

1.0 INTRODUCTION

This Record of Decision (ROD) provides final determinations and approvals by the Federal Aviation Administration (FAA) for federal actions needed to enhance safety features and improve aviation facilities at Juneau International Airport (JNU), Juneau, Alaska. The federal actions identified in Section 5.0 of this ROD, and other applicable state and local actions, are necessary to support the following projects:

- FAA's Preferred Alternative to increase the runway safety area (RSA) on both runway ends and sides to comply with FAA standards is RSA-5E. This would be accomplished by displacing the Runway 08 threshold, relocating the Runway 26 threshold, and constructing additional RSA at each runway end. Each runway would have 600-foot undershoot protection and 1,000-foot RSA for aircraft overruns. In addition, sufficient fill would be added to the lateral safety areas to meet FAA standards.
- Pilot alignment would be improved and safer aircraft landing conditions created by installation of a medium intensity approach lighting system with runway alignment indicator lights (MALSR) on Runway 26. FAA's Preferred Alternative for this action is NAV-2B.
- A new snow removal equipment and maintenance facility (SREF), designed to address the current building storage and design deficiencies, would be constructed in the Airport's Northeast Development Area, as described in FAA's Preferred Alternative SREF-3B1.
- FAA's Preferred Alternative to create safer vehicle traffic conditions and improve airfield efficiency is to construct a new fuel farm access road as described in Alternative FF-1.
- Additional aircraft parking and storage facilities would be installed in the Northeast and Northwest Development Areas at JNU. These facilities would satisfy existing aviation demands and accommodate projected future aviation needs. In addition, the facilities would be designed to separate incompatible aviation uses and provide adequate separation between aircraft. FAA's Preferred Alternative for these actions is FW/RW-2.
- A number of habitat modifications would be undertaken and wildlife control activities would be implemented to reduce wildlife hazards to aircraft operating at JNU. FAA's Preferred Alternative to meet the need for hazard reductions is WH-1, as modified by other components of wildlife hazard management that would be adopted into a revised Wildlife Hazard Management Plan.

The Airport Sponsor's proposed actions and alternatives considered to meet the defined needs are described in detail in Sections 2.2 through 2.13 of the Final Environmental Impact Statement (FEIS), and they are summarized in this ROD. A full description of the preferred alternatives and FAA's selected alternatives is included in the ROD.

FAA understands that the Sponsor will apply for federal grant-in-aid funding from the FAA's Airport Improvement Program. There are numerous findings and determinations prescribed by statute and regulation that must be made by FAA as preconditions to agency approvals of airport project funding applications. This ROD includes the environmental determinations necessary to establish eligibility for approval of grants for federal funding, and it provides the basis to proceed with those findings and determinations. However, this ROD neither grants federal funding nor

constitutes a funding commitment. FAA will review funding requests upon submission by the Sponsor of a timely grant-in-aid application, and FAA will make funding decisions in accordance with statutory and regulatory requirements.

This ROD completes the environmental decision-making process undertaken by FAA with the assistance of Juneau International Airport (the Sponsor of the projects) and cooperation of federal and state agencies. The U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Alaska Department of Fish and Game participated as Council on Environmental Quality (CEQ)-defined "cooperating agencies" (40 CFR §1501.6). Other agencies, particularly the U.S. Environmental Protection Agency and Alaska Department of Natural Resources, as well as local city and borough agencies and officials, worked closely with FAA. Agencies, public interest groups, citizens, and the Sponsor provided comment on project needs, possible alternatives, resources affected, mitigation, and other subjects throughout the course of the EIS. More information on the FAA's public involvement activities is provided in Sections 1.7 and 1.8 and Chapter 6 of the FEIS. Agency letters reflecting concurrence with FAA's findings are provided in Appendix A to this ROD. Public and agency comment on the FEIS, and FAA responses to those comments, is included as Appendix B.

FAA has conducted a thorough and careful environmental analysis of the projects and alternatives. Impacts arising from these actions are disclosed in the April 23, 2007 FEIS. The FAA's Acting Alaskan Region Administrator has reviewed the FEIS and administrative record in support of the decisions documented in this ROD.

This ROD has been prepared and issued by FAA in compliance with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. Section 4321 et seq.), CEQ regulations implementing NEPA (40 CFR §1500-1508), and guidance contained in FAA Orders 1050.1E and 5050.4B. This ROD is also used to demonstrate and document FAA compliance with procedural and substantive requirements as well as related environmental and programmatic statutes and regulations that apply to FAA decisions on airport projects.

