

Meeting Minutes
DIA Noise Working Group
April 13, 2005

DIA Noise Rule Compliance Status:

Rick Busch stated that there is currently an average of one to two Runway 25 departures per day by Noise Critical Aircraft overflying the NEPS areas, with a total of five to six per day including Noise Critical departures off other runways. Most of these aircraft are MD-80's, with a few 727's and an occasional 747.

Ron Schlotthauer explained how DIA Operations Department ramp controllers, located in the Concourse B ramp control tower, coordinate their actions with those of the FAA control tower to encourage and facilitate the use of the preferred runways and procedures by Noise Critical Aircraft. Ron stated that about 70-75% of the Noise Critical Aircraft they talk to end up using preferred runways. The remaining 25-30% generally is unable to use the preferred runways due to weather or runway configuration, with some crews refusing to accept a preferred runway due to performance issues.

Quarterly/Annual DIA Noise Report Status:

A summary of the 2004 DIA Annual Noise Report was presented to the group. A total of two Class II NEPS violations occurred during 2004, as compared to three Class II's in 2003. This represents the lowest number of violations to occur in a given year since the airport opened in 1995. The 2004 violations occurred at one NEPS point located in Thornton, and one point located on Buckley Air Force Base in Aurora.

During 2004, a total of 2,859 noise complaints were received by the DIA Noise Abatement Office. This is the lowest number of noise complaints recorded in any year since airport opening.

The use of Runway 25 for departures decreased in 2004. 22.5% of all departures used Runway 25, as compared to 24.2% during 2003. It was mentioned that this reduction in use was likely due to the availability of Runway 34L, which opened in September 2003, and which now takes some departure traffic that previously would have used Runway 25. The other likely contributor was the previously noted improved compliance with noise abatement procedures.

Denver/Adams County Joint Petition to FAA:

Nick Pijoan distributed copies of the recent joint petition to the FAA. Nick explained that each year, assuming that violations of the IGA have occurred, Denver and Adams County may jointly petition the FAA to do whatever is necessary to regain compliance. The most recent petition covers the 2003 reporting year.

Nick also explained that the 2003 petition contains requests for specific measures which, if implemented, should eliminate all current NEPS violations. One of these requests is to reduce the use of Runway 25 by departing aircraft to 20% or less of overall departures. Based upon analysis by HMMH, it is believed that if this were achieved, violations in NEPS Area 2 (west of the airport) would be eliminated. The second request contained in the joint petition is to maintain arriving traffic over NEPS Area 3 (primarily the downwind leg and turns from downwind to the base leg) at a minimum altitude of 11,000' MSL. HMMH's analysis has indicated that this measure would eliminate the violation at NEPS point E,-1 (located on Buckley Air Force Base, near Alameda and Tower Rd.).

HMMH Study of Alternate Departure Heading for Westbound Noise-Critical Aircraft:

Brad Nicholas, with HMMH, joined the meeting via telephone. Brad presented the results of HMMH's study of the suggestion to increase the use of Runway 25 by Noise Critical Aircraft, confining them to a more noise-compatible heading, in order to reduce the impact on both Areas 1 and 2. Brad first explained the assumptions and methodology used, mentioning that the analysis was based upon a 10-month sample of radar data obtained from the DIA ANOMS noise monitoring system. Brad also stated that three scenarios were considered, described as the "Base Case", the "Unrestricted Case", and the "70% Case". The Base Case represents what is currently occurring, without modification. The Unrestricted Case modifies the Base Case by assuming that 100% of Noise Critical Aircraft departing via the south half of the west departure gate will use Runway 25, and will do so on existing headings. The 70% Case modifies the base case by assuming that 70% of Noise Critical Aircraft departing via the south half of the west gate will use Runway 25, and that this 70% will also use a 255 degree departure heading.

From this analysis, HMMH concluded that increased utilization of Runway 25 by departing Noise Critical Aircraft could result in a noticeable shift in the annual NEPS results. HMMH also concluded that the 70% scenario, which was deemed the most realistic, should produce noise reductions of 0.1 dB and 0.3dB at the two NEPS points which currently remain in violation. This would not, however, result in a reduction in the number of violations. Brad also cautioned that increased use of Runway 25 by Noise Critical Aircraft without the corresponding use of a 255 degree heading could increase the number of NEPS violations.

During a follow-on discussion the possibility of studying the application of this procedure to all potential westbound aircraft, rather than just the Noise Critical, was suggested. It was decided that this was feasible, and that HMMH should be contracted to expand their study to include all candidate jet departures.

Brad Nicholas next presented the results of a brief analysis of the minimum arrival altitude over NEPS Area 3 which would be necessary to ensure compliance with NEPS point E,-1. HMMH conducted this analysis by studying the existing altitudes of arriving aircraft over Area 3, and their corresponding contribution to noise exposure at point E,-1. It was determined from this analysis that a minimum altitude, or floor, of 6,000' above ground level (or approximately 11,400' MSL) would have to be adhered to in order to just barely ensure compliance. During subsequent discussion, it was acknowledged that this may likely be undoable for operational reasons.

Next Meeting:

The next meeting will be scheduled as necessary.