

U.S. Department of Transportation

Federal Aviation Administration

June 20, 2008

Ms. Heather Gundersen CRC Environmental Project Manager Columbia River Crossing 700 Washington Street, Ste. 300 Vancouver, WA 98660

Dear Ms. Gundersen:

Northwest Mountain Region Colorado, Idaho, Montana Oregon, Utah, Washington, Wyoming 1601 Lind Avenue, S. W., Ste 315 Renton, Washington 98057

JUN 2 3 2008

Columbia River Crossing

Interstate 5 Columbia River Crossing (CRC) Project Draft Environmental Impact Statement (EIS)

We have reviewed the May 2008 draft EIS for the CRC project. In accordance with the February 14, 2006, letter (Attachment 1) from the Federal Aviation Administration (FAA), Northwest Mountain Region Administrator, our review was limited to aeronautical-related issues. Specifically, FAA's interest in this project primarily concerns the potential effects of the proposed bridge structure, including temporary construction equipment (cranes), on the navigable airspace and navigational aids, especially those associated with Portland International Airport (PDX) and Vancouver's Pearson Field (VUO).

Previously, we had conducted an aeronautical feasibility study on three conceptual alternatives (see Attachment 2, June 14, 2006, determination letter) and had commented informally on the June 2007 draft Aviation Technical Report (see Attachment 3, partial email correspondence). Those attachments are included again for your convenience.

Our understanding of the alternatives is that none will penetrate the airport imaginary surfaces (14 CFR Part 77) any more than the existing bridge structures, and that the replacement alternatives would actually reduce the amount of penetration by removing existing bridge structures. From an aeronautical standpoint only, we would prefer a bridge option that would prevent or reduce airspace obstruction to the maximum extent practicable. Our specific comments on the draft EIS are as follows:

- 1. Page 2-17, last para. (also, page 5-27, para. 4) We understand the trade-off between river- and air-navigation requirements and concur with the statements precluding tall towers and cable-stay or truss-type construction.
- 2. Page 3-93, para. 3 As noted above, the replacement alternatives, 2 and 3, reduce airspace obstruction more than any alternatives leaving in place the existing bridge structures, and therefore are preferable for that purpose.
- 3. Page 3-93, para. 4 (also, page 5-68, para. 4) The final design should seek to reduce the penetrations of the approaches/ramps (as well as the bridge structure itself) insofar as possible.
- 4. Page 3-95, para. 5 Form FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, will have to be filed with FAA for each temporary construction crane, indicating its maximum height and lateral extent of the boom. The form can be filed online; presently, the online filing address is: <u>https://oeaaa.faa.gov/oeaaa/external/portal.jsp</u>.

- 5. Page 3-96, para. 2 We concur with the statements regarding obstruction lighting and the prevention of light glare that could affect air navigation.
- 6. Page 5-68, para. 5 The aforementioned Form 7460-1 will also have be filed with FAA for the actual construction of the bridge structures. We recommend that it be filed at not later than a 10-percent design stage, or as soon as the footprint and elevation profiles are tentatively established.

If you have any questions, please contact me at (425) 227-2615.

Sincerely,

Don M. Larson

Don M. Larson Regional Capacity Program Manager

Enclosures

ATTACHMENT 1



Northwest Mountain Region Colorado, Idaho, Montana, Oregon Utah, Washington, Wyoming 1601 Lind Avenue, S. W. Renton, Washington 98055-4056 Tel: (425) 227-2007 Fax: (425) 227-1007

FEB 2 4 2006

Mr. R. F. Krochalis Regional Administrator Federal Transit Administration 915 Second Ave., Ste. 3142 Seattle, WA 98174

Dear Mr. Krochalis:

This is in response to your letter of December 14, 2005, regarding the I-5 Columbia River Crossing project. The Federal Aviation Administration (FAA), Northwest Mountain Region, accepts your invitation to serve as a cooperating agency in the National Environmental Policy Act (NEPA) environmental impact statement (EIS). FAA's interest in this project concerns the potential effects of the proposed bridge structure, including temporary construction equipment (cranes), on the navigable airspace and navigational aids, especially those associated with Portland International Airport (PDX) and Vancouver's Pearson Field (VUO). Our review and comments on this study's documents will be limited to aeronauticalrelated issues, and this should be outlined in a memorandum of understanding (MOU) between our agencies at the outset. Please provide a draft MOU for our review, or let us know if we should prepare it.

The Seattle Airports District Office (ADO) will be the lead for the FAA in this process, and will coordinate involvement of the other operating divisions (Air Traffic, Airway Facilities, Flight Procedures and Flight Standards) as necessary. In fact, we have already begun our advisory participation, as the Columbia River Crossing study team presented a briefing to FAA interdivisional staff here at the Regional Office on December 9, and received our initial feedback and interest in continued participation at that time. Our principal contact person will be Don Larson for airport/airspace planning and notice of proposed construction. Please feel free to contact him directly at (425) 227-2652.

Thank you for the invitation to participate in this project as a cooperating agency.

