

SUMMARY OF DISCUSSION

Focus Group Meeting #4 How Airport Noise is Being Evaluated

Palm Beach International Airport Environmental Impact Statement for Airport Improvement Program

Group A May 14, 2008

The purpose of the Focus Group Meeting was to provide neighborhood and community representatives an overview of the FAA's process for evaluating airport noise in the Environmental Impact Statement (EIS).

The Focus Groups are comprised of citizens representing the neighborhoods in the EIS study area. To facilitate discussion, two Focus Group meetings were scheduled. The same information was presented at both Focus Group meetings. Twenty-two (22) Focus Group members plus one guest each, for a total of forty-four (44) people were invited to the meeting on May 14. Focus Group Members and their guests in attendance at the meeting were:

Terrance McMahon – Town of Haverhill
Gail Meade – Citizens' Committee on Aircraft Noise
Paul Agnew – Citizens' Committee on Aircraft Noise
Gregg Weiss - Flamingo Park Neighborhood Association
Penny Payne – Flamingo Park Neighborhood Association
Nancy Pullum – El Cid Historic Neighborhood Association
Penelope Williams – El Cid Historic Neighborhood Association
Rick Rose - Grandview Heights Neighborhood Association
Tom Conboy – Poinciana Park Neighborhood Association
Joseph Rocchio – Poinciana Park Neighborhood Association
Jose Rodriguez – Vedado Park Neighborhood Association
Bailey Grey – Southland Park Historic Neighborhood Association
Reverend Mathieu Jean-Baptiste – United Haitian Baptist Church
Ron Byrnes – Historic Prospect Park Monceaux Home Owners Association
Raphael Clemente – Downtown Development Authority

Lindy McDowell of the FAA opened the meeting with a welcome to all participants. She provided guidance to the non-Focus Group members who were participating as observers and asked the Focus Group participants to introduce themselves and state which neighborhood they represented. Lindy then reviewed the agenda for the meeting and asked the EIS Team to begin the presentation.

The questions and issues discussed at the meeting are summarized below. Where ever possible, the person or persons asking the question or making the comment are identified. All responses were provided by the FAA on the night of the meeting.

Question:

Greg White asked what the acronym NEPA stands for.

FAA Response:

NEPA stands for “National Environmental Policy Act”.

Question:

Paul Agnew asked where Integrated Noise Model (INM) program data on particular aircraft comes from.

FAA Response:

INM data comes from each aircraft manufacturer.

Question:

Paul Agnew asked if the data used in INM was adjusted for real-life conditions or was theoretical.

FAA Response:

The data is based on an aircraft performing under best conditions, or that equivalent to test conditions.

Question:

Paul Agnew asked when is the data deleted from the model (i.e., for old aircraft).

FAA Response:

Aircraft stay in the model but are not used in the analysis unless they currently operate at or are forecast to operate at the airport being modeled.

Question:

Paul Agnew asked if the model gets updated for new aircraft and if the data on existing aircraft in the model gets updated as well.

FAA Response:

Yes, the model gets updated with new aircraft and new data on aircraft when new versions of the model are released by the FAA.

Question:

Paul Agnew asked how much time an analysis covers.

FAA Response:

The analysis is based on one years worth of data.

Question:

Nancy Pullum asked if the model reflects real-world conditions.

FAA Response:

INM does account for real-world conditions such as temperature, humidity, and elevation.

Question:

Nancy Pullum asked if the model included GA aircraft.

FAA Response:

Yes, the model includes GA aircraft and all aircraft that are currently operating at, and forecasted to operate at PBI.

Question:

Nancy Pullum asked if data was being used from 2006 or 2007.

FAA Response:

In the EIS process, FAA selects a baseline year. For this EIS the baseline year is 2006. The only way FAA would change the baseline year is if there were significant changes in operations from one year to the next.

Question:

Is wind direction and strength taken into account in the model?

FAA Response:

Yes, both wind direction and strength are taken into account in the modeling. It is used to establish runway use percentages for the modeling.

Question:

Does the modeling account for “seasonal activity”?

