

Aviation Noise Working Group

MEETING SUMMARY

APRIL 11, 2022; 5:00 PM – 6:30 PM
VIA ZOOM VIDEOCONFERENCE

Meeting Objectives:

Updates on the 1st quarter results for the Aviation Near-term Noise Action Agenda efforts, the Port's noise insulation program, Alaska Airlines' fleet changes, and China Cargo Airlines' late-night operations. Mitigation recommendations from the Ground Noise Study will be discussed along with a review of the utilization of SEA's monthly noise comment reporting.

Meeting Summary:

- I. Facilitator welcome, introduction, and meeting agenda, Brian Scott, BDS Planning & Urban Design
 - A. Justin Biassou, International Stakeholder Engagement (Detailee) of the FAA introduced his backfill, Dr. Vikas Uberoi, Acting Community Engagement Officer of the FAA's Northwest Mountain & Alaskan Region, for the duration of Justin's 6-month detail to headquarters.
- II. Aviation Near-term Noise Action Agenda: 1st Quarter Results, Tom Fagerstrom, Noise Programs Coordinator, Port of Seattle (POS)
 - A. Third Runway Usage
 - o In 2021 the average runway use per late night was 1.2 landings. In 2022 through April 5 this average was 2.5 due to some runway closures in January. However, usage is trending in the right direction since late February.
 - B. Late Night Noise Limitation Program
 - o During the 4th quarter, 2021:
 - 63% of FedEx operations exceeded noise thresholds making them the number one noise offender during the late night hours, followed by ATI/Amazon Prime and Asiana Airlines Cargo.
 - POS met with ATI/Amazon in early April. The meeting went well, and the very engaged chief pilot shared that they always review their exceedances internally. They asked for further information on the location of the monitors so they can figure out if they can configure their aircraft to reduce noise during landings.
 - Late night operations were down from Q4.
- III. Noise Insulation Status Report, Stan Shepard, Noise Programs Senior Manager, POS
 - A. Sound insulation projects identified in the last Part 150, will be completed by 2026. Insulation work has ramped up during the past two years to meet that milestone. POS hired an insulation manager and additional staff to manage the projects. Currently, there are approximately 75 staff across the Port supporting this program.
 - B. During 2021, ten single-family homes were completed.
 - C. The POS completed one home this year so far and has 11 more that are construction ready. Currently, there is a waiting time to get needed materials, but POS anticipates that another eight will be completed by the end of the year.
 - D. Seven units have been completed in a condo complex south of Des Moines and the project is on track

to complete the remaining 20 units.

- E. 18 apartment complexes with 903 units are potentially eligible, but a noise audit is needed to make sure those buildings qualify. Buildings with interior noise levels under 45 dB do not qualify. Design and construction on the eligible buildings will begin early 2023.
 - F. POS' outreach resulted in one application from a potentially eligible place of worship.
 - G. POS and FAA will continue to help fund the Highline School District's school reconstruction program. Next on their list is Pacific Middle School, supported by POS and FAA with \$7.2 million.
- IV. Alaska Airline Fleet Changes, Scott Kennedy, Alaska Airlines, Government Affairs Manager
- A. Alaska Airlines will shift to an entirely Boeing fleet by the end of 2023 to improve operational simplicity, flexibility, scalability, fuel efficiency and reduce maintenance costs. Currently, the airline is phasing out 40 Airbus aircraft. Likewise, Horizon Air is phasing out their Q400 Turboprops, and will shift to a fleet of entirely Embraer 175 aircraft by the end of 2023.
 - B. Once Alaska phases out all Q400's, only Air Canada Express & West Jet Encore be operating these aircraft in limited numbers which means the westerly turn over Burien will be utilized much less.
- V. China Cargo Airlines Update, Tom Fagerstrom, Noise Programs Coordinator, POS, Ken Galka, Air Cargo Operations Manager, POS and Vince Mestre, Consultant
- A. For the last couple of winters, typically from November through March, China Cargo Airlines stopped at SEA to fuel on their way to Chicago. They also have occasional flights in the summer during cherry season.
 - B. Factors that influence why China Cargo Airline's would fuel in Seattle vs. Anchorage.
 - o Route distance
 - o Price of fuel
 - o Jet stream
 - C. However, the assumption is the west to east jet stream is dominating their decision to come through Seattle to fuel instead of through Anchorage during the winter months. China Cargo Airlines takes advantage of the jet stream in the winter and when the jet stream shifts north in Summer, it follows the jet stream and fuels at Anchorage.
 - D. The airport does not have the authority to prevent a carrier from fueling at SEA and it can't charge carrier different prices for fuel either.
- VI. Ground Noise Study: Mitigation Recommendations, Gene Reindel, Vice President, HMMH
- A. HMMH is conducting a study of airport ground noise exposure in the communities surrounding SEA, utilizing temporary noise monitors at six community locations plus at a seventh site adjacent to the airfield t.
 - B. Mitigation techniques that FAA recommends evaluating in a Part 150 Study.
 - o Changes in airport layout
 - o Isolate run-ups
 - o Install barriers/shielding
 - o Restrict operations
 - o Land use controls
 - C. HMMH's mitigation analysis:
 - o *Mitigation for Start-of-takeoff Roll*
 - Installation of noise barriers.
 - Implementation of intersection departure on Runway 16L-34R.
 - Evaluated noise barriers slightly reduce noise ; however, the tested barriers are relatively far from the noise source and not close to residential/noise sensitive areas.