Sincerely. Douglas Murphy

Regional Administrator





U.S. Department of Transportation

Federal Aviation Administration

June 14, 2006

Ms. Lynn Rust Columbia River Crossing Project 700 Washington Street Suite 300 Vancouver, WA 98660

Dear Ms. Rust:

Portland, Oregon – Vancouver, Washington Airspace Analysis Results for Feasibility Studies Columbia River Crossing Project

The Federal Aviation Administration (FAA) has completed its review of your request for feasibility studies, per FAA Order 7200-2E, para. 6-1-6, on three conceptual alternatives for a new bridge near Pearson Field (VUO), Vancouver, Washington, and over the Columbia River between Vancouver and Portland, Oregon, as shown on the plans attached to your *Notice*(s) *of Proposed Construction or Alteration* (FAA Form 7460-1) dated May 1, 2006. The findings and comments from these studies are consolidated into one report below.

Aeronautical Study No. 2006-ANM-272-NRA - Downstream mid-level replacement bridge "RC-3"

It has been determined that the critical location of this proposal is Point 309, an existing tower (to be removed with proposed demolition of the existing bridge), which penetrates the Part 77 transitional surface for Runway 8-26 at VUO by 66.6 feet. The future critical location would be Point 304, which would penetrate the VUO horizontal surface by 26.46 feet. The proposal would not penetrate any existing or future Part 77 surface for Portland International Airport (PDX).

Air Traffic Division (AT) states: This lat/long has PART 77 busts: horizontal by 63 feet and transition by 72 feet - a bit more than 27 feet identified; a formal obstruction evaluation (OE) aeronautical study will need to be conducted after this feasibility study. (Robert van Haastert, 907-271-5863)

Airway Facility Division (AF) states: The bridge will penetrate the obstacle clear zone of Pearson's RW 08 visual approach slope indicator (VASI). (Peter Markus, 425-227-1450)

Seattle Flight Procedure Office (SEA-FPO) states: Current VUO RWY 26 instrument flight rules (IFR) departure procedure (DP) climb gradient is 650'/nautical mile (NM); and, is controlled by the existing I5 Bridge. If the existing I5 bridge were not present, the climb gradient would be 269'/NM with the 535' mean sea level (MSL) Columbia River Crossing transmission line tower @453557N/1224312W becoming controlling. Approximate Climb Gradients: 435'/NM for option RC-3 (191.49'MSL @ 2975' from 30' elev threshold height—TH). 460'/NM for option RC-4 (approx 180' MSL @ 2700' from 30' elv TH). 710'/NM for option RC-8 (251' MSL @

Seattle Airports District Office 1601 Lind Avenue, S. W., Ste 250 Renton, Washington 98055-4056 2500' from 30' elv TH) Even though RC-3 is higher than RC-4, it results in a lower climb gradient because it is further from VUO's TH. Suggest proponent explore the 180' msl design (ala RC-4) constructed on the West side of the existing I5 bridge. That gradient would be approximately |410'/NM (approx 180' MSL @ approx 2975' from 30' elv TH). (Vic Zembruski, 425-227-2224)

Aeronautical Study No. 2006-ANM-273-NRA - Upstream mid-level replacement bridge "RC-4"

It has been determined that the critical location of this proposal is Point 309, an existing tower (to be removed with proposed demolition of the existing bridge), which penetrates the Part 77 transitional surface for Runway 8-26 at VUO by 66.6 feet. After removal of the existing bridge, no part of the replacement bridge would penetrate any existing or future Part 77 surface for either VUO or PDX.

Air Traffic Division (AT) states: This lat/long and elevation has PART 77 bust: VUO RWY 08 transition by 72 feet - a bit more than identified; a formal OE aeronautical study will need to be conducted after this feasibility study. (Robert van Haastert, 907-271-5863)

Airway Facility Division (AF) states: Tech-Ops has no objection provided the associated traffic lights and freeway signs do not penetrate the obstacle clear zone of Pearson's RW 08 VASI. (Peter Markus, 425-227-1450)

Seattle Flight Procedure Office (SEA-FPO) states: Current VUO RWY 26 IFR DP climb gradient is 650'/NM; and, is controlled by the existing I5 Bridge. If the existing I5 bridge were not present, the climb gradient would be 269'/NM with the 535' MSL Columbia River Crossing transmission line tower @453557N/1224312W becoming controlling. Approximate Climb Gradients: 435'/NM for option RC-3 (191.49' MSL @ 2975' from 30' elv TH). 460'/NM for option RC-4 (approx 180' MSL @ 2700' from 30' elv TH). 710'/NM for option RC-8 (251' MSL @ 2500' from 30' elv TH) Even though RC-3 is higher than RC-4, it results in a lower climb gradient because it is further from VUO's TH. Suggest proponent explore the 180' msl design (ala RC-4) constructed on the West side of the existing I5 bridge. That gradient would be approximately 410'/NM (approx 180' MSL @ approx 2975' from 30' elv TH). (Vic Zembruski, 425-227-2224)

Aeronautical Study No. 2006-ANM-274-NRA - Upstream low-level supplemental bridge "RC-8"

It has been determined that the critical location of this proposal is Point 801, which would penetrate the VUO transitional surface by 72.3 feet. The proposal would not penetrate any existing or future Part 77 surface for PDX.

