

## StART FACILITATOR'S MEETING SUMMARY

October 28, 2020

5:00 pm – 7:00 pm Video Conference

Participant	Interest Represented		Participant	Interest Represented	
Eric Zimmerman	Normandy Park	X	Scott Kennedy	Alaska Airlines	X
Mark Hoppen	Normandy Park	X	Matt Shelby (Alt)	Alaska Airlines	
Jennifer Ferrer-Santa Ines (Alt)	Normandy Park	-	Tony Gonchar	Delta Air Lines	-
Carl Cole	SeaTac	X	Scott Ingham (Alt)	Delta Air Lines	X
Kyle Moore (Alt)	SeaTac	-	Shan Hoel	Air Cargo	X
Robert Akhtar	SeaTac	-	Justin Biassou	FAA	X
Tejvir Basra	SeaTac	-	Lance Lyttle	Port of Seattle	X
Michael Matthias	Des Moines	X	Arlyn Purcell	Port of Seattle	X
Brandon Miles	Tukwila	X	Marco Milanese	Port of Seattle	X
Erica Post	Tukwila	X	Eric Schinfeld	Port of Seattle	X
Tod Bookless	Tukwila	-	Tom Fagerstrom	Port of Seattle	X
Bill Vadino	Federal Way	X	Stan Shepherd	Port of Seattle	X
Dave Berger	Federal Way	X			
Chris Hall	Federal Way	X			
Brian Wilson	Burien	X			

**Additional Participants:** Vince Mestre, Consultant

**Facilitator:** Phyllis Shulman, Civic Alchemy

**Note Taker:** Amanda Murphy, Amanda Gray Consulting

### Meeting Objectives:

To provide an update on agenda items at the StART Federal Policy Working Group and the Aviation Noise Working Group October meetings. To present on and discuss the Port's aircraft noise monitoring program.

### Welcome

Lyttle welcomed participants. The cities of Des Moines, Burien and Federal Way have reinstated their membership on StART. Lyttle, welcomed back the cities and emphasized his interest in working together on shared priorities. He emphasized that he believes that even though there may be differences of opinion, that good work can still be accomplished together.

## **Recap of Federal Policy Working Group**

**Eric Schinfeld, Federal Government Relations Manager**

Schinfeld provided a briefing on the October meeting of the StART Federal Policy Working Group (FP Working Group). Schinfeld provided background on the shared agenda and the impacts of COVID-19 on the advocacy work. He stated that now is a good time to reenergize the work. The FP Working Group came to agreement on two items:

1. An updated federal policy advocacy plan that now includes four new policy priorities.
2. Organizing virtual meetings with Congressional representatives and FAA leadership to replace the trip to Washington DC that had been originally planned for last March.

Schinfeld asked each city to identify participants for the virtual meetings. He will follow up with coordination and the development of talking points. He acknowledged the congressional representatives who have kept these issues a continuing priority for Congress. Schinfeld stated that these issues are non-partisan, but that legislation can be stalled by overall lack of legislative progress in Congress these days. A StART member suggested that leadership at the US Department of Transportation be included in the meetings.

## **Recap of Aviation Noise Working Group**

**Marco Milanese, Community Engagement Manager, Port of Seattle**

Milanese provided a recap of the October Aviation Noise Working Group (AN Working Group). The AN Working Group discussed the following items:

- The winners of the 2020 Fly Quiet Award.
- Reviewed the latest data on the Late-Night Noise Limitation Program 2020 3<sup>rd</sup> Quarter Results showing that though late-night operations have dropped, the highest percentage of late night exceedances are related to cargo carriers.
- Reviewed the latest data on the Runway Use Agreement noting that in September there were only five late-night landings on the 3<sup>rd</sup> runway during the whole month.
- A presentation on SEA air cargo to better understand and determine how best to work with freight operators to reduce aviation noise. The presentation focused on freight cargo data including identification of freight carriers, their flight schedules, and aircraft type.
- Discussed the interest in engaging with FAA on NextGen procedures, engaging with airlines to understand future fleet plans, especially late night operators.

