

2 Existing Conditions and Issues

The first step in the airport master planning process is to gather information about the airport and surrounding environment. This information comes from a variety of sources and provides a starting point for evaluation of airport deficiencies and areas of potential development.

This chapter presents:

- ➔ The airport's general setting and role in the community, region, and state
- ➔ An overview of the airspace, including navigational aids and procedures
- ➔ Description of current airport facilities and services
- ➔ A summary of the environmental conditions at the airport

2.1 Issues

The Kotzebue Ralph Wien Memorial Airport (OTZ) has been the subject of considerable study over the past several years, including the idea of relocating the airport. The final airport relocation feasibility study, released in 2008, concluded that relocation was not feasible due to funding constraints. Subsequently, the Alaska Department of Transportation & Public Facilities (ADOT&PF) moved forward with expanding the Runway Safety Areas (RSAs), conducting a practicability study in 2010. In 2012 the final environmental assessment (EA) for expanding the RSAs was approved, and construction began in 2013.

During the initial phase of this master plan update, the following issues were raised through discussions with airport users, the Federal Aviation Administration (FAA), and ADOT&PF:

- ➔ Need for a float pond with public access
- ➔ Lease lot demand
- ➔ Property acquisition
- ➔ Security of general aviation (GA) aircraft
- ➔ Offset instrument landing system (ILS) for Runway 9/27
- ➔ Security, including fencing and gates, and transient pilots' access to the apron
- ➔ Desire for intervisibility between the main and crosswind runways
- ➔ Erosion of the hillside across from the Runway 27 threshold

2.1.1 Constraints on Development

There are considerable barriers to implementing a fully FAA-compliant airport at Kotzebue that accommodates the design aircraft under all weather conditions. Previous studies have analyzed these constraints.



Physical Constraints

The primary constraint to development at OTZ is the location of the airport. The runway is bounded by the Kotzebue Sound on the west end and Kotzebue Lagoon (into which it extends) on the east and south. The community is adjacent to the airport on the north side.

Because the airport effectively serves as the southern boundary of the community, there have been considerable accommodations to allow vehicle access around the west end of the airport for residents to access traditional fish camps south of the airport. The community and ADOT&PF went through a lengthy process of meetings and design alternatives and settled on the current solution: extension into Kotzebue Sound with a vehicle access road around the end of the extension. Pilot-activated electronic gates across this access road prevent vehicles from entering the RSA during final approaches by aircraft. Due to the direct effects on fisheries and the community, an Environmental Impact Statement (EIS) was considered, but ultimately it was determined that an EA would suffice (Section 2.9.11 summarizes the EA). Residents were concerned that any construction in Kotzebue Sound would disrupt the longshore channel that is important to boating and subsistence activities.

The RSA practicability study (USKH, 2010) examined a number of options for bringing the airport into full compliance with FAA RSA standards (500 feet wide, 1,000 feet long). Collaboration between the FAA Flight Standards office, ADOT&PF, and the community led to the decision to extend the runway further into Kotzebue Sound. A summary of this study is included in Section 2.9.7. The following table outlines the RSA deficiencies that could not be corrected.

Table 2-1 - Summary of RSA Constraints

Deficiency	Reason	Implication(s)	Study
RSA Width = 340'	Not practicable to widen	RSA is 160' too narrow	RSA EA, pg. 9
RSA Length = 400' on each end	Not practicable to lengthen	RSA is 600' too short on each end	RSA EA, pg. 9
Runway Length = 5,900'	Not practicable to lengthen	Runway does not accommodate fully-loaded 737-400/-800 during contaminated runway conditions	RSA EA, pg. 41

Financial Constraints

Considerable effort was put into evaluating the possibility of relocating the airport. Ultimately, the cost of relocating the airport was deemed too great.

The major financial hurdle facing most airport development projects at Kotzebue, particularly relocation, is the cost of gravel. There are no reliable sources near the community, and material brought from elsewhere must be lightered ashore. The relocation study (PDC, 2008) examined a number of material sources and included a cost sensitivity analysis to determine if a particular price for gravel would make relocation financially feasible.

Environmental Constraints

The Baldwin Peninsula is covered in wetlands and underlain with permafrost—two features that make construction challenging and expensive. Section 2.8.13 summarizes the extent of wetlands around the airport.

Additionally, subsistence and commercial fishing activity occur along the shoreline south of the primary runway. Continued access to the shore has been an ongoing concern for the community, and maintaining that access has prevented expansion of the airport to fully meet FAA design guidance.

The presence of cultural resources on and around the airport has also prevented airport expansion (see Section 2.8.8). Since construction of the RSA began in 2013, there has been ongoing recovery of human remains on airport property. The remains are to be interred on Kikiktagruk Inupiat Corporation (KIC) property within the airport boundary.

2.2 Background

2.2.1 Regional Setting

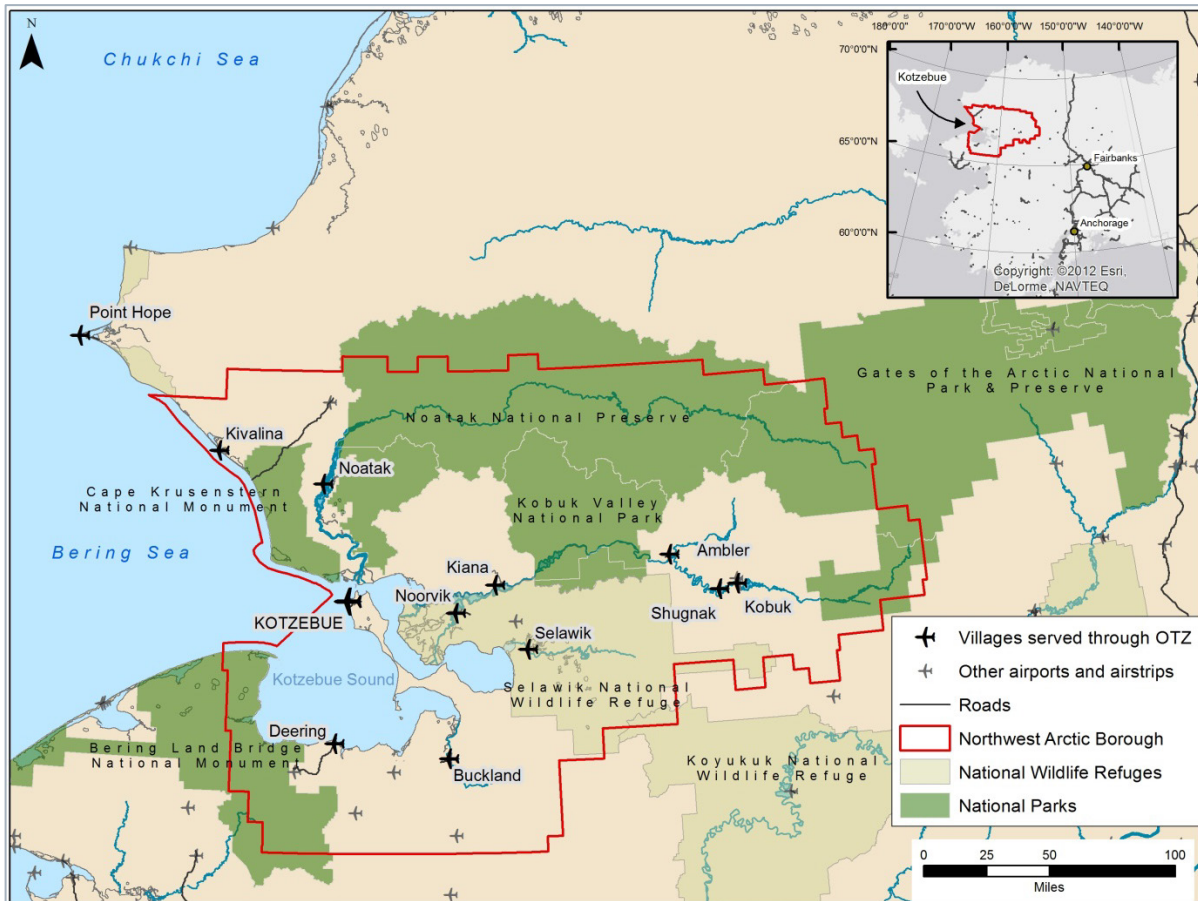


Figure 2-1 - Kotzebue Regional Setting



Located 549 miles northwest of Anchorage, Kotzebue is the largest of eleven communities in the 36,000-square-mile Northwest Arctic Borough (NWAB). The city occupies a 3-mile-long spit at the north end of the Baldwin Peninsula. The climate is transitional, characterized by cool summers and long, cold winters. Total precipitation averages only 9 inches per year, with an average snowfall of 40 inches.

