

**MEDIATED ROLE DETERMINATION PANEL
SNOHOMISH COUNTY ADMINISTRATION BUILDING EAST
FIRST FLOOR MEETING ROOM #1
April 6, 2006**

MEETING MINUTES

MRD PANEL ATTENDEES

Don Doran	Ray Stephanson	Michelle Robles
Tom Hoban	Lori Kaiser	Kevin Laverty
John Shaw	Hugh Townsend	A J Chase

TECHNICAL ADVISERS ATTENDEES

Roy Chandler	Carol Key
Russ Keyes	

SNOHOMISH COUNTY STAFF ATTENDEES

Donna Ambrose	Jim Maynard	
Dave Waggoner	Bill Dolan	Christie Baumel

INTRODUCTION

Co-Chair Don Doran called the meeting to order and welcomed the MRD Review Panel members, technical advisers, staff and the public to the third meeting of the MRD Review Panel.

MINUTES

Mr. Doran requested a correction to a typographical error in the draft March 2 meeting minutes where the 1981 Airport Master Plan was cited as the "1881" Airport Master Plan. Tom Hoban moved for approval of the minutes as corrected. Hugh Townsend seconded and the motion passed unanimously.

Mr. Doran then asked for public comment noting that there was a three minute per person limit with a 10 minute total so the Panel could move forward with their full agenda. He indicated that at the next meeting of the Panel there would be a sign-in sheet for speakers.

Greg Hauth, Vice President of Save our Communities (SOC), requested that the Panel consider allowing SOC an opportunity to provide a detailed presentation of 30-45 minutes at a future meeting. He noted that SOC has been following the issue for over 10 years and gathering substantial information which could be helpful for the Panel in their deliberations.

Grant Woodfield, a resident of the Picnic Point neighborhood southwest of the airport, presented copies of three papers to the MRD panel: 1) his summary of Paine Field noise reports; 2) his summary of business growth at Paine Field; and, 3) his markup of a report on America's 100 Most Needed Airports. He noted that the 2000 study from the National Air Transportation Association (NATA) does not include Paine Field as one of the 100 most needed airports as the U.S. moves into a new century of airport development.

Mr. Doran then introduced Donna Ambrose, management analyst for Executive Reardon, to provide a review of the MRD Panel's mission and goals. Using a PowerPoint presentation, Ms. Ambrose noted the Panel's mission is to review the MRD document, make the MRD document relevant and make recommendations on how to improve the document. The Panel's goals are to assemble factual information, present factual information for discussion and potential action, and to make recommendations to the Executive on policy decisions. She identified a scope of work for accomplishing those goals citing areas of the MRD that need varying levels of study and review.

Mr. Doran then introduced Ryk Dunkelberg, the president of Barnard Dunkelberg and Company. Mr. Dunkelberg's was hired to prepare updates to the Paine Field Airport Master Plan in 1995 and 2002 as well as the Airport's FAR Part 150 Noise Study. Mr. Dunkelberg presented background information on the legal and planning framework in which airports are required to operate as an overview of noise and noise metrics. Mr. Dunkelberg's firm has prepared the updates to the Paine Field Airport Master Plan in 1995 and 2002 as well as the Airport's FAR Part 150 Noise study.

Mr. Dunkelberg's "Airports 101" presentation followed an outline in a PowerPoint format. He explained that noise is defined as sound or a sound that is loud, unpleasant, unexpected or undesired." He also noted that personal preferences and sensitivities vary, so one person's music is another person's noise. While describing the characteristics of sound he said that the range of sound pressure levels is so large that it is expressed in a logarithmic scale of decibels (db). As most people think in linear terms, the logarithmic scale is often challenging to grasp. The reaction one has to sound is affected by the frequency (pitch) and duration of the sound. Very high and very low pitches are outside the range of human hearing so an A-weighting scale is used to more closely reflect human perception. This dBA scale has the advantage of a good correlation with community response and it is easily measured.

Mr. Dunkelberg explained that how sound travels is affected by several environmental characteristics including frequency, temperature, humidity, temperature gradients, wind gradients, shielding by structures and excess ground attenuation. A noise source can make the same noise level at two different times and be heard differently at a receiver if those characteristics vary between the two different times. He offered a few "rules of thumb" to help the Panel understand the logarithmic nature of noise including that 3dBA is the threshold at which a healthy ear can detect change in noise: 1) a 10dBA change seems twice as loud; 2) 20dBA change seems four times as loud; and, 3) that sound decreases 6dBA when the distance between source and receiver doubles.

He went on to explain various noise metrics, how they relate to each other and how they are used in understanding aircraft related noise impacts in communities around airports. These included the single event metrics Lmax and SEL, the cumulative noise metric LEQ, and the cumulative daily noise metric DNL. He used a few graphics to illustrate

the effects of single event noise on speech interference and sleep interference. He noted that hearing loss is not an issue until there is continuous noise exposure of over 85dBA over extended periods as measured by OSHA (the Occupational Safety and Health Administration). The graphics also showed how a small number of loud single events can have a great impact on the LEQ or DNL. Those graphics showed a time history example of three short duration aircraft flyover events with Lmax of 80-90dBA in an area with a background (ambient) noise level of 43dBA would produce an LEQ for that entire hour of 72dBA.

