

**Port of Seattle**

# FLY QUIET COMMITTEE REPORT



This new report informs readers on the work of the Fly Quiet Committee. The Fly Quiet Committee is just one of many ongoing community relations and noise mitigation efforts developed by the Port of Seattle.

The Community Development Department Includes:

- Noise Remedy—  
Home Insulation
- Noise Abatement—  
Aircraft Noise Reduction
- Acquisition—  
the Purchase and Relocation of highly impacted homes

For further information about all of the Community Development Department efforts, please visit our website at:

[www.portseattle.org/seatac/resources/noise](http://www.portseattle.org/seatac/resources/noise)

Or call the Noise Information Line and ask for a return call:

206-433-5393

**Inside this issue:**

<i>Incentive Program</i>	2
<i>Procedures</i>	3, 4
<i>Ground Noise</i>	5, 6
<i>Procedure Trends</i>	6

## PORT INTRODUCES FLY QUIET COMMITTEE AT SEATTLE-TACOMA INTERNATIONAL AIRPORT

The Port of Seattle has created a Fly Quiet Committee. This committee is a result of previous studies and recommendations. The goal of the Committee is to find innovative ways to further reduce the impacts from aircraft noise. While significant progress has already been made through insulation, acquisition and noise abatement programs, there is always room for improvement.

The Committee is mostly made up of citizens and city staff members from local communities. A list of members is shown on Page 2. Representatives from the Federal Aviation Administration, Puget Sound Regional Council, pilots and mechanics also attend the meetings. Since its inception in July, the committee met in September,

October and November and presented recommendations to the Port of Seattle Commission in December, 2002. Port staff will provide feedback and status regarding each recommendation at the spring meeting.

In the meantime, work has already begun on many of the recommendations. The purpose of the Fly Quiet Report is to keep the Committee and the public informed about progress on each of the recommendations on a quarterly basis. The rest of this report provides information specifically related to the Fly Quiet Program recommendations.

Feel free to contact the Noise Abatement Office if you have questions or comments regarding any information in this report.

The Committee Recommendations are:

1. Create a more detailed report about compliance with Sea-Tac's noise reduction programs and broadly disseminate it to the public.
2. Implement an incentive program that will encourage airline compliance with noise abatement programs.
3. Research and develop new programs to communicate more effectively with key groups.
4. Analyze and invest in facilities and technologies that will decrease impacts from ground run-up noise.
5. Increase fines for ground run-up violations.
6. Encourage voluntary compliance with ground run-up restrictions on weekend mornings.
7. Implement new programs for airline mechanics that will increase their awareness and provide incentives to decrease ground run-up noise.

*All future reports will be available online quarterly. **Don't miss your chance to be informed of the Fly Quiet Committee's latest developments!** Visit our website to register for an automatic electronic version when it's released at: <http://www.portseattle.org/seatac/resources/noise> or call: (206) 433-5393.*

## PORT INTRODUCES FLY QUIET COMMITTEE AT SEATTLE-TACOMA INTERNATIONAL AIRPORT (CONTINUED)

### Fly Quiet Committee Members

<u>Member</u>	<u>Representing</u>
John Adamson	South of airport
Milton Huff	Federal Way
Judith Kilgore	Des Moines
Craig Ward	SeaTac
Bill Whisler	Normandy Park
Tom Heltzel	East Side
Laverne McIntyre	Burien
John Musgrave	West Seattle
Susan McLain	North of airport, Seattle
Ron Fincher	FAA
Tom McRae	Airline Pilots Association
Steven Kiehl	Puget Sound Regional Council

## INCENTIVE PROGRAM TO LAUNCH AT SEATTLE-TACOMA INTERNATIONAL AIRPORT

One of the Fly Quiet Committee's recommendations is that the Port create an airline incentive program. This program would motivate airlines to comply with Sea-Tac Airport's Noise Abatement Procedures and Ground Run-up Program. The procedures and programs are well established and offer the best opportunities for airlines to reduce the noise impact on our communities.

