Appendix A
Meeting Coordination

Prepared by:
DMJM Aviation | AECOM
In association with:
Wyle
Portfolio Associates, Inc.
FAA Coordination Meetings
MEETING SUMMARY

To: Freddric Cummings
From: Lynn Keeley
Subject: PHL Noise Compatibility Update – FAA ATC Status Briefing
Place: Air Traffic Control Tower – Hog Island Road
Date of Meeting: September 8, 2008
Attendees: Mike Wagner (FAA), Warren Strickland (FAA), Royce Bassarab, (Wyle), Lynn Keeley (DMJM Aviation)

Purpose of the Meeting:

The purpose of this meeting was to provide FAA Air Traffic Control (ATC) with a status of the Noise Compatibility Study Update and to garner information from ATC on Airspace Redesign implementation at PHL, or any other air traffic issues which may affect our on-going noise compatibility study.

Summary of Discussion:

Royce Bassarab and Lynn Keeley provided Mike Wagner with a brief update on the status of the project and a summary of the June community workshops. Lynn explained that between the March and June Study Advisory Committee Meetings, the study team had proposed developing a 2008 baseline contour year rather than a 2007 baseline year, to ensure that the contour would be representative of existing conditions at the time it is officially submitted to the FAA for acceptance. Royce explained that the FAA has agreed with our proposed methodology, to use 12 months of operational data and six months of flight tracks, and we are proceeding accordingly.

Update on the Status of Operations at PHL

Royce inquired as to whether the fleet mix operating at PHL in 2008 had undergone any major changes, such as the introduction of a new aircraft type, or whether any periods of runway or navigation equipment closure might impact traditional runway utilization. Mr. Wagner noted that there have not been any notable fleet changes or changes in runway use patterns in 2008.

Airspace Redesign Project (ARD)

Status on the use of divergent headings

Mr. Wagner noted that effective September 1st, the hours in which the airspace redesign divergent headings are utilized at PHL have been extended. The hours are now between 8-11 am and 2-8 pm; an hour earlier in the morning and an hour later in the evening. However, during any period between 6:00 a.m. and 11:00 p.m., if departure delay reaches a specified threshold, the ATCT
may utilize the divergent headings. Presently, 10:00 am is the busiest hour, and 10:00 pm is the cut-off time for the use of the divergent headings.

**Overview of Next Implementation Steps**

Mr. Wagner explained that the Airspace Redesign Team is anticipating full implementation by 2011 and that he doesn’t foresee the next phase being implemented at PHL any sooner than that.

**Runway 17/35 Extension**

Royce asked Mr. Wagner if he thought the assumptions in the 2004 Runway 17/35 EIS were still considered representative of runway use when Runway 17/35 is fully operational at its increased length. For the most part, Mr. Wagner felt that they were. When the extended Runway 17/35 is open and operational, he expects to see an increase in Runway 35 departures, consistent with previous assumptions (EIS, 2013 Future Noise Exposure Map, etc). However, if there is a greater demand for departures from Runway 35 than forecasted, ATCT may consider modification to Runway 35 departure procedures.

Mr. Wagner and Mr. Strickland noted that that construction of the extended Runway 17/35 is scheduled to be complete in December 2008. However, the ILS will probably not be commissioned until at least March 2009.

**Noise Abatement Analysis**

- Royce generated questions for Mr. Wagner, meant to help us establish whether some of the noise abatement suggestions already received would be reasonable to pursue. Each of these topics will be more fully analyzed in the development of the noise compatibility plan.

  Q. Beyond what has been identified as a mitigation measure in the ARD, are there additional opportunities to implement Continuous Descent Approaches at PHL?

  A. Mr. Wagner explained that CDA’s could be used at PHL, but that there is too much cross traffic to expect that it could be used effectively for noise abatement. Mr. Strickland noted that CDA may be better suited for nighttime operations at PHL.

  Q. What is the status of RNAV procedures at PHL? (Also identified as a mitigation measure in the ARD, and a common recommendation in Part 150 programs in the U.S.)

  A. Mr. Wagner explained that RNAV arrivals have begun to be implemented at PHL two years ago. The RNAV departures will be part of the bigger Airspace Redesign implementation.

