

Appendix B: FAA CORRESPONDENCE

Airport Master Plan Update

Aurora State Airport



U.S. Department
of Transportation
**Federal Aviation
Administration**

Northwest Mountain Region
Seattle Airports District Office
1601 Lind Avenue S.W., Suite 250
Renton, Washington 98057-3356

October 19, 2012

Mr. Mitch Swecker, Director
Oregon Dept. of Aviation
3040 25th Street, SE
Salem, OR 97302

Dear Mr. Swecker,

The Aurora State Airport Layout Plan (ALP) dated March, 2012 and submitted by WH Pacific, Inc., is hereby approved. A signed copy of the ALP is enclosed.

This approval considers only the safety, utility, and efficiency of the Aurora State Airport, and is conditioned on acknowledgment that any development on airport property requiring federal environmental approval must receive such written approval from the Federal Aviation Administration (FAA) prior to commencement of the subject development. This ALP approval is also conditioned on acceptance of the plan under local land use laws. We encourage appropriate agencies to adopt land use and height restrictive zoning based on the plan since action toward this end is a prerequisite of the Airport Improvement Program (AIP). Grant Assurance 21, Compatible Land Use, requires airport sponsors to take appropriate action, including the adoption of zoning laws to restrict the use of land adjacent to, or in the immediate vicinity of the airport, to activities and purposes compatible with normal airport operations including the arrival and departure of aircraft. The FAA recognizes residential development adjacent to the airport property as an incompatible land use.

Approval of the plan does not indicate that the United States will participate in the cost of any development proposed. When airport construction, alteration, or deactivation is undertaken, such action requires notification and review in accordance with the provisions of Part 77 and Part 157 of the Federal Aviation Regulations.

Please attach this letter to the approved Airport Layout Plan and retain it in the airport files for future use under the Airport Improvement Program.

Sincerely,

A handwritten signature in blue ink that reads "Carol A. Suomi".

Carol A. Suomi
Manager, Seattle Airports District Office

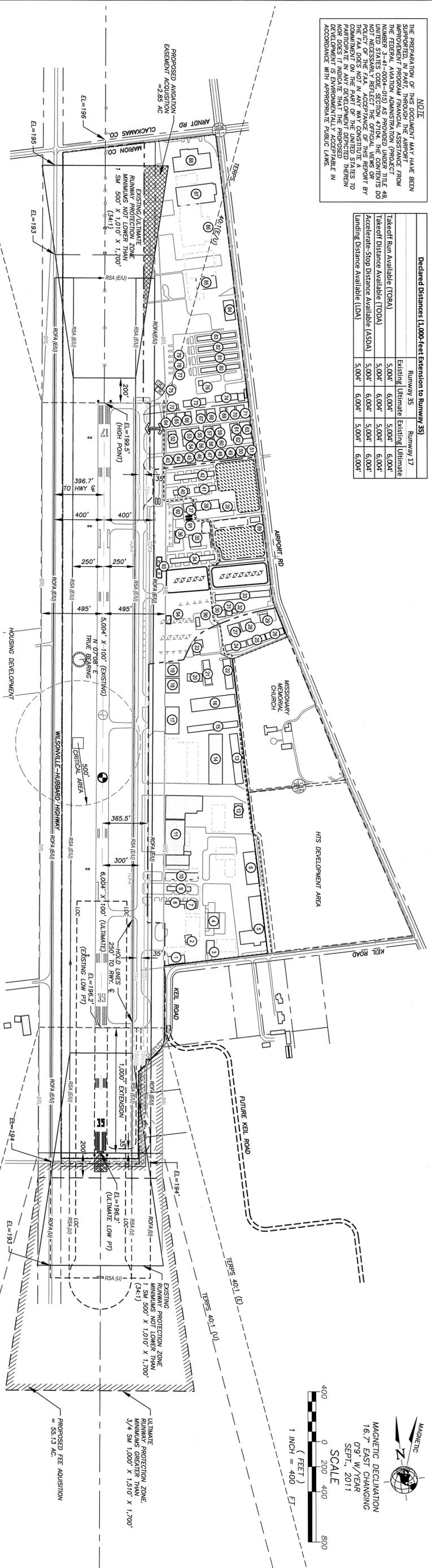
Encl: Aurora ALP dtd Mar 2012

cc:

Ms. Heather Peck, ODA
Mr. Rainse Anderson, WHP

NOTE
THE PREPARATION OF THIS DOCUMENT MAY HAVE BEEN SUPPORTED, IN PART, THROUGH THE AIRPORT IMPROVEMENT PROGRAM FINANCIAL ASSISTANCE FROM THE FEDERAL AVIATION ADMINISTRATION (PROJECT TITLE 49 USC 47101-47106). THE CONTENTS OF THIS DOCUMENT DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR OPINIONS OF THE FAA. THE FAA DOES NOT IN ANY WAY CONSTITUTE OR WARRANT IN ANY MANNER THE DEVELOPER'S REASONABLE DEVELOPMENT IS ENVIRONMENTALLY ACCEPTABLE IN ACCORDANCE WITH APPROPRIATE PUBLIC LAWS.

Declared Distances (1,000-foot Extension to Runway 35)			
Runway 35	Runway 17	Existing Ultimate	Existing Ultimate
5,000'	6,000'	5,000'	6,000'
5,000'	6,000'	5,000'	6,000'
5,000'	6,000'	5,000'	6,000'
5,000'	6,000'	5,000'	6,000'
5,000'	6,000'	5,000'	6,000'



Runway 17/35 Data	
Percent Effective Gradient	Existing
Percent Wind Coverage (10.5 Kts)	0.06%
Maximum Elevation Above MSL	96.93%
Runway Length	199.5'
Runway Width	5,000'
Runway Surface Type	Asphalt
Runway Strength (Dual Wheel Gear)	45,000 lbs
FAA Part 77 Approach Category	C (NP)
Approach Type	Nonprecision
Approach Slope (Required / Clear)	Not lower than 1 sm / 34:1 / 34:1
Runway Lighting	MTL / Reflectors
Taxiway Lighting	Standard
Navigation Aids	LOC/DME, NDB
Visual Aids	ODALS, VASI, REIL
Runway Safety Area Dimension	500' x 1,000' Beyond RW end
Runway Object Free Area Dimension	800' x 1,000' Beyond RW end
Runway Obstacle Free Zone (OFZ)	No OFZ Penetrations
Runway End Coordinates	Latitude: 45°15'14.166"N Longitude: 122°46'07.828"W
Runway 17	Latitude: 45°15'14.166"N Longitude: 122°46'16.515"W
Runway 35	Latitude: 45°14'25.148"N Longitude: 122°46'18.251"W

Airport Data	
Airport Elevation (MSL)	Existing
Airport Reference Point (ARP)	Same
Latitude	45°14'54.085"N
Longitude	122°46'11.405"W
Mean Maximum Temperature	84°
Airport Reference Code (ARC)	C-II
Airport Service Level	General Aviation
Design Aircraft	IAI Astra 1125

Notes	
Horizontal datum is NAD 1983, vertical datum is NAVD83.	
The Airport is flat. Elevations / ground contours vary by less than 5 feet and are not shown. Drainage features are typically 2-3 feet lower than adjacent land.	
Building restriction line is based on a 35-foot building located 495 feet from the runway centerline not penetrating FAR Part 77 surfaces for the Airport.	
A Residential Through the Fence (RTTF) access exists at Hangar #14 at the Wylee Condominium Association. The tenant is the resident caretaker for the airport.	