## **Noise Comment Monthly Reports**

**Tom Fagerstrom, Airport Noise Programs Coordinator, Port of Seattle**

Fagerstrom provided an overview of the Noise Comment Monthly Report for September. The report shows monthly totals and trends for noise comments and complaints by household, zip code, and city. The report shows the type of comment/complaint and the method in which it was received. The most

common complaint is “noise annoyance” and the most common method of reporting is through the third-part web application called Airnoise. Information is also shown through a heat map by zip code which shows where the intensity of complaints originate. In September, the most complaints registered were from Vashon. A suggestion was made to also report the data on number of complaints via flight paths. Monthly reports are posted on the [website](#).

## **SEA Aircraft Noise Monitoring Program**

**Vince Mestre, Consultant**

**Stan Shepherd, Manager Airport Noise Programs, Port of Seattle**

**Tom Fagerstrom, Airport Noise Programs Coordinator, Port of Seattle**

### Overview of Noise Monitoring Systems

Mestre discussed the history of noise monitoring systems, system design , equipment and components, best practices, and how the data can and cannot be used. Mestre identified technical considerations for site selection, samples of technical reports, and compared noise monitoring versus noise modeling. He discussed the importance of flight track analysis data. This data provides the location of aircraft to maximize flight tracking accuracy. Flight tracking systems identify location, flight, speed, and altitude of each aircraft. Mestre pointed out that as aircraft have gotten quieter, their noise levels can be closer to other ambient noise in the community. When ambient noise is high it is more difficult for noise monitors to differentiate aircraft noise. Due to the difficulty of separating ambient noise from aircraft noise, noise modeling provides the best estimate of aircraft noise. Mestre’s presentation can be found [here](#).

### SEA Permanent Noise Monitors

Shepherd and Fagerstrom’s presentation can be found [here](#).

Shepherd presented information on the SEA permanent monitoring system including the number of monitors, their location, and how the permanent noise monitors connect to the flight tracking system. He shared examples of what data the noise monitoring system collects and how that data is utilized. Highlights of the presentation include:

#### *Permanent Monitoring System*

- 24 permanent monitors located in close-in communities surrounding SEA, or in locations generally north and south of the runways near a departure or arrival flight path
- Aircraft noise event data is gathered and shared on a monthly basis via the Port’s Noise Programs website.

#### *Flight Tracking System*

- Record of all flights that occurred at SEA
- Same radar data feed the FAA uses
- Historic record of flight details, including the altitude, aircraft type, location, speed, and airline
- Flight tracks are correlated with likely noise events
- Non-correlated noise is identified as community noise

### *Noise Monitoring Data*

- The purpose of SEA's noise monitoring system is to identify aircraft overflights and correlate probable noise events. The metrics supplied by the Port are:
  - SEL – sound exposure level: metric represents all the acoustic energy in an individual noise event as if that event had occurred within a one second time period
  - LEQ – equivalent continuous sound level: measures the average acoustic energy over a period of time to take the cumulative effect of multiple noise events

### *Noise Monitor Data Utilization*

- Providing aircraft noise event information to the public along with aircraft type, airline, flight number and time/date.
- Monitoring noise levels for the Fly Quiet and Late Night Noise Limitations programs. FAA does not use data from noise monitors as the basis for determining the sound insulation boundary area. FAA mandates that only noise modeling be used.
- Noise monitors do not provide as accurate depiction of annual DNL compared to modeling.
- Noise monitors are not used as the basis for flight path changes.

### SEA Temporary Noise Monitors

Fagerstrom presented information on the Port's new Temporary Noise Monitoring Program. He stated that SEA recently acquired two portable monitors. Fagerstrom reviewed the Program's procedures including site selection criteria, deployment status, and data utilization. Highlights of the presentation include:

### *SEA's Temporary Noise Monitoring Program Procedures*

- Portable noise monitoring will be considered if requested through a local jurisdiction such as a city council or city administrator.
- A standardized report will be provided to the requesting jurisdiction consisting of the following information: SEL, LEQ, and the number and type of aircraft noise events correlated.

