Operational Noise Mitigation Procedures
Final Environmental Assessment

MIAMI INTERNATIONAL AIRPORT

Prepared for
Miami-Dade Aviation Department

MIAMI-DADE

Prepared by

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The Environmental Assessment becomes a Federal document when evaluated and signed and dated by the responsible FAA official.

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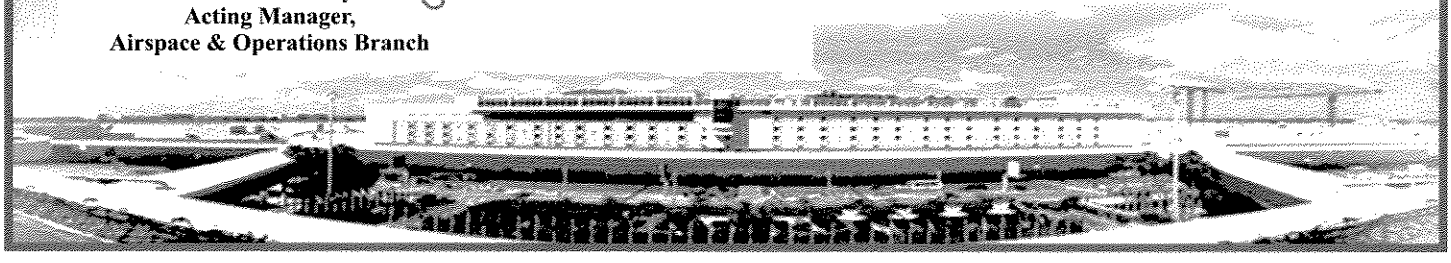
5/25/06
Date

February, 2006



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT
RECORD OF DECISION

Location

Miami International Airport (MIA)
Miami, Florida

Introduction

This Finding of No Significant Impact/Record of Decision (FONSI/ROD) sets out the Federal Aviation Administration's (FAA) consideration of environmental and other factors for the revision of air traffic control procedures for the purpose of noise abatement at Miami International Airport (MIA). This FONSI/ROD is based on the *Operational Noise Mitigation Procedures – Final Environmental Assessment – Miami International Airport* dated February 2006. The document is attached to this finding. The noise mitigation measures intended to minimize potential environmental impacts are identified in the EA and would become part of this air traffic control procedural change. There are no environmental impacts associated with the preferred alternative that are above FAA established significance thresholds.

Project Description

The FAA does not initiate changes of air traffic control procedures solely for the purpose of noise abatement; noise abatement from aircraft noise is the responsibility of the airport operator. The Miami-Dade Aviation Department (MDAD), as the operator of MIA, has requested the FAA to implement noise abatement air traffic control procedures MIA with the intent to reduce aircraft noise impacts to communities located around MIA. The proposed noise abatement measures are the results of recommendations agreed upon by a workgroup consisting of a community-based committee, MDAD and consultants convened to address noise associated with aircraft operations at MIA.

The goals of the proposed alternative are:

- Reduce aircraft departures to east of the airport at night
- Reduce the dispersion of low altitude aircraft departure turns during west flow operations
- Reduce the dispersion of aircraft arrivals and departures east of the airport
- Redirect aircraft over non noise sensitive areas in the vicinity of the barrier islands for both west flow arrivals and east flow departures at MIA

The proposed alternative specifically involves the following:

1. Modification of West Flow Departure Procedures (Day and Night) for heavier turbojet aircraft including air carrier and air cargo type aircraft. Departing aircraft to gain altitude over predominantly industrial and commercial land uses prior to making subsequent turns.

2. Maximization of West Flow Operations during nighttime hours (11:00pm to 6:00am Eastern Standard Time) under calm wind conditions below 5 knots.

3. Modification of East Flow Departure Procedures during east flow conditions at night (11:00pm to 6:00am Eastern Standard Time) for heavier turbojet aircraft including air carrier and air cargo type aircraft. The proposed modifications include the establishment of alternative headings from Runway 8 Left, 8 Right, 9 and 12 to reduce noise exposure over Miami Beach, Key Biscayne, and other beachside communities.

4. Establishment of West Flow Charted Visual Approaches during daytime and nighttime conditions for Runways 26 Right, 26 Left, 27 and 30 to reduce turbojet arrival overflights of Miami Beach, Key Biscayne, and Biscayne Bay.