FAA arrived at these determinations and approvals by reviewing the environmental analysis in the FEIS and all other documents that comprise the administrative record for the EIS.

2.0 PROJECT SETTING

Juneau, the state of Alaska's capital city, is located in the panhandle of southeast Alaska, approximately 950 air miles northwest of Seattle and 570 air miles southeast of Anchorage (Figure 1). The Airport plays an important role in serving the capital of Alaska by providing direct, non-stop service to Anchorage and other Alaskan cities. JNU provides primary intrastate access to the southeast region of Alaska and to the Juneau area population, and it serves as a main interstate connection between southeast Alaska and Seattle, Washington. The Airport is located within the City and Borough of Juneau (CBJ), approximately 9 miles northwest of downtown Juneau. Airport property encompasses approximately 662 acres of land.

Scheduled passenger service at JNU is provided by one large Part 121 Air Carrier operator, Alaska Airlines. Alaska Airlines, Federal Express, and Alaska Central Express provide air-cargo service to Seattle and within Alaska, and a number of air-taxi operators fly to destinations around Juneau and southeast Alaska. JNU receives scheduled international service by Air North from Whitehorse, Canada.

JNU is the primary commercial service airport for southeast Alaska and, other than ferry service, provides the only access to areas outside the Juneau area. (It is not possible to drive directly from Juneau to other major parts of Alaska or to the lower 48 states.) Since the 1960s, the CBJ has undertaken a number of efforts to maximize access to and from Juneau and to change a perception among some in Alaska that Juneau has insufficient transportation reliability to support the requirements of a capital and legislature. Many of these efforts typically supported by FAA and funded in large part by the federal government have been directed at improving aviation safety while at the same time increasing air service reliability into the Airport. For example, the use of state-of-the-art navigation systems has resulted in the development of special-use approach procedures and innovative departure procedures that enhance air carrier reliability under challenging weather, winds, and terrain constraints.

2.1 JUNEAU INTERNATIONAL AIRPORT (JNU OR THE AIRPORT)

The Airport was developed by the U.S. government to support military Air Corps operations in Alaska. Prior to World War II, the area was served by a limited number of small aircraft, mostly float planes. The paved runway at the Airport was constructed in 1942. Following the war, Pan American Airlines and Pacific Northern Airlines established service to Juneau from Seattle and Anchorage. In 1953, the Airport was transferred from U.S. government ownership to the City of Juneau. In 1961, the runway was extended to accommodate jet aircraft operations in Alaska. In 1989, a full-length parallel taxiway was constructed to connect both ends of the runway to the aircraft parking apron and passenger terminal area. Other facility improvements have taken place periodically, most recently for additional aircraft parking and hangar spaces.



Figure 1. Project area locator map.

The Airport is now owned by the CBJ. A seven-person Airport Board, appointed by and accountable to the CBJ Assembly, governs the Airport. The Airport Board oversees the maintenance and operations of the Airport, while fiscal responsibility is vested with the CBJ Assembly. The Airport Board also oversees the activities of the Airport Manager, who is responsible for the day-to-day operation of JNU.

2.2 AIRPORT MASTER PLAN

The Juneau International Airport Board approved an Airport Master Plan and update to the Airport Noise Compatibility Plan on April 14, 1999. The Airport Layout Plan was revised at the conclusion of the Master Plan and was conditionally approved by FAA subject to environmental review on November 24, 1999, and the Master Plan was accepted by FAA on June 27, 2000. The Master Plan identified a number of recommendations for the Airport intended to enhance land use compatibility, resolve design and capacity deficiencies, accommodate existing and future air traffic, and reconstruct or rehabilitate Airport facilities (USKH 1999). FAA subsequently determined that some of the improvements identified in the Master Plan were needed to comply with the Federal Aviation Act or design standards for runways (40 CFR §139.309[a][2]); FAA (1989). All of the recommendations in the Master Plan that required federal action, including partial or total federal funding, federal agency approval, or federal permit issuance, are subject to review and analysis under the National Environmental Policy Act (NEPA).