- **Public Feedback (SAC and Public Information Workshops)**

  Royce shared the “Fly Quiet” procedures that were submitted at the community workshop in Cherry Hill. Mr. Wagner was familiar with this material, and explained that it was possible to implement this at PHL, but it would be at the risk of significantly reducing capacity. This will be more fully evaluated in the Noise Compatibility Study.
• Air Traffic Suggestions

Royce asked Mr. Wagner about topics or issues that the ATCT would like addressed in the Noise Compatibility Study. Mr. Wagner explained that the use of the term ‘heading’ is often misleading to the public, as aircraft may be assigned a general heading but often, due to weather conditions, tower instructions, and pilot procedures, many aircraft are not flying a specific heading. Rather, the use of the phrase ‘tracks’ may be more appropriate and less confusing for the public.

Royce requested a follow up meeting with Mr. Wagner in 4 – 8 weeks to continue this discussion and to keep abreast of any further developments in either Airspace Redesign implementation at PHL or other operational changes that could affect this study.
MEETING MINUTES

Subject: PHL Noise Compatibility Study Update – FAA ATCT Coordination Meeting
Place: ATC Tower
        Hog Island Road, Philadelphia, PA 19153
Date of Meeting: November 9, 2009 (10:00 a.m.)
Attendees: See attached sign-in sheet
Date Prepared: November 20, 2009
Prepared By: Lynn Keeley, AECOM

Purpose of the Meeting:

The purpose of this meeting was to provide FAA Air Traffic Control (ATC) with a status of the Noise Compatibility Study Update noise abatement alternatives analysis and to garner information from ATC on any new developments with the Airspace Redesign implementation at PHL.

Summary of Discussion:

Mr. Royce Bassarab and Ms. Lynn Keeley provided an update on the status of the project. For the benefit of attendees that had not previously been exposed to the project, discussions ensued pertaining to the noise modeling data collection and input process. Mr. Bassarab reiterated that the noise contours attempt to capture average operating conditions under the existing conditions and that notable changes to operations at PHL may change the noise exposure patterns. No new changes to operating conditions were identified by ATC staff that had not already been considered. The discussion concluded noting that the existing and future NEMs are being reviewed by the FAA Harrisburg Airports District Office for comments prior to the official submission. The official NEMs are anticipated to be submitted to the FAA by the end of the year for acceptance.

Ms. Keeley explained that there is an upcoming SAC meeting (11/18/09) which will focus mostly on the noise abatement alternatives. Mr. Bassarab explained that the 65 DNL contour is the threshold of significance for noise impacts as defined in FAR Part 150, and that our team is tasked with evaluating the possibility of reducing incompatible land uses within the 2013 65 DNL contour. One of the primary ways to accomplish this is through noise abatement strategies. Mr. Bassarab noted that we are at a point in the study where we need to identify those noise abatement alternatives which are feasible and meet the standards defined in FAR Part 150. After this meeting we’ll be in a better position to justify the dismissal or recommendation of the alternatives under consideration.

The discussions summarized below centered on the status of the FAA’s Airspace Redesign program and the noise abatement alternatives that would require FAA ATCT involvement for implementation.
Airspace Redesign Project (ARD)

Mr. Mike Wagner noted that the airspace redesign divergent headings are currently utilized at PHL daily from 6:00 am until 10:00 pm. At 11:00 pm the nighttime preferential runway use procedure is utilized and remains in use until 6:00 am. Mr. Wagner noted that the Airspace Redesign Record of Decision did not allow the use of the divergent headings past 10:00 p.m. and suggested the possibility of extending the current nighttime procedure so that it begins at 10:00 pm. Mr. Jon Collette said that this could certainly be included as an alternative in the NCP, if the Airport and City agreed to it.

Overview of Next Implementation Steps

Mr. Wagner explained that the first of four Airspace Redesign implementation stages is complete except for use of the 230° departure heading. Implementing this heading cannot be done without further coordination among New York and New Jersey TRACONs. There is no firm date on when this heading will be utilized at PHL.

Mr. Wagner explained that once the 230° heading is implemented, the amount of air traffic on the 245° and 268° may actually decrease. For departures, it is anticipated that the 245° departures will head west, the 230° departures will head south and the 268° will go north. Also, the arrival headings may be fanned out further than they are today. However, Mr. Wagner noted that none of this is definite and that there are no timeframes associated with these modifications.