### *Site Selection Criteria*

- Distance from permanent monitoring sites – preferably not within 2 miles
- Proximity to established flight paths and airfield noise
- Availability of electric power
- Site accessibility for Port and vendor staff
- Site security
- Acoustically feasible
- Consideration of neighborhood equity and diversity

### *Deployment Status – First Monitor*

- Received requests for monitor placement from the cities of Burien, Federal Way, and Normandy Park.
- Using the placement criteria, Burien was selected for the first placement, but they deferred to a later date.

- Federal Way accepted placement at the Nautilus Elementary School for two months. The monitor was installed in October for preliminary testing.
- The temporary monitor will be located next in Normandy Park.

#### *Deployment Status –Second Monitor*

- Port Commission directed placement of monitor on Vashon Island for 12 months.
- Port staff currently are working on an access agreement.
- Monitor will be used for shorter terms for other municipalities once the 12 month period on Vashon ends.

#### Additional information based on questions and comments included:

- The Port does not have current plans to utilize emission monitors, but are continuing to utilize the Puget Sound Clear Air Agency air emissions data.
- Recommendation that the Port partner with the University of Washington on their air quality study.
- Port staff are currently considering a request to move the permanent noise monitor from Sacajawea Elementary School to Nautilus Elementary School.

#### **Public Comment**

Compiled public comments are included as Appendix A.

**Next Meeting:**  
**December 9, 2020- 5:00 pm – 7:00 pm**  
**Location: video conference**

## Appendix A Summary of Public Comments

### Public Comment

Anne Kroeker (oral and written comments):

- Stated that she thought she had heard earlier at the meeting that the aircraft noise is not coming from NextGen, but she thought that it was due to NextGen. Commented that due to how the noise monitors work she is not sure that the noise monitors are a wise investment.
- Mentioned two reports. One is from the Euro parliament on the impact of noise on cities. Stated that the report stated that noise can lead to negative public health impacts as well as socio-economic impacts. The second report states that aviation noise may affect dementia risk over time.
- Requested that the work of StART include diversity and equity in its strategies and include diversity and equity when the Port decides the placement of temporary noise monitors.

The following are references to the studies:

#### **Impact of aircraft noise pollution on residents of large cities:**

[https://www.europarl.europa.eu/RegData/etudes/STUD/2020/650787/IPOL\\_STU\(2020\)650787\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/650787/IPOL_STU(2020)650787_EN.pdf)

Abstract:

This study, provided by the Policy Department for Citizens' Rights and Constitutional Affairs at the request of the Committee on Petitions, aims to provide a clear and simple overview to the non-expert reader, on the Impact of aircrafts noise pollution on residents of large cities, as well as to give recommendations addressed to the most relevant actors. Noise is one of the most important problems linked to aviation. It can lead to health issues, as well as to negative social and economic effects. Examples of health issues produced by aviation are sleep disturbance, community annoyance, cardiovascular disease, and mental health problems.

#### **Community noise may affect dementia risk:**

<https://www.sciencedaily.com/releases/2020/10/201021085106.htm>

Summary:

Results from a new study support emerging evidence suggesting that noise may influence individuals' risk of developing dementia later in life.

Bernadine Lund (Federal Way) (oral and written comments):

StART meeting 10-28-2020, Public Comment, Bernadine Lund, resident of Federal Way

Hello, everyone,

I want to say thank you to the PoS Noise Monitoring staff the noise presentations and for agreeing to set up a Temporary Noise Monitor at Sacajawea Grade School here in Federal way. I look forward to being able to see and compare the data to Noise Monitor #22. I have one request for the reports – please do not use the word annoyance unless the DNL is below 45 (I find the use of the word very annoying). As reported in the 2018 WHO Noise Report, DNL levels above 45 are a health risk, and most of the residents do not agree with the FAA that the DBL has to be below 65 to just be annoying.

On a separate topic, I wanted to mention to the StART members that the PoS is preparing its 2021-2025 budget and is planning to spend about \$3.3 billion on capital investments. The Port is also considering a recommendation to increase the Port District tax levy by 3% for 2021, which would bring in about \$78 million. This spending is proposed while the Port also estimates the it will take to 2025 to reach the 2019 (the pre-Covid) flight levels. See the summary table for number of flights for 2019 and for Jan-Sept for 2020 so you can see the drop in number of flights this year.

