operations only. In the local area, the Class G airspace extends from the surface upward to 1,200 feet above ground level (AGL) until reaching an area of Class E airspace associated with enroute instrument airways. Areas of Class E airspace with a 700-foot ceiling are located north, south, and east of Florence. This airspace category is associated with airports with instrument approaches (Newport, North Bend and Eugene), ranging from 19 to 40 miles from Florence Municipal Airport. VFR aircraft operating in Class E airspace are responsible to see and avoid air traffic. There are no mandatory radio communication requirements during visual flight rules (VFR) conditions in Class E airspace. Eugene Airport also has an area of Class D airspace surrounding the airport, which requires two-way radio contact prior to entry, when in operation.



AIRPORT SERVICE AREA

The airport service area refers to the area surrounding an airport that is directly affected by the activities at that airport. Normally a 30 or 60-minute surface travel time is used to approximate the boundaries of a service area. **Table 2-9** lists the public airports within a 40 nautical mile radius of Florence. The Florence Municipal Airport service area extends north and south along Highway 101 and includes Reedsport and Winchester Bay to the south; Yachats and Waldport to the north; and east toward Mapleton.

Airport	Location	Runway Dimension (feet)	Surface	Lighted Runway?	Fuel Available?
Lake Woahink SPB (Florence)	5 NM S	9,000 x 1000	Water	No	No
Wakonda Beach State Airport (Waldport)	24 NM N	2,000 x 40	Turf	No	No
Lakeside State Airport	24 NM S	2,150 x 100	Turf	No	No
North Bend (Southwest Oregon Regional Airport)	34 NM S	5,321 x 150 (primary runway)	Asphalt	Yes	Yes
Newport Municipal Airport	36 NM N	5,398 x 150 (primary runway)	Asphalt	Yes	Yes
Toledo State Airport	38 NM N	1,750 x 40	Asphalt	No	No
Mahlon Sweet Field - Eugene Airport (Eugene)	40 NM E	8,009 x 150 (primary runway)	Asphalt	Yes	Yes

TABLE 2-9: PUBLIC USE AIRPORTS IN VICINITY

LAND USE PLANNING AND ZONING

Land use controls and zoning in the vicinity of the airport are administered by the City of Florence and Lane County. Florence Municipal Airport is located within the City of Florence's Airport Development (AD) District. Adjacent properties are overlain by the Airport Noise Corridor, Approach Safety, and Airport Obstruction Overlay Districts (Chapter 21 of Florence Code Title 10, Airport Districts), which are intended to implement the requirements of FAR Part 77 and *"other Federal and State laws regulating structural height, lights, glare producing surfaces, radio interference, smoke, steam or dust and other hazards to flight, air navigation or public health, safety and welfare."* The city has also acquired avigation easements for residential and open space areas abutting the western side of the airport.

Uses and zoning surrounding the airport are predominately of an industrial and open space nature, with some residential development and a golf resort also occurring in the vicinity, as noted in **Table 2-10**.

	Land Use	Zone		
North	Open Space, Manufactures Home Subdivision Tourist Destination/Resort	Limited Industrial Mobile/Manufactured Home Residential Single Family Residential		
South	Residential	Multiple Family Residential, Single Family Residential		
East	Manufacturing and Industrial uses, Open space and residential	Limited Industrial, Open Space, Single Family Residential Mobile/Manufactured Home Residential		
West	Open Space, Waste transfer station, Residential	Open Space, Limited Industrial, Single Family Residential		

TABLE 2-10: SURROUNDING LAND USE & ZONING

Potential future uses which may affect the airport and vicinity include, but are not necessarily limited to: the City's current construction of a road to connect the industrial property of the east of the runway to Highway 101 via existing 27th Street; the potential development of vacant, industrially zoned land which is currently in the City's ownership and located immediately north and northeast of the airport property; the potential development of the Industrial Zoned property adjacent to the subject site's southwest boundary; and the pending development, by Lane County and the Port of Siuslaw, of limited industrial uses on the newly rezoned Limited Industrial property immediately northwest of the airfield. Regarding existing residential development in the vicinity of the airport, the consultant was informed by City of Florence Planning Staff that the Multiple Family Residential Zoning occurs immediately southwest of the runway and also nearby to the east and northeast of airport property.

Chapter 21 of Florence Code Title 10, Airport Districts, is intended to *"accommodate the facilities necessary for aviation purposes and to provide a buffer to minimize potential dangers from and conflicts with the use of aircraft."* Subsection 21-1-2 provides that accessory buildings and uses whose immediate presence is necessary to the property's aviation function are permitted outright in the AD District. In addition, one residential caretaker unit for the airport is an outright permitted use in this District. Conditional Uses, subject to the provisions of Chapter 4 of Title 10, include; public and semi-public buildings, such as fire stations, substations or reservoirs essential to the physical, social and economic welfare of the community; public works and other passive recreation areas not including places of public assembly; and fuel storage facilities. Subsection 21-1-4 provides that all uses in the AD District must meet four additional criteria:

A) It must be demonstrated that the proposal complies with the land use element of the Airport Master Plan and with the Comprehensive Plan of the City;