Modifications to Standards	
Standard Being Modified	Proposed Action
1 Advisory Circular (AC) 150/5300-13, para 307 (Runway Object Free Area)	The standard runway object free area (OFA) for Airport Reference Code C-II airports is 800 feet. Highway 551 runs north/south parallel to Runway 17/35; the approximate distance from the Runway 17/35 centerline to the Highway 551 centerline is 400 feet. As the airport geometry is not changing from the current condition, the Oregon Department of Aviation (ODA) requests a modification of the OFA design standard to allow the runway and highway to remain in their current positions.
2 AC 150/5300-13, Appendix 14 (Declared Distances)	The ODA requests the existing threshold for Runway 17 be referenced in determining FAR Part 77 surfaces and design standard surfaces referenced in AC 150/5300-13 (i.e., RSA, RPZ, OFA, OTZ).

Airport Facilities and Buildings Legend		
Building No.	Name / Owner	Use
1	Aurora Jet Center	Maintenance, Aircraft Storage
2	Private Southern Hangar	Aircraft Storage
3	BRS Associates	Aircraft Storage
4	Van's Aircraft	Business
5	Arena	Business
6	Fokrot Hangars / Southern	Aircraft Storage
7	Airpark	Aircraft Storage
8	Hangar Row H / Southern	Business, Aircraft Storage
9	Hangar Row G / Southern	Business, Aircraft Storage
10	Hangar Row H / Southern	Business, Aircraft Storage
11	Hangar India, Juliet & Kilo / Southern	Business, Aircraft Storage
12	Wingo	Business
13	Hangar November / Southern	Business, Aircraft Storage
14	Hangar Mike / Southern	Business, Aircraft Storage
15-17	Airport Aviation Condo Association	Aircraft Storage
18	Airport Aviation Condo Association	Aircraft Storage
19	Aurora Aviation	Maintenance
20-22	Airport Aviation Condo Association	Aircraft Storage
23	Columbia Aviation Association	Clubhouse

Airport Facilities and Buildings Legend		
Building No.	Name / Owner	Use
24-26	Meridian Condos	Business
27	Patrick Coast Aviation	Business
28	Oregon Dept. of Aviation	Aircraft Storage
29	Columbia Helicopters	Maintenance
30	Columbia Helicopters	Maintenance
31	Aurora Aviation	Fixed Base Operator
32	Pitts Hangar	Aircraft Storage
33	Aurora Business Park	Aircraft Storage
34	Wylee Condo Association	Aircraft Storage
35	Civil Air Patrol Building	Aircraft Storage
36	Sunset Helicopters	Business
37	Aeronautical	Business
38-42	Williamette Aviation	Fixed Base Operator
43-44	Williamette Aviation	Aircraft Storage
45	Marlow Treit	Aircraft Storage
46	Columbia Helicopters	Business
47	Fire Suppression Tanks	Fire Suppression
48	Fire Suppression	Fire Suppression
49	Aurora Rural Fire Protection District	Emergency Response
50	Aurora Aviation	Aircraft Fueling
51	Oregon Dept. of Aviation	Cargo Airpark
52	Oregon Dept. of Aviation	Helicopter Parking
53	Oregon Dept. of Aviation	Air Traffic Control Tower
54	Oregon Dept. of Aviation	Tower

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OREGON DEPARTMENT OF AVIATION

APPROVAL BLOCK
 OREGON DEPARTMENT OF AVIATION
 FEDERAL AVIATION ADMINISTRATION

SIGNATURE: *David Skidmore*
 TITLE: *Manager*
 DATE: 10/19/12

SHEET INFO	
DESIGNED	SM
DRAWN	RAI
CHECKED	REA
APPROVED	
LAST EDIT	10/17/2012
PLOT DATE	6/28/2012
SUBMITTAL	

AIRPORT LAYOUT PLAN DRAWING
 OREGON DEPARTMENT OF AVIATION
 AURORA STATE AIRPORT - MASTER PLAN UPDATE

PROJECT NUMBER: 034317
 DRAWING FILE NAME: 034317-XREF-MSTR-ALP
 SCALE: 1"=400'