The 2010 census identified 3,201 residents of Kotzebue and 7,523 residents throughout the NWAB. The most recent forecast of population growth in the NWAB was 0.8%.¹ More than 70% of Kotzebue residents are Alaska Native, predominantly Inupiat.



Figure 2-2 - Airport Property and Local Setting

2.2.2 Government

Kotzebue is the seat of government for the NWAB and home to NANA Regional Corporation. The City of Kotzebue is a second-class city with a city manager form of government. The village corporation established for Kotzebue under the Alaska Native Claims Settlement Act (ANCSA) is the Kikiktagruk Inupiat Corporation (KIC). Maniilaq Association is the regional Native healthcare provider. The Kotzebue tribal council is the Kotzebue IRA Council.

¹ June 2014 issue of *Trends*, <http://laborstats.alaska.gov/>

2.2.3 Economy

Kotzebue's role as a regional hub provides the backbone of the community's economy. It is the regional center for the ten villages in the NWAB, providing services such as:

- ➔ Health care
- ➔ United States Postal Service (USPS) office
- ➔ Education (NWAB School District headquarters, tech center, and Chukchi Campus of the University of Alaska Fairbanks)

Education and health services, local government, and trade/transportation/utilities make up the three largest employment sectors in Kotzebue. Residents also rely on subsistence hunting, fishing, and gathering to supplement their income.

The Red Dog Mine is located north of Kotzebue, within the NWAB. The mine is the NWAB's sole taxpayer and provides the Borough 60% of its revenue. Additionally, it makes royalty payments to NANA. From 2005 to 2009, the mine paid \$373 million in royalties to NANA (Red Dog Mine, 2009).

The City of Kotzebue collects a 6% sales tax, 6% bed tax, and 6% alcohol tax.

Tourism also provides economic opportunities for residents. Kotzebue serves as the jumping-off point for visitors heading to federal parkland units such as Cape Krusenstern National Monument, Noatak National Preserve, Kobuk Valley National Park, Selawik National Wildlife Refuge, and Bering Land Bridge National Preserve. In 2010, the National Park Service opened the Northwest Arctic Heritage Center in Kotzebue. Sport hunters and fisherman also travel through Kotzebue to pursue game species such as caribou, muskox, moose, and bear, as well as salmon and other sportfish.

2.2.4 Transportation

The Ralph Wien Memorial Airport (OTZ) serves as a primary transportation hub for the NWAB. There is daily passenger jet service to Anchorage and Nome as well as air taxi service to outlying villages. Cargo and mail destined for the villages is also routed through OTZ. Villages served through OTZ include Ambler, Deering, Selawik, Noorvik, Point Hope, Noatak, Kivalina, Kiana, Shugnak, Kobuk, and Buckland.

The FAA categorizes OTZ as a Non-Hub airport under the National Plan of Integrated Airport Systems (NPIAS). The NPIAS categorizes primary commercial service airports according to passenger enplanements using the following rubric:

Large hubs are those airports that each account for at least one percent of total US passenger enplanements; medium hubs for between 0.25 percent and one percent; small hubs for between 0.05 percent and 0.25 percent; and non-hubs for less than 0.05 percent of all enplanements, but more than 10,000 annual enplanements.



The Alaska Aviation System Plan (AASP) classifies OTZ as a Regional airport. This is defined as:

...public use airports, heliports, or seaplane bases that serve as an economic or transportation hub for more than one community, indicated by having at least three of the following characteristics:

- *At least 10,000 annual passenger boardings*
- *An air carrier hub*
- *A postal hub or more than 2 million pounds of cargo handled annually*
- *Scheduled passenger service in aircraft with at least 30 seats*
- *Community has a health facility serving two or more communities*
- *Primary or secondary fire tanker base*
- *Community has a Coast Guard air station, air support facility, or forward operating station*

Due to its location on the coast, Kotzebue is a transfer point between ocean and inland shipping during the ice-free season (typically early July through early October). However, there are no deep-water port facilities near the community and goods must be lightered between deep-draft vessels and land. The ADOT&PF is currently evaluating a road connection to a potential deep-water port at Cape Blossom. A summary of this study is in Section 2.9.10. Two tugs and four barges are based in Kotzebue.

Within Kotzebue, there are 26 miles of local roads used by automobiles and ATVs. There are no road connections between Kotzebue and other communities, nor are there road connections between any of the other villages in the NWAB, although many of the villages are connected by winter trails. Every winter, ice roads are constructed from Kotzebue to Kobuk River villages to transport fuel, building materials, and supplies.

