



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

October 8, 2010

Mr. Harvey M. Douthit, PE, Design Section Chief  
Alaska Department of Transportation  
Aviation Design Section  
4111 Aviation Drive  
Anchorage, AK 99502

Dear Mr. Douthit:

Alaskan Region  
RECEIVED  
OCT 12 2010  
CR DESIGN SECTION

222 W. 7<sup>th</sup> Avenue #14  
Anchorage, Alaska  
99513-7587

**Whittier Airport, Whittier, Alaska  
Revised Airport Layout Plan Conditional Approval  
Airspace Case 2008AAL-180NRA**

We have completed our review of the Revised Airport Layout Plan (ALP) for the Whittier Airport, and find it acceptable from a planning standpoint. No Modifications to Standards are approved with this ALP approval.

We note the following outstanding challenges with this ALP that may require further action from the airport sponsor:

- Currently the Alaska DOT&PF is operating this airport in trespass of Railroad property (Tract I). In addition, the 5-year lease with the US Army Corps of Engineers will expire in 3 years (Tract II). We are uncertain of the scope and expiration date of the City of Whittier Agreement with DOT&PF (Tract III). Since the airport sponsor does not have sufficient property interest on this airport the FAA is unable to issue any developmental or maintenance Airport Improvement Program (AIP) grants for this site.
- Please correct the narrative to indicate that this is a VFR airport and obstructions prevent this site from developing a straight-in approach procedure.
- Please submit the proposed runway numbers change to NFDC.

The conditional approval indicated by my signature is given subject to the condition that the proposed airport development that requires environmental processing shall not be undertaken without prior written environmental approval by the FAA. This approval considers only the safety, utility, and efficiency of the airport. We encourage you to work with appropriate agencies to encourage adoption of height and zoning restrictions.

This approval does not represent a commitment to provide financial assistance to implement the proposed plan. FAA assistance in any development or its approval for any development will be determined at the time of request, based on the existing regulations, project justification, and eligibility at the time of the request.

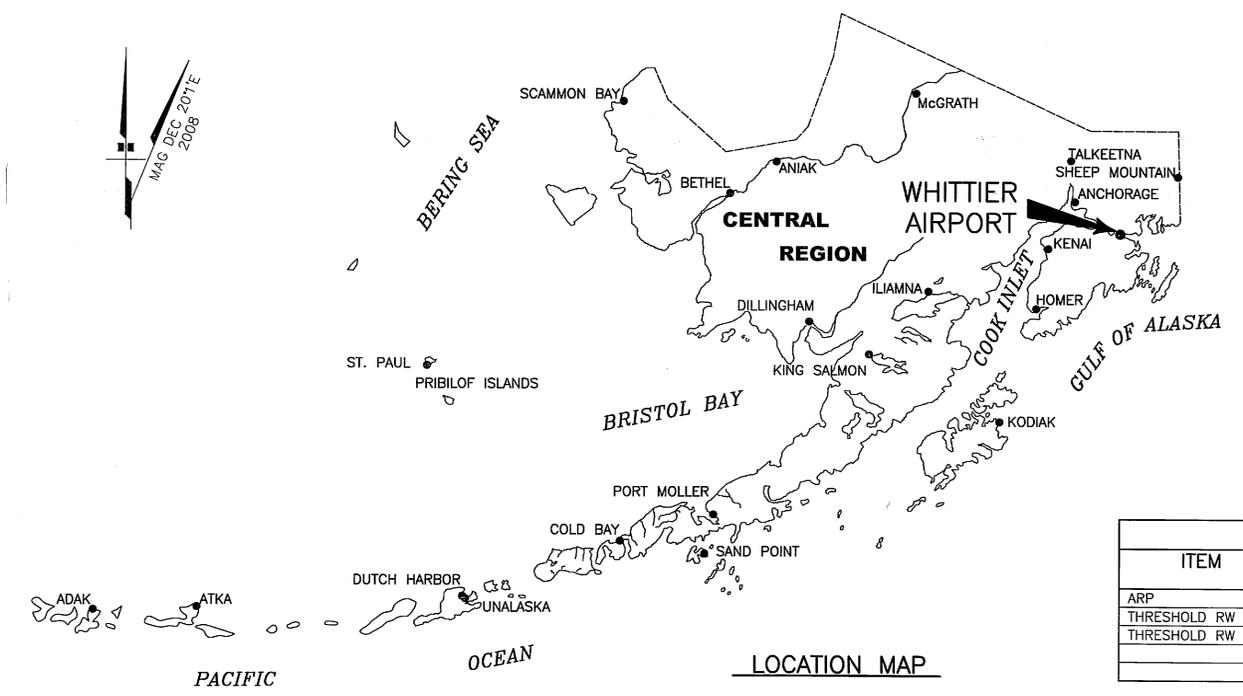
When airport construction, alteration, or deactivation is undertaken, such action requires FAA notification and review in accordance with the provisions of Part 77 and Part 157 of the Federal Aviation Regulations. In addition, all airport construction must be completed in accordance with FAA Advisory circulars current at the time of construction. Please attach this letter to the enclosed ALP and retain it in your files for future use.