An environmental assessment (EA) was prepared and published in 2000 to evaluate some of the Master Plan recommendations (USKH 2000). The potential for numerous environmental impacts was disclosed in the Draft EA, but a number of concerns were raised by state and federal agencies, local citizens, and special interest groups about the magnitude of environmental impacts. Additional concerns were raised in comment letters, including the potential for significant impacts to wetlands, essential fish habitat, recreation, wildlife, area hydrology, and other resources. In response to concerns raised by various stakeholders about the projects and specifically about the magnitude of environmental impacts, the FAA announced in June 2000 that a more comprehensive EIS would be necessary to thoroughly consider and evaluate project alternatives, environmental impacts, and mitigation options. This ROD provides the culminating decisions from the environmental analysis documented in the Final EIS dated April 23, 2007.

2.3 AVIATION OPERATIONS AND FACILITIES AT JNU

For wheeled aircraft, JNU has a single runway aligned in an almost east-west direction that is 150 feet wide and 8,456 feet long (see Figure 2). Takeoffs to the west and landings from the east use Runway 26, while takeoffs to the east and landings from the west use Runway 08. The Float Plane Pond also serves as a runway for water takeoffs and landings. It has the same alignment as the hard surface runway and is 4,900 feet long and 450 feet wide.

The RSAs extend approximately 250 feet beyond the end of Runway 08 (at a width of approximately 232 feet) and approximately 289 feet beyond the end of Runway 26 (at a width of approximately 228 feet). The width of the RSA also varies along the lateral extent of the

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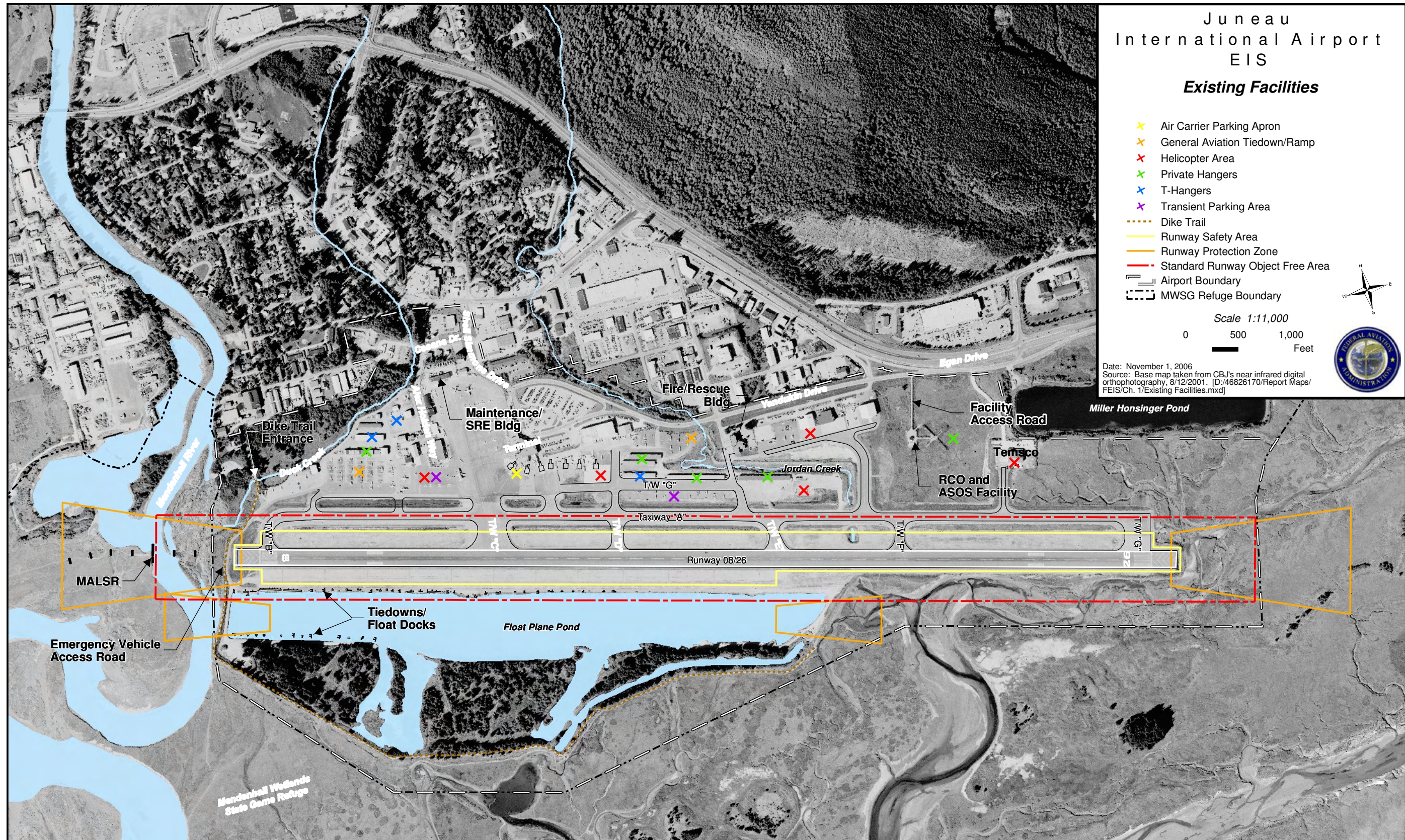


