MINUTES OF MEETING

We believe the following record to be an accurate summary of the meeting's discussions. We will appreciate notification of exceptions to this record within 10 days of its receipt. Failing such notification we will consider this a statement of fact in which you concur.

TO: Technical Advisory Committee

FROM: Study Staff

SUBJECT: Sea-Tac Noise Exposure Forecast Update
Technical Advisory Committee Meeting

Attending: TAC Members

Bob Nelson, P.A.C.
Jerry Patterson, Harbor Airlines
Paul Bray, Highline Public Schools
Virginia Dana, P.A.C.
James McLaughlin, Air Line Pilots Association
Bill Holstine, Riverton Heights
Marian MacKenzie, Zone 3
Pete Breysse, Dept. of Environmental Health, U of W
Marsha Huebner, City of Des Moines
Noël Peart, The Boeing Company
Robert Jones, Washington Pilots Association
George Saito, F.A.A.

Port of Seattle Staff

Oris Dunham
Dawson Alexander
Joe Sims
Ed Parks
Jody Yamanaka
Bob Wells

Others

Hugh Parry, The Parry Company
Joan Parry, The Parry Company
Georgette Valle, State Representative
Kevin Patterson, Highline Times
Dennis Ossenkop, F.A.A.

Ed Parks, Study Manager for the Noise Exposure Forecast Update, opened the meeting at 7:10 P.M. He described the background of the study, the scope of work, the study team, organization, and the responsibilities of the Technical Advisory Committee. Total costs of the study were estimated to be approximately $80,000, of which $55,000 will come from the Federal Aviation Administration, Planning Grant Program. A preliminary schedule was presented which indicated completion of the study by July, 1981.

Study progress was summarized by Jody Yamanaka. The work expected to be initiated by the next meeting was also described.

Two of the tools basic to the study, the Integrated Noise Model (INM) and the Noise Monitoring System (NMS), were described by Hugh Parry and Bob Wells, respectively. Mr. Parry, (from The Parry Company, the retained noise consultants for the Sea-Tac Noise Exposure Forecast Update) explained that the INM is a computer program which estimates aircraft noise. It was devised by the Federal Aviation Administration (FAA) and uses Ldn as a measure of noise with units being decibels on the A scale. The calculated Ldn contours are then generated for an airport using a number of variables as input (e.g., the type of plane, the geometry of the airport, annual temperature, flight tracks, altitude profiles, speed and thrust, noise and distant status, aircraft traffic volumes, and the time of day and stage length of each operation).

Bob Wells briefly described the Sea-Tac Noise Monitoring System. The locations of the permanent monitoring stations were identified on map handouts. He also described the DA607 portable noise monitor that will supplement the NMS currently in operation.

A number of issues were raised which included inputs to the INM, the relationship of this study to the Sea-Tac/Communities Plan, and the use of the portable noise measuring equipment.

Bob Nelson questioned if INM was the best measure of sound since it was an averaging process. He stated that the individual overflights and the number of events over a specific noise threshold level concerns him, more than an average air flight.

Peter Bryesse stated that identifying a peak noise level was a problem. He also questioned the use of DBA as an input to any noise forecasting model.

Hugh Parry responded that Ldn, which measures noise on the A scale, is the state of the art technology,. It is accepted on both a national and international basis. The Environmental Protection Agency, Department of Transportation, Department of Labor, and State of Washington all use DBA as a noise descriptor and Ldn as an aggregate measure.

Discussion followed concerning the conversion of existing noise contours at Sea-Tac to Ldn units. Hugh Parry stated that the standard conversion of Ldn is approximately equal to NEF plus 35 db.

Noel Peart wished to clarify the validity of the INM as a data base and noise calculations under flight tracks. Mr. Bryesse questioned Mr. Peart (from Boeing) on how aging affects aircraft noise level. As a manufacturer's representative, Mr. Peart stated that the levels were fairly nearly the same even after 2,000 hours of operations. Some variation from plane-to-plane has been identified. However, the deviation is minimal.

Bill Holstine requested that both Ldn and ANE/NEF contours be shown in the studies in order to draw a direct comparison between the 1974 noise exposure analysis done for the Sea-Tac/Communities Plan and the new updated noise exposure forecast. Bill also questioned the use of topography and how the high levels of surface traffic noises affected those areas with high aircraft noise.

Marian MacKenzie suggested the Mansion Hills area be used as one area for review by the portable noise system.

Noel Peart asked Hugh Parry about the sensitivity of the noise contours and whether a tolerance level is identified for noise predictions. Hugh stated that there will be a tolerance level stated within the report.

Virginia Dana restressed Bob Nelson's request for single event noise levels at individual noise monitoring stations. She suggested that the study identify either the number of flights over a given noise threshold level or the amount of time over a given noise threshold level. Bob Nelson added that this could be used as a "misery index" for presentation along with the averaged Ldn contours for Sea-Tac.

The meeting adjourned at 9:00 P.M. Several people were taken by Bob Wells to the central control room where the Sea-Tac Noise Monitoring System was explained in detail.

The next meeting of the Techincal Advisory Committee is scheduled for January 20, 1981, at 7:00 P.M. in the Airport Conference Room.

D/54

cc: Shay, Dunham, Muller--POS