SHEET NUMBER: 1
 2 of 10



U.S. Department
of Transportation

**Federal Aviation
Administration**

Seattle Airports District Office
1601 Lind Avenue, S. W., Ste 250
Renton, Washington 98057-4056

June 7, 2011

Mr. Rainse Anderson
Director of Aviation
WH Pacific, Inc.
9755 SW Barnes Road, Suite 300
Portland, OR 97225

Dear Mr. Anderson:

This letter is in response to your e-mail of May 15, 2011, in which you requested clarification of the application of declared distances at the Aurora State Airport in Oregon. It is our understanding that although the current Master Plan study indicates that there are constrained operations that justify a runway extension, it recommends using declared distances as a way to gain limited operational use of new pavement because pursuing an extension would not be feasible due to the negative environmental and/or business related impacts.

The purpose of declared distances is described in Federal Aviation Administration Advisory Circular 150/5300-15 (Airport Design) Appendix 14, which states:

"The purpose of declared distances in airport design is to provide an equivalent runway safety area (RSA), runway object free area (ROFA), or runway protection zone (RPZ) in accordance with the design standards in Chapters 2 and 3 at existing constrained airports where it is otherwise impracticable to meet standards by other means. Declared distances are also employed when there are obstructions in the runway approaches and/or departure surface that are beyond the ability of the airport owner to remove and result in a displaced runway threshold or change in the departure end of the runway."

The Master Plan's Chapter 5 (Scenarios 1 & 2), proposes an alternative that adds pavement before newly displaced thresholds (thereby necessitating the application of declared distances) to meet the constrained operations of aircraft; however, it does not consider this additional pavement as a runway extension. Upon careful review of these proposals, our determination is that these pavement extensions are in fact limited use runway extensions despite the application of declared distances. A rule of thumb is that; ***anything that increases the takeoff run available from the existing total runway length is a runway extension.***

In summary, we would not participate in funding proposals that would provide only partial and/or limited use of a runway extension.

If you have any other questions, please contact Bruce Fisher at 425.227.2649 or me at: 425.227.2657.

Sincerely,

Carolyn T. Read
Acting Manager, Seattle Airport District Office

Cc: Mr. Mitch Swecker, Oregon Dept of Aviation

Lucas, Sarah

Subject: Aurora State Airport-Master Plan
Attachments: Aurora Scenario #1.pdf; Aurora Scenario #2.pdf

From: Anderson, Rainse
Sent: Friday, May 13, 2011 1:33 PM
To: Bruce.Fisher@faa.gov; Stan.Allison@faa.gov
Cc: Mark Gardiner; SWECKER Mitch T * ODA; chris.corich@portofportland.com; LARSEN Sandra * ODA; Lucas, Sarah; Anderson, Rainse; WILSON John P * ODA
Subject: Aurora State Airport-Master Plan

Bruce/Stan,

The Aurora State Airport Preferred Alternative public comments were gathered until April 21, and were then discussed by the Oregon Aviation Board on April 28. As you will recall, a runway extension was shown to be justified in prior chapters of the Master Plan Update. However, a runway extension was not included in the proposed Preferred Alternative for several reasons. As a result of the comments given (available [here](#)), we have developed two additional scenarios that utilize displaced thresholds to gain takeoff length available in an attempt to “meet in the middle” of the airport user safety needs and community concerns. The scenarios are as such (drawings attached):

Scenario #1

Add 600-foot displaced threshold to Runway 35 and 200-foot displaced threshold to Runway 17 to acquire the following declared distances.

Scenario #1 Declared Distances		
	R35	R17
Takeoff Run Available (TORA)	5,604'	5,204'
Takeoff Distance Available (TODA)	5,604'	5,204'
Accelerate-Stop Distance Available (ASDA)	5,804'	5,804'
Landing Distance Available (LDA)	5,004'	5,004'

Scenario #2

Add 800-foot displaced threshold to Runway 17 to achieve the following declared distances.