Figure 2. Existing facilities.

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runway. It is approximately 362 feet wide for approximately 3,500 feet of runway length and is 500 feet wide for the remainder of the runway.

There are several aircraft parking aprons at JNU. The passenger terminal apron and commercial-based aircraft apron are currently co-located north of Runway 08/26 and consist of approximately 16 acres of aircraft parking and movement area. This apron serves the air carrier and based air taxi and general aviation fleet. A second apron, for general aviation, is located west of the terminal apron and provides roughly 3 acres of aircraft parking and movement space. Other general aviation aprons are located east of the terminal. In addition, there are numerous tenant helicopter-parking areas located adjacent to the parallel taxiway system (Taxiways A and H) and within the northeast quadrant of the Airport.

2.4 AIRPORT NAVIGATIONAL SYSTEMS

The Airport is situated in a mountainous region of southeastern Alaska. The mountainous terrain places limits on flight operations (e.g., weight limitations placed on some aircraft to ensure that these aircraft clear obstructions when departing). The FAA and JNU have been constantly improving facilities and seeking system improvements to increase the ability of the Airport to safely serve the passenger and cargo demand of the Juneau region.

Alaska Airlines has developed, received FAA approval for, and implemented special-use approach and departure procedures for each end of the runway. These procedures are based on the existing aircraft fleet mix, maximum passenger and cargo load weights, and aircraft operational performance. The Runway 08 special-use departure procedures (i.e., the Lemon, Fox, and the Gastineau Channel departures) and Area Navigation (RNAV) global positioning system (GPS) enable aircraft to safely operate to and from JNU during challenging atmospheric conditions.

Operating conditions at JNU are rather complex due to the changing weather and winds and the need for aircraft to maintain adequate clearance from terrain and other aircraft. Most aircraft are capable of operating into or out of JNU during Visual Flight Rule (VFR) conditions. However, during Instrument Flight Rule (IFR)-only conditions, special procedures and equipment are required to ensure that aircraft maintain adequate clearances from the surrounding terrain. As noted earlier, Alaska Airlines has developed and received approval to use special approach and departure procedures when operating during poor weather conditions at JNU.

According to data for JNU obtained from the National Climactic Data Center, the winds in Juneau are highly variable, with both wind speed and direction influenced by the terrain. These types of conditions typically result in a need for extensive aircraft maneuvering to align the aircraft for a landing, causing a shorter stabilized approach to the runway. Turbulence and wind shear are common in the vicinity of the Airport. Temperatures often hover near freezing throughout the winter, and the maritime location contributes to extensive icing conditions. Alaska Airlines has provided correspondence estimating that contaminated runway issues were encountered at the Airport approximately 20 days per year. All of these factors can result in long, fast landings (FAA 2002).

When considering the published "public-use" approaches, the Airport can be expected to experience VFR conditions approximately 90.1% of the time, and to be below minimums approximately 9.9% of the time. The term "below minimums" indicates the percentage of time that the ceiling or visibility is so reduced that most operators cannot operate at JNU.

In consideration of the "special-use" approaches authorized for use only by Alaska Airlines, the Airport can be accessed under IFR conditions an additional 6.9% to 8.2% of available time, depending on which runway is utilized for landing. This means the Airport would be below minimums, for Alaska Airlines equipment, approximately 1.7% and 3.0% of the time annually. As a result, Alaska Airlines has improved its service reliability at JNU by being able to operate under special use approaches about 30 more days per year. However, weather conditions during about 11 days annually are still so poor (below minimums) that the airline will experience flight cancellations.