- *Takeoff roll at the intersection of taxiway E* provides 5dB or more reduction but taking off further down the runway results in increased noise levels under the flight path. In addition, not all aircraft could take off elsewhere because they need the full-length runway.
 - *Mitigation for Taxiing*
 - There is a slight noise reduction with single engine taxiing.
 - *Mitigation for Engine-Run-ups*
 - Relocation of run-up location to the west would increase the noise level to communities on the west.
 - Relocation of run-up location during south flow would increase higher noise-level for communities to the west and east.
 - .
 - *Mitigation for Reverse Thrust*
 - Noise barriers to the west are not feasible due to height/safety restrictions and terrain.
 - Increased usage of the center runway for arrivals, although this could negatively affect efficiency.
 - Discourage pilots from deploying reverse thrust. SEA has a voluntary policy at night already. Maybe implement it for all hours.
 - *Mitigation for Queuing*
 - Leave them at the gate until they know they have a take-off time. The FAA is working on time-based flow management software to allow for more efficiency. Recommendation is to encourage FAA to implement the software.
 - *Mitigation for Auxiliary Power Unit (APU) Usage*
 - Port Is already engaged in an initiative to lessen use of APU's.
- D. Recommendations: First draft is expected in May 2022
 - Start-of-takeoff roll on departure
 - Implement a policy to recommend airlines depart using rolling takeoffs
 - Taxi
 - Work with operators to develop a policy of using one engine to taxi to the runway to depart
 - Engine run-ups
 - Review results to see if any areas exist to move the primary run-up locations that take advantage of existing structures to block the noise
 - Reverse Thrust
 - Work with operators to improve voluntarily not applying reverse thrust during nighttime operations and amend chart language to all times of the day as possible
 - Conduct further outreach to the carriers to increase awareness
 - Queue
 - Develop a policy and encourage the FAA to implement sequencing to reduce or eliminate aircraft queues to depart SEA
 - APU
 - Continue to monitor developments in resolving power and AC issues at the gates, once resolved work with appropriate Port staff to monitor the use and rules enforcement.

