

PORT OF SEATTLE
MEMORANDUM

COMMISSION AGENDA – STAFF BRIEFING

Item No. 7a
Date of Meeting June 28, 2011

DATE: June 22, 2011
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. The Part 150 Study process is designed to identify noise incompatibilities surrounding Sea-Tac Airport, and to recommend measures to address existing incompatibilities and to prevent future incompatibilities. There will be a public hearing and public comment period before the final study is submitted to the Port Commission for review. It is expected that the Commission will consider a resolution in late 2011 or early 2012 approving the Part 150 Study recommendations before they are forwarded to the Federal Aviation Administration (FAA) for approval.

PART 150 STUDY UPDATE:

Community Outreach

The Part 150 Study began in late 2009. The Commission has been briefed four times on the study in public session, providing the public with opportunities to testify. To date, there have been four large-scale public outreach events: February 24, 2010, in Des Moines; June 9, 2010, in Burien; October 27, 2010, in Des Moines; and April 9, 2011, at Sea-Tac Airport. All outreach events 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.

The latest public outreach event was an open house on Saturday, April 9, 2011. The open house was comprised of a series of stations staffed by Port employees and consultants. Some of the topics at the stations included:

- The new, still in draft form, noise remedy boundary;

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- A discussion of noise abatement programs;
- Potential new sound insulation programs; and
- An update on the hush house, designed to suppress aircraft engine testing noise.

During the open house, which began at 10 a.m. and ended at 4 p.m., more than 75 citizens came to the open house to share their thoughts, have their questions answered, and take part in the airfield tours narrated by Port staff.

Staff has offered, on several occasions, to provide Part 150 information discussions to city councils and other interested groups. To date, a number of entities have taken advantage of the offer including: the Federal Way City Council on November 16, 2010; the SeaTac City Council on March 8, 2011; the Des Moines City Council on March 24, 2011; City of SeaTac Hotel/Motel Committee on April 13, 2011; the Highline School District on April 13, 2011; the Burien City Council on May 9, 2011 and the Normandy Park City Council on May 10, 2011. Members of the study team also met with Citizen's Against Sea-Tac Expansion (CASE), the City of Medina, the Vashon-Maury Island Community Council, and a number of elected stakeholders including King County Councilmembers Larry Phillips and Julia Patterson, former King County Councilmember Jan Drago, State Senator Karen Keiser and State Representatives Dave Upthegrove and Tina Orwall.

Other community involvement efforts:

- Provided on-going briefings to the Highline Forum to ensure that elected leaders in communities surrounding the airport are kept informed and have the ability to offer input throughout the process. To date, there have been seven discussions at the Highline Forum with another discussion scheduled for June 29.
- Hosted five Technical Review Committee meetings where 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 Federal Aviation Administration (FAA), Puget Sound Regional Council, Boeing Field, Washington State Department of Transportation, and Alaska and Horizon Airlines.
- On July 12, 2010, provided a special data review session for the public to ask questions about noise metrics and other Part 150 process questions.

Port staff also continues outreach to the communities around the airport with limited English-speaking capabilities. Informational flyers describing the public meetings in several languages were developed and distributed. There also is a dedicated language telephone line where callers can leave a message in their own language and receive a return call by someone who speaks their language. Interpreters are available for anyone who requests interpretive services at the public meetings.

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Noise Remedy Boundary Maps

As a requirement of the Part 150 study, the FAA specifies updating the Noise Exposure Maps to reflect the most current conditions. These updated Noise Exposure Maps are used by the FAA to determine eligibility for federal funding for programs like the Sea-Tac Airport sound insulation program. Using the FAA required noise metric of Day Night Level (DNL), the year 2016 65 DNL contour forecast was developed and used by Port staff and the consulting team to prepare an updated Noise Remedy Boundary Map (PowerPoint Slide #6). The updated boundary map shows that the 65 DNL area is smaller than the previous 65 DNL boundary map. The previous noise remedy boundary was drawn during the original 1985 Part 150 noise study using the forecasted year 2000 DNL contour and was scheduled to be updated after the third runway became operational. The new noise program boundary map, after approval by the FAA, will define the area in which noise mitigation programs may become eligible for FAA grant funding. As noted previously, the new boundary map will be substantially smaller than the current existing boundary map, which has been in place since 1985. For anyone inside the 1985 noise remedy boundary but outside of the updated noise remedy boundary who is eligible, and not yet had their home insulated, the Port will provide one last opportunity to apply for sound insulation before the new boundary map becomes final.