2.5 AIRPORT FACILITIES

JNU maintains a number of existing facilities for a variety of tenants, ranging from private aircraft parking and storage to commercial aviation services and military operations. The following subsections briefly mention only those facilities for which an action has been proposed and evaluated in the FEIS: snow removal equipment and maintenance building, fuel farm access road, and general and commercial aviation parking and storage.

2.5.1 SNOW REMOVAL EQUIPMENT AND MAINTENANCE BUILDING

The existing Airport snow removal equipment and maintenance building, located immediately north of the commercial aircraft apron, covers approximately 5,200 square feet. The main building was designed to accommodate three pieces of airfield snow removal equipment: a grader, loader, and a plow truck. Since the early 1950s, the snow removal equipment and maintenance building has also served as a storage facility for some of the snow removal equipment, although currently, because of the space limitations, many pieces of equipment are left outside. Another hangar, built in the 1940s and across the terminal from the snow removal equipment and maintenance building, serves as storage for sand, pavement de-icing/anti-icing compounds, and other materials and supplies.

2.5.2 FUEL FARM ACCESS

The main bulk fuel storage area ("fuel farm") at the Airport is located northwest of the snow removal equipment building (see Figure 2). Access to and from the bulk storage fuel farm for aviation and jet fuel is not direct, and refueling tanker trucks are required to travel outside of the secure Airport environs on Alex Holden Way to reach the terminal aviation ramp.

2.5.3 AVIATION FACILITIES: EXISTING DEMAND AND PROJECTED NEEDS

Aircraft based at or using JNU can be classified as either rotary wing (i.e., helicopters) or fixed wing. Approximately 35 acres are being used at JNU to accommodate aircraft: this area includes hangars and aircraft parking. The Master Plan published in 2000 identified a need for more

facilities and problems with the existing layout (with respect to aircraft spacing, mixed aircraft types in common areas, and other safety and operational concerns). A comparison of the Airport operational forecast against FAA's Terminal Area Forecast (TAF) for 2004 was conducted for the EIS, which illustrates the current demands for aviation facilities as well as the projected increased need for hangars and parking sites. Table 1 presents the forecasted aviation facility needs for JNU through the year 2015, derived for the EIS and using Airport Waiting List data for storage space.¹

Table 1. Existing and Projected Future Aviation Facility Requirements

Facility/Aircraft	Number Existing and Approved ¹	Additional Demand ²	EIS Forecast (year 2015)	Projected Number Increase ³
T-Hangars/Executive Hangars	80	16	116	36
Other Hangars (Large Private/Commercial) ⁴	9	1	16	7
Transient Aircraft Tiedowns	128	var. ⁵	153	25
Based Aircraft Tiedowns	196	var. ⁵	194	<2>
Helicopter FBO ⁶	5	2	6 ⁷	2 ⁸
Based and Transient Helicopter Parking Sites	32	7	46 ⁷	14

¹ Total number in use as of June 2004 as well as those in construction or already authorized but not yet in use.

² Only shows additional demand over and above value in previous column. Based on February 2004 Wait Lists. Recent data indicates greater demand exists for commercial and private hangars.

³ Difference between demand in year 2015 vs. number existing and approved.

⁴ Number of aircraft stored can vary by size and need, particularly for commercial hangars. For example, Wings hangar is approximately 20,000 sq/ft.

⁵ Current tie-down needs vary according to available hangar space, seasonal operations, etc.

⁶ FBO = Fixed Base Operator; typically includes hangar, building, access road, aircraft parking, vehicle parking, and operational area.

⁷ Helicopter forecasts based on Master Plan, as FAA's Terminal Area Forecast does not track or forecast helicopter operations.

⁸ Demand already exceeds Master Plan forecast.

The greatest deficiency is the availability of executive hangars and T-hangars. The forecasts indicate that the space needed for T-hangars and executive/corporate hangars will increase from that currently available by almost 50% through the planning horizon (2015). As of March 2006, there were 29 people on the waiting list for an executive or T-hangar, and two companies on the commercial hangar waiting list (Mello 2006). Currently, aircraft are parked in obscure places or with insufficient space that is cramped, thus, there is unnecessary aircraft movement and a lack

¹ Needs are based on review/compilation of the JNU Hangar Waiting list, February 2004.

of separation between aircraft and operational surfaces, all of which result in potential safety concerns.