If you have any questions, please contact Gabriel Mahns at 271-3665.

Sincerely,

John Lovett  
Lead Civil Engineer, Airports Division

Date Plotted: 10/16/2010, 1:46 PM  
 Layout Name: DATA (1)  
 File Name: C:\PROJECTS\AUTOCAD\TEMP\AcPublish\_3432\ALP-WHITTIER.dwg  
 Designed By: mlewellyn  
 Drawn By: Escobedo  
 Checked By: Johnson  
 DOWL File No.: 232-103-1

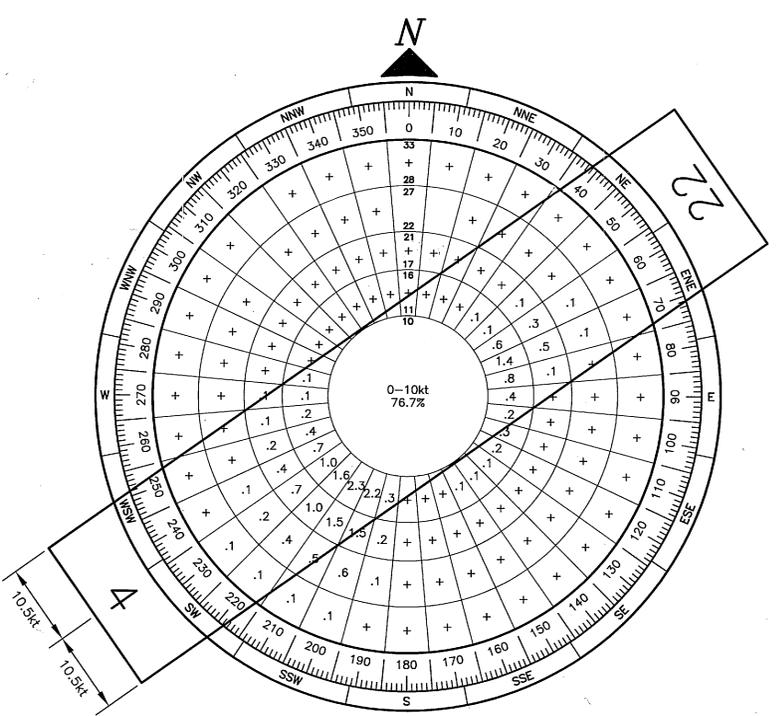


LEGEND		
ITEM	EXISTING	ULTIMATE
AIRPORT REFERENCE POINT (A.R.P.)		
ANTENNA		
BLUFF		
BUILDINGS		
BUILDING RESTRICTION LINE		
FENCE		
PAPI		
PROPERTY LINE		
REIL		
ROADWAYS		
ROTATING BEACON		
SHORELINE		
SURVEY MONUMENT		
THRESHOLD MARKERS/LIGHTS		
TOPOGRAPHIC CONTOURS		
TREE (LARGE SINGLE)		
TREELINE		
VASI		
WIND CONE		
WIND CONE AND SEGMENTED CIRCLE		

