Part 150 Presentation

Technical Review Committee

October 1, 2012

Seattle-Tacoma International Airport
Agenda

- Introductions
- Updated Noise Exposure Maps
- Current Abatement Measures Recommended to:
  - Continue
  - Continue with Modifications
  - Not be Carried Forward
- New Potential Abatement Measures
- Current Mitigation Measures Recommended to:
  - Continue
  - Continue with Modifications
  - Not be Carried Forward
- New Potential Mitigation Measures
- New Potential Program Management Measures
- Update on Hush House
- Part 150 Process from Here to Approval
Updated Noise Exposure Maps

- Revised Noise Exposure Contours
  - Original Existing Noise Contour = 2011
    - 317,873 Annual Operations (870.5 average day)
  - Revised Existing Noise Contour = 2013
    - 313,352 Annual Operations (858.1 average day)
  - Original Future Noise Contour = 2016
    - 363,755 Annual Operations (996.6 average day)
  - Revised Existing Noise Contour = 2018
    - 385,270 Annual Operations (1,055.5 average day)
Existing (2013) Noise Exposure Map - DRAFT

- Existing (2013) Noise Exposure Contour
- Existing (2011) Noise Exposure Contour
Current Abatement Measures Recommended to Continue

• Measure A-1: Explore Limited Rescheduling of Nighttime Flights
• Measure A-3: Use VOR Radials to Curb Aircraft Drifting from Noise Abatement Track
• Measure A-11: Preferential Runway Use
• Measure A-15: Use of FMS Procedures
• Measure A-16: Use of Ground Equipment
Current Abatement Measure Recommended to Continue with Modifications

**Measure A-10: Maintenance Run-up Regulations**
- Continue measure with modification pending the outcome of the hush house study
- Minimal administrative and operational costs

**Measure A-12: Development/Implementation of a Fly Quiet Program**
- Continue measure with modification to expand program per Measure A-19
Current Abatement Measures Recommended to not be Carried Forward

Measure A-7: Establish Noise Barriers/Run-up Enclosure
- Terrain on the west side of the airport and the FAA height restrictions make it impossible to site a berm/wall that would effectively reduce noise. Siting of a hush house is being re-evaluated under a separate measure (see Measure A-18).

Measure A-8: Restrict Taxiing of Aircraft to/from Maintenance Areas during Nighttime Hours
- This measure was not implemented. Very few maintenance run-ups occur at night

Measure A-13: Evaluate Increased Use of the Duwamish/Elliott Bay Corridor with FMS
- This measure was disapproved by the FAA. Implementing this action would greatly impact the efficiency of the air traffic system in the region and degrade safety, which would not be consistent with 14 CFR Part 150, section 150.35(b)(3)(iii).
Current Abatement Measures Recommended to not be Carried Forward

Measure A-14: Nighttime Use of Commencement Bay Departure Corridor

- This measure was not implemented due to concerns from multiple potentially affected local jurisdictions.

Measure A-17: Raise Altitude Where Aircraft Intercept Glide Slope

- Standard approach is 3-degree glide slope for safety, performance of the aircraft, and comfort to the passengers. Raising altitude would have very little effect on noise levels and would reduce the operational efficiency of the airport during poor weather.
New Potential Abatement Alternatives

Measure A-18: Construct a hush house at the airport to minimize run-up noise.

- **Benefits:** Would reduce noise from ground run-up activity
- **Drawbacks:** Requires a large land envelope, which is in demand at Sea-Tac.
- **Recommendation:** Construction of a hush house is recommended at a site to be determined
New Potential Abatement Alternatives

Measure A-19: Expand the Fly Quiet Program with new elements, including:

- Use of reporting of operational modes (i.e. arrivals or departures) for comparison to runway use goals.
- Include provisions for the use of the hush house.
- Adding different categories of airline operations.

- **Benefits:** Could improve the effectiveness of the existing Fly Quiet Program at Sea-Tac Airport.

- **Drawbacks:** Would not reduce the number of incompatible uses within the 65 DNL. Program is voluntary and could encounter resistance from airlines and aircraft operators.

- **Recommendation:** Recommended for inclusion in the NCP
Current Mitigation Measures Recommended to Continue

Measure M-2b: Insulation of Schools
- The FAA and Port have each committed $50 million to complete this measure.
- Highline Community College – 14 of 22 college buildings identified to receive funds are complete

Measure M-5: Property Advisory Service

Measure M-6: Local Government Remedy Support

Measure M-7: Funding for Land Use/Noise Compatibility Planning

Measure M-11: Approach Transition Zone Acquisition
- Conduct on a voluntary basis
Current Mitigation Measures Recommended to Continue

- **South ATZ**

- **ATZ**

- **Single-Family**

- **Multi-Family**
Modify the Noise Remedy Boundary

- The Noise Remedy Program boundary in use at Sea-Tac is based on the 2000 noise exposure contours developed for the 1985 Part 150 Study.

- This Part 150 update has developed noise exposure contours for Future (2018) conditions that are substantially smaller than the previous contours from the 1985 Part 150 Study due to improved engine technology and changes in aircraft operations.

- All eligible homeowners located within the existing Noise Remedy Boundary but outside of the modified Noise Remedy Boundary that request participation will be allowed to enter into the new program prior to the FAA’s approval of the new NCP.
Current Mitigation Measures Recommended to Continue with Modification

- 2018 Future Noise Contour
- Current Noise Remedy Boundary
- Updated Noise Remedy Boundary (Draft)
Current Mitigation Measures Recommended to Continue with Modification

**Measure M-2a: Standard Insulation** – Continue measure for eligible housing units within the modified Noise Remedy Boundary.

