

**MEMORANDUM**

TO: Advisory Committees

FROM: Andy Harris

SUBJECT: Preliminary Noise Contours for 2011 and 2014  
PTIA Part 150 Study  
ASH 200301

DATE: 18 February 2005

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Attached are Preliminary Noise Contours for 2011 and 2014.

We presented and discussed the operations forecasts for 2006 and 2011 at the December meetings of the Advisory Committees. We also agreed to complete forecasts for 2014, the current estimated beginning of Phase II operation of the FedEx hub. We have prepared preliminary contours for 2006, 2011 and 2014. (The forecasts for all three years will be reviewed near the conclusion of this study in 2006. If necessary, we will update the contours at that time.)

#### 2011 Contours

2011 is 2 years after the anticipated beginning of Phase I FedEx operations. The contours are compared with the Phase I EIS contours with runway use designed to mitigate impacts of the addition of runway 5L/23R. The 2011 contours are smaller throughout the airport area than the EIS contours. The difference in area reflects the smaller number of operations forecast for 2011 than forecast for Phase I in the EIS. As noted in the description of the preliminary contours for 2006, the shape of the 2011 contours differs somewhat from the shape of the EIS contours because the flight tracks observed during 2004 differ somewhat from the flight tracks observed during preparation of the EIS. As reported during the December meetings, turns during departures tended to begin slightly later than previously observed and there was greater dispersion than previously observed.

#### 2014 Contours

The 2014 contours represent the first year of Phase II operation of the FedEx hub. While FedEx estimated during discussion of this study that Phase II will begin during 2014, it may occur during a different year. Nonetheless, 2014 is the best estimate at this time. FedEx and Northwest currently operate some retrofitted aircraft (aircraft that meet the Stage 3 requirements of FAR Part 36 through modification rather than through original design). Both carriers are replacing the retrofitted aircraft with new aircraft that meet the Stage 3 requirements of FAR

Part 36 when produced and are quieter. We do not know whether the retrofitted aircraft will still be in service during 2014. For this reason, we have developed two sets on noise contours for 2014. The first set assumes that the retrofitted aircraft will still be in use. The second set assumes that the retrofitted aircraft will have been replaced. When preparing the second set of contours, we replaced the FedEx 727s with 737-300s and the Northwest DC-9s with A320s. The EIS used the same assumption for FedEx and Northwest is replacing its DC-9s with A320s. The contour figure for 2014 shows both sets of contours. “Forecast A” represents the case with the retrofitted aircraft. “Forecast B” represents the case with new aircraft. The area between the contours for Forecast A and Forecast B for each contour level is shaded.




The EIS contours for Phase II of the FedEx hub are shown for comparison with the forecast contours for 2014. The 2014 contours are smaller than the EIS contours in almost every area around the airport. All of the contours assume balanced use of the runways by FedEx.

While FAR Part 150 requires contours for the base year (2006) and the five-year forecast year (2011), the FAA allows contours for more distant future years, such as 2014 for the PTIA study. However, as described above, there is a greater degree of uncertainty with the 2014 forecasts than with the forecasts for 2006 and 2011. We will be reviewing the 2014 forecasts and contours with the FAA to determine how to evaluate potential eligibility for mitigation under FAR Part 150.

We will prepare a summary of the input used to prepare these contours so that we can send it to members of the Advisory Committees before the March meetings.