Scenario #2 Declared Distances		
	R35	R17
Takeoff Run Available (TORA)	5,004'	5,804'
Takeoff Distance Available (TODA)	5,004'	5,804'
Accelerate-Stop Distance Available (ASDA)	5,804'	5,804'
Landing Distance Available (LDA)	5,004'	5,004'

As we have discussed the scenarios internally, and with ODA, we recognize there are (at least) two separate issues from FAA's perspective. The first issue relates to the technical application of the declared distances and the second is in regards to funding such projects. At this time we are concerned with the technical issues and wish to defer the funding issue to a later time, if needed.

Specifically, the technical concerns we have relate to the TERPS and Part 77 surfaces and how they would be applied at the Airport. Per our understanding of the RSA, OFA, and RPZ we believe these surfaces will be located in relation to the threshold (not end of pavement).

As for the departure/TERPS surface, AC 150/5300-13 Appendix 2, Figure A2-3, states "Surface (TERPS) starts at end of clear way if one is in place." Would the pavement behind the threshold be considered a "clearway" at Aurora? If we do not have to designate the pavement as a clearway to leave the departure surface in its current location this would be desirable. Moving the surface would create impacts to Columbia Helicopters' future expansion plans.

As for Part 77 surfaces, we read AC 150/5300-13 Appendix 14, Para 1.b, that states "Where declared distances differ, the primary surface extends 200 feet beyond each end of the runway or the far end of each TODA, whichever is further, to protect departures to the extent of the 14 CFR Part 77 approach surface for that runway end." So it is our interpretation that the primary surface would be relative to the paved surface, rather than the threshold, even if that portion of the pavement were only available for takeoff and not landing (*i.e.*, approach surface). Correct?

Additionally, while running the AFTIL simulation labs last week, a 1,000' extension to the south was modeled – as you know. This was done to preserve the ability to extend the runway in the future. While an extension of pavement to the north was not modeled, given the topography and building layout at the Airport, it is not anticipated there would be any issues with tower cab visibility.

The use of declared distances at Aurora, while perhaps unconventional, is an attempt on our behalf to provide a viable airport that meets user needs and still be neighborly. Controversy over any true runway extension would likely thwart the environmental process, and we have good reason to believe it would be challenged on a legal basis for violation of Oregon's Statewide Planning Goals (farmland protection). From responses given by operators, it is clear a longer runway is justified at Aurora. While the declared distances would not fully utilize the runway in all directions, it is a compromise that adds substantial operational value and safety for the constrained business jets while not impacting the existing businesses development plans by changing approach and departure surfaces. The Oregon Aviation Board views this option favorably as an agreeable solution to the challenges presented.

In closing, we look forward to FAA's official position on the application of declared distances at the Aurora State Airport and clarification of the technical issues associated with them. Mitch Swecker, ODA, will be at your office on May 18-19. It is my hope that you will be able to discuss this letter with your colleagues prior to that date and to arrange an in-person meeting May 18.

Please contact me if you have any questions.

Regards,
Rainse

Rainse Anderson
Director of Aviation



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29 September, 2010

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Renton, Washington 98055-4056

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OCT 04 2010

WHPACIFIC

Mr. Doug Hedlund
Director, Oregon Department of Aviation
3040 25th Street, SE
Salem, OR 97302

Dear Mr. Hedlund:

Airport Improvement Program (AIP) Project Number 3-41-0004-015
Approval of Activity Forecasts – Aurora State Airport Master Plan Update

I have reviewed Chapter 3 of the Airport Master Plan Update submitted by Mr. Rainse Anderson of WH Pacific, Inc.

I find adequate justification exists for the figures cited in the Forecasts of Aviation Activity and hereby approve the Forecast Summary. This chapter appears to be well-done and I believe that you and your Consultant(s) are off to a good start.

If you have any questions, please feel free to contact me at: 425.227.2649 or by e-mail at: bruce.fisher@faa.gov.

Sincerely,

Bruce C. Fisher
Airport Planner, Oregon / Idaho

cc: Mr. Rainse Anderson