Mr. Dunkelberg continued noting that the DNL metric is the sum of all noise events within a 24-hour period and it includes a 10dBA penalty added to all noise events between 10pm and 7am (making the event seem twice as loud) to reflect our higher sensitivity to noise during hours of sleep. He explained that the federal government has established DNL as the accepted metric for analysis of aircraft noise impacts. Furthermore, he said that the federal government adopted 65DNL as the threshold for precluding noise sensitive uses near airports based on a series of studies on annoyance and community response. He described how the FAA produces a computer program tool called the Integrated Noise Model (INM) for calculating the annual DNL around any airport. The INM is updated periodically to include new noise data on new models of aircraft (current version is INM 6.1). The INM requires airport specific data inputs including number of flights by aircraft type, the flight tracks, time of day, typical operational procedures and average meteorological conditions and then produces DNL noise contours. DNL noise contours are graphic representations on a map with lines connecting areas exposed to equal noise energy. Mr. Dunkelberg showed the Official Noise Exposure Maps (NEM) DNL contours adopted by the FAA for Paine Field for the year 2008 which were produced after the 2002-2021 Airport Master Plan Update. The report for these NEM's (available at painefield.com) includes the INM data input file.

Lori Kaiser asked if the lack of significant numbers of night (10 p.m. – 7 a.m.) flights at Paine Field would have the effect of understating the noise impacts during the daytime hours. Mr. Dunkelberg noted that the NEM's include a fair amount of night activity (much of it is between 10 and 11 p.m.) and also a substantial amount of growth in Boeing and Goodrich related flight activity (6,000 operations in 2008 vs. 3,443 in 2000) which are the primary drivers in the size of the DNL noise contours. He indicated that the INM could produce a contour for the 15-hour daytime (7 a.m. – 10 p.m.) period.

Mr. Dunkelberg continued his presentation describing the regulatory environment for airports. He explained how the FAA requires airport sponsors to agree to a set of 32 Assurances with each grant for capital improvements at the airport and that those assurances run for 20 years. He noted that similar assurances are contained in deeds when the FAA provides the land for the airport and that in those cases the assurances are forever. Mr. Dunkelberg focused on the economic nondiscrimination assurance which requires the airport to be kept available on a non discriminatory basis for all types and classes of users.

He described Federal Air Regulation (FAR) Part 77, which protects airspace for safe aircraft flight by requiring a notice to FAA and their review of all construction over 200' tall and of shorter objects near airports. Mr. Dunkelberg noted that FAA is not a land use control authority and that it is up to local jurisdictions with that land use control authority to adopt zoning that protects against obstructions to navigable airspace

Mr. Dunkelberg then discussed the FAR Part 139 Airport Certification program. Part 139 certificates are an assurance for aircraft operators that the Airport meets FAA design and operation standards for safety. The certificate indicates the airport's commitment to meeting these safety standards. Snohomish County is obligated to meet these standards by the Boeing company joint use agreement. The Part 139 certificate enhances the County's chances when competing for FAA grant funds for capital improvement projects.

He explained that since Congress passed the Airport Noise and Capacity Act (ANCA) in 1990, local jurisdictions have extremely limited ability to impose mandatory restrictions on access or flight related noise at airports. In exchange Congress set January 1, 2000 as the phase out date for loud air carrier aircraft (over 75,000lbs). The law sets out a process, called FAR Part 161, wherein jurisdictions need to do an economic cost benefit analysis to justify access restrictions. Such restrictions can only be implemented if acceptable to the FAA as not having an unreasonable impact on interstate commerce. He indicated that the Part 161 hurdle is almost impossibly high and that only one community has been successful. Naples Florida has been successful in getting a Part 161 access restriction plan approved and that was only because it sought to restrict access to old stage 2 (noisy) business jets (under 75,000lbs) that were demonstrated to exceed the communities adopted 60DNL noise standard which was enforced uniformly on all types of noise sources. Mr. Dunkelberg explained that ANCA allowed a grandfathering of restrictions that were in place prior to its adoption in 1990.

He described the FAA's Part 150 planning process by which airport operators, surrounding communities and the various divisions of the FAA work cooperatively to analyze aircraft noise impacts and develop mitigation strategies. FAA participates in viable operational changes and provides grant funding for mitigation strategies. These strategies include insulation and purchase programs for homes and other noise sensitive uses in areas where impacts exceed the 65 DNL significant impact threshold.

Ms. Kaiser asked about the experiences last year where Southwest Airlines and Alaska Airlines proposed to construct new terminals at Boeing Field and were turned down by King County due to lack of available space and cost to mitigate the cumulative traffic and noise impacts. Mr. Dunkelberg indicated that since neither airline filed a complaint with the FAA on this decision there was no action by the FAA, so any discussion about how King County's action would fare in light of ANCA would be speculative. He did note that there are airspace issues and a close spacing between the runways that would have impacted the airports ability to actually accommodate the operations proposed by both airlines. Members asked who would have had the funding responsibility for off airport infrastructure necessary had those airlines begun service at Boeing Field. Mr. Dunkelberg said he was not aware of specific federal requirements that would require the airline to fund that off airport infrastructure.

As the meeting moved toward conclusion Mr. Doran noted that he would be out of town for the next meeting on April 20. Michelle Robles asked if there would be value to have a web page subcommittee. She also asked that media be invited to meetings of the Panel. Mr. Doran indicated that all materials provided to Panel members would be available on the web page.

The meeting adjourned at 4:35 p.m.