VII. Noise Comment Reporting & Utilization, Tom Fagerstrom, Noise Programs Coordinator, POS and Vince Mestre, Consultant

- A. There are four submission methods:
- Hotline phone call
 - Online comment form
 - Port mobile app

- PublicVue flight tracking site
- B. The Airnoise complaint button is a 3rd party web app that connects with POS comment form. When a user hits the button, it attempts to correlate with an aircraft operation. 93% of all comments come through this method, and it dominates the complaint numbers.
- C. March noise comment report: (More north-flow operations during the month of March)
 - 22,169 total comments
 - 20,948 via Airnoise
 - Highest number of comments are from Vashon residents
 - Des Moines' comments increased two-fold, and Seattle and Federal Way all increased from February due to increased north-flow operations.
- D. Frequent reasons for submitting comments:
 - Requesting sound insulation info
 - Under busy flight path
 - Unusual aircraft overflight
 - Perception of lowered altitude
 - Ground noise
- E. Responding to noise comments:
 - The primary goal is to listen and understand the impacts of aircraft noise & provide information regarding aircraft activity.
 - When requested or when noise office staff become aware of a possible change, POS investigates the noise occurrence.
 - Example: In 2016, POS began to receive numerous calls from residents from an area of Burien that typically didn't call. The local FAA staff was contacted for information who confirmed a new procedure has been implemented for propeller aircraft. POS notified the public.
- F. Noise complaint history:
 - Noise complaints play little or no role in federal noise policy except to the extent they exert political pressure.
 - Noise annoyance surveys are time consuming and expensive.
 - FAA recently created a complaint portal to standardize complaint collection & response protocol in response to congressional concerns.

| MEMBER | INTEREST REPRESENTED | PRESENT |
|-------------------|--|---------|
| AMY ARRINGTON | NORMANDY PARK – CITY | ✓ |
| BILL VADINO | FEDERAL WAY – CITY | ✓ |
| BOB LEONARD | DES MOINES – COMMUNITY REPRESENTATIVE | - |
| GARMON NEWSOM II | BURIEN – CITY | ✓ |
| CARL COLE | SEATAC – CITY | - |
| CHRIS HALL | FEDERAL WAY – COMMUNITY REPRESENTATIVE | - |
| DAVE BERGER | FEDERAL WAY – COMMUNITY REPRESENTATIVE | - |
| DAVID TOMPOROWSKI | SEATAC – CITY | - |
| JEFF HARBAUGH | BURIEN – COMMUNITY REPRESENTATIVE | ✓ |
| LANCE LYTTLE | PORT OF SEATTLE | ✓ |
| LYNAE CRAIG | ALASKA AIRLINES | ✓ |
| MICHAEL MATTHIAS | DES MOINES – CITY | - |

| | | |
|------------------|-----------------------------------|---|
| ROBERT AKHTAR | SEATAC – COMMUNITY REPRESENTATIVE | - |
| SCOTT INGHAM | DELTA AIR LINES | ✓ |
| SCOTT KENNEDY | ALASKA AIRLINES | ✓ |
| STEVEN OSTERDAHL | ALASKA AIRLINES | - |
| SUSAN CEZAR | DES MOINES - CITY | ✓ |
| PRESENTERS | TITLE | |
| GENE REINDEL | VICE PRESIDENT, HMMH | ✓ |
| RESOURCES | TITLE | |
| CHRIS SCHAFFER | FAA | - |
| CLARE GALLAGHER | PORT OF SEATTLE | ✓ |
| COLIN RICE | PORT OF SEATTLE | - |
| JOSEPH BERT | FAA | ✓ |
| JUSTIN BIASSOU | FAA | ✓ |
| KEN GALKA | PORT OF SEATTLE | ✓ |
| MARCO MILANESE | PORT OF SEATTLE | ✓ |
| STAN SHEPHERD | PORT OF SEATTLE | ✓ |
| TIM TOERBER | PORT OF SEATTLE | - |
| TOM FAGERSTROM | PORT OF SEATTLE | ✓ |
| TOM GREEN | PORT OF SEATTLE | ✓ |
| VIKAS UBEROI | FAA | ✓ |
| CONSULTANT | | |
| BRIAN SCOTT | BDS PLANNING & URBAN DESIGN | ✓ |
| DORI KRUPANICS | BDS PLANNING & URBAN DESIGN | ✓ |
| MELODIE GARCIA | BDS PLANNING & URBAN DESIGN | ✓ |
| VINCE MESTRE | CONSULTANT | ✓ |

NEXT MEETING: JUNE 13, 2022- 5:00 PM - 7:00 PM
LOCATION: ZOOM VIDEOCONFERENCE