# PIEDMONT TRIAD INTERNATIONAL AIRPORT

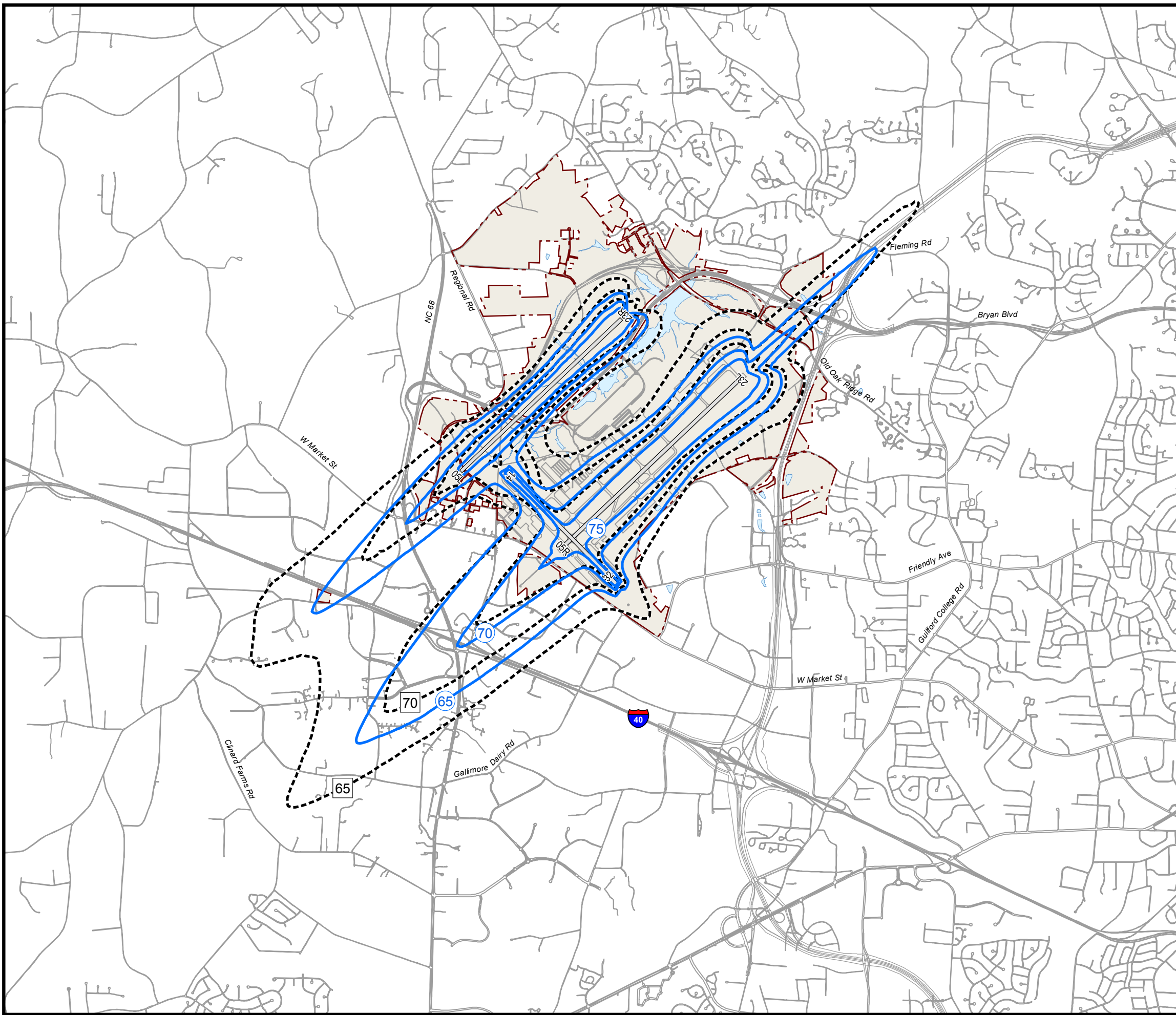
## PART 150 STUDY

-  Airport Runways
-  2011 DNL Contour
-  EIS Phase I W1-A1 Mitigated DNL Contour






### Preliminary 2011 DNL Contours

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# PIEDMONT TRIAD INTERNATIONAL AIRPORT

## PART 150 STUDY

-  Airport Runways
-  2014 Forecast A DNL Contour
-  2014 Forecast B DNL Contour
-  2019 EIS Phase 2 W1-A1 DNL Contour

0 1,500 3,000 4,500 Feet



### Preliminary 2014 DNL Contours

 HARRIS MILLER MILLER & HANSON INC.