FAA Response:

INM is based on an average annual-day (AAD) scenario. However, because of the unique nature of operations at PBIA, FAA will also include “seasonal” analysis in the EIS. This will include developing noise contours for the Peak-Month Average-Day (PMAD) and Average-Busy Day (ABD) operational scenarios.

Question:

Rick Rose asked (in regards to the flight track graphics on page 12 of handout) how a plane can take off from the middle of a runway.

FAA Response:

The graphic on page 12 of the handout shows a depiction of radar tracks for aircraft departing runway 9L. Because the airport radar has 30 second sweep intervals, there are gaps in the information provided. An aircraft may be in a turn for 30 seconds but it is displayed as a straight line between the two sweep intervals. This makes it look like some aircraft are turning at the beginning of their take-off roll.

Question:

Nancy Pullum asked about the “fanning” procedure at PBIA – is it shown and will it be taken into account in the modeling?

Response:

Paul Agnew responded that aircraft typically drift to the north and south of the runway heading on departure. At PBIA, aircraft “fan” mostly to the north because turning to the south would conflict with the air traffic flow to and from south Florida. FAA concurred with Paul’s response and added that PBIA’s “fanning” procedure would be considered in the modeling.

Question:

Rick Rose asked (in regard to the flight track graphic on page 14 of the handout) if the dark lines represent “spine” tracks – the graphic shows some going to the south.

FAA Response:

Yes, the dark lines represent the spine tracks and the lighter lines are dispersion tracks. Some aircraft do turn to the south when departing Runway 9L.

Question:

It was asked if FAA can fix the footer on slide #14, it is misleading because it is not all runways, only runway 9L.

FAA Response:

The graphic shows an example of the flight tracks that were developed for all aircraft on all runways. The footer helps the viewer understand that this was done for all runways.

Question:

Can the Focus Group get more information on airspace control of flight levels?

FAA Response:

Air Traffic Control (ATC) has some data on how airspace is controlled. FAA will follow up with trying to get some information for the Focus Group.

Question:

Are there any problems with the staffing at the tower?

FAA Response:

There are no problems with staffing at the tower.

Question:

Jose Rodriguez asked why the Grid-Point Spacing was set at 400' intervals.

FAA Response:

Because of the large area being evaluated, the Grid-Point Spacing gives FAA a representative sampling of the study area without resulting in an un-manageable amount of data.

Question:

Are the results based on modeling and not on noise monitoring?

FAA Response:

Yes, the EIS analysis will be based on modeling using the INM and not on noise monitoring data. The EIS impact assessment is based on future noise levels, comparing the No-Action Alternative to the "Build Alternative." Noise monitoring data can not be used to predict future noise levels.

Question:

Gregg Weiss asked for modeling purposes, will the analysis be based on a 24-hour average, even if the airport doesn't operate late night and early in the morning?

FAA Response:

Yes, INM averages the noise over a 24-hr period, even if there are no late night or early morning operations. DNL represents a "dose of noise" and the associated levels of annoyance; it is a 24-hour average but it is the total sound energy that truly matters.

Question:

Sensitivity to noise in Florida is higher because of all the opportunities for outdoor life; particularly Sunday afternoons.

FAA Response:

FAA recognized that there are a lot of opportunities for outdoor activities because of the year-round climate.

Question:

What is the difference between DNL & Leq?

FAA Response:

Nighttime operations are weighted in DNL, i.e. a 10x nighttime penalty is incorporated into the DNL metric, such that one nighttime operation is counted as 10 operations in the model. The Leq noise metric does not use a penalty for nighttime operations.

Question:

Tom Conboy asked if INM accounts for highway noise too.

FAA Response:

No, INM does not account for roadway noise.

Question:

Paul Agnew asked if INM takes into account reverse thrust.

FAA Response:

Yes, INM takes into account reverse thrust.

Question:

Gregg Weiss asked if INM accounts for actual power settings adjusted for real life conditions (for arrival procedures).

FAA Response:

INM uses an average but non-average power settings were taken into account for this EIS through customized arrival profiles. INM does not have a specific reduced thrust arrival procedure.