Proposed Agency Actions

The FAA actions involved in the implementation of the proposed project include the following:

a. Approval of the proposed action pursuant to determination of effects upon the safe and efficient utilization of navigable airspace pursuant to 14 CFR Part 77 .

b. Continued close coordination with Miami-Dade Aviation Department and appropriate FAA program offices regarding air traffic control procedures and FAA policy for air traffic services. The FAA will not monitor the compliance of aircraft operators who request another runway or procedure or chose not to adhere to the proposed federal action. It is the responsibility of the airport operator to monitor compliance to and the effectiveness of noise abatement procedures.

c. Approvals to provide air traffic controller training and updated position responsibilities for new and revised approach/departure procedures and all ATC procedures related to the proposed action (e.g. approval and development of arrival procedures and ATC procedures used in enroute and terminal airspace).

d. Decisions to modify and/or develop air traffic control and airspace management procedures to affect the safe and efficient movement of air traffic to and from the runway. This includes the development of a system for routing arriving and departing traffic and the design, establishment, and publication of standardized flight operations procedures, including instrument approach procedures, standard instrument departure procedures, and new flight procedures into and out of the airport and specifically for the proposed action (49 U.S.C. 40103(b) and 44721 and 14 CFR Part 95).

e. Determinations through the aeronautical study process (49 U.S.C. 44718 and 14 CFR Part 77), regarding any off-airport obstacles that might obstruct the navigable airspace under established standards and criteria (49 U.S.C. 40103(b) and 40113).

f. Approvals to develop new video maps for the proposed action and associated airspace.

g. Designations of controlled airspace and revised routing (14 CFR Parts 71 and 75).

Background

Miami International Airport airfield consists of four air carrier runways. Three of the runways (Runways 8L/26R, 8R/26L and 9/27) are in a parallel east-west configuration and are spaced approximately 800 and 5,100 feet apart. The fourth runway (Runway 12/30) is oriented in a southeast-northwest direction. MIA is located approximately seven miles west-northwest of Miami's central business district. The airport encompasses approximately 3,300 acres and is surrounded by dense urban development to the east, north and south. To the west, industrial commercial and undeveloped areas dominate the landscape. MIA is bordered by the following main highways: Route 836 along the south, Doral Boulevard along the north and I-95 bordering eastern boundary of the airport. Route 826 runs parallel to the west side of the airport. Lake Jeanne and Blue Lagoon Lake are immediately south of Route 836; the Melreese Golf Course is adjacent to the southeast corner of airport property and Miami Springs Golf Course is directly north of Doral Boulevard. The immediate vicinity west side of the airport is comprised of industrial areas. Because of prevailing east winds, the large majority of aircraft arrivals and departures currently take place in an east flow at the Airport, placing departing aircraft over the more densely populated areas east of the airport.

As the owners and operators of the airport, Miami-Dade Aviation Department (MDAD), in cooperation with the Noise Abatement Task Force (NATF) composed of MDAD staff, elected officials and citizens from affected communities commissioned a study and recommended the proposed action. The proposed procedures represent the consensus of recommendations by both the NATF and MDAD. FAA Miami Air Traffic Control Tower represented the Agency during the study to address aviation safety and operational and procedural questions raised by the NATF. The FAA did not select, develop or recommend procedures contained in the proposed alternative.

The public involvement process for the evaluation and recommendation of operational noise abatement actions has been an on-going process at MIA for the past five years, with communities voicing concerns with noise as related to the overall procedures for directing aircraft into and out of the existing four –runway system at the Airport. In 1998, citizens living within the approach and departure corridors and other areas in close proximity to the Airport raised a number of noise issues during the assessment process of the 1998 new Air Carrier Runway Environmental Impact Statement (EIS). Initial meetings of the NATF resulted in identification of the noise issues needing to be addressed and established the following goals for noise abatement:

- Reduce aircraft departures to east of the airport at night
- Reduce the dispersion of low altitude aircraft departure turns during west flow operations
- Reduce the dispersion of aircraft arrivals and departures east of the airport
- Redirect aircraft over non noise sensitive areas in the vicinity of the barrier islands for both west flow arrivals and east flow departures at MIA

Purpose and Need

The purpose of the proposed federal action is to achieve the objectives of the NATF by implementing a series of four flight procedures developed during the NATF process to meet the following goals:

- Reduce aircraft departures to east of the airport at night
- Reduce the dispersion of low altitude aircraft departure turns during west flow operations
- Reduce the dispersion of aircraft arrivals and departures east of the airport
- Redirect aircraft over non noise sensitive areas in the vicinity of the barrier islands for both west flow arrivals and east flow departures at MIA

There are approximately 38,654 people living within the existing 65 DNL contour.

Air traffic control procedures need to be changed to:

1. Reduce aircraft noise exposure in residential areas to the east of the Airport at night by decreasing departures to the east and redirecting them over compatible land areas to the west.
2. Reduce aircraft noise exposure in residential areas to the east of the Airport affected by low altitude aircraft activity by narrowing the flight tracks that currently disperse aircraft over residential areas and by relocating the other arrival and departure tracks over bodies of water to the extent practicable.
3. Reduce aircraft noise exposure to residential area to the west of the Airport affected by low altitude aircraft activity by reducing aircraft dispersion and directing aircraft over compatible land areas to the extent practicable.