Air Traffic Division (AT) states: This lat/long has PART 77 busts: horizontal by 69 feet and transition by 72 feet - a bit more than identified; a formal OE aeronautical study will need to be conducted after this feasibility study. (Robert van Haastert, 907-271-5863)

Airway Facility Division (AF) states: When the bridge is open for marine traffic, it will penetrate the obstacle clear zone of Pearson's RW 08 VASI (Peter Markus, 425-227-1450)

Seattle Flight Procedure Office (SEA-FPO) states: Current VUO RWY 26 IFR DP climb gradient is 650'/NM; and, is controlled by the existing I5 Bridge. If the existing I5 bridge were not present, the climb gradient would be 269'/NM with the 535' MSL Columbia River Crossing transmission line tower @453557N/1224312W becoming controlling. Approximate Climb Gradients: 435'/NM for option RC-3 (191.49' MSL @ 2975' from 30' elv TH). 460'/NM for

option RC-4 (approx 180' MSL @ 2700' from 30' elv TH). 710'/NM for option RC-8 (251' MSL @ 2500' from 30' elv TH) Even though RC-3 is higher than RC-4, it results in a lower climb gradient because it is further from VUO's TH. Suggest proponent explore the 180' msl design (ala RC-4) constructed on the West side of the existing I5 bridge. That gradient would be approximately 410'/NM (approx 180' MSL @ approx 2975' from 30' elv TH). (Vic Zembruski, 425-227-2224)

The **Flight Standards Division** stated "no objection" on all three alternatives. If you have any questions on the foregoing comments, please contact the specialists at the numbers listed. Once a final plan has been decided upon for the bridge, a *Notice of Proposed Construction or Alteration* (FAA Form 7460-1) must be submitted to FAA for a formal OE aeronautical study, preferably not later than at a ten-percent design stage. If you have any other questions please contact me at (425) 227-2652.

Sincerely,

ORIGINAL SIGNED BY DON M. LARSON

Don M. Larson Airport Planner





Steve Karnes/ANM/FAA ATO, Western System Support Group 04/14/2008 12:49 PM

To Don Larson/ANM/FAA@FAA

cc bcc

Subject Fw: Columbia River Crossing - 2nd Feasibility Study Request & Draft Aviation Technical Report

Hi Don,

Here is the e:mail trail that Lynn last rec'd from Robert. I had a telephone conversation with her and that was all she needed. She did mention that they planned to have the Draft EIS ready by May 2nd.

CC

Steve Karnes X 4513

----- Forwarded by Steve Karnes/ANM/FAA on 04/14/2008 12:46 PM -----



"Rust, Lynn" <RustL@columbiarivercrossi ng.org> 04/14/2008 12:40 PM

To Steve Karnes/ANM/FAA@FAA

Subject RE: FW: Fw: Columbia River Crossing - 2nd Feasibility Study Request & Draft Aviation Technical Report

Lynn Rust Assistant Deputy Project Director I-5 Columbia River Crossing Project 360-816-2177

From: robert.van.haastert@faa.gov [mailto:robert.van.haastert@faa.gov]
Sent: Wednesday, January 09, 2008 8:59 AM
To: Rust, Lynn
Cc: Steve.Karnes@faa.gov
Subject: RE: FW: Fw: Columbia River Crossing - 2nd Feasibility Study Request & Draft Aviation Technical Report

Hi Lynn,

Will an email work for you? If so, the FAA has no objections nor comments on the proposed Columbia River Crossing Draft Aviation Technical Report.

FAA point of contact: Steve Karnes, Western Service Area, System Support Group. Telephone: 425-917-6736; email: Steve.Karnes@faa.gov

Steve coordinated with the local FAA facilities and did all of the actual 'grunt' work.

When you have a final product, and if it is available in electronic format (pdf or word document), can you email us a copy or send a CD?

FAA / Western Support Group (AJO2-W2) Attn: Steve Karnes 1601 Lind Avenue, SW Renton, WA 98055

Robert van Haastert Obstacle Evaluation Service, Anchorage Specialist: AK, AZ, CO, ID, MT, OR, UT, WA, & WY phone: (907) 271-5863, fax: (907) 271-2850 Sign up for emailannouncement of Public Notices at https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchCircularizationForm

"Rust, Lynn" <RustL@columbiarivercrossing.org>

01/09/2008 07:26 AM

ToRobert van Haastert/AAL/FAA@FAA

CC

SubjectRE: FW: Fw: Columbia River Crossing - 2nd Feasibility Study Request & Draft Aviation Technical Report

Hello Robert,

I got your voice mail yesterday. Thank you. I like to here no objections. Did you have any comments on the tech report?

Are you or will you send us written correspondence to close the loop on this? Or an email?

Thanks again.

Lynn Rust Assistant Deputy Project Director I-5 Columbia River Crossing Project 360-816-2177