



## SEA-TAC STAKEHOLDER ADVISORY ROUND TABLE

### StART FACILITATOR'S MEETING SUMMARY

### AVIATION NOISE WORKING GROUP

Monday, March 11, 2019

5:30-7:30PM, SeaTac Airport Conference Room

Member	Interest Represented
Terry Plumb	Burien
Chris Hall	Federal Way
Ken Rodgers	Des Moines
Earnest Thompson	Normandy Park
Eric Zimmerman	Normandy Park
Jennifer Kester	SeaTac
Jennifer-Ferrer-Santa Ines	Normandy Park
Michael Matthias	Des Moines
Robert Akhtar	SeaTac
Tom Fagerstrom	Port of Seattle
Robert Tykoski	Port of Seattle
Marco Milanese	Port of Seattle
Stan Shepherd	Port of Seattle
Scott Ingham	Delta Air Lines
Chris Shaeffer	FAA
Vince Mestre	L&B

**Facilitator: Phyllis Shulman, Civic Alchemy**

**Note Taker: Megan King, Floyd Snider**

**Other Attendees: Lance Lyttle**

#### **Meeting Objectives:**

To open discussions on potential noise abatement departure profiles and to provide updates on actions in the Rolling Work Plan.

#### **Meeting Summary:**

Brief status update on the Rolling Work Plan initiatives:

- Runway use plan letter agreement (limits 3<sup>rd</sup> runway usage between 12AM – 5AM) has been forwarded to the FAA and is still under review.

### Late Night Noise Limitation Program Update:

Port Staff provided an overview and update on the Late-Night Noise Limitation Program. The Program overview included:

- Focus on operations between the hours of 12 am to 5 am
- SEL noise thresholds will be established at four noise monitors to capture departures and arrivals
- Website reporting on operations that exceeded the thresholds will occur on a regular basis
- Airlines that have exceeded threshold will be notified
- Operations that exceed the thresholds will negatively affect the airline's Fly Quiet Award score
- All airlines will be briefed on the program and encouraged to limit late night operations or change to quieter aircraft

Staff reviewed the current thinking about departure and arrival noise thresholds with the goal of identifying the noisiest aircraft. Staff gave examples of sample reports that would be posted on the Port's website. The reports identify the noisiest flights in a given month.

Questions included:

- Is there a way to differentiate noise from reverse thrust during arrivals?
  - *Response:* No, monitors measure general levels.
- Why are the closer in monitors not being used?
  - *Response:* The monitors that are currently being used for other Fly Quiet categories are being proposed for use. The chosen noise monitors also have the best alignment with the runways being monitored.
- What are the current Fly Quiet scores based on?
  - *Response:*
    - Flying within noise abatement procedures
    - Adhering to Sea-Tac's nighttime engine testing procedures.
    - Average noise levels of their operation
- Is the FAA aware of Sea-Tac's noise abatement procedures?
  - *Response:* The Port and FAA meet on a monthly basis to review procedures.
- Has the FAA ever taken action for an air carrier not following noise abatement procedures?
  - *Response:* No. The FAA does not have the ability to fine or penalize airlines for flying outside the noise abatement procedures, as noise abatement procedures are secondary to safety. If there is a consistent issue of non-compliance, the Port and FAA will monitor and correct. Airports cannot penalize or fine air traffic controllers or airlines for non-compliance with noise abatement procedures. Non-adherence with a flight procedure is different than non-adherence with a flight standard, and flight standards issues are very rare. Noise abatement is not considered a flight standard issue.
- Who would monitor/regulate non-compliance with noise abatement procedures if it is not the Port or the FAA?