Forecasting

In order to assess the impacts resulting from the implementation for the proposed action, a full calendar year of FAA air traffic control operational data from 2003 was established as the base year for the analysis. The fleet mix information for the same period was collected from MIA's airport monitoring system; 2005 and 2010 were selected as the future years of analysis. The 2004 FAA Terminal Area Forecast (TAF) was converted from a federal fiscal year to a calendar year basis to project the forecasted 2005 and 2010 activity levels and modified to reflect actual partial year 2004 activity levels. The growth rates for each category of aircraft were identified in the 2004 TAF were maintained in developing the modified TAF projections. The current and projected trends in the industry were analyzed as well as those specific to MIA and its associated carries to project the fleet mix. This analysis resulted in a detailed fleet mix for both 2005 and 2010.

Alternatives

No Action: Aircraft operations are conducted with current standard operating procedures; the proposed alternative would not be implemented.

Proposed Federal Action: Combination of Procedures 1 through 4 - A combination of four modified air traffic procedures with the intent to reduce aircraft noise impacts in communities

around MIA. All procedures are voluntary and will be implemented only when weather and local/National Airspace System operating conditions permit and upon FAA Air Traffic Control (ATC) discretion. As a voluntary measure, aircraft operators have authority to decline the use of these procedures and request another ATC procedure or runway:

Procedure 1: West Flow Departure Procedures (Day and Night)

Modification of west flow departure patterns during both daytime and nighttime hours for turbojet type aircraft only. Procedures will be implemented only when weather and local/National Airspace System operating conditions permit and upon FAA Air Traffic Control discretion. This alternative does not apply to propeller aircraft.

a. Daytime hours (6:00am to 11:00pm EST)
   i. Runways 27, 26 Left and 26 Right: Depart heading of 270 degrees until reaching either 5 nautical miles (nm) or 4,000 feet Mean Sea Level (MSL) for northbound aircraft or 4 nm or 3,000 feet MSL for southbound aircraft, prior to making initial turns to their destinations. If operational conditions do not permit aircraft to use the above headings, mileage and altitudes, aircraft would use a heading of 290 degrees until reaching either 5 miles or 4,000 feet for northbound aircraft prior to making turns.

   ii. Runway 30: Aircraft depart heading of 305 degrees until reaching either 5 nm or 4,000 feet MSL. If operational conditions do not permit aircraft to use the above headings, mileage and altitudes, aircraft will fly 270 degrees until reaching 5 nautical miles or 4,000 feet for both northbound and southbound aircraft, prior to making turns.

b. Nighttime Hours (11:00pm to 6:00am EST)
   i. Runway 27: departing aircraft use 270 degrees
   ii. Runways 26 Left, 26 Right and 30: departing aircraft use 265 degrees

Procedure 2: Increased use of West Flow Operations at Night (11:00pm to 6:00am EST)

Increase number of aircraft operations to the west during nighttime hours and under calm wind conditions (under 5 knots) and when weather and local/National Airspace System operating conditions permit. This includes all types of aircraft.

Procedure 3: East Flow Departure Procedures Nighttime Hours (11:00pm to 6:00am EST)

Apply to turbojet aircraft only.

a. Southbound Departures:
   iii. Runways 8 Left, 8 Right and 9: departing aircraft turn right and fly to the intersection of the DOLPHIN (DHP) 103 Degree Radial and VIRGINIA KEY (VKZ) 315 Degree Radial. Aircraft proceed along VKZ 315 Degree Radial to VKZ VOR until 2 nautical miles DME (Distance Measuring Equipment) before turning to their final heading.

iv. Runway 12: departing aircraft turn left and join the DOLPHIN (DHP) 103 Degree Radial. Aircraft proceed to the VKZ 315 Degree Radial to VKZ VOR until 2 nautical miles DME before turning to their final heading.

b. Northbound Departures:

v. Normally, approximately 25% of departure operations on Runways 8 Left, 8 Right, 9 and 12: departing aircraft turn left and fly to the intersection of DHP 091 Degree Radial and VKZ 347 Degree Radial. Proceed to the intersection of DHP 084 Degree Radial and VKZ 028 degree radial then turn to final headings.

vi. Likewise, approximately 75% of departure operations on Runways 8 Left, 8 Right, 9 and 12: departing aircraft turn left and fly to the intersection of DHP 076 Degree Radial and VKZ 002 Degree Radial. Proceed to the intersection of DHP 002 Degree Radial and VKZ 028 degree radial then turn to final headings.

