U.S. Department
of Transportation

**Federal Aviation
Administration**

Northwest Mountain Region
Colorado Idaho Montana
Oregon Utah Washington
Wyoming

[illegible]
[illegible]
Seattle Washington 98168

In Reply Refer To:

83-ANM-181-NR

TO ALL CONCERNED:

The Federal Aviation Administration (FAA) has completed an aeronautical study of the Port of Seattle's recommendation of July 26, 1983, to modify current noise abatement procedures at the Henry M. Jackson International Airport.

The proposal was to eliminate use of the "right-turn" route designed for east/southeast bound turbojet aircraft departing that airport to the north (Runway 34) during daytime hours (6:00 AM to 10:00 PM).

The proposal was circulated to the public for comment on August 15, 1983. Of the comments received on the proposal, the majority contained objections of non-aeronautical nature. In view of these objections, the results and findings of the study were presented to the Port of Seattle on November 14, 1983, for their review. On December 15, 1983, the Port of Seattle withdrew the July 26, 1983, recommendation.

The Determination of Aeronautical Study 83-ANM-181-NR is that eliminating the "right-turn" route would increase use of other existing routes and proportionately increase community exposure to aircraft noise along/under those routes. Therefore, the proposal to eliminate the subject noise abatement route is withdrawn.

A synopsis of study 83-ANM-181-NR is attached.

Richard Lien
Air Traffic Manager
Seattle-Tacoma Air Traffic Control Tower

Issued in Seattle, Washington on December 28, 1983

Attachment

AERONAUTICAL STUDY 83-ANM-181-NR
SYNOPSIS

BASIS: By letter dated July 26, 1983, the Port of Seattle, owner and operator of the Henry M. Jackson International Airport (formerly Sea-Tac), recommended that subparagraph 5.a.(2) (exception) of Order SEA TWR 7110.071C (Noise Abatement Procedures) be eliminated. This subparagraph describes the "right-turn" route designed for east/southeastbound turbojet aircraft departing that airport to the north (Runway 34) during daytime hours (6:00 am to 10:00 pm).

PREMISE: The study was based on the premise that all turbojet aircraft would be handled along the remaining routes described within Order SEA TWR 7110.071C.

COMMENTS: The proposal was circularized for public comment on August 15, 1983. The period for submitting comments closed on October 5, 1983. Three thousand, one hundred three (3,103) individuals responded to this study; 82 indicated no opinion or the comments made were not germane to the study; 2,806 voiced objections. Additionally, Paul Barden, King County Councilman (District 7) provided the results of his similar study, conducted by questionnaire. That poll resulted in 2,772 responses; 2,611 of those objected to the change of existing aircraft routes.

AERONAUTICAL OBJECTIONS: Alaska Airlines, United Airlines and the Air Transport Association of America (ATA) voiced objections based on the excess energy (fuel) consumption, additional economic costs to the users, and the capacity restraints of the airport and the terminal airspace(s).

NONAERONAUTICAL OBJECTIONS: The majority of objections were of nonaeronautical nature. The most referred to of these objections--listed in order of the number of times mentioned -- were:

- o Concern for possible adverse effects on property values and other negative economic impacts if aircraft traffic would be routed over or increased over the neighborhoods of respondents.

- o Objections to changing those traditional traffic routes which have been in use for 10 years.

- o Belief that residents of Bellevue, Madrona, Leschi, Mercer Island, etc., share the use of the Henry M. Jackson International Airport and should also share the effects (noise) of that facility.

- o Concern for possible adverse effect on the life styles and health of residents and the ecology of the neighborhoods if aircraft traffic would be routed over or increased over those areas.

- o Concern for added cost to airline companies and increased fuel consumption. Remarks cited that additional costs would be borne by passengers; that increased cost could hurt/bankrupt those companies already having financial problems and/or that increasing fuel consumption is detrimental to national efforts to save energy.

- o Concerns by those who had selected their present residences to specifically avoid being under/near existing aircraft routes would now be placed under/near the "new" routes.

- o Feelings that proposed "alternate" routings, being more circuitous, would increase the time of eastbound aircraft over heavily populated areas, and therefore expose area residents to more (longer) noise per aircraft.

- o Concerns for safety ranged from fear of aircraft overflying, to feelings that congestion along remaining routes would increase the potential for collision.

- o Feelings that the proposal would not reduce noise but would only shift the same noise to a different community.

- o Feelings that the proposal is not based on logical or technical reasoning; that the route change is arbitrary/capricious or that the proposal was formulated to satisfy political/influential interests only.

- o Concerns that this proposal violates established land-use plans and promises by concerned agencies.

- o Concerns of potential for adverse effects on the hospitals, schools, retirement homes, etc., that would experience new or increased traffic over/near them.

- o Feelings that such action should not be taken without hearings, tests and/or before full environmental impact statements (EIS) are prepared.

FINDINGS OF THIS STUDY:

1. That the elimination of this one route would not derogate air safety. The alternate routes are used during the 2200-0600 time frame, and have proven viable.

2. That both affected air traffic control facilities can resectorize and/or change procedures to handle the flow as proposed.

3. That the proposed circuitous routing of eastbound turbojet aircraft would increase flight time and fuel consumption of these aircraft. ATA estimates this would increase operating costs by approximately $1.5 million annually.

4. That restricting jet aircraft to a single initial departure path (Jackson International-Boeing Field-Elliott Bay) will result in ongoing delays to preclude route congestion, etc. Amount of delay and associated costs will vary with existing demand (number of aircraft awaiting departure) and cannot be accurately estimated.

5. That the proposal would eliminate departing jet aircraft along, and resultant noise beneath, the right turn departure route. Those communities (Madrona/Leschi Park/Mercer Island/Bellevue, etc.) would be relieved of the effects of jet aircraft noise(s) during north departure operations. However, as the same number of aircraft would depart and use other established routes the noise and effects would probably be redistributed as follows:

    a. Between Jackson International and Boeing Field: No change.

    b. Between Boeing Field and Puget Sound: All north departing jets would use this route, an estimated 54% increase in number of flights. Normal altitudes along this segment are between 3,000' and 7,000'. Although the last 5 miles of this segment is "over" Elliott Bay, jets turning north/south do increase noise impact along the opposite shore areas. The Magnolia/Queen Anne Hill/West Point Communities could experience a 43% increase (jets turning south) in noise events while the West Seattle/Alki areas could experience a 75% increase (jets turning north) in noise events.

    c. Areas north of Magnolia and south of White Center: East/southeast jet aircraft would be rerouted via the "over Puget Sound" routes if the "right-turn" route is eliminated as proposed. These aircraft would be turned eastbound over populated areas upon reaching 8,000'. This would result in a marked increase of aircraft overflights (above 8,000') in these areas.

    d. Vashon Island: South/eastbound jet aircraft would "join" the southbound flow until abeam the Henry M. Jackson Airport and at/above 8,000'. This could increase overflights of North Vashon Island by about 43%. These flights will normally be above 7,000'.