At the PoS Commissioners meeting yesterday I asked that they use 0.1% of the \$33 billion (or \$33 million) in 2021 to provide air purifiers to local homes and schools, including ongoing money for replacement air filters every 6 months. This cost falls well within the \$78 million from one year of the tax levy. I also asked them to move forward on replacing or updating the Port sound mitigation packages that have failed and to provide new ones as requested. The local residents should not have to wait while the Port has the tax levy money to provide this work.

I asked the Port to take this step to protect the health of local residents. It is very important to me to keep the health of the local residents from deteriorating due to aircraft emissions and noise, and more important than improving the experience of travelers going through the airport. I hope that it is more important to you too.

Number<sup>1</sup> of Flights Measured by PoS Noise Monitors  
Jan-Dec 2019

Noise Monitors Site	#	2019												Total 2019	Ave # flights/ Mo	2019 Ave # flights/d ay
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec			
Air Cargo 4, SeaTac	#1	11,929	8,798	14,792	11,630	12,456	10,458	7,060	7,371	5,686	6,830	8,203	3,941	109,154	9,096	303
Maple Leaf Reservoir, Seattle	#3	714	361	505	737	476	631	588	410	607	780	425	1,158	7,392	616	21
C Blain School, Seattle	#4b	102	67	72	95	79	83	92	83	85	98	86	147	1,089	91	3
Median Ele, Medina	#5	861	1,895	2,874	1,875	2,565	1,710	1,248	1,938	1,477	1,239	2323	262	20,267	1,689	56
Hamilton View Park, SW, Seattle	#6	47	59	80	48	104	65	67	58	57	56	63	19	723	60	2
Central Area Sr Center, Seattle	#7	496	696	1,224	778	1,286	870	1,154	1,120	994	550	1065	522	10,755	896	30
Mercer View Community Center	#8	12	5	8	16	20	4	21	13	5	9	7	14	134	11	0
Beacon Hill Reservoir	#9	10,883	18,575	20,960	22,067	9,141	18,367	17,181	14,172	14,454	17,001	20,753	27,509	211,063	17,589	586
Brighton Playfield, S Seattle	#10	515	537	580	592	603	582	852	738	641	690	753	724	7,807	651	22
Beverly PK School, SeaTac	#11	16,064	13,450	15,639	15,763	16,785	17,629	18,900	18,586	16,897	16,844	15,644	17,361	199,562	16,630	554
S 126, Burien	#12	4,662	5,567	8,102	6,542	7,867	6,538	7,194	8,161	5,466	6,135	7,478	3,042	76,754	6,396	213
Cedarhurst Middle Sch, Burien	#13	11,460	8,841	10,075	11,698	12,099	12,003	12,582	12,493	12,244	11,720	11,585	12,850	139,650	11,638	388
N Clear Zone, SeaTac	#14	14,311	11,524	13,179	15,135	14,383	14,082	13,410	13,089	11,688	11,653	11,115	11,642	155,211	12,934	431
Sylvester Mid Sch, Burien	#15	2,849	369	42	455	423	270	173	210	315	344	394	490	6,334	528	18
Chinook Mid Sch, SeaTac	#16	1,642	859	704	1,312	1,419	1,376	222	91	923	1,263	953	1,155	11,919	993	33
S 207th St, SeaTac	#17	15,668	13,675	15,892	15,997	17,295	18,114	19,211	19,549	17,369	17,339	15,774	16,381	202,264	16,855	562
S 226 St, Des Moines	#18	14,811	13,057	15,480	15,341	16,644	17,523	18,619	19,028	16,806	16,655	15,645	15,824	195,433	16,286	543
Midway Ele, 24 Ave S, Des Moines	#19	12,580	9,557	9,470	11,432	11,654	13,946	14,712	13,630	14,145	13,677	10,721	16,070	151,594	12,633	421
Parkside Ile, S 247, Des Moines	#20	11,982	8,933	9,379	10,993	11,275	13,410	14,469	13,387	13,449	12,621	9,998	15,202	145,098	12,092	403
Mark Twin Ele, Star Lake, FW	#21	11,619	8,125	8,643	10,419	10,109	12,536	12,199	12,371	12,939	12,040	9,481	14,881	135,362	11,280	376
Sacajawea Jr H, FW	#22	12,121	10,717	13,450	13,264	14,748	15,431	16,063	16,665	14,502	13,825	13,757	13,684	168,227	14,019	467
Meredith Hills Sch, 5300, Auburn	#23	139	170	144	132	115	166	218	101	252	293	114	243	2,087	174	6
Twin Lakes Ele, 42 Pl SE, FW	#25	358	230	343	272	404	454	366	238	366	391	236	653	4,311	359	12
Woodmont Ile, 16 Ave S, Des Moines	#28	13,906	12,089	14,350	14,803	16,292	16,854	18,050	18,273	16,186	9,078	14,764	15,361	180,006	15,001	500