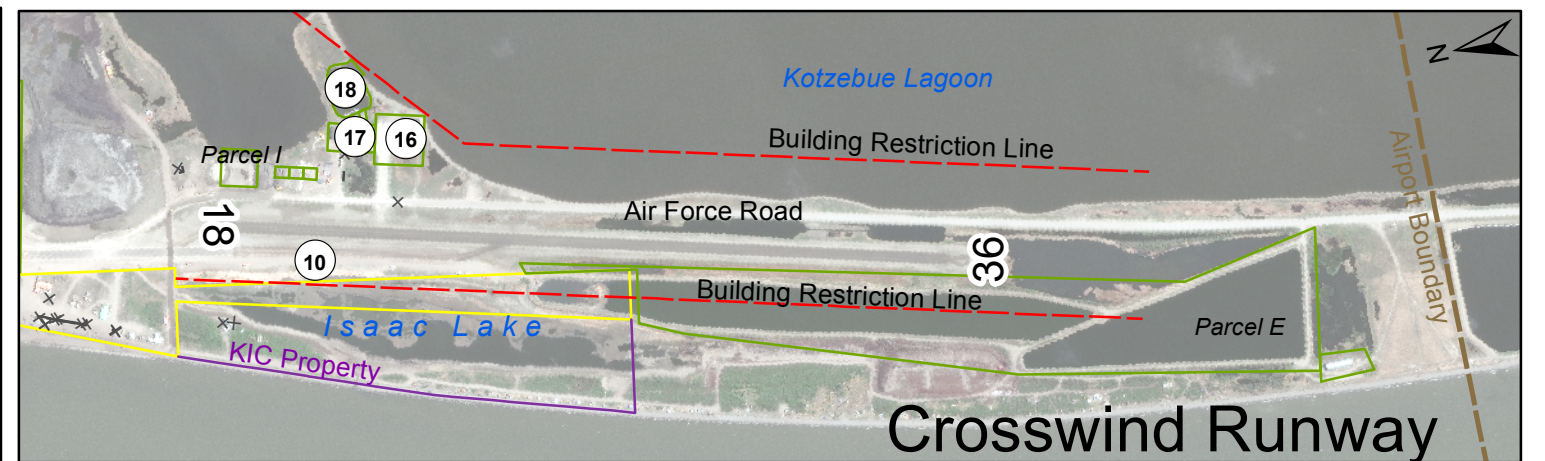
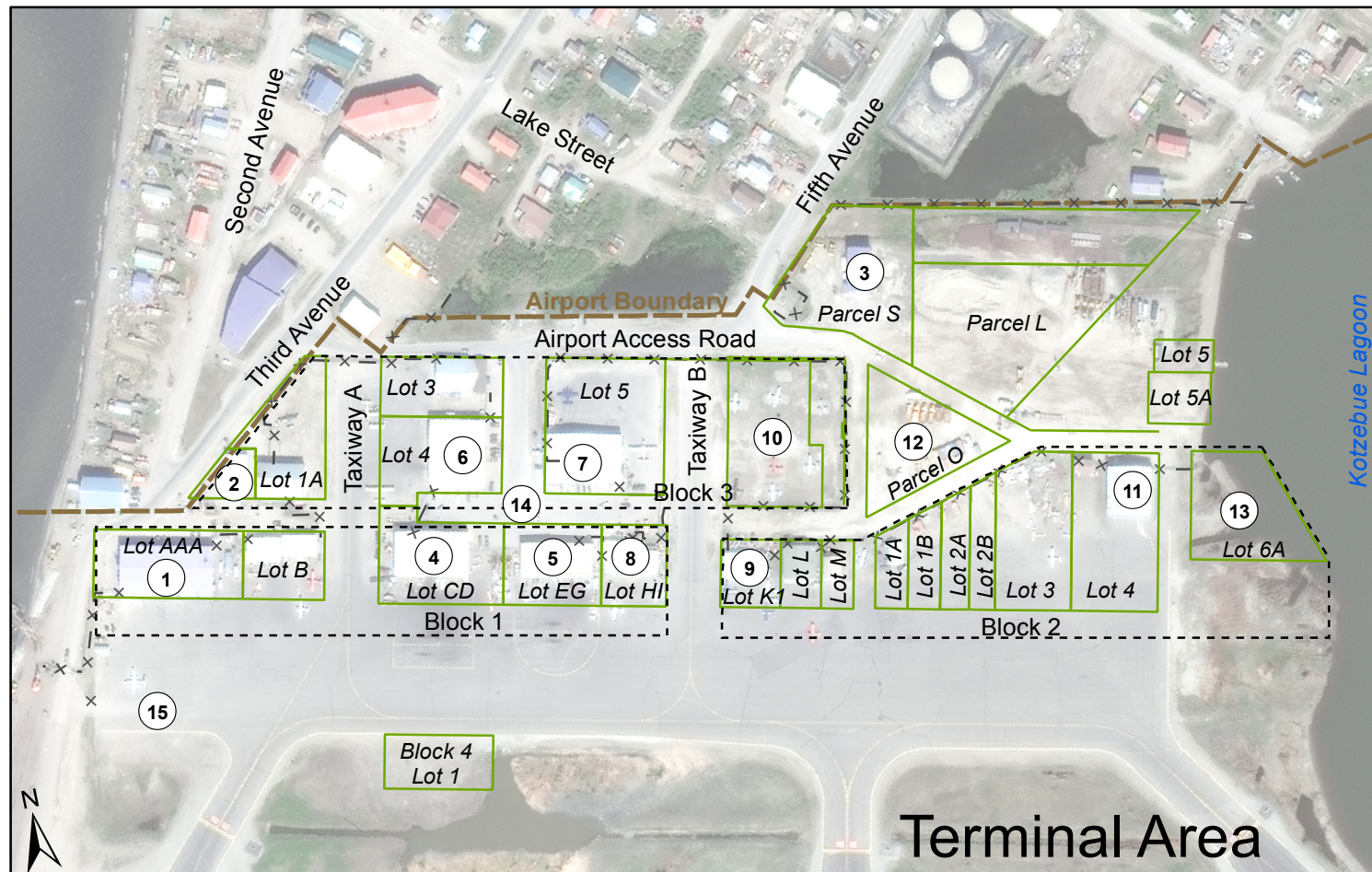
2.2.5 Climate

The Division of Community and Regional Affairs (DCRA) within the Alaska Department of Commerce, Community, and Economic Development (DCCED) summarizes the climate of Kotzebue as follows:

Kotzebue is located in the transitional climate zone, which is characterized by long, cold winters and cool summers. The average low temperature during January is -12°F; the average high during July is 58°F. Temperature extremes have been measured from -52 to 85°F. Annual snowfall averages 40 inches, with total precipitation of 9 inches per year. Kotzebue Sound is ice-free from early July until early October.

2.3 Land Use

Land use within the City of Kotzebue is mixed, with residential, commercial, and recreational occurring throughout the City. The land surrounding OTZ and much of the Baldwin Peninsula is primarily owned by KIC and NANA.



- | | | |
|----------------------------|------------------------------------|-------------------------|
| ① ARFF / SREB / FSS / NWS | ⑩ Tie-downs | — Lease Lots |
| ② M&O Storage | ⑪ Guardian Flight | — Airport Boundary |
| ③ Sand Storage | ⑫ Seasonal Use Area | × - × - Fence |
| ④ FBX | ⑬ Lot 6A - Aircraft/Dock Area | - - - BRL |
| ⑤ Alaska Airlines Terminal | ⑭ Public Parking & Terminal Access | — Navaid Critical Areas |
| ⑥ Bering Air Terminal | ⑮ Transient Parking | — FAA Property |
| ⑦ Ravn Terminal | ⑯ National Guard (Lot 3) | |
| ⑧ Baker | ⑰ Fish & Wildlife Service (Lot 1) | |
| ⑨ Northwestern Aviation | ⑱ Float Plane Pond (Lot 6) | |

Figure 2-3
Existing Airport Layout

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Incompatible land uses include the City of Kotzebue sewage lagoon that is located at the south end of Runway 18/36, and the vehicle access road (Second Avenue) around the west end of Runway 9/27. Additionally, Air Force Road crosses Taxiway F. The property owned by KIC adjacent to Runway 18/36 (see Figure 2-3) contains seasonal fish camps and fish drying racks. Other seasonal fish camps are located on airport property along the beach south of the KIC property. Wind turbines owned and operated by Kotzebue Electric Association (KEA) are approximately 3.6 miles southeast of the airport.

The community landfill is approximately 1.4 miles south-southeast of the Runway 36 threshold and 2.4 miles south of the primary runway mid-point.

The community has expressed concerns that a portion of the Kotzebue cemetery is located on airport property (see Figure 2-2).

Table 2-2 below summarizes the current airport leaseholders and sub-lessees. All leases are currently used for aeronautical purposes.

Table 2-2 - Current Airport Leases and Sub-leases

Lessee	Block	Lot	Sub-lease (if any)
Alaska Airlines	1	EG	
Department of Military & Veterans Affairs	6	3	
Civil Air Patrol	1	L	
Baker Leasing	1	B ²	
	1	HI	
Bering Air	3	4	
	3	3	
City of Kotzebue		Parcel E Parcel M	
CPD Alaska, LLC	1	M	
Drake Investments	1	K1	Northwestern Aviation
FAA			
Frontier Flying Service	3	5	
JJM Inc.	3	1A	
FBX	1	CD	
	2	3	
Northwestern Aviation	2	4	Guardian Flight
Northern Air Trophy	2	2A	
Ram Aviation	2	1A	
U.S. Fish & Wildlife Service	6	1, 2, 6	
Federal Aviation Administration		Tract VIII	

² Ryan Air Inc. was formerly a sub-lessee of Baker Leasing, but was awarded possession of the Baker lease lot B on Block 1 in a court judgment. ADOT&PF has not yet issued consent to the assignment.