Port staff researched other airports to learn about similar programs, and they reviewed options for advertising and communicating the Incentive Program to all participants.

Four airports were researched: Atlanta-Hartsfield Int'l; Chicago



O'Hare; San Francisco; and Westchester County Airport, New York.

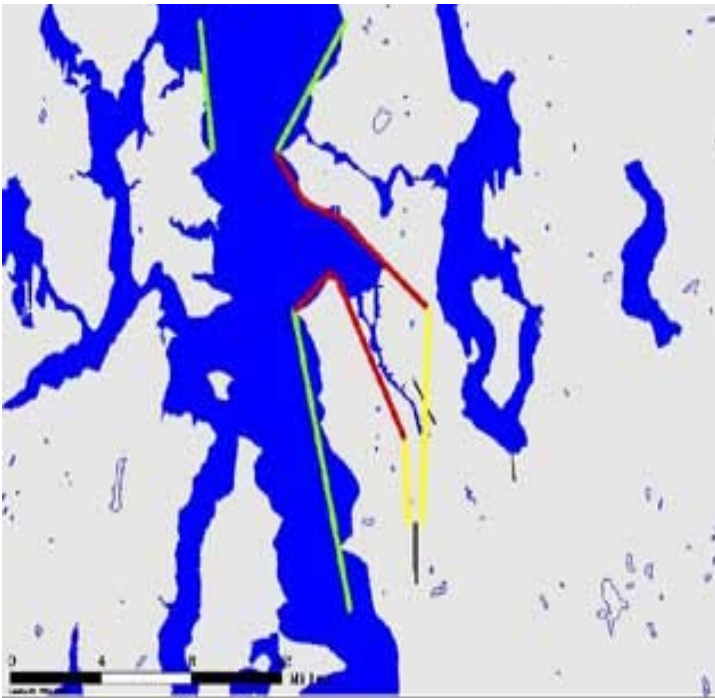
Chicago O'Hare's program looks the most compatible for use at Sea-Tac Airport.

O'Hare's program incorporates all aspects of their noise reduction efforts and uses a point system to determine an overall winner.

The next step for staff is to analyze a point system that is appropriate for Sea-Tac Airport, develop a worthwhile set of awards, and most importantly, communicate the new program to all the airlines with enough time for them to prepare. It's anticipated that the program will begin in April.

## NOISE ABATEMENT PROCEDURES AT SEATTLE-TACOMA INTERNATIONAL AIRPORT

The Airport has procedures for aircraft to follow in order to mitigate aircraft noise for surrounding communities. Which procedure an aircraft follows depends upon whether the airport is in north or south flow, and the aircraft's intended destination or arrival direction. When the airport is in north flow, all aircraft arrive from the south and depart to the north. For south flow, aircraft arrive from the north and depart to the south. The incentive program will hold airlines accountable for how well they follow these procedures.



### Initial Departure – North (*yellow*)

In use 24 hours a day. This corridor is intended to confine departing aircraft to the narrowest flight path possible. 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 8 nm. Aircraft must be at or above 4000 feet in altitude before beginning a turn to the east.