Port intends to make last offer of sound insulation to previously-eligible units outside the modified Noise Remedy Boundary.

Where feasible, the Port may include air conditioning as one element of new sound insulation installations.

**Measure M-12: Prepare Cooperative Development Agreements** – The process should continue to address development potentials for other areas included within the recommended modified Noise Remedy Boundary.
Current Mitigation Measures Recommended to not be Carried Forward

**Measure M-2c: Multi-Family Developments**
- To be replaced with new measures M-14 and M-15.

**Measure M-3/M-3a/M-3b: Transaction Assistance**
- This measure is recommended to be withdrawn.

**Measure M-4: Easement acquisition**
- Measure being discontinued.

**Measure M-9: Community Planners Forum**
- The Port participates in the Highline Forum, which continues the intent of this measure.

**Measure M-10: Operations Review and NEM Updates**
- Replace with Measure P-3.
New Potential Mitigation Measures

Measure M-14: Sound insulate owner-occupied multi-family units (condominiums) within the revised noise remedy boundary

- **Benefits:** Measure M-2c offered sound insulation to owner-occupied multi-family units within the 70 DNL of the 1998 Noise Exposure Contour. This measure would expand the program to eligible units within the revised Noise Remedy Boundary that were not previously mitigated.

- **Drawbacks:** Program will require new funding.

- **Recommendation:** Recommended for inclusion in NCP
New Potential Mitigation Measures

Measure M-15: Sound insulate renter-occupied multi-family units (apartments) within the revised noise remedy boundary

- **Benefits:** Measure M-2c offered sound insulation to owner-occupied multi-family units within the 70 DNL of the 1998 Noise Exposure Contour. This proposed measure would expand the program to include eligible renter-occupied units within the revised Noise Remedy Boundary.

- **Drawbacks:** Program will require new funding.

- **Recommendation:** Recommended as a pilot-project for inclusion in NCP
New Potential Mitigation Measures

Measure M-16: Offer avigation easements to owners of individual lots in which mobile homes are located.

- **Benefits:** This measure would provide avigation easements to owners of individual lots in return for removing the mobile home from the lot. Another option would be to offer easements for providing air rights.

- **Drawbacks:** Alternative would require new funding. Property owners may not be willing to accept the easement and potentially forfeit the revenue from the rent on the property.

- **Recommendation:** Recommended as a pilot-project for inclusion in NCP
New Potential Mitigation Measures

Measure M-17: Initiate a formal study to evaluate the noise levels at various churches/places of worship located within the recommended noise remedy boundary for eligibility for sound insulation.

- **Benefits:** Has the potential to offer sound insulation potentially eligible churches.

- **Drawbacks:** Churches could be difficult to effectively sound insulate depending upon construction type.

- **Recommendation:** Recommended for inclusion in NCP
New Potential Program Management Measures

Measure P-1: Evaluate Noise Monitoring and Flight Tracking System for Potential Upgrades

- **Benefits:** This measure would improve the ability of the Port to provide information to the public regarding noise and aircraft operations and to respond to public inquiries.

- **Drawbacks:** This alternative does not directly improve noise compatibility.

- **Recommendation:** Recommended for inclusion in NCP
New Potential Program Management Measures

Measure P-2: Communication of the previously completed Runway Use Agreement between FAA and Port

- **Benefits:** This measure would provide information to the public about runway use procedures at Sea-Tac Airport and situations in which deviations from normal procedures may be required.

- **Drawbacks:** This alternative does not directly improve noise compatibility.

- **Recommendation:** Recommended for inclusion in NCP
New Potential Program Management Measures

Measure P-3: Periodically review and, if necessary, update the Noise Exposure Maps (NEMs) and the Noise Compatibility Program (NCP).

- **Benefits:** Updates NEMs and the NCP. Provides continued opportunity for public outreach and public involvement in planning for noise compatibility.

- **Drawbacks:** Cost of NEM or NEM/NCP update

- **Recommendation:** Recommended for inclusion in NCP
New Potential Program Management Measures

Measure P-4: Continue to operate the Noise Office.

- **Benefits:** The Noise Office continues to initiate, implement, and monitor the various abatement actions included in the NCP and responds to public inquiries.

- **Drawbacks:** Cost to staff and run the Noise Office. This alternative does not directly improve noise compatibility.

- **Recommendation:** Recommended for inclusion in NCP
Hush House Update

Refined Hush House Locations

- Site eliminated from consideration
Part 150 Process

- **Major steps left to accomplish**
  - Further work on hush house analysis and consultation, and prepare report
  - Prepare Preliminary Draft Part 150 for FAA review and comment
  - Update Part 150 Study based on FAA comments
  - Publish Draft Part 150 document and advertise availability.
  - Publishing starts a public comment period (at least 45 days)
  - Schedule, advertise, and hold a public hearing
  - Review all comments received during the comment period and at the public hearing
  - Update the document based on those comments
  - Submit a Final Part 150 document to FAA for review and approval
  - FAA will take ~8 months to issue a Record of Approval
Part 150 Schedule

- TRC Meeting – Today (October 1)
- Commission Briefing 1 – October 2
- Submit Preliminary Draft Part 150 to FAA for Review – mid-October
- Highline Forum Update – Week of November 12
- Commission Briefing 2 – December 4
- Publish Draft Part 150 and Hold 45-Day Comment Period – mid-December
- Public Hearing – mid-January 2013
- TRC Meeting – February 2013
- Commission Adopts Final Part 150 NCP – February/March 2013
- Submit Final Part 150 Study to FAA for Approval – March 15, 2013
Questions/Answers