ADOT&PF is interested in acquiring the FAA and KIC properties south of the Runway 9 threshold (Tract VIII; see Figure 2-3) in order to deter future incompatible land uses. FAA is currently demolishing some structures and cleaning up their parcel.

2.4 Aviation Facilities

The following section describes the current airport facilities, including dimensions, non-standard conditions, and other deficiencies. The FAA outlines the standards and recommendations for airport features in Advisory Circular (AC) 150/5300-13a. This document gives the geometric layout and engineering design requirements for runways, taxiways, aprons, and other airport facilities. The current version of the AC took effect in September 2012. A detailed discussion of the required airfield and airspace dimensions based on the design aircraft and adherence to FAA standards is presented in Chapter 4, “Facility Requirements.”

2.4.1 Airfield/Airspace

The current Airport Reference Code (ARC) for Kotzebue Airport is C-III. The ARC is a coding system developed by the FAA to relate airport design criteria to the operational and physical characteristics of the airplanes operating at an airport. As such, it is part of the design standards established in FAA AC 150/5300-13a. In order to determine the appropriate ARC for an airport, a design aircraft is determined. The design aircraft is typically the most demanding (in terms of an airport’s physical features) that conducts at least 500 annual operations at the airport. The ARC has two components relating to the airport design aircraft:

- ➔ **Aircraft Approach Category** (designated by a letter) is based on aircraft approach speed and typically affects runways and features relating to runway length
- ➔ **Airplane Design Group** (designated by a Roman numeral) is based on airplane wingspan and primarily affects width-related features and separation from other facilities

The airspace around OTZ is classified as Class E airspace. Tie-downs along Runway 18/36 are within the runway’s primary surface. Transient aircraft parked in front of the ARFF/SREB may penetrate the transitional surface, depending on type of aircraft and where they park.

2.4.2 Runways

Runway 9/27

Runway 9/27 is the primary runway at OTZ. It is paved and lighted, with a precision instrument approach for Runway 9 and a non-precision approach for Runway 27.

Runway 9 has a straight-in ILS approach with visibility minimum of 4,000 feet Runway Visual Range (RVR). The decision altitude for this approach is 263 feet. Decision altitude is the lowest an aircraft is permitted to fly without the runway in sight.

There is also an Area Navigation (RNAV) global positioning system (GPS) approach for Runway 9 that reduces the decision altitude to 213 feet. All of the other minima are the same as the ILS approach. This GPS approach has the lowest published minimums for OTZ.

The Runway 9 VOR/DME approach has a decision altitude of 340 feet and a one-mile visibility minimum.

Runway 27 has an RNAV GPS approach with visibility minimums as low as 1¼ miles and two VOR/DME approaches with visibility minimums as low as one mile.

Runway 9/27 was recently resurfaced, and the 2013 pavement condition report indicates that the surface is in good condition and recommends only preventative maintenance. The surface is grooved along its full length and width.

Runway 18/36

Runway 18/36 is the crosswind runway, used primarily by air taxis and GA aircraft. It is lighted but does not have runway markings. The surface is gravel.

Table 2-3 - Runway Characteristics

Item	Runway 9/27	Runway 18/36
Length	5,900'	3,876'
Width	150'	90'
Surface	Asphalt	Gravel
RSA Width	340'	120'
RSA Length beyond End	400'	240'
Runway Object-Free Area Width	800'	500'
Runway Object-Free Area Length beyond End	1,000'	300'
Runway Obstacle-Free Zone Width	400'	400'
Runway Obstacle-Free Zone Length beyond End	200'	200'
Visibility Minimums	Runway 9: ≥3/4-mile Runway 27: ≥1 mile	Both: ≥1 mile

2.4.3 Taxiways

There are seven taxiways at OTZ. Table 2-4 summarizes their dimensions and functionality.

Table 2-4 - Taxiway Characteristics

Taxiway	Function	Surface	Width	Safety Area
“A” Alpha	Access from apron to Block 3 lease lots	Asphalt	50’	120’
“B” Bravo	Access from apron to Block 3 lease lots and north GA tie-downs	Asphalt	50’	120’
“C” Charlie	Runway 9/27 to apron access	Asphalt	75’	120’
“D” Delta	Runway 9/27 to apron access	Asphalt	90’	120’
“E” Echo	Runway 9/27 to apron access	Asphalt	90’	120’
“F” Foxtrot	Connection between runways	Asphalt	50’	100’
“G” Golf	Connection between Runway 18/36 and National Guard apron	Gravel	50’	100’

Taxiways C and F are being reconfigured under the current RSA project. Both taxiways will be shifted to the east and aligned to intersect Runway 9/27 at 90° angles.

The 2013 Pavement Condition Report indicated that Taxiways A and B require only preventative and corrective maintenance, respectively. Taxiways D and E are also listed as requiring only preventative maintenance.

There is a 60-foot-wide taxilane along the south edge of the apron.

2.4.4 Apron

Kotzebue Airport has a single, paved apron covering approximately 550,000 square feet. The 2013 Pavement Inspection Report indicated the apron has Pavement Condition Index (PCI) values in the 60-69 range and pavement between 10 and 14 years old. PCI values in the 60s warrant only corrective maintenance.

2.4.5 Runway Safety Areas

FAA design standards for an ARC C-III runway specify that the RSA be 500 feet wide and extend 1,000 feet beyond the runway ends.

The RSAs at OTZ have been the focus of considerable study. As of this writing, they are currently being expanded to 400 feet beyond the runway ends for Runway 9/27. This will leave the RSAs 600 feet short of FAA standards; however, the FAA determined that extending them to the full 1,000 feet was not practicable.

2.4.6 Building Restriction Line

The Building Restriction Line (BRL) defines the limit of development of all on-airport buildings. The FAA Airport Design AC does not establish standard setback distances for BRLs. Rather, the FAA recommends that the BRL encompass the runway object-free area (ROFA), runway protection zone (RPZ), areas required for clear line of sight, and navigational aid (navaid) critical areas. Although FAA offers only limited guidance on defining the appropriate location for BRLs, many airports use Federal Aviation Regulation (FAR) Part 77 imaginary surfaces to determine the airport's BRL. At Kotzebue, the BRLs are based on a 1,000-foot primary surface.

On the north side of Runway 9/27, the BRL is set as close as 750 feet from the runway centerline. For Block 2, Lots 1A, 1B, 2A, and 2B, the BRL moves to 790 feet. For Block 2, Lots 3 and 4, the BRL is set at 850 feet (see Figure 2-3). These BRLs prohibit buildings more than 35 feet tall, 41 feet tall, and 50 feet tall, respectively. None of the buildings adjacent to the terminal apron penetrate the transitional surface.

The current airport layout plan (ALP) shows the BRL for Runway 18/36 at 500 feet from the centerline for approximately 2,800 feet from the Runway 36 threshold and then extending out to meet the BRL for Runway 9/27. The BRL appears to have this layout to provide intervisibility between the main and crosswind runways. The U.S. Fish & Wildlife Service (USFWS) hangar and National Guard hangar are both within the BRL (see Figure 2-3); however, they do not penetrate the Part 77 transitional surface.

2.4.7 Approach Surfaces

The current approved ALP shows that the Runway 9 approach is free of obstructions other than the glide slope antenna, which is fixed by function. The ALP indicates that Runway 27 has a single obstruction, the localizer antenna, which is also fixed by function. Runway 36 has one obstruction—the sewage lagoon access road. The ALP indicates that the road is to remain, referencing it as “the best solution for access.”

Runway 9 has a 50:1 approach surface, and Runway 27 has a 34:1 approach surface. Runways 18 and 36 each have 20:1 approach surfaces.

