StART enhances cooperation between the Port of Seattle and the neighboring communities of Sea-Tac Airport

AVIATION NOISE WORKING GROUP
StART FACILITATOR’S MEETING SUMMARY
November 18, 2019; 5:30 pm – 7:30 pm
Seattle-Tacoma International Conference Center, Room 4A Conference Room
17801 International Blvd. (Directions)

<table>
<thead>
<tr>
<th>Attendee</th>
<th>Interest Represented</th>
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<tbody>
<tr>
<td>Eric Zimmerman</td>
<td>Normandy Park</td>
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<tr>
<td>Robert Akhtar</td>
<td>SeaTac</td>
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<td>Mark Hoppen (phone)</td>
<td>Normandy Park</td>
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<td>Jennifer Kester</td>
<td>SeaTac</td>
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<td>Scott Ingham (Alt.)</td>
<td>Delta Air Lines</td>
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<td>Tom Fagerstrom</td>
<td>Port of Seattle</td>
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<td>Marco Milanese</td>
<td>Port of Seattle</td>
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<td>Stan Shepherd</td>
<td>Port of Seattle</td>
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<td>Jason Ritchie</td>
<td>FAA</td>
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<td>Vince Mestre</td>
<td>L&amp;B</td>
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Additional Participants: Lynae Craig, Alaska Airlines (phone), Lance Lyttle, Port of Seattle
Facilitator: Phyllis Shulman, Civic Alchemy
Note Taker: Emily Jackson, Floyd Snider

Meeting Objectives:
To discuss and get input on the Noise Abatement Departure Profiles Study’s next steps. To provide an update on the Late Night Noise Limitation Program outreach. To recap and share insights on the recent AAAE/ACI-NA Noise Conference. To review and discuss input received on the Ground Noise Study Scope.

Meeting Summary

Noise Abatement Departure Profile Study: Next Steps
Vince Mestre

Mestre provided a review of the Noise Abatement Departure Profiles Study and described the implementation steps, if action is taken. He stated that based on the study, NADP 2 (ICAO B for international carriers), known also as the distant procedure, is the preferred departure profile that offers the greatest potential noise reduction benefit for local communities. Next steps include the Port making a formal request through a letter to each airline asking them to utilize the NADP 2 for each runway and
changing their operations specs (if not already using NADP 2), and then, communicating the changes to the FAA. Once there is FAA approval, pilots would be authorized to use NADP 2.

Discussion and questions included:

- **Based on previous conversations, it seems that most of the airlines are currently flying a distant procedure, is that correct?**
  - *Response:* This is true for the Boeing 737, but no other aircraft types have been surveyed for this analysis. Airlines have often adopted this procedure since it saves fuel.

- **What are international airlines doing?**
  - *Response:* International airlines from Asia with wide body aircraft primarily use the distant procedures, and European airlines use a combination of both procedures.

- **Will changing to the NADP 2 procedure result in an increase of noise for Normandy Park residents, even though it may have benefits for other communities? It would be helpful to have a clearer understanding on where the benefits are and whether there are impacts on Normandy Park.**
  - *Response:* The Port will work with the consultants to clarify where there are potential benefits and impacts and develop visual information useful to communities. There does not appear to be a noise increase in Normandy Park.

- **Since studies have only been performed on the Boeing 737 aircraft, is that the only aircraft that would be included in possible changes to the departure profile?**
  - *Response:* All aircraft would be included in the request, not just the 737. The noise reduction benefits are expected to be similar when the NADP 2 is applied to larger aircraft.

- **Are there differences in emissions between the two procedures?**
  - *Response:* Yes, the distant procedure results in less fuel burned and less greenhouse gases. Getting the aircraft up faster reduces criterion pollutants as well.

- **Could a phased-in approach be used or do the departure profile changes need to occur all at once?**
  - *Response:* Each airline could implement it at different speeds based on changes to their operations specs. This could take place over a timespan of months to a year. If pilot training is required, it could be longer than a year.

- **Has the airport decided that they are going to make this request and is there a timetable?**
  - *Response:* The Port will continue to get input from the Working Group and will have preliminary conversations with the FAA before next steps.

- **What would the numbers look like for Boeing 747 aircraft or large body aircraft? Could that be modeled so that there is a comprehensive understanding of the proposed change?**
  - *Response:* Based on the study and other analysis, the trend is anticipated to be similar with larger aircraft.

- **Since the benefits will be greater to communities that are further from the airport than the StART communities and given the close in communities won’t notice a difference, why pursue this?**
  - *Response:* The purpose is to find noise reduction benefits without negative impacts, wherever they can be found.
- Would this potentially make Seattle the second airport in the US to have a procedural policy of this nature?
  
  Response: San Francisco International Airport and Chicago O’Hare International Airport may have similar procedure policies in place.

- If this were to set a precedent, does this create additional costs for the airlines to implement?
  
  Response: This is not currently known. The distant procedure is probably already built into the aircraft flight management system.

