



## Sea-Tac International Airport Procedure Program for Jets

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### **What are Noise Abatement Procedures?**

Noise Abatement Procedures are specific headings and altitudes for airplanes to fly in order to minimize noise impacts. Many years ago, the Federal Aviation Administration (FAA) in cooperation with the Port and local communities established Noise Abatement Procedures. These procedures were designed to take advantage of existing geographical and compatible land use conditions where possible. For example, the Duwamish Industrial Area, Elliott Bay and the Puget Sound provide some opportunities for aircraft to fly over non-residential areas to the north of Sea-Tac Airport. The following maps depict the Noise Abatement Procedures that are used to the maximum extent possible, air traffic conditions permitting. These maps are not intended to show actual flight tracks or all the corridors, only the corridors that are monitored for arrival and departure noise abatement procedures.

### **Why do aircraft fly out of the corridors?**

There are many reasons jet aircraft may operate outside the noise abatement corridor. Sometimes these reasons are outside the control of the Air Traffic controller and pilot, such as safety and weather concerns. Aircraft may also operate outside the corridors due to aircraft performance, pilot technique and traffic conflicts.

Due to propeller aircraft being smaller and having slower performance, they cannot fly in the noise abatement corridors with jet aircraft.

### **How are the Noise Abatement Procedures monitored?**

Although the Federal Aviation Administration (FAA) has sole authority over aircraft in flight, the Port of Seattle, as operator of Sea-Tac Airport, has taken the lead responsibility for monitoring and reporting jet air traffic activities in regard to noise abatement. Data from the FAA's Automated Radar Terminal System (ARTS) is used to monitor aircraft. Every month, with the ARTS data collected from FAA, flights are evaluated for each noise abatement procedure. This information is used to track trends, show improvements, and identify problem areas. Results are published quarterly and shared with Airlines, Pilots, the FAA, and Sea-Tac's Fly Quiet Committee.

**South Flow Arrival** *(shown in purple)*

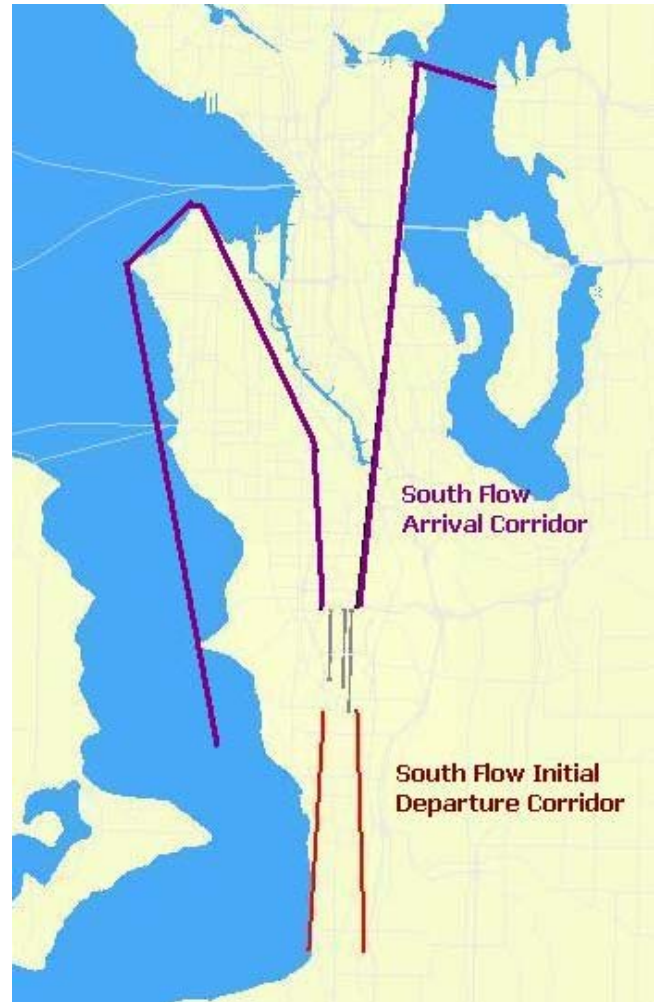
In use 24 hours a day The objective of this procedure is to have jet aircraft fly north of West Seattle when arriving from Puget Sound, preferably over Elliott Bay, traffic allowing. Or, when arriving from the east, aircraft stay north of the 520 Bridge until intercepting the glide slope.

**Initial Departure – South** *(shown dark red)*

In use 24 hours a day This corridor is intended to confine departing aircraft to the narrowest flight path possible. Aircraft may initiate a turn once reaching 5 nautical miles (nm) and at least 3,000 feet in altitude.

Whether an airplane departs to the north (north flow) or the south (south flow) depends on wind conditions. Aircraft depart heading into the wind. In the Puget Sound region, winds tend to flow out of the south during cloudy, overcast weather, necessitating departures to the south.

During an average year, Sea-Tac Airport experiences north flow approximately 35% of the time and south flow approximately 65% of the time.



### **Initial Departure - North** (dark blue)

*In use 24 hours a day.* Aircraft should, upon departure, intercept the compass heading 341°. The west side of the corridor extends north 5 nautical miles (nm) from a navigational aid called a VOR, which is located at the southern end of the runways. The east side of the corridor extends north 8nm. Aircraft should only be turned east during daytime hours, 6 a.m. to 10 p.m. and must be at or above 4,000 feet above sea level before beginning a turn to the east.

### **Nighttime** (10:00 p.m. to 6:00 a.m.)

All jet aircraft should, upon departure, intercept the compass heading 341° and continue past the corridors described below before beginning their turns to the east or west. The east side of the corridor extends north 8nm. Jet aircraft should be turned east only during daytime hours, 6 a.m. to 10 p.m. and must be at or above 4,000 feet above sea level before beginning a turn to the east.

### **Duwamish/Elliott Bay Departure Corridor** (red)

*Only in use between the hours of 10 p.m. and 6 a.m.* Once through the Initial Departure Corridor, aircraft must intercept the compass heading 341° to 5nm from the VOR. The objective of this corridor is to have jet aircraft turn westward while remaining over the Duwamish industrial area and Elliott Bay during nighttime hours. Aircraft should not be turned east during nighttime hours.

### **Puget Sound Departure South** (green)

*Only in use between the hours of 10 p.m. and 6 a.m.* Once through the Initial Departure and Elliott Bay Departure Corridors, jet aircraft heading south should not be turned eastbound to re-cross land, east of Puget Sound, until they have reached the 223 compass radial° and are at or above 10,000 feet above sea level.