1 - Count of SEL measures used to estimate count of flights; there may be small percentage (< 5%) of the counts that are due to noise other than aircraft  
2 - Location of noise monitor in relation to airport. See Noise Monitor Locations map.

### Number of Flights<sup>1</sup> Measured by PoS Noise Monitors 2020 Jan-Sept

Noise Monitors	Site <sup>2</sup>	2020												Summary Data			
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Jan-Sept 2020	Ave # flights/month	Ave # flights/day	
#01	Air Cargo 4, SeaTac	4,263	5,033	7,620	5,471	4,979	6,788	8,820	8,733	7,943					59,650	6,628	221
#03	Maple Leaf Reservoir, Seattle	1,243	723	482	73	101	173	150	141	185					3,271	363	12
#04b	C Blain School, Seattle	122	110	116	53	43	52	44	38	104					682	76	3
#05	Mediam Ele, Medina	87	616	866	419	775	1,052	1,353	1,343	1,381					7,892	877	29
#06	Hamilton View Park, SW, Seattle	13	36	83	33	42	53	62	72	29					423	47	2
#07	Central Area Sr Center, Seattle	336	447	304	117	214	311	368	437	299					2,833	315	10
#08	Mercer-View Community Center	8	39	5	1	14	5	3	5	1					81	9	0
#09	Beacon Hill Reservoir	29,711	25,077	19,233	5,224										90,813	18,163	605
#10	Brighton Playfield, S Seattle	567	693	520	222	5,067	7,745	202	178	217					15,411	1,712	57
#11	Beverly Pk School, SeaTac	16,758	15,207	13,556	4,512	5,067	7,745	9,415	11,052	10,291					93,603	10,400	347
#12	S 126, Burien	2,551	3,493	4,654	2,817	2,509	3,373	4,850	5,661	5,098					35,006	3,890	130
#13	Cedarhurst Middle Sch, Burien	12,447	10,859	8,209	2,093	2,535	3,955	4,605	5,439	5,863					56,005	6,223	207
#14	N Clear Zone, SeaTac	12,884	10,494	9,038	3,008	2,837	4,586	6,407	7,253	6,908					63,415	7,046	235
#15	Sylwester Mid Sch, Burien	389	264	171	91	139	115	208	198	232					1,807	201	7
#16	Chinook Mid Sch, SeaTac	1,840	1,460	623	89	117	101	81	65	144					4,520	502	17
#17	S 207th St, SeaTac	15,605	14,793	13,812	4,953	5,343	7,728	10,032	11,995	10,751					95,012	10,557	352
#18	S 226 St, Des Moines	14,970	14,242	13,301	4,737	5,047	7,439	9,669	11,539	10,280					91,224	10,136	338
#19	Midway Ele, 24 Ave S, Des Moin	15,382	13,359	11,142	3,834	4,246	5,804	6,499	7,701	7,162					75,129	8,348	278
#20	Parkside Ele, S 247, Des Moin	14,302	12,382	9,828	2,946	1,522	2,302	2,560	5,534	5,881					57,257	6,362	212
#21	Mark Twain Ele, Star Lake, FW	14,387	12,019	8,934	2,461	3,016	4,383	4,478	5,565	6,088					61,331	6,815	227
#22	Sacajawea Jr H, FW	10,886	11,329	8,724	3,184	3,771	5,505	7,334	9,145	8,290					68,168	7,574	252
#23	Merredith Hills Sch, S300, Auburn	297	195	76	29	25	33	95	150	76					976	108	4
#25	Twin Lakes Ele, 42 Pt SE, FW	374	356	236	67	83	188	115	103	95					1,617	180	6
#28	Woodmont Ele, 16 Ave S, Des M	13,862	13,375	11,157	3,765	4,231	6,331	8,157	9,836	9,026					79,740	8,860	295

#### General Comments

- 1 - Count of SEL measures used to estimate count of flights.
- 2 - See Noise Monitor Map for location of noise monitors.