The new electronic gate that blocks vehicle access around the Runway 9 threshold protects against tall vehicles penetrating the approach surface while a plane is on final approach to Runway 9.

2.4.8 Lighting, Marking, and Signing

Nav aids

Runway 9/27 has an ILS that consists of a localizer, distance measuring equipment (DME), and a glideslope. Additional radio nav aids include a direction finder (DF), a Very High Frequency (VHF) Omnidirectional Range (VOR), a non-directional radio homing beacon (NDB), and a runway visual range (RVR). For visual approaches, Runway 9/27 has Precision Approach Path Indicators (PAPI) and runway end identification lights (REIL).



Runway 18/36 is a visual approach runway and does not have any nav aids.

FAA has a 75 kW power plant for communications and FAA-maintained nav aids.

Signage

Guidance signs provide the ability to easily determine the designation or name of taxiways and runways. The signs at OTZ meet these needs.

Stop signs and warning signs with flashing red lights are located on the road that crosses Taxiway F.

Lighting

Runway 9/27 has High Intensity Runway Lights (HIRL) while Runway 18/36 has Medium Intensity Runway Lights (MIRL).

2.4.9 General Aviation



Figure 2-4 - Transient Aircraft Parked in front of the ADOT&PF ARFF/SREB, July 2014

As of July 20, 2014, the FAA aircraft registration database lists 45 aircraft registered to individuals in Kotzebue. Of these 45, all but one are single-engine, fixed-wing aircraft. An additional 14 aircraft are registered as co-owned.

GA facilities at OTZ include:

- 12 tie-downs adjacent to terminal area:
 - 8 paved
 - 4 unpaved
- 38 gravel tie-downs along Runway 18/36, along the edge of Isaac Lake
- Flight Service Station (FSS); see description below

Float-equipped aircraft are also common at OTZ. Currently, they operate off Kotzebue Lagoon. During a site visit in July 2014, pilots indicated an interest in operating from a freshwater lake rather than the salt water of Kotzebue Lagoon and suggested Isaac Lake as a potential float pond. However, Isaac Lake is periodically drained for material removal during large-scale construction projects.

There is no formally designated transient parking. Larger aircraft such as corporate jets park in front of the ADOT&PF Aircraft Rescue and Firefighting/Snow Removal Equipment Building (ARFF/SREB) facilities (Figure 2-4). Smaller aircraft can use the tie-downs if spaces are available.

2.4.10 Airport Access, Parking, and Security

Third Avenue and Fifth Avenue intersect Airport Access Road and provide the primary access to the airport terminal area. Access to the crosswind runway and tie-downs is via Second Avenue and Air Force Road. Second Avenue is currently being reconstructed such that it will go around the west end of the RSA, approximately two feet below the grade of the RSA, to prevent vehicles from driving across it.

Perimeter fencing along the north side of the airport encompasses the lease lots, tie-downs, and apron area. Vehicle access around the Runway 9 threshold is to be controlled by electronically activated gates on the north and south sides. The gates can be closed by pilots during final approach and will remain closed for 10 minutes. These gates are currently being installed as part of the RSA project. In the meantime, ADOT&PF M&O staff are positioned near the approach end of Runway 9 during air carrier operations until the installation is complete.

Other than the gate stopping traffic around the Runway 9 threshold, there is no security fencing on the south side of the airport.

All gates in the security fence other than the two mentioned above are operated by lock and key. An electronically activated man gate may be installed as part of the RSA project to provide through-the-fence access for transient pilots. Ensuring that tenants secure all gates can be challenging, however.

Kotzebue sees an influx of sport hunters in August and September. These hunters often use local air taxis to transport them to the field. There have been reports of hunters storing game meat on the apron, as well as wandering around the apron with firearms.

Wildlife management is a concern at OTZ. The proximity of large water bodies to the airport attracts migratory waterfowl and seabirds that can pose a risk to approaching aircraft. Commercial fishing vessels have come fairly close to the airport at times, bringing with them flocks of seabirds. A wildlife hazard assessment is currently being developed.

There are two designated Security Identification Display Areas (SIDA): one in front of the Alaska Airlines terminal and one in front of the FBX facility.



The Transportation Security Administration (TSA) screens passengers and baggage inside the Alaska Airlines terminal. Passengers must pass through metal detectors and carry-on baggage is X-rayed. The TSA is currently evaluating the installation of full-body scanners at rural Alaska airports, including Kotzebue.

2.4.11 Airport Support Facilities and Utilities

Fueling

There are currently two on-airport fuel dispensing permits: one for Vitus Energy and one for Crowley Petroleum. Crowley provides Avgas 100LL, diesel fuel, heating fuel, jet fuel, and unleaded gasoline. Fuel is delivered to aircraft directly from fueling trucks. Vitus Energy began selling fuel oil and unleaded gasoline in Kotzebue in December 2013. They operate a 24-hour pay-at-the-pump station just off airport property.

Bering Air also sells fuel informally to pilots that request it. They do not have any plans or desire to develop a self-serve fuel station.

Flight Service Station

The Kotzebue Flight Service Station (FSS) is located within the ADOT&PF ARFF/SREB facility. It provides local pilots and air traffic with pilot briefings, weather, and coordination. The FSS facilities are relatively new, and there are no plans to expand, modify, or move them.

National Weather Service

The National Weather Service (NWS) office is located within the ADOT&PF ARFF/SREB facility. An Automated Surface Observing System (ASOS) provides 24-hour weather monitoring. Information from the ASOS is distributed to pilots by the FSS. The ASOS is located approximately 500 feet northeast of the Runway 18 approach end.

Utilities

The City of Kotzebue maintains a piped sewer and water system for the community, including the airport. Water comes from Devil's Lake Reservoir and is stored in two 1.5-million-gallon tanks. Sewage is treated in a 32-acre zero-discharge lagoon southwest of the airport. The sewage lagoon is over 30 years old and in need of improvements.

Kotzebue Electric Association, the electric utility cooperative, provides electricity to the community and airport. Electricity is generated through a variety of sources including diesel and wind.

The City of Kotzebue provides solid waste facilities for the community. A Class 2 landfill and solid waste transfer station were constructed within the past 10 years. The landfill is located approximately one mile south of Runway 18/36 and two and a half miles from Runway 9/27. The FAA guidance suggests that landfills should be more than 10,000 feet from any airport where jet aircraft are used.

Police and Fire Protection

The City of Kotzebue provides fire and police protection services to the community. The Alaska State Troopers maintain a post in Kotzebue and have a single aircraft based at OTZ.

2.5 Passenger Terminal Facilities

There are no consolidated passenger terminal facilities at OTZ. Instead, each air carrier or air taxi operates its own terminal. The three largest terminals are operated by Alaska Airlines, Ravn Alaska, and Bering Air. Previous master plans have identified a desire to consolidate all carriers into a single terminal.

The Alaska Airlines terminal is approximately 8,000 square feet. TSA screens passengers boarding Alaska Airlines flights in the terminal. Groups of approximately 20 passengers at a time are screened and escorted to the aircraft due to the size of the terminal facility. Alaska Airlines indicated that they are considering refurbishment of the terminal to accommodate additional TSA needs, but they do not expect to expand or relocate the facility.

The Ravn Alaska terminal and cargo facility was expanded in 2013. The new facility is approximately 12,000 square feet.

Bering Air operates an approximately 13,000-square-foot terminal with space for passengers and cargo handling.

2.6 USPS

The USPS utilizes OTZ as a regional postal hub, with most of the area's mail traffic related to goods moved through the Bypass Mail program (Northern Economics, 2011). Mail generally arrives from Anchorage and is then distributed to smaller communities in the region. The post office is located on Shore Avenue at the corner of Friends Way, approximately ½ mile from the airport's terminal area. Chapter 3, *Forecast of Aviation Demand*, will present mail volumes.