Question:

Are there any studies that compare noise levels to DNL, i.e. like the “barometer” shown on page 23 of the handout?

FAA Response:

Yes, there are studies that compare actual “observed” noise levels to the DNL metric, although it is harder to do.

Question:

Housing and Urban Development (HUD) defines “nuisance” noise at 75 dB inside a structure. How far out (horizontally) is an airplane on approach when it is at an altitude of 500’?

FAA Response:

An aircraft would be approximately 2 miles away from the end of the runway at an altitude of 500’ AGL.

Question:

Is the future noise compared to existing conditions?

FAA Response:

No, future noise levels of the No-Action Alternative will be compared to future noise levels associated with the Proposed Project & Alternative 2 for the EIS.

Question:

Can you show the 60 DNL noise contour?

FAA Response:

FAA does not show the 60 DNL noise contour in its NEPA documents because the agency's threshold of compatibility is based on the 65 DNL noise contour. It is possible the airport sponsor could show the 60 DNL noise contour as part of its on-going FAR Part 150 study process.

Question:

Are there regulations on single-event impacts?

FAA Response:

No, FAA does not have regulations on impact thresholds based on single-event noise levels.

Question:

Can it be requested to provide a graphic of the 60 DNL noise contour.

FAA Response:

Yes, the public can request that the FAA include a graphic of the 60 DNL noise contour in the EIS.

Question:

Does the Preliminary APE include the Alternative 2 contours?

FAA Response:

Yes, the Preliminary APE was sized to include both build alternatives; Alternative 2 and the Proposed Project

Question:

Will the speech interference analysis be conducted for indoor or outdoor conditions?

FAA Response:

The speech interference analysis can be used to calculate both indoor and outdoor noise levels.

[Note: The following was added to this response by FAA during the preparation of these meeting notes.] At the time of the Focus Group Meeting, FAA was still developing the methodology for the Supplemental Noise Analysis. The methodology is still under development. Thus, no final methodology has been approved at this time. A description of FAA's methodology and the results of the Supplemental Noise Analysis will be included in the DEIS.

Question:

Will FAA be presenting both indoor and outdoor noise levels in the EIS?

FAA Response:

The analysis of the potential for speech interference in the EIS will be based on indoor noise levels. **[Note: The following was added to this response by FAA during the preparation of these meeting notes.]** At the time of the Focus Group Meeting, FAA was still developing the methodology for the Supplemental Noise Analysis. The methodology is still under development. Thus, no final methodology has been approved at this time. A description of FAA's methodology and the results of the Supplemental Noise Analysis will be included in the DEIS.

Question:

Can we see the outdoor noise levels for the speech interference analysis?

FAA Response:

FAA will consider presenting the outdoor noise levels for the Speech Interference Analysis in the EIS. [Note: The following was added to this response by FAA during the preparation of these meeting notes.] At the time of the Focus Group Meeting, FAA was still developing the methodology for the Supplemental Noise Analysis. The methodology is still under development. Thus, no final methodology has been approved at this time. A description of FAA's methodology and the results of the Supplemental Noise Analysis will be included in the DEIS.

Question:

Is the "number of events above" analysis calculated for 1 day?

FAA Response:

Yes, the "number of events above" analysis will represent the number of times per day a certain noise level occurs.

Question:

Will the "number of events above" analysis include the duration of each noise event?

FAA Response:

No, it will not include the duration of each noise event, just the number of times per day it occurs.

Question:

Will the noise data be presented as an average over an area?

FAA Response:

No, the noise data will be presented for each grid point within the study area.

Question:

What is the duration of the school year used in the study?

FAA Response:

FAA calculated the number of days that school was open for a normal school year in Palm Beach County.

Question:

We don't agree with the school day hours shown on page 32 of the handout. Schools in Palm Beach County start earlier and close later than shown.

FAA Response:

The FAA consulted with Palm Beach County on the hours of operation of schools in the county. Some before and after school activities occur outside the listed timeframe, but 8:00 a.m. to 4:30 p.m. is the time frame most representative of the Average School Day (ASD) in Palm Beach County.

Question:

What consideration is being given to outdoor activity?