#### Data Notes - see outlined boxes in table

May - Aug: No data for Monitor #9 from May 1 - Aug 7, 98 continuous days; data for Aug represents 24 days. Summary data based on 5 months with data, Jan-April and Sept.

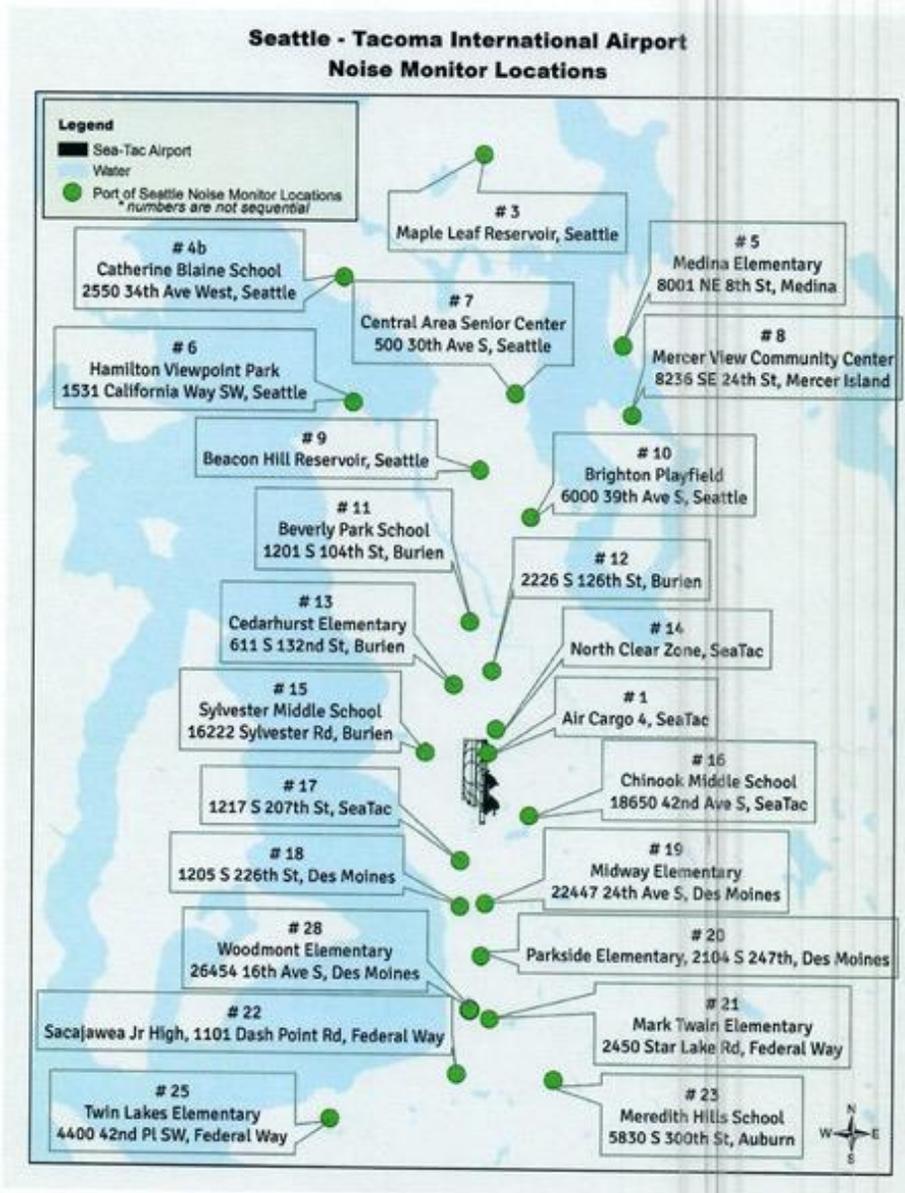
# StART

SEA Stakeholder Advisory Round Table



10/28/2020

NMT locations as of 2020.jpg (3264x4224)