Mr. Wagner continued to discuss upcoming implementation of the ARD, including further airspace structure changes that are not yet defined. Mr. Bassarab explained that this somewhat limits the type of alternatives that may be feasible since detailed coordination with ATC and the FAA is required for flight track changes.

Noise Abatement Analysis Discussions

Runway 17-35

Mr. Wagner explained that more localized airspace changes could include using Runway 17/35 as a departure runway to the Pottstown fix. This change could be undertaken internally, separate from the ARD project, and could take place within the next six months. But again, this modification is only in the discussion phase at the PHL ATCT.

Regarding Runway 17/35, the runway has been operating at its extended length of 6,501 feet for approximately nine months now. However, Mr. Stephen Batchelder noted that Runway 35 is closed from 11:00 pm – 6:00 am almost every night, due to construction or other Airport projects.

Mr. Bassarab explained that there is a projected significant noise impact area in the Eastwick neighborhood of Philadelphia. One of the proposed noise abatement alternatives proposed is to turn aircraft to the right after departing Runway 35 thereby putting them over a more industrial/commercial type land use. Whereas departing straight out, as the current procedure
does, places the aircraft over residential areas and noise-sensitive public facilities (i.e. schools and churches).

Mr. Batchelder noted that right turns would be very complicated and would adversely impact arrival capacity. Currently, most right turns from that runway are go-arounds. If the aircraft are turned to the right after departure, they would need to stay low at 3,000’ to avoid conflicts with PNE traffic and PHL arrivals to Runways 35, 27L and 27R. Holding aircraft down at lower altitude could actually account for more noise. In addition, aircraft turning to the right could conflict with arrival routes to LaGuardia, Newark, JFK and Teterboro airports. In conclusion, ATCT noted that right turns from Runway 35 departures are not preferred under any circumstance.

Mr. Collette asked if, for noise abatement purposes, a voluntary restriction could be placed on jets departing Runway 17/35 starting at 10:00 pm. Mr. Batchelder noted that this might be feasible.

**RNAV and RNP Procedures**

A general discussion of RNAV and RNP procedures followed. Mr. Wagner explained that additional RNAV arrival procedures at PHL have been implemented, but are not currently in use pending computer systems work. Mr. Bassarab and Mr. Collette stated that one suggestion was that the use of the river approach be increased, including use by aircraft originating from the north. Mr. Wagner explained that if the existing Runway 9R RNP arrival procedure were to be used for aircraft arriving from the north, it could result in more noise given the sharp 120° turn required for the plane to get established on the procedure.

It was discussed that the first RNAV departure procedures are expected to be published in mid-February 2010 and that they should be in use by the spring. Additional RNAV departure procedures are expected to be designed and implemented once additional design of the airspace surrounding PHL is completed, as they are part of the bigger Airspace Redesign implementation.

**CDAs**

Mr. Bassarab explained that CDAs, included as a mitigation component in the ARD, are included in the noise abatement alternatives analysis and the noise study assumes they will be in place by 2013. Mr. Wagner confirmed that he expects they will be in place, but cannot speak to the timeline. All parties agreed upon the limited use of CDAs due to aircraft spacing requirements, but that notable noise benefits may be realized in areas beyond the noise contours.

Mr. Collette mentioned that UPS night arrivals from the west or south could be prime candidates to utilize CDAs. Mr. Wagner noted that CDA’s during nighttime operations are fine, but during the daytime or evening there is simply too much cross traffic to expect that CDAs could be used effectively for noise abatement.

**Raising the Intercept Altitude on Approach**
Mr. Bassarab noted that the team was also looking into a suggested alternative that would entail arrivals to Runways 27R/27L remaining as high as possible, then intercepting KIRDE at an altitude higher than 3,000 feet, then maintaining the guide slope to the touchdown point.

Mr. Batchelder noted that Runway 27 arrivals need to be down to 3,000’ at KIRDE to avoid Runway 35 arrivals on their downwind leg. These Runway 35 arrivals cross over the Runway 27 arrivals at 4,000’ about four to five miles east of the airport.

There were no further questions regarding noise abatement alternatives. The invitation to attend the SAC the following week was reiterated, and ATC staff confirmed they would be in attendance. The meeting was concluded at noon.
**FIA / PHE NCP Update Mtg.**
11.09.09 10:00 am
Sign-in Sheet

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