Participants provided feedback suggesting what information would be needed to better educate communities about this effort as well as recommended formats. It was expressed that it would be helpful to have a map that shows city boundaries and which areas would benefit, which areas would be no change in, and which areas might have an increase in noise. Port staff said that they would work with the noise consultants to develop those materials and review those draft materials with StART.

Late-Night Noise Limitation Program: Outreach Update
Tom Fagerstrom and Marco Milanese, Port of Seattle

Fagerstrom provided an update on the Late-Night Noise Limitation Program outreach.

- All of the airlines that had noise exceedances received letters that included data showing their exceedances. Letters also went out to airlines that had operations during late night hours that did not exceed noise thresholds.
- A number of airlines who had noise exceedances expressed interest in the program and the third quarter results and asked for additional information about their operations that exceeded noise thresholds in the third quarter, 2019.
- The Port initiated conversations with the three noisiest carriers during the third quarter’s late-night hours. Port staff shared information about these conversations including:
  
  - EVA Air - They currently fly the Boeing 777. Staff met with them about the possibility of utilizing quieter aircraft. EVA Air stated that they did not see that possibility in the near future. They shared that they are currently developing their 2020 summer schedule and that they were considering moving their flights to an earlier departure time, but these times may still fall after 12:00am. Conversations are expected to continue.
  
  - China Airlines Cargo - a meeting has been scheduled.
  
  - FedEx - They are planning on transitioning the MD11 and DC10 out of their fleet, which has been responsible for the majority of their late-night noise exceedances. A timeline was not provided at this time. They mentioned that, due to the holiday season, expect increased operations during the fourth quarter.

One community representative commented that it’s great to hear that the Port and airlines are engaging in a dialogue about late-night operations.

Noise Conference Recap
Stan Shepherd, Port of Seattle

Shepherd shared that the annual AAAE/ACI-NA Noise Conference was held this year in Seattle and had record attendance (200 attendees). Participants mostly included airport employees, the FAA, and airport
consultants due to the highly technical nature of the conference presentations. Shepherd shared information about some of the presentations that he attended.

Notable presentations included:

- Ruud Ummels discussed an expert study on understanding community and noise – This study indicated that a communication disconnect exists between noise professionals and the communities their studies serve. The data needs to be clear, transparent, easy to understand, and should be inclusive of all of the communities surrounding and impacted by an airport, not just close-in neighbors.
- Study on noise annoyance stated that 20-30% of noise annoyance complaints are attributed to the noise level, the rest is non-acoustic. People additionally complain as a result of seeing aircraft, not just hearing aircraft.
- Sound insulation program – San Francisco International Airport staff Gerardo Fries is working on a program that fixes and repairs older noise reduction insulation in homes where it has failed. They are using city funds (SFO is operated by the City), since FAA funds are not available.
- Faculty from the William D. Ruckelshaus Center discussed considerations for designing constructive community stakeholder engagement for airports.
- FAA talked about technical data for taxiway noise, modeling of supersonic jets that will be entering the market in the future, urban air mobility and unmanned aerial systems that are entering the U.S. market soon.
- Vince Mestre was awarded the annual Randy Jones Award for his work in aviation noise mitigation and monitoring.

Working Group members requested access to the presentations agenda. An email was sent to Working Group members after the meeting with this information. Presentations are available at: https://www.aaae.org/AAAE/AirportNoiseConference/Agenda/Presentations.aspx

Discussion and questions included:

- Could community members attend conferences like these in the future?
  - Response: Yes, although this conference was more technical and geared towards industry professionals. The UC Davis Aviation Noise and Emission Symposium in March may be more interesting to community members as its focus is more oriented to community issues and concerns.

- Would the Port be able to send StART community representatives to the UC Davis symposium in March?
  - Response: The Port currently has not budgeted for that, but Port staff stated that they would be willing to look into that possibility. Cities may additionally choose to send their representatives.

Ground Noise Study Scope Input Received
Tom Fagerstrom and Marco Milanese, Port of Seattle

Fagerstrom and Milanese provided the Working Group with a draft list of items suggested by StART participants to add to the scope for the Ground Noise Study. One Working Group participant had performed some preliminary analysis to identify locations with line of site to the Airport, that may
correlate with noise complaints. It was suggested that maybe that analysis could be used to help
determine where to locate noise monitors. The Working Group indicated that the scope looks good.

Fagerstrom reviewed the general timeline of the study. He stated that, after an on-the-ground assessment
of noise sources, the noise consultants are planning to do the noise monitoring sometime in March or
April. Analysis of the data and the development of potential mitigation approaches will take place over
the Summer of 2020. There will be multiple opportunities for discussion and input from StART. The noise
consultants aim to share findings and potential mitigation options by the Fall of 2020.

Future Meeting Date/Times:

Tentative Next Meeting: February 10, 2020, 5:30pm - 7:30pm, Seattle-Tacoma International Conference
Center, Room 4A Conference Room