GEOGRAPHIC COORDINATES TABLE				
ITEM	EXISTING LATITUDE	EXISTING LONGITUDE	ULTIMATE LATITUDE	ULTIMATE LONGITUDE
ARP	60°46'37.81"N	148°43'10.75"W		
THRESHOLD RW 4	60°46'33.72"N	148°43'23.08"W		
THRESHOLD RW 22	60°46'41.90"N	148°42'58.42"W		

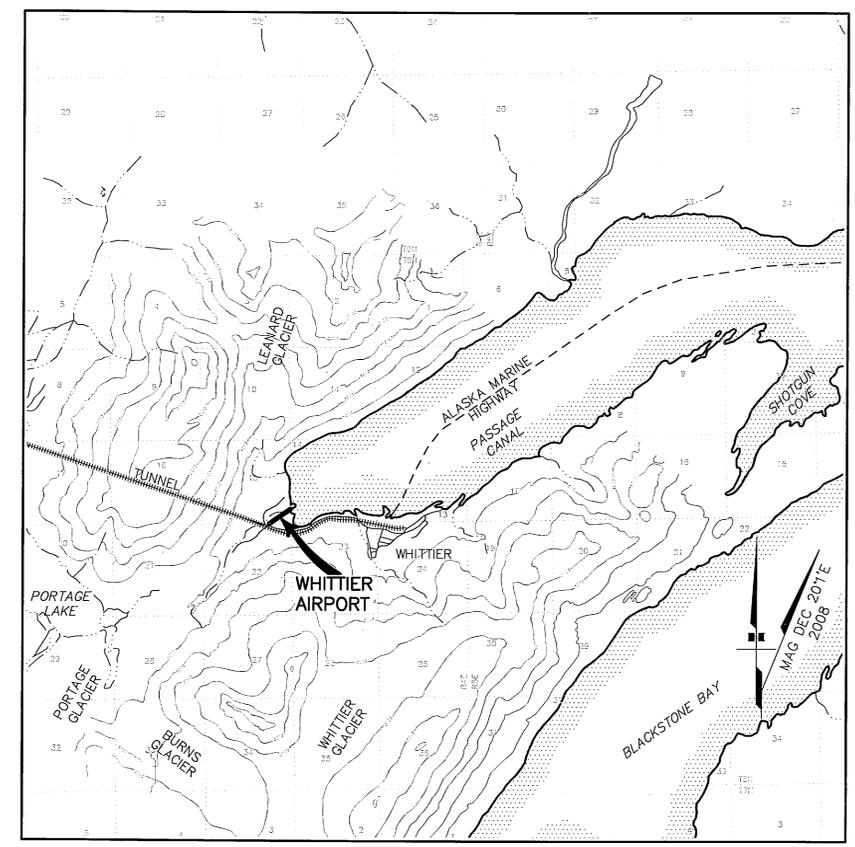
AIRPORT DATA TABLE		
ITEM	EXISTING	ULTIMATE
ICAO IDENTIFIER	NONE	
NATIONAL AIRPORT IDENTIFIER	IEM	
FAA SITE NUMBER	50875.*A	
AIRPORT ELEVATION NAVD88	39'	
AIRPORT REFERENCE CODE	A-1	
MEAN MAX. TEMPERATURE, HOTTEST MONTH	63°F, AUGUST	
AIRPORT AND TERMINAL NAVIGATION AIDS	NONE	
TAXIWAY LIGHTING/MARKING	NONE	
OBSTRUCTION SURVEY SOURCE & TYPE	NONE	
MAGNETIC DECLINATION, YEAR, RATE OF CHANGE	20°53'E, 2005, -0°16'(W) / YEAR 19°28'E, 2010, -0°16'(W) / YEAR	