FAA Response:

FAA will develop noise contours for PMAD and ABD operational scenarios. However, the supplemental noise analysis will be based on indoor noise levels. [Note: The following was

added to this response by FAA during the preparation of these meeting notes.] At the time of the Focus Group Meeting, FAA was still developing the methodology for the Supplemental Noise Analysis. The methodology is still under development. Thus, no final methodology has been approved at this time. A description of FAA's methodology and the results of the Supplemental Noise Analysis will be included in the DEIS.

Question:

What (noise) metrics are being used to determine "number of events above"?

FAA Response:

FAA will use both Leq and Lmax noise metrics.

Question:

Is the FAA using the airports (Palm Beach County Department of Airports) numbers' for operation of the runways? (i.e. how many and what type of aircraft would use the proposed runway)

FAA Response:

FAA coordinated with ATC to see how they would operate the airport in the future with the different airfield configurations, such as the Proposed Project and Alternative 2.

Question:

Would there still be corporate jets on Runway 9R, (the south runway)?

FAA Response:

Yes, there will still be corporate jet operations on Runway 9R, if either the Proposed Project or Alternative 2 were built.

Question:

Are any of the suggestions given by the Focus Group members going to be incorporated into this EIS?

FAA Response:

What has been requested by the Focus Group members will be considered by the FAA. A lot of the supplemental analysis being done by the FAA for this EIS is for disclosure purposes only. There are no impact thresholds for these analyses; it is being done for informational purposes.

Question:

Is the FAA looking at the cause or effect?

FAA Response:

The FAA will be evaluating the effects of the Proposed Project and reasonable alternatives.

Question:

What mitigation will be offered for areas that would experience an increase of 1.5 DNL?

FAA Response:

Mitigation measures have not been developed yet by the FAA. If the Proposed Project would result in a significant impact, mitigation measures would be developed and then implemented by Palm Beach County.

Question:

Does the EIS process provide a mechanism for mitigation funding?

FAA Response:

Yes, the EIS process provides a mechanism for mitigation funding for significant impacts.

Question:

Have there been any studies done on the affect of noise on historic structures?

FAA Response:

Yes, two detailed studies were conducted at Dulles International Airport. The studies were primarily based on vibration affects to historic properties.

Question: General

The supplemental noise analysis should be done for PMAD scenarios and not just for the AAD conditions.

FAA Response:

The FAA will be developing noise contours for the PMAD and ABD operational conditions, but the supplemental analysis will be conducted only for the AAD scenarios.

SUMMARY OF DISCUSSION

Focus Group Meeting #4 How Airport Noise is Being Evaluated

Palm Beach International Airport Environmental Impact Statement for Airport Improvement Program

Group B May 15, 2008

The purpose of the Focus Group Meeting was to provide neighborhood and community representatives an overview of the FAA's process for evaluating airport noise in the Environmental Impact Statement (EIS).

The Focus Groups are comprised of citizens representing the neighborhoods in the EIS study area. To facilitate discussion, two Focus Group meetings were scheduled. The same information was presented at both Focus Group meetings. Twenty-nine (29) Focus Group members plus one guest each, for a total of fifty-eight (58) people were invited to the meeting on May 14. Focus Group Members and their guests in attendance at the meeting were:

Al Vazquez – Parker Ridge Neighborhood Association
Joanne Jaimes – Parker Ridge Neighborhood Association
John O'Neil – Southland Park Historic Neighborhood Association
Dan Syrluk – Portofino South Condo Association
Eugene Christophenson – Portofino South Condo Association
George Humphries – West Gunclub
Brenda Warren – Royal Palm Estates
Janel Horne – Royal Palm Estates
Betty James – Town of Cloud Lake
Mike Klingensmith – Town of Cloud Lake
Kevin Wellman – Town of Glen Ridge

Lindy McDowell of the FAA opened the meeting with a welcome to all participants. She provided guidance to the non-Focus Group members who were participating as observers and asked the Focus Group participants to introduce themselves and state which neighborhood they represented. Lindy then reviewed the agenda for the meeting and asked the EIS Team to begin the presentation.

