

FAA Responses to Federal Way Community Noise Concerns February 2016

The following 'common themes' were raised during a community meeting on November 19, 2015. Additional questions were raised during a telecon with Brian Wilson and the Port of Seattle on December 16, 2016.

Share the 'Noise' Load with Other Neighborhoods

- **Can departures be fanned out so they're not always going over the same point, or**
- **Can the point where the departing aircraft make their turns be moved, e.g., at 5 miles out on Monday, 7 miles on Tuesday, 9 miles on Wednesday, etc. until they get out to 21 miles, and then start over?**

Response

No. The current procedures are published, predictable and efficient routes. Making changes like the ones suggested would cause a safety hazard for the air traffic controllers and potential environmental impacts to the communities.

A proposal to fan out departures or change the point where departing aircraft make their turns would require new procedures to be developed. Any proposed procedural changes need to be submitted to the FAA Instrument Flight Procedure (IFP) Gateway. This is the process that the FAA follows to evaluate proposed procedures for feasibility, fly-ability and environmental impacts, and when necessary, conduct public outreach.

Website: https://www.faa.gov/air_traffic/flight_info/aeronav/procedures/

Utilize Optimized Profile Descent (OPD) as Much as Possible

- **Are the Greener Skies procedures the only ones that take advantage of operational profile descents (OPD) or do others? Is there a plan to incorporate more OPDs in the future?**

Response

Yes, the Greener Skies Procedures, the HAWKZ and MARNR arrivals, are currently the only OPDs into SeaTac. There are no plans to establish additional OPDs at this time.

Greener Skies is part of the FAA's Strategic Initiatives to achieve the benefits of NextGen. Throughout the National Airspace System (NAS), the FAA is looking at developing OPD procedures. We currently are collecting data from the Greener Skies procedures to learn how to better develop future procedures across the NAS. At this time we have not begun to discuss plans for any other OPD procedures.

Departures to the South

- **Most of the departures are going south – does it have to be that way?**

Response

Yes, due to the runway configuration and weather, primarily wind, south flow operations are used 65% of the time. When the wind is at or above 8 knots, south flow is utilized for the safety of the aircraft.

Weather is the main factor used in determining the direction of flow (landings and takeoffs) at all airports. However, wind is the greatest factor, and all aircraft are certified with a tailwind component. The tailwind component, as well as wind dictates which direction an aircraft can safely land or depart. Generally larger aircraft can accept a greater tailwind than smaller aircraft. This plays a major role in

order for Boeing Field and SeaTac Airports to operate safely and efficiently, as they are operationally dependent on one another. Therefore, the FAA elects the flow that aligns both airports. Often times a light tailwind at Boeing Field, dictates the flow at both airports.

Prevailing visibility is another factor that comes into play for safe aircraft operations. The Seattle area experiences a number of days throughout the year with fog and/or low ceilings. These conditions exist with calm or light winds that are almost always out of the south; it is extremely rare to have north winds with fog and low ceilings. Because of this, SeaTac has the greatest precision navigational equipment on the south side of the airport to ensure safe operations in a south flow. This equipment is unavailable in a north flow configuration.

The forecast also plays a role in the decision. A flow change has a negative impact to efficiency and introduces a safety risk. In order to change flows, air traffic has to be held or stopped, and the busier it is, the greater the impacts. If strong winds are forecasted, flow changes are made during calm winds and light traffic periods to reduce impact to the NAS.

- **Is there a different policy for aircraft departing/arriving from the north vs. from the south, and if yes, can policy changes be made? Is there any leeway to make any changes to help the south end?**

Response

Yes to the first part of the first question. In 1990, the 4-Corner Post procedures were developed focusing on safety and efficiency. Through the process of implementation, public meetings were held, resulting in the Record of Decision (RoD). It is important to note the RoD addressed noise abatement for north flow. At that time, no changes were made to the south flow noise abatement.

As stated before, any proposed changes to procedures need to be entered in the FAA Instrument Flight Procedure (IFP) Gateway.