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

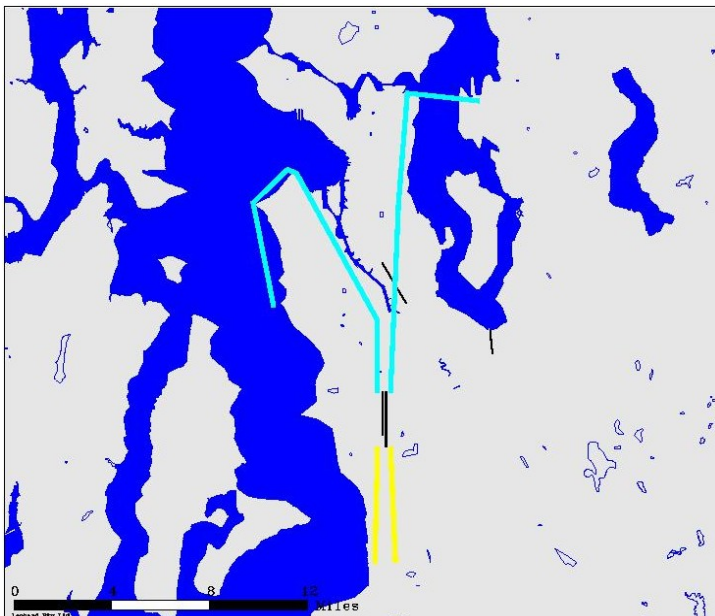
In use between the hours of 10 p.m. and 6 a.m. The objective of this corridor is to have jet aircraft turn westward to remain over the Duwamish industrial area and Elliott Bay.

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

In use between the hours of 10 p.m. and 6 a.m. Once out of Elliott Bay, the aircraft are turned north and remain over Puget Sound until reaching an altitude of 10,000 feet above sea level or at a distance of 20 nautical miles from the airport.

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

In use between the hours of 10 p.m. and 6 a.m. Aircraft heading south should not be turned eastbound to re-cross land, east of Puget Sound, until at or above 10,000 feet above sea-level.



### South Flow Arrival (*light blue*)

In use 24 hours a day. The goal of this procedure is to have jet aircraft fly north of West Seattle when arriving from Puget Sound, preferably over Elliott Bay, when there is enough spacing between aircraft. When arriving from the east, aircraft stay north of the 520 Bridge until lining up for a straight-in approach to the runway.

### Initial Departure – South (*yellow*)

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.

# COMPLIANCE WITH NOISE ABATEMENT PROCEDURES

## FOURTH QUARTER 2002

Colors in this chart correspond with the colors on Page 3 used to describe the noise abatement corridors.

NOISE ABATEMENT PROCEDURE	DAY			NIGHT			TOTAL		
	Events Monitored	Met Objective	Success Rate	Events Monitored	Met Objective	Success Rate	Events Monitored	Met Objective	Success Rate
<b>NORTH FLOW</b>									
Initial Departure/did not turn early	2922	2858	97.8%	315	296	94.0%	3237	3154	97.4%
Initial Departure/above 4000' at turn	1999	1998	99.9%				1999	1998	99.9%
Departed to West				315	315	100.0%	315	315	100.0%
Elliott Bay Departure				315	260	82.5%	315	260	82.5%
Puget Sound Departure North				228	190	83.3%	228	190	83.3%
Puget Sound Departure South				81	63	77.8%	81	63	77.8%
<b>NORTH FLOW TOTAL</b>	2922	2858	97.8%	1254	1124	89.6%	6175	5980	96.8%
<b>SOUTH FLOW</b>									
Initial Departure/did not turn early	10214	9600	94.0%	1015	932	91.8%	11229	10532	93.8%
Initial Departure/above 3,000' at turn	10214	10171	99.6%	1015	1013	99.8%	11229	11184	99.6%
Puget Sound Arrival from west	4493	4345	96.7%	1016	990	97.4%	5509	5335	96.8%
Puget Sound Arrival from east	4652	4338	93.3%	750	656	87.5%	5402	4994	92.4%
<b>SOUTH FLOW TOTAL</b>	29573	28454	96.2%	3796	3591	94.6%	33369	32045	96.0%

- **Events Monitored** = the number of tracks for which Noise Abatement received data during the quarter.
- **Met Objective** = the number of flights that were successful.
- **Success Rate** = the percentage of flights that were successful.
- **Total Success Rate** = Each procedure is monitored separately for day and night data - with the combined total on the right.