2.7 Airport Maintenance and Operations

ADOT&PF personnel are responsible for the maintenance and operation of the airfield, including snow removal, runway deicing and sanding, friction testing, wildlife management, security badging, and emergency response.

Kotzebue Airport is a Part 139 Certified Airport and as such is required to have firefighting agents such as water, foam, Halotron, etc. available at specified volumes, rates, and response times. ADOT&PF operates an Aircraft Rescue and Firefighting (ARFF) facility on Lot AAA, Block 1. The ARFF is an Index B facility and was constructed less than 10 years ago. All maintenance and operations (M&O) staff are trained in aircraft firefighting, although the 2013 Part 139 Inspection indicated some staff needed additional training.

Snow from the apron is pushed into the airport infield and off the east edge of the apron. M&O staff reported drifting snow around the debris on the FAA property south of the Runway 9 threshold.

The primary runway is de-iced with a chemical deicing agent (potassium acetate) that is distributed from a 2,000-gallon tank truck with a sprayer bar. De-icing chemicals are stored in the M&O facilities in large plastic containers.

Aircraft operators are responsible for deicing their aircraft. There is no centralized deicing facility or equipment, so aircraft deice on the apron in front of their respective lease lot.

The M&O equipment fleet at OTZ is listed in Table 2-5.

Table 2-5 - Kotzebue Airport M&O Equipment

Equipment	Age (years)
Aeroil Pro asphalt heater	30
Oshkosh T1500 ARFF fire truck	27
Case 1150E bulldozer	24
International 2554 de-icing truck	20
Caterpillar 966FII Loader	19
Dodge pickup truck, extended cab, ¾-ton	15
EZ Liner palletized lane striper	15
Case 921C loader	11
Ford pickup truck, extended cab, 1-ton	11
Chevy Trailblazer	10
Schmidt MP318 snow blower	10
Henderson 8 cubic yard sander	9
International dump truck, 8-yard	8
Caterpillar 160M grader, 37,000LB	4
Ford pickup truck, crew cab, ½-ton	3
Oshkosh H2923B snow blower	2

2.8 Environmental, Cultural, and Meteorological Data

The purpose of the environmental overview is to document environmental conditions that should be considered in the identification and analysis of airport development alternatives. These alternatives will be presented in Chapter 5. The information below outlines the existing conditions or potentially affected environment and helps to identify any data gaps. This section is more detailed than in a typical airport master plan due to the availability of data from recent projects at OTZ.

2.8.1 Air Quality

According to FAA’s Airport Environmental Handbook, no air quality analysis is needed if the annual levels of activity in a proposed study area are fewer than 1.3 million passengers and fewer than 180,000 operations, or if it is a general aviation airport with fewer than 180,000 annual operations forecast (Section 47(e)(5)(c)(1)). Current and forecast activity at Kotzebue is significantly less than these levels; therefore, no air quality analysis is necessary.

2.8.2 Coastal Resources

The Kotzebue airport is within the former Alaska Coastal Management Program (ACMP) NWAB coastal zone management district. The ACMP website and agency are inactive. The federally approved ACMP expired on July 1, 2011, resulting in a withdrawal from participation in the National Coastal Management Program established by the Coastal Zone Management Act (CZMA). The CZMA federal consistency provision no longer applies in Alaska.

Although the Kotzebue airport is within a coastal district, it is not subject to the ACMP unless the program is re-activated and approved by state legislation. Because a federally approved coastal management program must be administered by a state agency, no other entity may develop or implement a federally approved coastal management program for the state.

For Kotzebue, the ACMP expiration means the FAA does not provide a consistency determination (with a state coastal management policy) for a NEPA document.

2.8.3 Department of Transportation Section 4(f)

Section 4(f) of the Department of Transportation Act of 1966, codified as 49 USC Section 303(c), gives the Secretary of Transportation approval power for projects requiring the use of publicly owned land of a park, recreational area; a wildlife refuge of national, state, or local significance; or a historic site of national, state, or local significance.

There are no Section 4(f) lands defined for Kotzebue Airport. However, the presence of human remains on airport property (see Section 2.8.8) could potentially lead to Section 4(f) designation. In general, graves and graveyards are not eligible for listing on the NRHP but they can be listed if they meet certain criteria considerations. The burials may also be an indicator that the sites are Traditional Cultural Properties (TCPs). TCPs are properties whose significance is derived from the role the property plays in a community’s historically rooted beliefs, customs, and practices. TCPs can be eligible for listing on the NRHP.

2.8.4 Prime and Unique Farmlands

There are no prime or unique farmlands in Kotzebue, as defined by the Farmland Protection Policy Act of 1981.



2.8.5 Fish and Wildlife Resources

Some common terrestrial mammals occasionally seen near the runway are small rodents, hares, foxes, and caribou. While the Kotzebue locale does not provide habitat for eagles, and there are no eagle nests in the project vicinity (USFWS, 2008), it is a productive breeding area for other waterfowl, shorebirds, and loons (USKH, 2012). Ravens are also common.

Anadromous Fish Streams and Essential Fish Habitat

Essential fish habitat (EFH) has not been mapped for Kotzebue Sound. However, EFH species, which include saffron cod (*Eleginus gracilis*), Arctic cod (*Boreogadus saida*), Alaska snow crab (*Chionoecetes opilio*), and all five species of Pacific salmon are known to be present (M. Eagleton, National Marine Fisheries Service [NMFS], personal communication, January 27, 2010, as referenced in USKH 2012). Alaska snow crab and Pacific salmon use the Kotzebue Sound as a migration corridor. Although not a catalogued anadromous water body, the brackish waters of Kotzebue Lagoon are known to support resident fish and Arctic char as they migrate to June Creek (J. Magdanz, Alaska Department of Fish & Game [ADF&G], personal communication, August, 2009, as referenced in USKH, 2012). ADF&G has indicated that herring and capelin use Kotzebue Lagoon as spawning and rearing habitat (R. McLean, personal communication, September 22, 2009, as referenced in USKH, 2012). Epifaunal (e.g., phytoplankton and zooplankton) and infaunal species (e.g., nematodes, amphipods, and bivalves) can be found both in Kotzebue Sound, and in greater abundance in the lagoon, where they serve as prey species for fish (USKH, 2010).

Threatened and Endangered Species

No terrestrial mammals listed as endangered or threatened by the USFWS in Alaska are likely to be found in the study area.

Birds

Species range maps for the Steller's eider (*Polysticta stelleri*) and spectacled eider (*Somateria fischeri*), both threatened, include the Baldwin Peninsula (ADF&G, 2011). However, a May 2000 Section 7 findings letter from the USFWS for another project nearby (Kotzebue Roads/Shore Avenue Project) stated that both species have not been known to nest in Kotzebue, they migrate further offshore, and they are not known within the proposed project area (ADOT&PF, 2006). On June 6, 2011, USFWS concurred with this previous finding as applicable to the proposed project area (USKH, 2012).

Marine Mammals

Bowhead, fin, and humpback whales are listed as endangered species, and their ranges include the Kotzebue Sound; however, no critical habitat is designated in Alaska for these endangered whales.

Kotzebue Sound is within federally designated polar bear (*Ursus maritimus*) critical sea ice habitat. The project footprint overlaps with critical sea ice habitat, but no federally designated

barrier island, terrestrial denning, or no-disturbance zones are within the project area or associated with the Baldwin Peninsula. However, ringed seals (*Phoca hispida*) and bearded seals (*Erignathus barbatus*), which are polar bear prey species, are found in Kotzebue Sound (USKH, 2012).