The questions and issues discussed at the meeting are summarized below. Where ever possible, the person or persons asking the question or making the comment are identified. All responses were provided by the FAA on the night of the meeting.

Question:

What are spine tracks and dispersion tracks?

FAA Response:

A spine track is the most used aircraft flight track and dispersion tracks are the variations or deviations from the spine track.

Question:

Are corporate jets included in the radar data, flight tracks, and Integrated Noise Model (INM)?

FAA Response:

Yes. The INM will include all aircraft that operate at, and are forecast to operate at PBI.

Question:

Why was 2006 data used instead of 2007 as the baseline?

FAA Response:

The EIS needed to have a starting point to represent “existing conditions” at PBI. Year 2006 data was used because FAA started the EIS in 2007 and it takes several months to process a full years worth of radar data. Year 2006 was the most recent year for which complete data was available.

Question:

Does the FAA look at a 24-hour average when there are limited nighttime operations at PBI?

FAA Response:

The FAA uses the DNL noise metric as the primary tool for evaluating aircraft noise. Based on FAA’s guidance, the DNL metric must be used in the EIS process.

Question:

When calculating a 24-hour average, does the DNL bring down the noise levels during the “quieter” periods?

FAA Response:

Yes, using a 24-hour average would reduce average noise level during “quieter” periods. However, there is a nighttime penalty factor of 10 for operations that occur between 10 p.m. and 7 a.m. That means that each nighttime operation is counted as 10 operations in the model.

Question:

Where is the consultant from? Can they really understand the effects on Cloud Lake and the health effects on senior citizens and children?

FAA Response:

The FAA will evaluate numerous environmental categories in the EIS, including air quality and effects to children’s health.

Question:

What do I do when I get woken up at night?

FAA Response:

The analysis in this EIS includes nighttime operations.

Question:

During the nighttime (between 10 p.m. and 6:59 a.m.) flights, the airport shifts aircraft flow to the west. Is the noise measurement of this shift included in the modeling (i.e., the reduced noise levels)?

FAA Response:

The INM is developed to represent the Average Annual Day (AAD) of operations and runway use. The shift in operational flow from daytime to nighttime is accounted for in the runway-use percentages set-up in the model.

Question:

Is the 10 dB penalty assigned because of lack of flights or higher intrusiveness?

FAA Response:

It is assigned because of the higher intrusiveness associated with nighttime noise.

Question:

The AAD analysis doesn't take PBIAs seasonality into account or does it?

FAA Response:

The FAA recognizes the seasonality of operations at PBIAs. The EIS will include a Supplemental Noise Analysis section that will show noise contours for seasonal operations including the Peak-Month Average-Day (PMAD), and Average-Busy Day (ABD) operational scenarios.

Question:

Does the model measure noise other than aircraft?

FAA Response:

No it does not. INM only calculates aircraft noise.

Question:

Is the modeling based on noise monitoring data?

FAA Response:

No, the noise modeling will be based on computer modeling using INM. However, the data in the computer model is based on data collected by the aircraft manufacturer.

Question:

Does the modeling account for increased operations?

FAA Response:

Yes, the noise modeling will account for future increases in aircraft operations.

Question:

Will the PMAD and ABD be used to make decisions on the project?

FAA Response:

The FAA's decisions on significant impacts and mitigation measures will be based on the AAD, but the other operational scenarios will provide the public with more information and help to better understand the noise environment in the PBIAs area.

Question:

Will changed flight tracks and operational procedures be included in the modeling?

FAA Response:

Yes, the noise modeling will include the new flight tracks for the Proposed Project and build alternatives.

Question:

Will we be able to identify the “real day” that is representative of the AAD (i.e., what day, of what month, of that year)?

FAA Response:

No, AAD does not represent a single day of the year.

Question:

Is there a standard deviation for the AAD?

FAA Response:

No, there will be no statistical deviations calculated for the AAD.

Question:

It is harder to understand AAD than PMAD or ABD. Can you disclose what time periods in June, July, etc. that are representative of AAD?

FAA Response:

No, because the AAD is the average of 365 days, it is not possible to identify a specific day of the week, or month that it represents.

