



# SOUND INFORMATION

## PORT OF SEATTLE

### SEATTLE-TACOMA INTERNATIONAL AIRPORT

#### FLIGHT TRACK PLOT SAMPLE - PROPELLER

Flight track plots are a graphic illustration of the ground paths of aircraft traffic, as observed from above, for a specific time period. The flight track plots represent both arrivals and departures of propeller aircraft to and from Sea-Tac Airport, according to the direction of traffic flow (north or south). These plots represent daytime flight activity from 6:00 a.m. to 10:00 p.m.

The flight track sample gives the date and time range, the type of operation (arrival or departure), and the traffic flow direction.

Whether the aircraft depart to the north, (north flow), or to the south, (south flow), is dependent on the wind conditions. Aircraft arrive and depart headed into the wind. In the Puget Sound region, winds tend to flow out of the north during clear weather, necessitating departures to the north. During an average year, Sea-Tac Airport experiences north flow 35% of the time and south flow 65% of the time.

The data used in creating the flight tracks is generated by the air traffic control system operated by the Federal Aviation Administration. This system is called ARTS or Automated Radar Terminal System. Of great significance is the fact that aircraft flying identical procedures do not necessarily fly along the same ground track. Unlike cars or trains, aircraft in flight cannot be physically restrained to a narrow corridor such as a roadway or a railroad track. Aircraft operate in three dimensional space and are subject to variations in pilot technique, air traffic control, weather and aircraft performance. Therefore, even though several aircraft may be assigned the same route, their track and flight profiles along that route will not be identical.

Propeller aircraft are kept separate from the faster moving jet aircraft which results in the jets and props having distinctive flight tracks.

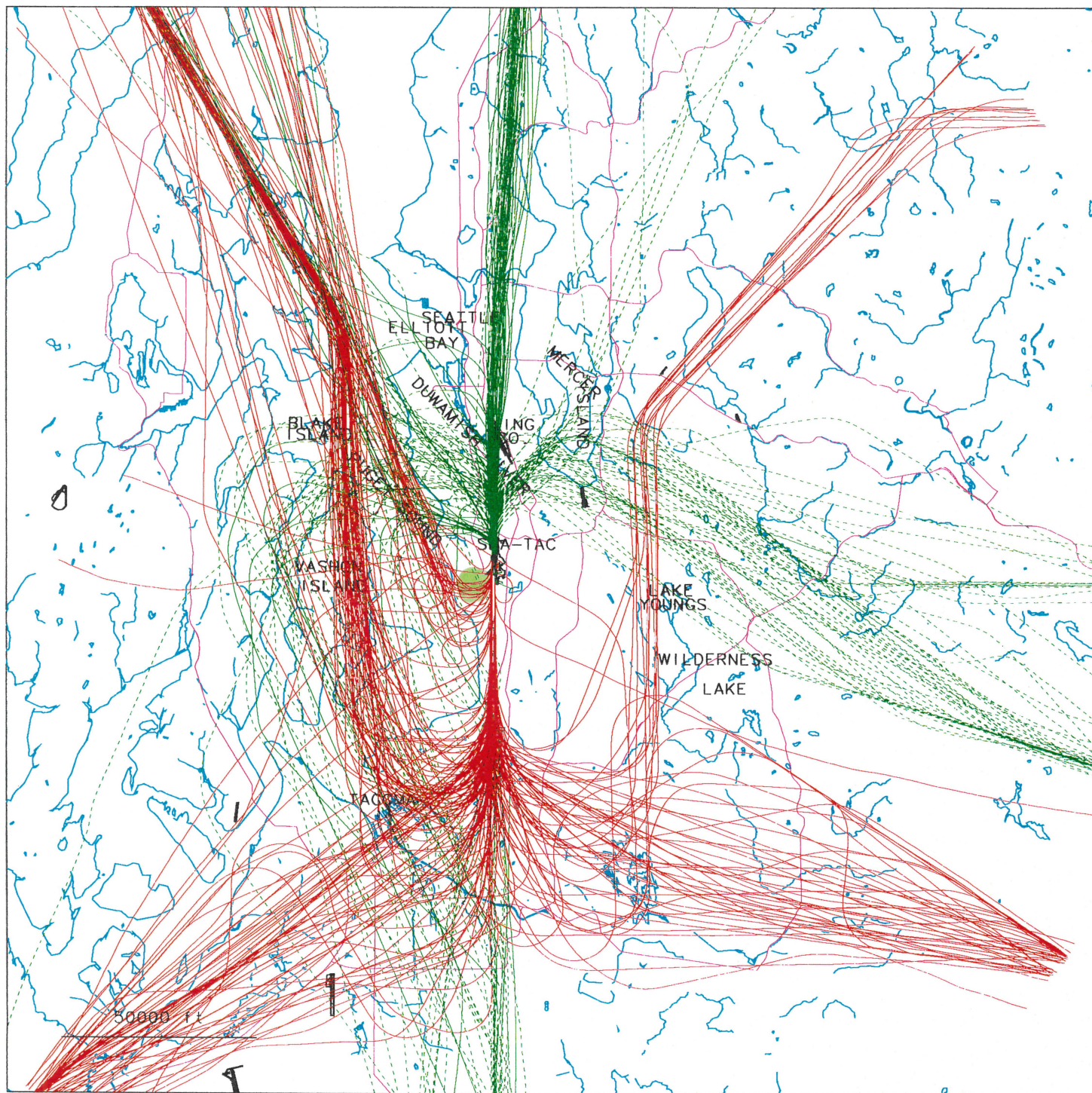


Port of Seattle

## Sea-Tac Propeller Aircraft Flight Track Patterns

NORTH FLOW  
Summer 1998  
6am – 10pm

Green = Departures  
Red = Arrivals







## Sea-Tac Propeller Aircraft Flight Track Patterns

SOUTH FLOW  
Summer 1998  
6am - 10pm

Green = Departures  
Red = Arrivals