Procedure 4: West Flow Chartered Visual Approaches (Daytime and Nighttime)

A separate Charted Visual Approach is proposed for each runway for all turbojet aircraft arrivals to Runways 26 Left, 26 Right, 27 and 30 under west flow conditions. This alternative does not apply to propeller aircraft. It can only be implemented during Visual Flight Rule (VFR) conditions, and may be limited based on local/National Airspace System operational conditions or time of day.

a. Runway 26 Left: Aircraft shall remain offshore until abeam the Julia Tuttle Causeway. Aircraft shall then intercept the Runway 26 Left final approach course, remaining between the Julia Tuttle Causeway and the Venetian Causeway and maintain 3,000 feet MSL until 10 nm from the approach end of the runway.

b. Runway 26 Right: Aircraft shall remain offshore until abeam the Julia Tuttle Causeway. Aircraft shall then intercept the Runway 26 Right final approach course, remaining between the Julia Tuttle Causeway and the Venetian Causeway and maintain 3,000 feet MSL until 10 nm from the approach end of the runway.

c. Runway 27: Aircraft shall remain over the ocean until Government Cut, then overfly the Cut until intercepting the final approach course for Runway 27. Maintain 3,000 feet MSL until 10 nm from the approach end of the runway.

d. Runway 30:

i. Aircraft approaching from the north or south shall remain over the ocean until the northern boundary of Key Biscayne, then turn northwest over Biscayne Bay to intercept the final approach course to Runway 30. Maintain 3,000 feet MSL until 10 nm from the approach end of the runway.

ii. Aircraft approaching from the west or southwest shall maintain 3,000 feet MSL until crossing the western shoreline of Biscayne Bay eastbound and remain over Biscayne Bay until Rickenbacker Causeway. Interept the final approach course for Runway 30. Maintain 3,000 feet MSL until 10 nautical miles from the approach end of the runway.

Alternatives one through four are proposed as a single federal action. All noise abatement procedures are implemented when weather and operational conditions permit (local and National Airspace System conditions).

Alternatives Considered but Rejected

- Restrict Operations at Night – This alternative was rejected because it does not meet the need to serve the demands of the aviation industry and federal legislation strongly discourages this measure. Also, under current federal legislation, this measure would require extensive further analysis in the form of FAR Part 161 studies.
- Restriction on Aircraft Types – This alternative was rejected because it does not meet the need to serve the demands of the aviation industry and federal legislation strongly discourages this measure. Also, under current federal legislation, this measure would require extensive further analysis in the form of FAR Part 161 studies.
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- Multiple Departure Headings Other than used in the Preferred Alternative: Many different departure headings were discussed and modeled before the NATF that did not meet the purpose and need of the study.
- Single Departure Headings to the West – Discussions and modeling determined that a single departure heading to the west was not operationally feasible.

The procedures considered but rejected do not meet the established purpose and need and would have an adverse impact on the safety and efficiency of the National Airspace System. Therefore, they were not considered to be viable or reasonable alternatives for achieving the purpose and need and were not carried forward for further evaluation in the EA. These proposed alternatives were limited due to nearby airspace limitations, air traffic congestion, prevailing east winds and dense residential development surrounding the airport. A number of other arrival and departure procedures designed to reduce aircraft noise in the communities around MIA have been evaluated over the years as part of the NATF process and during previous tests and studies dating back to 1996; these were determined to be operationally infeasible or did not result in any noise relief.

Study Area

The study area focused on those residential areas primarily to the east and west of the Airport affected by aircraft noise at an average day-night sound level (DNL) of 65 decibels (dB) or greater and on residential areas that are affected by aircraft noise but at levels less than 65 DNL. The 65 DNL is the level which the FAA considers incompatible with many land uses and the level at which funding is made available for noise abatement measures. Levels of less than 65 DNL are considered generally compatible with sensitive land uses, such as residential areas, by the Federal Interagency Committee on Aviation Noise (FICAN), a working group of federal agencies involved in protecting the public health and welfare with regard to noise. There are 17 noise sensitive sites within the study area consisting of 10 churches, one golf course, five parks and one school.

Noise

To meet the requirements FAA Order 1050.1E - *Environmental Impacts: Policies and Procedures,* a noise study for the proposed noise abatement procedures was completed. Additionally, a supplemental noise evaluation was conducted consistent with FAA's Air Traffic Noise Screening (ATNS) criteria as defined in FAA Order 1050.1E. The noise study reports are presented in Section 3 and Appendix C of the EA.

1. **Baseline 2003 Noise Contours**
   Portions of five local governments in the vicinity of MIA are within the projected 2003 65 DNL and greater noise contours:

   - Unincorporated Miami-Dade County (physical location of MIA)
   - The City of Miami Springs (borders MIA on the north)
   - The Village of Virginia Gardens (borders MIA on the north)
   - The City of Miami, (borders MIA on the east and southeast)
   - The City of Hialeah (northeast of MIA)

   The 65 DNL contour extends approximately 3 miles east and west of MIA; the total population within the 65 DNL and above contours is 38,654. The surface area of the contours are 12.61, 5.16 and 2.17 square miles respectively for the 65, 70 and 75 DNL contours.

   Other areas experiencing aircraft overflights that are outside the projected 2003 65 DNL contour include Miami Beach and Key Biscayne.