RUNWAY 4/22 DATA TABLE				
ITEM	EXISTING	NEAR TERM	ULTIMATE	
RUNWAY TYPE UTILITY OR OTHER THAN UTILITY	UTILITY			
FAR PART 77 APPROACH CATEGORY (V, NPI, P)	V			
APPROACH SURFACES	20:1			
VISIBILITY MINIMUM	≥1 SM			
RUNWAY SURFACE	GRAVEL			
PAVEMENT STRENGTH SW,DW,DTW,DDTW x1000lbs	N/A			
AIRCRAFT APPROACH CATEGORY	A			
AIRPLANE DESIGN GROUP	I			
TRUE BEARING	N55°50'55"E			
EFFECTIVE GRADE	1.35%			
TOUCHDOWN ELEVATION NAVD88 (ESTIMATED)	39' / 39'			
RUNWAY DIMENSIONS	60' x 1480'			
RUNWAY SAFETY AREA (RSA) DIMENSIONS	100' x 1705'			
LENGTH BEYOND R/W END	25' / 200'			
RUNWAY PROTECTION ZONE (RPZ) DIMENSIONS	250' x 450' x 1000'			
RUNWAY OBJECT FREE AREA (ROFA) DIMENSIONS	250' x 1745'			
LENGTH BEYOND R/W END OR STOPWAY	25' / 240'			
RUNWAY OBSTACLE FREE ZONE (ROFZ) DIMENSIONS	250' x 1880'			
RUNWAY LIGHTING	NONE			
RUNWAY MARKING TYPE	NONE			
RUNWAY VISUAL APPROACH AIDS	NONE			



WIND DATA TABLE				
RUNWAY	10.5 kt	13 kt	16 kt	20 kt
4/22	96.0	98.2	99.4	99.6

SOURCE: NATIONAL CLIMATIC DATA CENTER.  
PERIOD: 1975 - 2007.



VICINITY MAP  
 PROTRACTED T 8 N, R 4 E, SEC. 15  
 SEWARD MERIDIAN  
 U.S.G.S. SEWARD (D-5), ALASKA

SCALE IN STATUTE MILES  
 1 SM .5 SM 0 1 SM 2 SM

**NOTES**

1. THE INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY DOWL HKM ON NOVEMBER 14, 2007.
2. THE HORIZONTAL DATUM IS NAD83(CORS96) (EPOCH:2003.0000) AS DETERMINED BY STATIC GPS OBSERVATIONS USING LEICA DUAL FREQUENCY GPS RECEIVERS AND PROCESSED USING THE NGS OPUS UTILITY. CONTROL CORS STATIONS USED FOR THE POSITION SOLUTION WERE TSEA, POT5 AND CH15.
3. THRESHOLD COORDINATES WERE DETERMINED USING A STATIC GPS NETWORK. THE TOPOGRAPHIC MAPPING IN THE AIRPORT VICINITY WAS DIGITIZED FROM USGS QUAD SEWARD (D-5).
4. RUNWAY NUMBERS CHANGED FROM 3/21 TO 4/22 DUE TO CHANGES IN MAGNETIC DECLINATION.

DRAWING INDEX	
SHT #	TITLE
1	DATA
2	EXISTING LAYOUT
3	AIRPORT AIRSPACE, 14 CFR, PART 77

BY: DATE: REVISION:	APPROVED: DATE: 10-1-2010
K. KIM RICE, P.E. PRECONSTRUCTION ENGINEER	DATE: 10/1/2010
RECOMMENDED: HARVEY M. DOUGHIT, P.E. DESIGN SECTION CHIEF	

STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES CENTRAL REGION	
WHITTIER AIRPORT WHITTIER, ALASKA AIRPORT LAYOUT PLAN	DATE: 09/15/2010 SHEET: 1 OF 3

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 10/8/2010 FAA AIRSPACE REVIEW NUMBER: 2008-AAL-180-NRA	DATE: 10/8/2010 617
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# WHITTIER (IEM) AIRPORT LAYOUT PLAN

## NARRATIVE REPORT

### A. Purpose

The purpose of this Airport Layout Plan (ALP) is to describe existing development and constraints according to the Federal Aviation Administration (FAA) Advisory Circulars *Airport Design* 150/5300-13 and *Airport Master Plans* 150/5070-6B. The format of the ALP follows the guidance of the Alaska Department of Transportation and Public Facilities (DOT&PF) publication *Airport Layout Plan Preparation and Submittal Guide* dated February 14, 2006. No prior FAA-approved ALP exists for the Whittier Airport.