State-Listed Species of Special Concern

As of August 15, 2011, ADF&G no longer maintains a Species of Special Concern list. The State is responsible for determining and maintaining a list of endangered species in Alaska. The five State-listed species (short-tailed albatross, Eskimo curlew, blue whale, humpback whale, and right whale) are also listed as endangered species under the federal Endangered Species Act.

Wildlife Hazards

Bird and wildlife attractants near or on airfields are incompatible with air operations. The FAA online Wildlife Strike Database (<http://wildlife.faa.gov>) provides strike data for the Ralph Wien Memorial Airport. Twenty-one strikes have been reported since 1991. Fourteen of these strikes have occurred in the last 10 years, seven in the last 5 years. Airport planning and improvements should consider the habitat types used by the species included in the strike record and identify means of mitigation to prevent future aircraft strikes. A wildlife hazard assessment is scheduled for 2015.

2.8.6 Floodplains

Kotzebue is located along the shoreline of Kotzebue Sound. The City of Kotzebue participates in the National Flood Insurance Program, and Flood Insurance Rate Maps (FIRM) are available for the area encompassed by the project (FIRM 020059 0011 B). Kotzebue Lagoon and areas surrounding the airport lie within the Federal Emergency Management Agency's mapped 100-year floodplain. The Kotzebue area is susceptible to flooding resulting from storm surges (USKH, 2012). According to U.S. Army Corps of Engineers (USACE) data, an August 1990 flood caused by a coastal storm likely represents a 100-year event. It was reported that floodwaters did not reach the first floor of any major buildings in Kotzebue (USKH, 2012). During a similar, September 1986 coastal storm, there were also no reports of buildings flooded (USKH, 2012). The USACE considers the flood hazard at Kotzebue to be low (USKH, 2012).

2.8.7 Hazardous Materials, Pollution Prevention, and Solid Waste

The Kotzebue Airport has been in operation since the 1940s. Numerous environmental records exist for the airport as they pertain to contaminated sites, hazardous materials, and cleanup efforts that have occurred over the last two decades. Most of these activities are restricted to the developed areas adjacent to the runway surfaces on the apron, lease lots, maintenance facilities, and adjacent FAA Flight Service Station. Several monitoring wells that are monitoring groundwater quality within these areas are located in and around the airport apron and lease lots. Surface water and groundwater in the apron area is contaminated with petroleum and benzene, related to past incidences of leaking underground storage tanks (USKH, 2012). Surface water in

the apron area currently drains both east and west, directly into Kotzebue Lagoon and Kotzebue Sound through culverts. The Alaska Department of Environmental Conservation (ADEC) reports show the surface and groundwater contamination in the apron area has migrated to both Kotzebue Lagoon and Kotzebue Sound.

A search of the ADEC contaminated sites and leaking underground storage tank (LUST) databases on April 23, 2012, identified numerous contaminant releases, spills, and underground storage tank leaks within airport property and adjacent lands (USKH 2012); see Table 2-6. Seven of the contaminated sites on airport property remain active and three sites have been closed.

Table 2-6 - Contaminated Sites and LUSTs in Project Vicinity

Site Name	Hazard ID	Location	Description	Status
FAA Kotzebue Airport	814	Den Road	Petroleum contamination of soils and groundwater	Active
ADOT&PF MarkAir - Kotzebue Airport	2497	Block 1, Lots A, C, D Ralph Wien Airport	Petroleum contamination of soils and groundwater	Active
Kotzebue Airport – Alaska Airlines	24439	Block 1, Lots E, F, G Ralph Wien Airport	Petroleum and benzene contamination of soils and groundwater	Active
Kotzebue Airport – Northwest Aviation	24444	Block 2, Lot 4 Ralph Wien Airport	Petroleum contamination of soils	Active
Kotzebue Airport – Crowley Marine Services	24895	Block 4, Lot 1 Ralph Wien Airport	Petroleum and benzene contamination of soils and groundwater	Active
Kotzebue Airport – ADOT&PF Maintenance Station	25111	Block 1, Lots AAA Ralph Wien Airport	Petroleum and benzene contamination of soils and groundwater	Active
Kotzebue Airport - Lot M, Block 1	25557	Block 1, Lot M Ralph Wien Airport	Petroleum and benzene contamination of soils and groundwater	Active
Kotzebue Army Aviation Facility	2494	Ralph Wien Airport	Petroleum contamination of soils	Cleanup Complete
FAA - Kotzebue	25026	FAA Facilities at Ralph Wien Airport	Petroleum contamination of soils	Cleanup Complete
Kotzebue NANA UST	25029	Block 2, Lot 2 Ralph Wien Airport	Petroleum contamination of soils	Cleanup Complete

Commercial fueling of aircraft is provided by Crowley Marine Services from refueling trucks. ADOT&PF stores de-icing chemicals in their new sand/de-icing chemical storage facility located on the airport apron. A landfill that serves the City of Kotzebue and the airport is located 2.5 miles south of the airport property. A sewage lagoon operated by the City lies within the airport boundary next to Isaac Lake. ADOT&PF will coordinate with ADEC throughout the design process to ensure any disturbance to contaminated areas is handled in an ADEC-approved manner.

2.8.8 Historical, Architectural, Archaeological, and Cultural Resources

Kotzebue is located on a series of beach ridges that were occupied during the prehistoric period. Archaeological materials have been unearthed in the vicinity reflecting multiple periods in human prehistory: the Northern Archaic Tradition (6,000 to 4,500 years ago), the Arctic Small Tool Tradition (4,500 to 1,000 years ago), and other manifestations referred to as the Northern Maritime Tradition (from 1,500 years ago to the Kotzebue historic period, beginning in 1897) (USKH, 2012). The prehistoric features and artifacts are widely scattered and buried such that they have broadly been assigned to one Alaska Historic Resource Survey (AHRs) site number: KTZ-036, the Kotzebue Archaeological District. The known historic sites include buildings and are known collectively as the Front Street Historic District (KTZ-250) (USKH, 2012).

Kotzebue Archaeological District (KTZ-036) encompasses both the City of Kotzebue and the airport. Table 2-7 summarizes information from the AHRs (USKH, 2012).

Table 2-7 - AHRs Sites at Kotzebue

AHRs #	Name
KTZ-001	Historic Kotzebue
KTZ-031	Old Kotzebue
KTZ-036	Kotzebue Archaeological District
KTZ-038	Pre/protohistoric house wall
KTZ-229	Burials (south end of town)
KTZ-233	NANA Museum Site
KTZ-250	Front Street Historic District
KTZ-251-295	Individual Buildings in KTZ-250

In June 2012, the FAA, DOT&PF, SHPO, the Native Village of Kotzebue, and the Northwest Arctic Borough signed an MOA that formally develops plans for phased identification, evaluation, and mitigation of adverse effects to historic and culturally significant sites as a result of the RSA Improvement project (USKH, 2012). Since construction on the RSA began in 2013, there has been ongoing recovery of human remains on airport property.

2.8.9 Light Emissions and Visual Impacts

No concerns about light emissions have been raised by the community. No major changes are proposed for the airfield lighting that would increase the visual impacts to the surrounding properties.

2.8.10 Noise

Recent airport projects have not raised concerns about airport noise. Generally, when annual operations are below 90,000 propeller operations or below 700 jet operations, the cumulative



noise levels of greater than 65 Day Night Average Sound Level (DNL) typically remain within the airport's property line. If future forecast operations go beyond these levels, it would be appropriate to prepare Noise Contour maps using the FAA's Integrated Noise Model to assess the impacts of noise outside of the airport property.

2.8.11 Socioeconomic Impacts

Socioeconomic conditions in Kotzebue are described in Chapter 3, Aviation Demand Forecasts.