2. **Future 2005 and 2010 No Action Noise Contours – Contour Sizes**
   The 65 DNL is the level which the FAA considers incompatible with many land uses and the level at which funding is made available for noise abatement measures. Levels of less than 65 DNL are considered generally compatible with sensitive land uses, such as residential areas.

   The area under the noise contours for 2005 and 2010 no action scenarios compared to the 2003 baseline would increase due to the increase of forecast operations.

   The area (in square miles) for 2005 contours when compared to the 2003 baseline conditions are projected to change as follows: 65-70 DNL would increase from 7.448 to 7.501; 70-75 DNL would increase from 2.991 to 3.030 and contours greater than 75 DNL would increase from 2.167 to 2.214. The overall change of the DNL contours for 2005 would increase from 12.606 to 12.745 square miles (an 0.139 square mile increase).

   The area (in square miles) for 2010 contours are projected to change (compared to 2003) as follows: 65-70 DNL would increase from 7.448 to 7.696; 70-75 DNL would increase from 2.991 to 3.103 and contours greater than 75 DNL would increase from 2.167 to 2.248. The overall change of the DNL contours for 2010 would increase from 12.606 to 13.047 square miles (an 0.551 square mile increase).

3. **Future 2005 and 2010 No Action Noise Contours – Population**

The population under the future no-action noise contours for 2005 compared to the 2003 baseline contours is projected to change as follows: the population under the 65-70 DNL would increase from 34,801 to 35,161; 70-75 DNL would decrease from 3,853 to 3,811 and the population under contours greater than 75 DNL remain unchanged at 0. The overall change of the of the population under the DNL contours for 2005 would increase from 38,654 to 38,972 people (a 318 person increase).

The population under the noise contours for 2010 compared to the 2003 baseline contours is projected to change as follows: the population under the 65-70 DNL would increase from 34,801 to 36,748; 70-75 DNL would decrease from 3,853 to 3,762 and the population under contours greater than 75 DNL remain unchanged at 0. The overall net change of the population under the DNL contours for 2010 would increase from 38,654 to 40,510 people (a net increase of 1,856 people).

4. **Proposed Federal Action (Combination of Proposed Procedures 1,2,3,4) versus the 2005 No Action Alternative**

The area (in square miles) for the 2005 Proposed Action contours compared to the 2005 No Action contours are projected to change as follows: 65-70 DNL would increase from 7.501 to 7.917; 70-75 DNL would decrease from 3.030 to 3.004 and contours greater than 75 DNL would decrease from 2.214 to 2.197. The overall change of the DNL contours for 2005 would increase from 12.745 to 13.118 square miles (an 0.373 square mile increase).

The area (in square miles) for the 2010 Proposed Action contours compared to the 2010 No Action contours are projected to change as follows: 65-70 DNL would increase from 7.696 to 8.087; 70-75 DNL would decrease from 3.103 to 3.071 and contours greater than 75 DNL would decrease from 2.248 to 2.233. The overall change of the DNL contours for 2010 would increase from 13.047 to 13.401 square miles (an 0.354 square mile increase).

5. **Proposed Federal Action versus the 2005 and 2010 No Action Alternative-Population**

The population under the noise contours for proposed federal action in 2005 compared to the 2005 No Action Alternative contours is projected to change as follows: the population under the 65-70 DNL would decrease from 35,161 to 32,880; 70-75 DNL would decrease from 3,811 to 2,439 and the population under contours greater than 75 DNL remain unchanged at 0. The overall change of the population under the DNL contours for 2005 would decrease from 38,972 to 35,319 people (a decrease of 3,653 people).

The population under the noise contours for proposed federal action in 2010 compared to the 2010 No Action Alternative contours is projected to change as follows: the population under the 65-70 DNL would decrease from 36,748 to 34,343; 70-75 DNL

would decrease from 3,762 to 2,519 and the population under contours greater than 75 DNL remain unchanged at 0. The overall change of the population under the DNL contours for 2010 would decrease from 40,509 to 36,862 people (a decrease of 3,647 people).

In 2005, the DNL change with the proposed federal action compared to the No-Action Alternative occurs at 19 other noise sensitive sites (churches, golf courses, schools) with 18 being reductions and one site increasing in noise exposure. The changes range from +0.1 DNL to –1.5 DNL in 2005. For 2010 a DNL change occurs at 17 sites with 16 being reductions and one increasing in noise exposure. The changes range from +0.1 DNL to –1.5 DNL in 2010. The results are presented on Pages 4-4 and 4-6 of the EA.

The persons removed from the 70-75 DNL would experience levels from 65-70 DNL and those removed from the 65-70 DNL would experience noise levels below 65 DNL. No persons would be added to the 65 DNL who were not within the 65 DNL limits with the No Action Alternative. The population count reflects residents only and is a net amount.