### B. Introduction

The community of Whittier is linked to the Seward Highway via the Anton Anderson Memorial Tunnel, which runs through Maynard Mountain. Whittier is located at the head of Passage Canal, on the west side of Prince William Sound. It is approximately 75 miles southeast of Anchorage. The Whittier Airport is located approximately one mile northwest of town. The airport includes a gravel runway.

### C. Aviation Activity

The airport is primarily utilized by small, single engine A-I aircraft. The majority of operations at the Whittier Airport are conducted by general aviation aircraft. No air taxi operators serve the airport. There were no aircraft parked on the apron during a 2007 site visit. Small general aviation aircraft conduct approximately 50 itinerant operations per year at the airport.

The number and type of aircraft that use the airport is not anticipated to change during the near term.

### D. Airport Features

This ALP proposes an airport reference code (ARC) of A-I, and the forecast use supports this designation.

The A-I design standard for runway width is 60 feet. The runway at the Whittier Airport is 60 feet wide by 1,480 feet long.

There are no published instrument approaches published for Runway 4/22.

Based on the runway end siting criteria specified in Table A2-1 of Advisory Circular 150/5300-13 *Airport Design*:

- Runway 4 is not capable of supporting small airplanes with approach speeds of 50 knots or less (visual only, day or night), because a road and railroad tracks penetrate the approach near the threshold, and mountainous terrain occupies the approach beyond 1,000 feet from the threshold.
- Runway 22 is capable of supporting instrument straight-in night operations, serving approach category A and B aircraft only.

The wind data contained in the windrose on the ALP Data Sheet was gathered between 1975 and 2007 by the National Climatic Data Center. The weather station is located in the town of Whittier, approximately 1.2 nautical miles away from the airport reference point.

There are no taxiways or aprons. Aircraft park in a cleared area adjacent to Runway 4. Concrete tie down blocks are located at the end of Runway 4.

A road connects the airport to the community of Whittier.

The Whittier Airport area is approximately 17 acres which is leased from the Alaska Railroad Corporation.

The Whittier sewage collection, treatment and submarine discharge occurs within enclosed facilities. Solid waste is collected in dumpsters and trucked to Anchorage Regional Landfill by a contractor (Whittier Comprehensive Plan Update, 2005).

### **E. Unusual Airport Features**

The following discussion addresses non-standard issues at the Whittier Airport.

A standard A-I runway safety area (RSA) is 120 feet wide and extends 240 feet beyond each runway end. The RSA at the Whittier Airport was constructed to a width of 100 feet. The RSA extends 25 feet beyond the Runway 4 threshold and 200 feet beyond the Runway 22 threshold.

A road 25 feet beyond the Runway 4 threshold penetrates the runway object free area (ROFA) and runway object free zone (ROFZ).

Brush along both sides of the runway located 55 feet either side of the runway centerline penetrates the ROFA and ROFZ.

The aircraft parking area and concrete tie down blocks near Runway 4 penetrate the ROFA and ROFZ.

Vegetation along both sides of Runway 4/22 penetrates the Primary Surface. Roads penetrate the Primary Surface and the Runway 4 Approach Surface. Railroad tracks penetrate the Runway 4 Approach Surface.

The Approach, Transitional, Horizontal and Conical Surfaces are all penetrated by mountainous terrain.

### **F. Summary of Staged Development with Estimated Costs**

This ALP does not propose any developments for the Whittier Airport.