[https://www.portseattle.org/sites/default/files/inline-images/NMT\\_locations\\_as\\_of\\_2020.jpg](https://www.portseattle.org/sites/default/files/inline-images/NMT_locations_as_of_2020.jpg)

1/1

David Goebel (Vashon Fair Skies) (Oral and Written Comments):

- Commented that the algorithm measure of noise monitoring is important and is not shown in the data. Stated that it is not just the noise level but the number of these noise level events. For example, with noise monitor #12 – it registered 77 events; however, there were more than 500 events that didn't meet the noise threshold. While each noise event was small, there was A LOT of them which adds up.

The following written testimony was submitted with additional detail:

Vashon Island Fair Skies <http://www.vifs.org>  
 PO Box 1250 [info@vifs.org](mailto:info@vifs.org)  
 Vashon, WA 98070 (206)682-8638

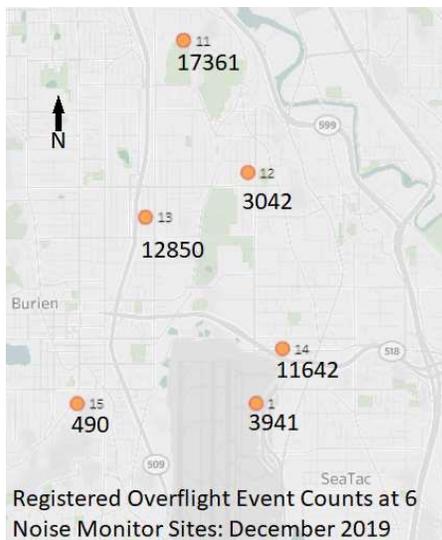


Dedicated to restoring the pre-NextGen dispersed arrival paths and more optimized profile descents at Seattle/Tacoma International Airport that had been in place since the introduction of commercial aviation to the Puget Sound region, many decades ago.

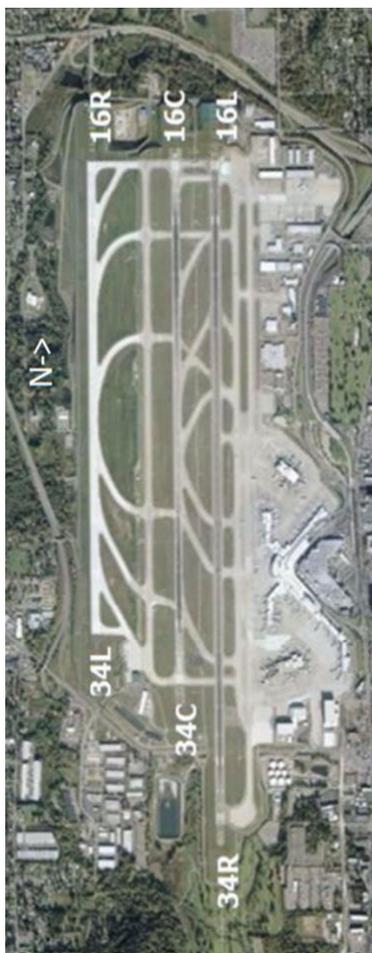
Oct 28, 2020

These written comments to Port of Seattle's "Seattle-Tacoma Airport Stakeholder Advisory Round Table" are intended to provide the detail and documentation behind David Goebel's spoken public comments to the same on 10/28/2020.

The layout of the runways and distribution of the noise monitors, specifically #11 and #12, are the central background information:



In Southflow, arrivals land on runways 16 L/C/R. Given their locations, monitor #11 is optimized for 16R and #12 for 16L. 16R has the large majority of arrivals in Southflow.