The Air Traffic Noise Screening Model for the proposed federal action of aircraft operations at altitudes between 3,000 and 10,000 feet AGL determined that the areas under these altitudes would not experience a 5 dB or greater increase of noise exposure. No further noise analysis is required as a result of this determination under FAA Order 1050.1e.

6. Analysis of Procedures on an individual basis
   The analysis of each procedure on an individual basis in discussed on pages 4-7 through 4-15 of the EA.

Compatible Land Use

MIA is located 7 miles north east of central Miami with residences to the north, east and south. Industrial areas are located west of the airport. There is an overall reduction of residential land use within the DNL contours as a result of the proposed federal action.

For 2005, the proposed action reduces the total acreage of residential land impacted within the 65 DNL by 96 acres when compared to the 2005 No Action Alternative; in 2010 the total acreage reduces by 93 acres.

No noise sensitive sites experience an increase of 1.5 DNL within the 65 DNL with the proposed federal action.

Air Quality

The Miami/Fort Lauderdale/West Palm Beach area is designated attainment for the following National Ambient Air Quality Standards (NAAQS): carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (PM) and lead (Pb); the area is designated maintenance for ozone (O_3).

An emission inventory was prepared using the Emissions and Dispersion Modeling System (EDMS) Version 4.2. The following emissions were inventoried: CO, Volatile Organic Compounds (VOC), NOx and sulfur oxides (SOx); EDMS does not project emission rates for particulate matter (PM).

The aircraft operational level, fleet mix, and taxi/queue delay were assumed to be the same for alternatives (including the No Action Alternative). The evaluation focused on the change in air pollutant emission levels resulting in the change in taxi distance when compared to the No Action Alternative. Proposed Procedure 2 (maximization of west flow operations during nighttime hours) is the only alternative that would affect taxi distances. This analysis is discussed in Section 4.3 of the EA.

The results of the analysis for Procedure 2 indicate that the emissions of CO, VOC, NOx and SOx would decrease approximately one to six pounds per day in 2005 and one to seven pounds per day in 2010. This decrease in emissions is considered minor. Based on the current maintenance designation for O_3 within Dade County, the deminimis level is 100 tons/year of VOC or NOx. Procedure 2 is the only procedure that would change taxi distances and would result in a minor decrease in VOC and NOx emissions; thus, the project is presumed to conform to the Clean Air Act. The proposed action would result in a minor decrease in emissions, therefore there is no need to evaluate the regional significance of project related emissions. Mitigation for Air Quality is not required for the proposed action.

There are no motor vehicle related transportation plans, programs or project associated with the proposed federal action, therefore transportation conformity under Title 23 of the United States Code or the Federal Transit Act (49 U.S.C. 1601) does not apply to this project.

Section 303c Properties

The proposed federal action does not result in any actual or constructive use of any publicly owned land from a public park, recreation area or wildlife and waterfowl refuge of National, State or local significance. Five publicly owned parks and one golf course are located within the 65 DNL contour for the Proposed Action; there are no wildlife or waterfowl refuges within the 65 DNL or the vicinity of MIA that will be subject to a change in aircraft overflight activity. The closest refuge is located approximately 40 nautical miles north of MIA (Loxahatchee National Wildlife Refuge).

Two national parks – Biscayne Bay National Park and Everglades National Park are located well beyond the 65 DNL contour and experience aircraft overflights. Analysis of two sites at Biscayne Bay National Park indicated that there is a DNL of 32.8 at Blockpoint and 37.6 for Stiltsville for the No Action Alternative in 2005; these sites are projected to decrease to 31.1 and 37.4 with the implementation of the proposed federal action in 2005. In 2010 the DNL values decrease from 32.9 and 37.7 to 31.1 DNL and 37.4 DNL respectively with the implementation of the proposed federal action.

Analysis of two sites at Everglades National Park indicated that there is a DNL of 16.0 at Chekika Parking Lot and 26.5 for Shark River Slough for the No Action Alternative in 2005; the DNLvalues at these sites are projected to change to 16.7 and 23.5 with the implementation of the Proposed federal Action in 2005. In 2010 the DNL values are expected to change from 16.1 and 26.7 (No Action) to 16.8 DNL and 23.8 DNL respectively with the implementation of the proposed federal action.

Historic Sites

The noise exposure for the 2005 and 2010 conditions for the No Action and the proposed federal action are less extensive than those examined in a prior Environmental Impact Statement conducted in 1998 for the Air Carrier Runway at MIA that determined that there were no significant archaeological or historical sites recorded or likely to be present within the project areas, and that it was very unlikely that any such sites would be affected. Appendix D of the EA contains the correspondence pertaining to the 1998 EIS and historical site identification. In addition, there is no significant noise exposure would occur at any tribal lands.