Question:

Can you use another noise metric other than DNL?

FAA Response:

The FAA’s regulations require the use of the DNL noise metric for its NEPA studies. However, other noise metrics such as Leq and Lmax will be included in this EIS for disclosure purposes.

Question:

What happens if the operations change a lot more than that forecasted?

FAA Response:

The airport updates its FAR Part 150 noise compatibility study to account for changing noise conditions. The PBC DOA actually develops new noise contours on a yearly basis.

Question:

How was the Generalized Study Area (GSA) defined?

FAA Response:

The GSA was based on the estimated size of the future noise contours. This also included a review of past noise contours developed for PBIA.

Question:

Why doesn’t the GSA go further out?

FAA Response:

It extends far enough in all directions to accommodate the noise contours of the airport.

Question:

Have the (current) forecasts been checked against past forecasts and “calibrated” for errors in previous forecasts?

FAA Response:

Previous forecasts and assumptions were considered in the development of the current forecasts that have been approved by the FAA for use in the EIS.

Question:

Where is the FAA Forecast data available?

FAA Response:

Forecast information is available on the FAA’s website (www.faa.gov) under the Terminal Area Forecast (TAF).

Question:

Can the speech interference levels for outside conditions be calculated?

FAA Response:

Yes, the speech interference levels for outside conditions can be calculated if requested. [**Note: The following was added to this response by FAA during the preparation of these meeting notes.**] At the time of the Focus Group Meeting, FAA was still developing the methodology for the Supplemental Noise Analysis. The methodology is still under development. Thus, no final methodology has been approved at this time. A description of FAA’s methodology and the results of the Supplemental Noise Analysis will be included in the DEIS.

Question:

Have the thresholds been established for the Speech Interference Analysis?

FAA Response:

No, not yet. FAA is working to identify which analysis levels to use in the EIS for disclosure purposes. [**Note: The following was added to this response by FAA during the preparation of these meeting notes.**] To date, there is no proven methodology and no generally accepted standard or threshold for impact analysis for any of the supplemental analyses that will be included in the EIS, such as; sleep disturbance, speech interference, or effects on children’s learning.

Question:

Have sleep disturbance analyses been done at other airports?

FAA Response:

Yes, sleep disturbance analyses have been done at other airports, but no thresholds of impact have been established yet by the FAA.

Question:

Will the FAA post the speech interference, sleep disturbance, and effects on children's learning thresholds on the EIS website when the decision is made?

FAA Response:

The FAA will post the meeting notes for the Focus Group meetings on the website, usually within thirty days of the Focus Group meetings. [Note: The following was added to this response by FAA during the preparation of these meeting notes.] To date, there is no proven methodology and no generally accepted standard or threshold for impact analysis for any of the supplemental analysis that will be included in the EIS, such as; sleep disturbance, speech interference, or effects on children's learning. The analysis levels used for the supplemental noise analysis will not be posted on the website prior to the release of the DEIS.

Question:

The FAA is looking at three areas of supplemental analysis. Are there other analyses that have been done at other airports?

FAA Response:

There have been vibration analysis and "time above" analysis done at other airports in other EIS's.

Question:

Is the supplemental analysis for disclosure and will it be used to determine significant impact?

FAA Response:

The Supplemental Noise Analysis will be included in the DEIS for disclosure purposes only – it will not be used to determine significant impacts.

Question:

We don't agree with the school day hours shown on page 32 of the handout. Schools in Palm Beach County start earlier and close later than shown.

FAA Response:

The FAA consulted with Palm Beach County on the hours of operation of schools in the county. Some before and after school activities occur outside the listed timeframe, but 8:00 a.m. to 4:30 p.m. is most representative of the Average School Day (ASD) in Palm Beach County.

Question:

Can we get a copy of the lists of Focus Group members?

FAA Response:

Yes, FAA can provide a copy of the list of Focus Group members.

Question:

Where is the information on the Proposed Project?

FAA Response:

The FAA has an EIS website that describes the Proposed Project and the EIS study being conducted. (www.pbia-eis.com)