- *Response:* It is a combined responsibility of both the FAA and Port. 99% of flights are within the noise abatement procedures. In instances where there is non-compliance, the Port works with the FAA to understand why.
- Are the noise monitors taking into account GBAS, which will allow for different approach paths?
  - *Response:* They are all near existing flight paths and GBAS has yet to be initiated and will not change flight paths.
- Why do the monitoring points have different SEL levels?
  - *Response:* The varying levels that would trigger a penalty vary based on the location of the monitor in relation to the flight path.
- Is noise monitor 18 at Woodmont Elementary School?
  - *Response:* Noise monitor 18 is located directly beneath the 3<sup>rd</sup> runway flight path, not at Woodmont Elementary School.
- Looking at data for night flights how will anomalies be handled?
  - *Response:* Port will more closely analyze data when there is an anomaly and can work with the airline to understand why. There is chance for simultaneous noise events to be corrupted with ambient noise such as motorcycles or fireworks. Can look at the profile, and see if there is a noise spike, that could be attributed to something else. There can also be a way that the data is reported, for example, reporting exceedances on percentage of flights, rather than number of flights.

Additional information included how the program will be rolled out to the air carriers and a review of the goals of the program. It was noted that federal law prohibits airports in the US from charging a higher night- time landing fee as is happening at some international airports.

#### Noise Abatement Departure Procedure (NADP) Profiles Presentation:

The noise consultant presented information about NADP. He reviewed that it includes two procedures:

- Close-in: noise reduction close to airport (potentially increased noise farther out on flight path)
- Distant: noise reduction farther out from airport (potentially increased noise close to the airport)

Advisory circular 91-53A dictates requirements for NADP profiles. The noise consultant reviewed the difference in altitude along departure flight tracks -- distant versus a close-in procedure. Trade-offs were discussed including that there is always a smaller area of noise reduction for close in as opposed to distant. Detailed modeling is required as well as an inventory of current procedures is needed to consider whether there is benefit in introducing the procedures. Next steps to explore NADP would include an inventory of current air carrier take-off procedures, understanding the impact it would have on close-in and farther out communities, detailed modeling, and formulating a request to airlines. It was mentioned that some airlines are already using distant procedure, because of fuel saving benefits. A study by UPS has been conducted that shows significantly reduced fuel usage, as well as noise reduction.

Additional information in response to questions and comments included:

- Noise reduction benefit between a close-in and distant procedure observed at John Wayne Airport is on the range of 2-3 dB noise reduction in the areas immediately below/adjacent to the runway.
- Lower fuel consumption is associated with flap retraction and the reduced amount of time with additional drag.
- The airlines have operations specifications detailed in an agreement between the airline and FAA in the region where the airline is based. This includes emergency procedures, lost radio contact, etc. If a departure procedure is going to change, the airlines need to change their Ops Specs. The Ops Specs are proprietary.
- The Port can request the airlines to utilize a distant procedure, but the Port would first want to conduct modeling to see what the impact would be. The Port may find that some airlines are already implementing distant procedures.
- Cost savings occur due to reduced fuel burn, which is significant.

The Working Group expressed support to take the next steps. This will require the hiring of a consultant to conduct the noise evaluation. It was stated within a few months a consultant could be hired and some preliminary results could be prepared. It was requested that the preliminary results be added to the June agenda for the Working Group. In addition to hiring a consultant, the Port can start discussions with airlines to get information on their current procedures.

#### Airfield Noise Assessment Next Steps:

Airport staff reviewed the possible scope and timing of an airfield noise assessment. The scope could include:

- What are sources of airfield noise?
- How might they be prevented, reduced, and/or mitigated?
- Actions (procedural and mechanical) that might be helpful to change those noise sources
- Evaluation of whether physical barriers would reduce noise and be appropriate

Other potential scope elements could include:

- Reverse Thrust
- Taxiing
- Additional temporary noise monitors in the neighborhoods east and west of the airport
- Location of sources – different noise levels in different areas of the airfield
- Maintenance
- Survey other airports / examples of what is being done at other airports
- Cargo operations
- Construction Noise
- Taxiing aircraft
- Past applicable P150 recommendations

It was stated that it is important to identify improved information sharing between the airport and community regarding whether to build a Ground Run-up Enclosure for aircraft testing. It was suggested that maybe there is a place on the Port's website that could be utilized for this purpose. Also, it was stated that the scope should be distinct from the SAMP process.

The Port will put out a Request for Proposals to consulting firms and then review them, interview, and select from the qualified bidders. Since this study is more extensive, it will require at least six months to hire a consultant.