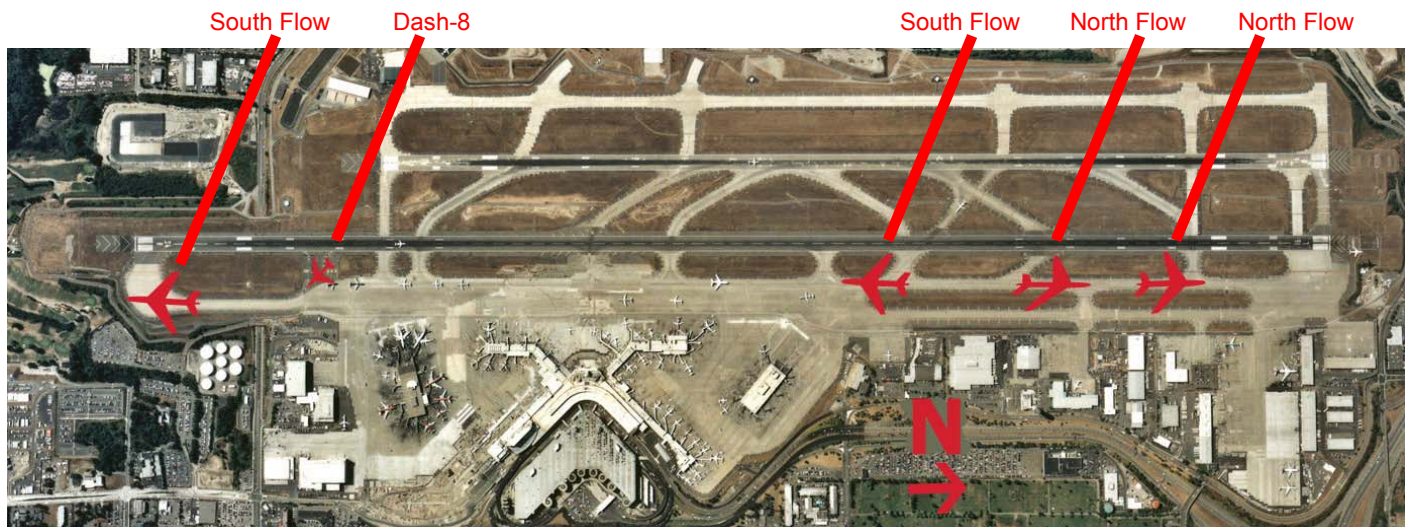
## GROUND NOISE PROGRAM

When certain types of maintenance activities are performed on an engine, the operator of an aircraft must test the engine prior to the next flight. Depending on the scheduled departure time of that aircraft, run-ups can occur at anytime day or night.

To help minimize noise impacts to surrounding communities, certain areas on the airfield were established for run-ups. Sites were chosen on the airfield to accommodate any wind condition.

When aircraft depart to the south ('South Flow'), an aircraft is turned into the wind (e.g., facing south) directing the jet blast back across the airfield rather than toward an immediately adjacent community. Conversely, when aircraft are departing to the north ('North Flow') the opposite applies. There is also a special designation for Dash-8 run-ups.

The map below illustrates these locations.



### GROUND NOISE RULES AND REGULATIONS

In order for an airline to conduct a run-up, they must adhere to the Airport's Rules and Regulations, which state that:

- ◆ All run-ups require approval of an Airport Supervisor
- ◆ Aircraft that are scheduled to depart between 7 a.m. and 8:30 a.m. are allowed to conduct a run-up as necessary between 6 a.m. and 7 a.m.
- ◆ Engine checks at idle power are allowed
- ◆ Nighttime engine checks—above idle power, for a total of two minutes—are allowed.

An important issue for the Fly Quiet Committee to consider is what to do with the money collected from these fines. Recommendations from a previous citizen committee led to the purchase and installation of an informational kiosk. The kiosk is located in the central area of Sea-Tac Airport's main terminal.