Energy

Changes in fuel use were evaluated by assessing the change in taxi routes and the increase of flight track distances resulting from the proposed federal action; it was assumed that the aircraft operational level, fleet mix and aircraft taxi/queue delay would be the same with the proposed federal action and the No Action alternatives.

Procedure 1 would have an increase in fuel use by 103 gallons per day for 2005 and 230 gallons/day in 2010 when compared to the No Action Alternative; Procedure two would have a decrease of 130 and 235 gallons respectively. The decrease in energy use for Procedure 2 is a result of the decrease in taxi time. Section 4.6 of the EA discusses energy analysis.

Environmental Justice, Children's Environmental Health and Safety Risks, and Socioeconomic Impacts

Environmental Justice

In accordance with *Executive Order (EO) 12898, Federal Action to Address Environmental Justice in Minority Populations and Low-income Populations (1994),* information was obtained regarding the presence of minorities and/or low-income persons in the vicinity of the proposed airport development.

The analysis of the population within the 65 and above DNL contours consisted of the total population, minority population and low-income households for each procedure under consideration. The minority populations include all non-white race categories included in the 2000 Census. In addition to the race categories, persons of Hispanic or Latino origin were also considered. Census data indicates that 57.3% of Miami-Dade county residents are Hispanic or Latino origin.

Section 4.7 of the EA discusses the environmental justice impacts; all populations would experience a reduction in noise impact as a result of the implementation of the proposed federal action. The proposed federal action does not consist of any construction, property acquisition, or relocation of housing or businesses. Therefore no significant environmental justice impacts were identified.

Children's Environmental Health and Safety Risks

The proposed federal action does not consist of any construction activities and air and water quality analysis has determined that there are no significant impacts on these resources; therefore there are no significant impacts on children's environmental health and safety.

Construction Impacts

There are no construction activities associated with the proposed federal action.

Fish, Wildlife, and Plants

There are no construction activities associated with the proposed federal action that would affect fish wildlife and plants.

Secondary/Induced Impacts

The proposed federal action is for noise mitigation purposes and does not involve any construction or development proposals and does not increase the number of aircraft operations at the airport. Therefore there would be no secondary impacts on the surrounding communities.

Water Quality

The proposed federal action does not involve any construction and has no affect on water quality.

Wetlands

The proposed federal action does not affect surface resources nor result in the development of facilities, therefore no impacts would occur on wetlands.

Wild and Scenic Rivers

No stream or river area exposed to arrivals or departures of aircraft operations below 10,000 feet above ground level appear to qualify as a Wild or Scenic River. Therefore no analysis for this category for the proposed federal action was required.

Other Impact Categories

Coastal Resources

The proposed action would not affect surface resources nor result in the development of facilities. Therefore no impacts would occur under this category.

Light Emissions

No approach lighting, airport facility lighting, parking area lighting or other ground lighting is included in the proposed federal action, thus the proposed federal action would have no effect on Light Emissions or Visual Impacts.

The proposed federal action does not consist of any construction activities or acquisition or taking of any land. Therefore would have no impact to the following resource categories: farmlands; endangered and threatened species of flora and fauna; floodplains; architectural, archaeological and cultural resources; natural resources and hazardous materials and solid waste.

Cumulative Impacts

Cumulative effects on noise impacts were analyzed and discussed above under "Noise".

Summary of Impacts

The implementation of the proposed federal action will not change the number of aircraft operations at MIA when compared to the No-Action scenario for 2005 and 2010; the total noise generated by aircraft would remain the same but would be redistributed to reduce noise exposure on noise sensitive areas. The proposed federal action results in a decrease in the number of people impacted within the 65 and greater DNL contour, with the reductions located east of the airport. Flight track modifications are being recommended to minimize overflights of residential areas that are outside the 65 DNL; aircraft are being directed over land that is compatible with aircraft noise to the greatest extent possible west of MIA over industrial areas. The proposed federal action does not contain any construction activities nor the acquisition or constructive use of property; there will be no relocation of residences or businesses, nor will there be any affects on natural biological or water resources. Aircraft emissions and energy use (aircraft fuel) are projected to slightly decrease due to decreasing taxi distances associated with Procedure 2.

Mitigation

The purpose of the proposed federal action is to reduce noise impacts on the communities surrounding MIA; therefore there are no mitigating actions as part of or in addition to the proposed federal action.

Coordination with the General Public

The sponsor has closely coordinated this project with various jurisdictional agencies and established a Noise Abatement Task Force (NATF) composed of MDAD staff, elected officials and citizens from affected areas. The NATF citizen representation was not restricted to individuals within the 65 DNL noise contours. The NATF included representatives from MIA Air Traffic Control Tower (ATCT), MDAD and MDAD consultants. Participation of MIA ATCT was restricted to technical advisement pertaining to the safety and operation of the National Airspace System. MIA ATCT did not specifically recommend, develop or select any of the alternatives contained in the EA. Meetings were held on a monthly basis.