Sound Mitigation Elements

Port staff and the consulting team reviewed all the stakeholder input on how to reduce noise in the communities. There were many suggestions – some were feasible and others weren't feasible. Suggestions that have a potential noise reduction benefit for the impacted communities are being carried forward for further evaluation.

In the next phase of the study, these suggested ideas for noise reduction will be further evaluated based on several criteria including noise reduction significance, funding eligibility, availability of both airport revenues and FAA grants, and whether significant progress on completing them can be accomplished within a five-year timeframe.

Following are the items that will be carried forward for further evaluation in this process.

- **Single Family Sound Insulation** – Continue offering sound insulation to eligible homes within the updated noise remedy boundary;
- **Multi Family Owner-Occupied Sound Insulation** – Offer sound insulation programs to eligible multi-family, owner-occupied residences inside the updated noise remedy boundary;
- **Multi-Family Tenant-Occupied Sound Insulation** – Offer sound insulation programs to eligible apartment buildings inside the updated noise remedy boundary;

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- **Mobile and Manufactured Homes Avigation Easements** – Offer to purchase avigation easements for mobile and manufactured homes on private land within the updated noise remedy boundary;
- **South Approach Transition Zone (ATZ) Voluntary Buyouts** – Offer to purchase residential properties experiencing noise levels of 65 DNL or greater in the South ATZ of the third runway and offer relocation benefits (PowerPoint Slide #8). This is anticipated to be a voluntary program. If acquired, the parcels must become noise compatible as commercial/industrial land; and
- **Air Conditioning** – Include air conditioning with the standard insulation package for single family homes within the updated noise remedy boundary that have not been previously insulated.

Hush House Feasibility Study

The consulting team is engaged in the process of evaluating potential locations for a hush house on the airfield. A hush house, or Ground Run-up Enclosure (GRE), is a large three-sided structure in which aircraft perform required engine testing. The walls of the hush house are made of special sound absorbing material that can have a quantifiable noise reduction (15 to 20 decibels) impact on the surrounding community. Depending on how far you are away from the noise source, the 15-20 decibel reduction could be perceived by the community as a significant reduction. As a general acoustic guideline, a 10 decibel reduction is perceived as half as loud by the listener. The initial hush house evaluation began with six general locations on the airfield (PowerPoint Slide #11). Due to the limited amount of available land at Sea-Tac, each location presents some difficult tradeoffs. A few sites will be carried forward for further evaluation by the study team. The size of the facility is determined by the predominant aircraft at Sea-Tac, which is the Boeing 737-800. Approximately 96 percent of the engine run-ups that typically occur at Sea-Tac are performed by 737-800 or smaller aircraft, and there are usually at least one to two run-ups every day.

Next Steps

- Prepare draft recommendations by fall of 2011;
- Evaluate the flight tracking and noise monitoring system for potential technology improvements;
- Evaluate noise abatement programs for potential improvements, including ways to improve the Fly Quiet program;
- Host one more Technical Review Committee meeting in the summer of 2011;

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- Commission Policy Roundtable Discussion with Mayors or their representatives from Burien, Des Moines, Federal Way, Normandy Park, SeaTac and Tukwila, scheduled for August 23, 2011.
- Prepare draft Noise Compatibility Plan (NCP), which includes draft recommendations for public review;
- Brief Port Commission on draft NCP;
- Host final public open house including a formal public hearing and comment process in the fall of 2011;
- Prepare any state environmental documentation needed based on proposed NCP;
- Brief Port Commission on public open house and final NCP;
- Prepare final NCP to be submitted to the FAA by the end of the year;
- Commission briefing and resolution adopting NCP; and
- FAA starts 180-day review period beginning in 2012.

OTHER DOCUMENTS ASSOCIATED WITH THIS BRIEFING:

PowerPoint Presentation

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:

- **October 26, 2010** – Part 150 Noise and Land Use Compatibility Update Briefing.
- **June 22, 2010** – Part 150 Noise and Land Use Compatibility Update Briefing.
- **March 23, 2010** – Part 150 Noise and Land Compatibility Study Update held in Normandy Park.
- **February 23, 2010** – Briefing and Policy Roundtable with Mayors (or their representatives) from Burien, Des Moines, Federal Way, Normandy Park, SeaTac and 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.