# PORT OF SEATTLE MEMORANDUM

## COMMISSION AGENDA STAFF BRIEFING

Item No.	7a
<b>Date of Meeting</b>	October 26, 2010

**DATE:** October 20, 2010

**TO:** Tay Yoshitani, Chief Executive Officer

**FROM:** Stan Shepherd, Manager Airport Noise Programs

**SUBJECT:** Part 150 Study Aircraft Noise and Land Use Compatibility Study Update

#### **SYNOPSIS:**

Today's Commission update will provide information about the Part 150 Study's progress and the study's ongoing public involvement.

#### **PART 150 STUDY UPDATE:**

#### **Community Outreach**

The Part 150 Study began in late 2009. To date there have been two public workshops, one on February 23, 2010, in Des Moines, and one on June 9, 2010, in Burien. Both workshops were well attended and designed for maximum public involvement with a focus on obtaining input on ways for reducing the noise caused by aircraft operations at Sea-Tac Airport. Staff has offered, on several occasions, to provide Part 150 information discussions to city councils and other interested groups and that invitation continues to remain open.

#### Other community involvement includes:

- Provided on-going briefings to the Highline Forum to ensure that the airport's surrounding community leaders are kept informed and have the ability to offer input throughout the process. To date we have had five discussions at the Highline Forum.
- Held four Technical Review Committee meetings in which the study team solicited feedback on issues such as data review and land use analysis. The Technical Review Committee is comprised of technical experts including land use planners from local airport communities, the FAA, Puget Sound Regional Council, Boeing Field, Washington State Department of Transportation, and Alaska and Horizon Airlines.
- Provided a special data review session for the public to ask questions about noise metrics and other Part 150 process questions.

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- Provided briefings to three King County Council members.
- Met twice with the members of the 33<sup>rd</sup> Legislative District the district that encompasses Sea-Tac Airport and the airport communities.
- Port Staff will be meeting with some of the members of the Medina City Council and Mayor on October 27, 2010. The City of Medina requested the meeting.

The next Part 150 Public Workshop is scheduled for October 27, 2010, at Mount Rainier High School in Des Moines. This workshop will focus on presenting the Day Night LEDNL noise contours, the results of the study's temporary noise monitoring program, and it will be designed to give the public multiple ways to provide suggestions and comments.

Port staff has begun public outreach to the limited-English speaking communities around the airport by providing informational flyers in several languages and by offering, if requested, interpretive services at public meetings.

## **Temporary Noise Monitoring**

A temporary noise monitoring element of the study was completed in August. There were a total of 11 noise monitors stationed temporarily at locations around the airport. Locations were chosen primarily though community input at the public workshops but also where the consulting team felt that there was a need for supplemental data. This noise monitoring data, along with the airport's permanent 25 noise monitors, helps not only to verify the noise contour modeling results, but also helps to understand noise levels within communities that are often outside of the 65 DNL contours, which the FAA standard for determining significant noise impacts to residential communities.

## **DNL Noise Contours and Forecast**

A major milestone in the study process was achieved recently with the production of the current and future forecasted 5 year DNL noise contours. For the future contour, an aircraft operations forecast had to be prepared in order to understand future operational levels for Sea-Tac Airport. The FAA reviewed and approved these forecasts. Aircraft operations are projected to grow from 317,873 in 2009 to 363,860 in 2016 and to 419,680 in 2021, representing a future average annual growth of 2.3 percent.

The 2009 contours were prepared using actual operating data under two scenarios. The first depicts actual 2009 operating conditions at the airport, which included 6 months of the 16L/34R runway closure. The second contour depicts the airport as if all three runways were operating for the entire year by using 2009 actual operations data and re-assigning the runways used within the computer model. The second contour gives us a "most typical" scenario since the construction on 16L/34R was a temporary condition. Both contours show a significant reduction in contour size as compared to historical studies that predicted much larger contours for 2010. The smaller contours are a direct result of fewer and quieter aircraft operations.

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#### **Runway Use Agreement**

Staff worked closely with the FAA to develop a Noise Abatement Runway Use Agreement. The goal of the runway use plan is to establish a clear understanding of the preferred way all of the runways will be used in various operating conditions. This plan is also being pursued as a way to limit use of the third runway without causing delays or safety concerns. Our goal is to provide this to Commission in the spring of next year, after public discussion, for an early resolution as a Part 150 recommendation.

#### **Hush House Feasibility Study**

The consulting team has begun the initial stages of the aircraft engine testing hush house feasibility study. A hush house is a large three sided structure where aircraft can perform required engine testing. The walls of the hush house are made of special sound absorbing material that can have a quantifiable noise reduction impact on the surrounding community. The study will identify a location and quantify the benefits associated with the construction of a hush house, as well as provide analysis of challenges to its feasibility.

#### **Extended Long Range Forecast**

Although not an element of the Part 150 Study, at the suggestion of the Commission, staff is working with the consulting team to develop a long-range forecast through the year 2030. The data will be presented in two different scenarios with the understanding that there could be a significant margin of error with the results. The first will be a noise contour produced with a forecast showing a high growth rate for the airline industry and the replacement of older aircraft with newer aircraft at a quicker pace. The second scenario will be based on a forecast showing a slow growth rate for the airline industry and a slower replacement pace of older aircraft with new aircraft.

#### **Next Steps**

After the October 27, 2010, Public Workshop, the Port's consulting team and staff will continue with the land use analysis to identify any non-compatible or sensitive land use within the 65 DNL noise contour. This will set the parameters for any potential sound mitigation programs that could be recommended. We will also begin analysis of our noise abatement program to determine if there are any noise reduction benefits that can be achieved through improvements to flight procedures.

Another public workshop is tentatively scheduled for January 2011.

The Part 150 project continues on schedule.

#### OTHER DOCUMENTS ASSOCIATED WITH THIS REQUEST:

**Powerpoint Presentation** 

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## PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

- June 22, 2010 Part 150 Noise and Land Use Compatibility Update.
- February 23, 2010 Briefing and Policy Roundtable with Mayors (or their representatives) from Burien, Des Moines, Federal way, Normandy Park, Seatac, Tukwila.
- November 23, 2009 Authorization for the Chief Executive Officer to update the Part 150 Noise Compatibility Plan for an overall approximate cost of \$2.5 million, representing an increase of \$1.5 million over the previously authorized amount.
- June 23, 2009 Authorization for the Chief Executive Officer to procure and execute a contract for consultant services to implement an update to the Part 150 Noise Compatibility Plan for an estimated cost of \$500,000 to \$1.0 million.