The EIS considered the spatial requirements to provide for all of the current needs plus forecasted needs. Based on the existing demand for facilities and projected growth in demand for aviation services, the EIS study team estimated that approximately 9.1 additional acres will be needed. These estimates do not fully account for the infrastructure to support such growth, such as additional taxiways, public access routes, snow storage, utilities, and vehicle parking. In accordance with standard airport design practices, some operational flexibility is also desirable to accommodate changing economic conditions or social needs or unanticipated requests for aircraft storage and parking.

2.5.4 FLEET MIX AND CRITICAL AIRCRAFT

An evaluation of the aircraft fleet mix was conducted for the EIS, in part to determine runway length requirements as a component of developing alternatives for RSAs. This evaluation concluded that Alaska Airlines' fleet was expected to continue to be dominated by the B-737 series of aircraft, with both the B737-200 and B737-400 models currently employed at JNU, and much less frequent use of their 737-NGB series (particularly the B737-700 and B737-900). The FEIS documented that the B737-400 would continue to be the critical aircraft at JNU for takeoffs, while the B737-900 is and would be in the reasonably foreseeable future the critical aircraft for landings. In addition, the runway analysis demonstrated that the current runway length is adequate for all typical, fully-loaded aircraft using JNU under most conditions. The only exception is for the B737-900 aircraft landing on contaminated runway (also designated as "Poor" runway landing condition).

2.6 WILDLIFE HAZARD MANAGEMENT

In accordance with 14 CFR Part 139.337(d), JNU is responsible for development and implementation of a Wildlife Hazard Management Plan (WHMP), including the need to take immediate measures to alleviate wildlife hazards whenever they are detected. JNU has a WHMP under which it operates in compliance with FAA requirements. After completing an updated Wildlife Hazard Assessment (WHA) in 2001, the Airport submitted a revised WHMP in April 2002. Because some actions proposed in the WHMP would have a significant affect on the environment the FAA decided to include an analysis of those actions and alternatives within the FEIS.

3.0 NEED FOR ACTION

The CEQ regulations implementing NEPA require that an EIS specify the underlying Purpose and Need to which an agency is responding in proposing actions and alternatives (40 CFR §1502.13). The following sections summarize the Need to improve Airport facilities and the stated Purpose for actions proposed by the Airport and FAA. More information documenting the Needs may be found in Section 1.4 of the Final EIS.

3.1 RUNWAY SAFETY AREA (RSA)

The RSA dimension for Runway 08/26 is defined as a 500-foot-wide rectangular area centered upon the runway and extending lengthwise 1,000 feet beyond each runway end. These dimensions are based on the type of design aircraft using the Airport, specifically the wingspan and approach speed of the design aircraft.² Shortly after publication of the Draft EIS, FAA issued new guidance for RSA undershoot protection, reducing the required RSA length from 1,000 feet to 600 feet beyond each runway end (FAA 2004). Overshoot protection remained unchanged at 1,000 feet beyond each runway end.

Under dry conditions, the RSA should be capable of supporting occasional aircraft that could overrun, underrun, or veer off the runway without causing structural damage to the aircraft, as well as supporting aircraft firefighting and rescue equipment. In order to meet federal special grant conditions associated with a runway rehabilitation conducted in 1997, the RSA must be brought into compliance with FAR Part 139 (Public Law 109-115) no later than December 31, 2015. The deficiencies associated with the runways at JNU include:

- insufficient lateral RSA along approximately 3,500 feet on the south side of the east portion of the runway,
- a relatively small amount of insufficient lateral RSA on the north side of the runway, and
- runway-end RSAs that are too narrow and more than 700 feet too short.

The deficiencies described above illustrate the Need to bring the Airport into compliance with FAA's standards for RSA. In doing so, the Airport shall not be required to reduce the length of the runway or declare the length of the runway to be less than the actual pavement length in order to meet the FAA requirements for RSAs³. Improvement of the RSA will meet FAA's statutory responsibility to ensure that the safe operation of the Airport and runway system is the highest aviation priority (49 U.S.C. §47101[a][1]).

2 The design aircraft currently using or projected to use JNU fall within the wingspan category of Group III and approach category of C, thereby defining the 1,000 feet x 500 feet RSA dimensions.

3 See Public Law Section 502 Runway Safety Standards, Vision 100 – Century of Aviation Reauthorization Act, December 12, 2003.