Due to this distribution of arrival runways, in Southflow monitor #12 correlates many fewer overflight events than monitor #11. For example, in December 2019:

Site	Runway (Southflow)		
	16L	16C	16R
SEA11	2344	306	31342
SEA12	4750	236	304

The flight correlation data has a variety of anomalies, including not just missed overflights, but single overflight events registering multiple correlations, and no, not go arounds. In this latter case the spurious correlations are a few seconds apart and have much lower intensity, combined with being few in number, mean they don't have a significant impact on the results, but do complicate the analysis process. In other cases, the wrong flight can be identified when there are parallel arrivals. These don't make a net change in LEQ, but again complicate analysis when trying to account for every single arrival.

Picking a random day in December 2019 with a small number of anomalies, Thursday December 5<sup>th</sup>, an analysis of the aggregate impact of the overflight events intentionally excluded from monitor #12's LEQ result was undertaken. This day also had zero 16C arrivals, which are always relatively small in number, but having it zero makes the analysis easier.

On Dec 5<sup>th</sup> monitor #12 had 77 correlations (74 16L and 3 16R). In addition to the three 16R arrivals that *were* correlated **there were 532 16R arrivals which were intentionally excluded**. Each of these excluded 16R arrivals had much lower intensity than the 16L ones as measured by monitor #12. In order to approximate the noise level that each of these excluded 16R arrivals *would* have been on monitor #12, I used the 33 arrivals on December 5<sup>th</sup> that were correlated by **both** monitors 11 & 12 to judge what the noise intensity likely would have been. In these joint 16R correlations, the SELs (Sound Exposure Level) on monitor #12 were approximately 9 dB lower than the same overflight measured by monitor #11.

This is an approximation as I have a day job. A rigorous analysis would use a method called "Floating Threshold" to investigate every overflight event individually using the raw Time History data from the noise monitor. I would contend the approximation of using these 74 joint 16R correlations as a Rosetta Stone of sorts is sufficiently accurate.

**Taking into account these 532 excluded 16R arrivals on Dec 5th, the LEQ for monitor #12 on that day goes from ~53.4 dB to ~56.7 dB, which is about a doubling of intensity\*.**

I do recognize that FAA regulation 14 CFR Appendix A to Part 150 - Noise Exposure Maps: Part C - Mathematical Descriptions, Sec. A150.205(d) regarding the integration envelope for the Sound Exposure Level says:

"The time interval should be sufficiently large that it encompasses all the significant sound of a designated event. The requisite integral may be approximated with sufficient accuracy by integrating LA(t) over the time interval during which LA(t) lies within 10 decibels of its maximum value, before and after the maximum occurs."

So, you "should" include all significant events but "may" exclude those without a 10dB swing. Even using this standard, as shown by my earlier produced video, overflight events with > 10dB swings are still excluded. I didn't study how many events were incorrectly excluded using the above "may" rule. It's entirely possible that sticking with the "may" rule and performing a Floating Threshold analysis would have resulted in a very similar LEQ deficit. I would ask StART to please have the Port's noise consultant, Vince Mestre, [look at and comment on the specific numbers in this note](#), and not just generally comment on the nature of noise monitoring in the abstract.

Thank you,

David Goebel

President, Vashon Island Fair Skies

\*The specific word "intensity" here is intentional and important as it has an explicit mathematical meaning.

Councilmember JC Harris (Des Moines) (oral comments):

- Commented that in a prior meeting, there was discussion on the failure of some sound mitigation projects. Pointed out that these failures were for very specific homes which had been insulated in the first round of noise mitigation projects. These specific failures (about 170 homes) have specific problems that need to be addressed. Stated it is important to not characterize these homeowners as whiners or their mitigation projects as failures.

Ryan Crompton (Des Moines)(written comments):

I live under the flight path in Des Moines and while the current turndown in aviation has temporarily reduced the noise overhead I know it won't last. That being said I would like the committee to continue to work with the FAA, airlines and the Port of Seattle to find ways to reduce the impact on me and my neighbors. From being involved with this effort in the past I still think that there is a lot that the FAA can do with regards to changing the glideslope and looking at moving the flight paths such that they spend more time over the water or highways (99 and I-15) instead of neighborhoods.

I just don't want this effort to lose steam because of the coronavirus. Those of us who live under the flight path are still struggling and hoping that solutions can be found that take into account our health and safety.

Sincerely,

Ryan