### GROUND NOISE TARIFFS

Previous Fines:

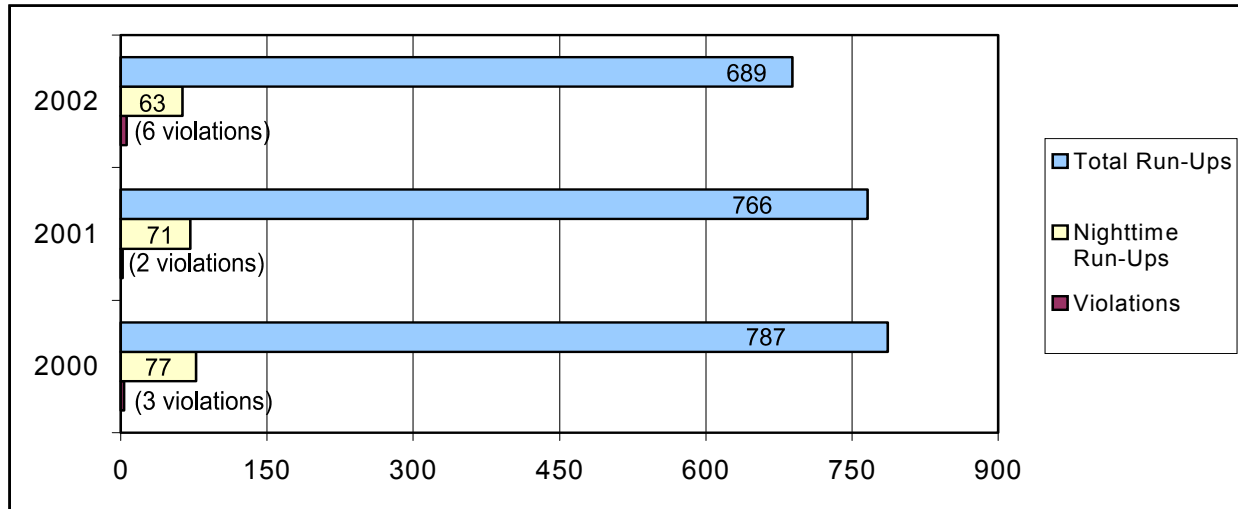
- ◆ First offense in one year = Letter of Admonishment
- ◆ \$100 = Second offense in one year
- ◆ \$250 = Third offense in one year
- ◆ \$500 = Each additional offense in one year

Increased Fines based on Fly Quiet Committee Recommendation #5:

- ◆ First offense in one year = Letter of Admonishment
- ◆ \$1,000 = Second offense in one year
- ◆ \$2,000 = Third offense in one year
- ◆ \$8,000 = Maximum fine within one year

## GROUND NOISE PROGRAM

### ENGINE RUN-UP SUMMARY



The graph illustrates the total number of run-ups for each year, the total number of nighttime run-ups each year, and the total number of violations to the Airport's Rules and Regulations for each year, 2000 through 2002. The number of run-ups—both at night and in general—have decreased over the last three years.

### Airline Run-up Summary (What percentage of total run-ups does each airline conduct?)

◆ Alaska Airlines	40%
◆ Horizon Airlines	25%
◆ United Airlines	9%
◆ Northwest Airlines	7%
◆ American Airlines	5%
◆ Delta Airlines	2%
◆ Other	11%

### RECENT TRENDS AND ACTIONS

#### Trend Watch:

- During the third quarter of 2002 America West had a number of flights turning east between 10:00 p.m. and 6:00 a.m. when departing north. This is not compliant with Sea-Tac Airport's noise abatement corridors.
- Gemini Air Cargo was the only airline to stay within every noise abatement corridor for all of their operations at Sea-Tac during the fourth quarter of 2002.

#### Trend Action:

- America West was contacted regarding the east turns which were violating the noise abatement procedures. America West responded promptly, asked for further information, met with the FAA, and have since had no violations to the nighttime east turn restriction.
- Gemini Air Cargo was sent a letter of appreciation for following all noise abatement corridors.