3.2 IMPROVE NAVIGATIONAL ALIGNMENT

Flight operations into and out of JNU are complicated by mountainous terrain, inclement weather including strong winds, precipitation, and fog with limited visibility, and sometimes slippery runway conditions caused by ice and snow. When the Airport is below ceiling or visibility minimums, some aircraft are not capable of landing or taking off, creating delays and, in some cases, flight cancellations. As a result, flight schedule reliability, particularly for commercial traffic, is reduced, which has clear economic and social impacts.

Additional approach lighting is needed to improve pilot alignment and create safer landing conditions for all aircraft during the transition to visual references used in landing at night and during poor weather conditions. Improvements to the navigational system would help to fulfill FAA's statutory responsibility to ensure that the safe operation of the Airport and runway system is the highest aviation priority.

3.3 IMPROVE AND INCREASE AVIATION FACILITIES

The Purpose of improving and adding additional aviation facilities is to efficiently meet current and reasonably foreseeable Needs for snow removal resources, access to the fuel farm, and aircraft parking for commercial and general aviation users. All of these actions support FAA's statutory responsibility to ensure that the safe operation of the Airport and runway system is the highest aviation priority.

3.3.1 SNOW REMOVAL EQUIPMENT AND MAINTENANCE FACILITY (SREF)

The current snow removal equipment building does not meet building codes or worker safety codes. Because of insufficient storage space inside the building, much of the equipment is stored outside, which reduces equipment life expectancy and increases maintenance costs. Equipment status is a major reason for delays to airfield operations and other time-critical activities, such as keeping the runway surface cleared to a condition suitable for landing and takeoff in wet snow. The sand storage hangar, located across the terminal from the current snow removal equipment and maintenance building, is also in a state of disrepair. This facility was not designed as a storage area for efficient loading and unloading of sand, nor was it constructed to hold airfield chemicals, such as de-icing compounds.

JNU has a Need for a larger SREF that is designed to shelter equipment and reduce mobilization time for snow removal operations, and a new sand storage building designed for such use. Co-location of snow removal equipment and maintenance and the sand shed would also increase operational efficiency.

3.3.2 FUEL FARM ACCESS

A new access route between the bulk fuel farm and the general aviation ramp has been proposed by JNU to keep fuel supply trucks off public thoroughfares, thereby creating safer traffic conditions. A new fuel farm access road would also increase airfield efficiency because of the shorter distance trucks would travel to reach the aviation ramp. The new road would provide

better security for the Airport and fuel supply trucks, as all fuel loading and transport would take place on Airport property.

3.3.3 AIRCRAFT PARKING AND STORAGE

At the present time, aircraft at JNU are parked in obscure places or with insufficient space, resulting in unnecessary aircraft movement and inadequate separation between aircraft and operational surfaces. Additional facilities and apron space are needed to satisfy existing private and commercial aviation demands and to accommodate the projected growth in aviation needs, thereby satisfying other Airport objectives such as separating general aviation aircraft from commercial operations and relieving facility and parking congestion.

These developments would reflect FAA's responsibility to undertake airport construction and improvement projects that increase the capacity of facilities to accommodate passenger and cargo traffic to the maximum feasible extent, so that safety and efficiency increase and delays decrease (49 U.S.C. §47101[a][7]).

3.4 WILDLIFE HAZARD MANAGEMENT PLAN (WHMP)

There have been a number of wildlife strikes to aircraft approaching or departing JNU. FAA's strike database includes 44 documented strike reports for JNU during the years 1990 through 2005 (Cleary 2006). Except for one reported bat strike, all of the strikes involve birds including a variety of species such as herons, owls, sandpipers, sparrows, ducks, ravens, and geese. One recent major event occurred on August 17, 2004. An Alaska Airlines B-737-400 was struck on departure from Runway 26 by a medium-sized bird at an elevation of approximately 1,000 feet. According to the wildlife strike report, the bird was ingested into one of the engines. No passenger or crew injuries were reported, but the aircraft was out of service for inspection and repair for approximately 24 hours.

JNU published a revised WHMP (City and Borough of Juneau [CBJ] 2002) and identified species and problem areas presenting a hazard to aviation. In accordance with FAR Part 139, an updated WHMP is needed to implement habitat modifications and management actions that will reduce potential for aircraft collisions with wildlife.

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