2.8.12 Receiving Waters/Impaired Water Bodies/Water Quality

A search of the ADEC website <http://dec.alaska.gov/water/wqsar/Docs/2010impairedwaters.pdf> on August 28, 2014, revealed no impaired waterbodies in the project area. The water supply for the community and the airport comes from two large lakes, Vortac Lake and Devils Lake, located 1.5 miles east of the airport. Wetlands on the airport property and surrounding area may be influenced by surface runoff from the airport runway, aprons, and adjacent fuel storage and handling facilities containing hydrocarbons and other pollutants.

2.8.13 Wetlands and Vegetation

USKH prepared a wetlands summary report that compiled previous existing data on wetlands at the airport and evaluated and updated wetlands mapping with current, high resolution aerial photography and ground photography to determine the extent of wetlands within the footprint of the proposed project (USKH, 2012). Previous studies at Kotzebue Airport have documented large extents of wetlands in the project area, including open water areas and saltwater marshes along the edges of Kotzebue Lagoon. Approximately 80 percent of the airport property is comprised of wetlands and open water. Non-wetland areas are developed areas of the airport or areas that are highly disturbed due to airport maintenance or operations. All of the wetlands within the airport boundary have been determined jurisdictional due to their close proximity or groundwater connection to Kotzebue Sound and the Kotzebue Lagoon.

The functional value of wetlands and aquatic areas near the airport are influenced by a short growing season, wildlife and fish uses, tidal waters of Kotzebue Sound, and the close proximity of a population center and industrial development. The primary functions of the airport area wetlands and aquatic areas are retaining of sediment, toxicants, and nutrients, some buffering against storm surges, and providing migratory bird habitat. Due to the predominance of frozen soils, disturbed nature of many of these wetlands, and the hazing of birds for safety purposes, their functional capacity is somewhat limited. Wetland values in the project area are generally moderate to low.

2.8.14 Wild and Scenic Rivers

There are no designated state or federal wild or scenic rivers in the vicinity of Kotzebue (<http://www.rivers.gov/alaska.php>).

2.8.15 State Refuges, National Wildlife Refuges, Critical Habitat Areas, and Sanctuaries

There are no state designated refuges, critical habitat areas, wildlife ranges, or sanctuaries in the project vicinity (ADF&G, 2010).

2.9 Related Plans, Programs, and Projects

2.9.1 1983 Ralph Wien Memorial Airport Terminal Area/Land Use Plan

The terminal area/land use plan was developed to address the increased demand for expanded facilities in the terminal area. The study examined the potential location for a multiple-carrier passenger terminal building and developed a plan for accommodating additional lease lots in the terminal area. The plan recommended expanding the apron to the east and the construction of a joint carrier terminal in the northeast corner of the expanded apron.

2.9.2 1989 Ralph Wien Memorial Airport Master Plan

The 1989 master plan expanded on the 1983 terminal area/land use plan to include the first comprehensive look at all of the facilities at OTZ. The forecast chapter of the plan indicated the potential for 70,000 enplanements and 70,500 operations by 2005. The master plan also examined the possibility of relocating the airport. Ultimately the plan concluded that expanding the existing airport was most beneficial for future airport development.

2.9.3 1993 Northwest Arctic Borough Comprehensive Plan

The NWAB developed a comprehensive plan in 1993 to plan for future growth and needs of the Borough, determine what land use controls might be necessary in the region, and provided guidance for the management of Borough-owned lands.

2.9.4 1998 Kotzebue Airport Master Plan Update

The 1998 airport master plan update identified several development components in the preferred alternative:

- ➔ Full-length parallel taxiway for Runway 9/27
- ➔ Relocation of the GA tie-downs adjacent to Runway 18/36
- ➔ Formal float pond with launch ramp and floatplane parking on Isaac Lake
- ➔ Relocation of jet aircraft parking and development of a multiple-carrier terminal on the northeast corner of the apron



2.9.5 2004 Northwest Alaska Transportation Plan

A planning team led by ADOT&PF completed a two-year planning process that investigated and compared various marine, air, road, and rail alternatives to existing area transportation systems. Using current and projected population figures for the next 20 years, the Northwest Alaska Transportation Plan established air and marine infrastructure requirements and potential highway and railroad connections.

2.9.6 2008 Kotzebue Airport Relocation Feasibility Study

The 2008 relocation feasibility study was a precursor to this master plan update. The study divided the Baldwin Peninsula into three general areas and evaluated each in terms of the issues and benefits that could affect the feasibility of relocating the airport there. Ultimately, the study determined that relocating the airport was impractical due to financial constraints with such an ambitious project.

2.9.7 2012 Final EA and Finding of No Significant Impact - Kotzebue Airport RSA Improvements

In October 1999, the FAA issued Order 5200.8, *Runway Safety Area Program*, which requires airports to provide a standard RSA to the extent practicable for the type of aircraft regularly operating at a facility. The ADOT&PF identified OTZ as having deficient RSAs and initiated a practicability study to determine to what extent the RSAs could be expanded. The practicability study (completed in 2010) led to the environmental assessment of several options and ultimately determined that widening the RSA was impractical, but they could be lengthened by 400 feet on each runway end.

During the environmental process, the residents of Kotzebue expressed concern about maintaining access to areas south of the airport. The RSA improvements therefore included an access road around the west end of the runway that would be secured with electronic gates. This concept was determined to provide adequate airfield security while maintaining resident access to the south.

2.9.8 2013 Alaska Aviation System Plan

The Alaska Aviation System Plan (AASP) sets the vision for the Alaska aviation network by addressing Alaska's aviation infrastructure and policy needs. It is a key component of ADOT&PF's statewide transportation planning.

The AASP made projections of aircraft activity for all airports in the state, including OTZ. These forecasts will be outlined in Chapter 3, *Aviation Demand Forecasts*.

2.9.9 2013 City of Kotzebue Comprehensive Plan

The City of Kotzebue Comprehensive Plan analyzed past development, created a vision for the community, and established policies to guide future development. This community plan does not make any recommendations for the airport, but does indicate that the location of the airport inhibits expansion of the community. While the plan supports the ADOT&PF efforts to improve the airport, it also suggests re-evaluating the possibility of airport relocation in the future (p. 49).

2.9.10 Kotzebue to Cape Blossom Road

The concept of a road from Kotzebue to Cape Blossom has been around for some time. The first formal study of this connection was in 1977, followed by renewed studies in 1983, 2004, 2011, and 2013:

- ➔ Feasibility Analysis 1977
- ➔ Feasibility Analysis 1983
- ➔ Fuel Cost Savings Analysis 2004
- ➔ Reconnaissance Study 2011
- ➔ Environmental Assessment & Finding of No Significant Impact 2013

The impetus for a road to Cape Blossom is to develop a deep-water port that would reduce the cost of barging freight to Kotzebue. Because Kotzebue Sound is so shallow, goods must be lightered from vessels anchored approximately 15 miles offshore.

The preferred alternative from the EA and Finding of No Significant Impact (FONSI) is to upgrade portions of Air Force Road between New Hillside Road and the KEA wind farm. From the wind farm south, a new two-lane gravel road would be constructed for 8.9 miles to a beach access ramp approximately one mile east of Cape Blossom.

Because Air Force Road crosses airport property, traffic across the airport may increase.

2.9.11 2014 Final Supplemental Environmental Assessment - Kotzebue Airport RSA Improvements

The contractor selected to construct the RSA improvements requested permission from ADOT&PF to dredge a barge access channel and landing site and to mine material from Isaac Lake. To address community concerns about the disruption of the longshore channel associated with this proposal, a supplemental EA was developed. The EA documented that the construction of a temporary barge channel would not have lasting effects on the longshore channel.



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