- **Don't allow 'shortcuts' south of SeaTac – is this possible?**

Response

The Record of Decision (RoD) signed in 1990 describes how departures are to be routed in both north and south flows. Once the route, distance and/or altitude requirements are met, aircraft may be put on course. The majority of our departure procedures today guide the aircraft on course after noise abatement requirements are met. Air Traffic controllers monitor the flow of traffic and intervene or make adjustments to an aircraft's route and/or altitude to resolve conflicts with other aircraft or to merge aircraft that departed other airports onto the same established routes as SeaTac departures. This is done after noise abatement requirements are met.

These adjustments may be perceived as 'shortcuts;' however Seattle Air Traffic maintains a greater than 98% compliance to noise abatement in both Port of Seattle audits and in internal Quality Control audits, which are conducted monthly. The less than 2% of non-compliance is the sum before Quality Control removes flights that are exempt from noise abatement, such as mechanical or medical emergencies requiring expeditious handling or aircraft requesting to deviate for severe weather.

- **Aircraft departing south are not permitted to take advantage of water/industrial zones to mitigate noise disturbances to communities they are flying over. Can procedures be changed without risking safety or reducing efficiency or moving noise over another community?**

Response

Any proposed changes to procedures need to be entered in the FAA Instrument Flight Procedure (IFP) Gateway.

Perceived Changes to Routes or Altitudes

- **Aircraft are flying at lower altitudes than they used to. Why?**

Response

The FAA compared data from July 2014/2015 and November 2014/2015 and found that departures were lower over Federal Way by 3%. However, the procedures are being flown as designed and published, and aircraft are complying with all required altitude restrictions. The FAA doesn't determine how an aircraft is flown, as that is done by the pilot based on several operational factors including aircraft weight and weather. As long as the aircraft meets the required altitude restrictions of the published procedure, the FAA considers the aircraft in compliance. For more information about the decrease in altitude, the FAA suggests following up with the local stakeholders including the airport or airlines.

- **Why have changes been made to the routes aircraft are flying without following the environmental review process?**

Response

The departure procedures over Federal Way have not changed since 1990. The only changes were to arrival routes during the Greener Skies projects. Those changes were addressed through an Environmental Analysis, which included the opportunity for public comment. A Finding of No Significant Impact (FONSI) and Record of Decision (RoD) for the Implementation of RNAV/RNP Procedures at Seattle-Tacoma International Airport (Greener Skies Over Seattle) was issued in November 2012.

- **In general, changes due to Performance Based Navigation (PBN) and fewer dispersed flight paths have concentrated noise here and elsewhere in the country. What is being done to mitigate the increased noise in some communities?**

Response

The benefits of PBN enhance the safety and efficiency of the airspace through a more repeatable, predictable route. While PBN procedures may concentrate noise over the route, the overall benefit is that the noise impacts are lessened to the communities as a whole.

Are Changes Possible?

- **What options are available to mitigate noise issues in the south, including changes to altitude, procedures, flying further out before making turn, etc., that would not prompt a new environmental review?**

Response

Moving flight paths will only be done for safety or stringent efficiency reasons (efficiency being the capacity of the system, not for the efficiency of individual users), and not to move noise from one place to another.

Proposed changes to procedures need to be entered in the FAA Instrument Flight Procedure (IFP) Gateway.

- **Is there flexibility to make changes in the south end that are within the scope of the current environmental?**

Response

There might be; however, in order to evaluate a proposed route that information will need to be entered in the FAA Instrument Flight Procedure (IFP) Gateway for consideration.

- **Can aircraft be required to be at higher altitudes?**

Response

The National Airspace System (NAS) contains airspace and air traffic procedures that are highly dependent upon each other to ensure safety and efficiency of the System. Therefore, any changes to existing procedures and flows of aircraft cannot be assessed in isolation. Procedures are designed with routes and altitudes to manage the traffic safely and efficiently. Routes can be developed in accordance with environmental concerns; however, altitude restrictions are utilized for separating aircraft and must meet Terminal Instrument Procedures (TERPS) requirements.

Military

- **Have there been any changes in military operations, which are contributing to the noise?**

Response

There have been no changes to IFR procedures for military operations. There have been changes in the types of aircraft that fly in and out of and those based at JBLM. The military would be your best source of information regarding their operations at the bases and in the restricted areas and Military Operations Areas (MOA).