Initial meetings of the NATF resulted in the identification of the noise issues and established the goals for the noise abatement program and the purpose and need of the federal proposed action. The EA represents the consensus of recommendations by both the NATF and the MDAD.

A 30-day public comment period was held for the Draft EA; during the public comment period, copies of the Draft EA was made available for review at the MDAD Aircraft Noise & Environmental Planning Office and was posted on MIA's website (www.miami-airport.com).

Interested parties were given 30 days to provide comments on the Draft EA and public notifications were published in local newspapers written in English (*The Miami Herald* and *The Miami Times*) and in Spanish (*El Nuevo Herold* and *Diario Las Americas*). The notification dates were November 18th through the 22nd and the 25th 2005. Comments were accepted until the close of business on Monday, December 19, 2005. The public comments received and responses to these comments are included in the Final EA and were considered in the decision making process.

The Draft EA was also distributed to the applicable federal, state and local government offices. Responses to agency comments are contained in Appendix G of the EA.

Comments received included concerns about the population changes within each specific contour (65, 70, 75 DNL), impacts on persons of Hispanic origin, the possibility of noise abatement procedures during the daytime and an opposition to the proposed alternative Procedure 2 by the City of Doral. FAA ensured that the comments were appropriately addressed in the Final EA and determined that alterations to the proposed federal action were not required as a result of the comments.

The proposed federal action is a combination of four procedures that are intended to reduce noise levels over residential areas, including the City of Doral. The City of Doral currently experienced direct overflights of aircraft departing to the west day and night. These overflights are particularly disturbing to the residents at night. The proposed federal action has nighttime aircraft departures directed along the 265-degree heading away from the City of Doral. Under the No Action alternative, aircraft will continue to depart over the City of Doral at night.

No residential areas within the City of Doral are located within the 65 DNL noise contours with the proposed federal action. Procedure 2 does increase the overall flow of the airport to the west at night, but it does not increase the number of operations west of the airport. The change results

in more turbojet aircraft departures to the west at night with a corresponding reduction in arrivals from the west at night. There would be no change in the total number of operations west of the airport with or without the implementation of Procedure 2. However, there will be less aircraft flying over the City of Doral at night under the proposed federal action due to all departing aircraft being directed along the 265-degree heading and due to the reduction of arrival aircraft over the city brought about by the change in flow from east to west.

Agency Findings

Implementation of the proposed action will provide for the safe and efficient use of the airport.

FAA hereby makes the following determinations and approvals for this project, based on the appropriate information and data contained in the Final EA and having considered: the policies set forth at 49 U.S.C. 40104 and 47101; and the ability of the alternatives to meet the purpose and need:

1. The project is consistent with existing plans of public agencies for development of the area surrounding the airport (49 U.S.C. 47106(a)(1)).

2. The interest of the communities in or near where the project may be located was given fair consideration (49 U.S.C. 47106(b)(2)).

3. The FAA has given the proposal the independent, thorough, and objective evaluation required (CEQ Regulations 40 CFR 1506.5).

4. MDAD has provided the opportunity for a public hearing to consider economic, social, and environmental effects of the project and the project's consistency with the objectives of any planning that the community has carried out (49 U.S.C. 47106(1)(a)(I)).

Decision and Order

The FAA recognizes its responsibilities under the National Environmental Policy Act of 1969 (NEPA) and its implementing Council on Environmental Quality (CEQ) regulations, and its own directives. Recognizing these responsibilities, I have carefully considered the FAA's goals and objectives in relation to the various aeronautical aspects as discussed in the Final Environmental Assessment, and I have used the environmental process to make a more informed decision. This review included the purposes and needs to be served by this project, alternative means of achieving them, the environmental impacts of these alternatives, and any mitigation necessary to preserve and enhance the human environment.

The final environmental documents satisfy the policies and objectives as set forth in Section 101(a) of NEPA and demonstrate that the project will not significantly affect the quality of the human environment or otherwise include any condition requiring consultation pursuant to Section 102(2)(C) of NEPA.

Having carefully considered aviation safety and the operational objectives of the proposed project, as well as being properly advised as to the anticipated environmental impacts of the proposed action, under the authority delegated to me by the Administrator of the FAA, I find that the project is reasonably supported. Approval of the proposed federal action is based on determinations through aeronautical studies regarding potential obstructions to navigable airspace, and that the airport development proposal is acceptable from an airspace perspective. I therefore direct that action be taken to carry out the agency actions noted above. Specifically:

a. Approvals to provide air traffic controller training and updated position responsibilities for new noise abatement approach/departure procedures and all ATC procedures related to the new noise abatement procedures (e.g. approval and development of arrival procedures and ATC procedures used in enroute and terminal airspace).

b. Decisions to modify and/or develop air traffic control and airspace management procedures to affect the safe and efficient movement of air traffic to and from the runway. This includes the development of a system for routing arriving and departing traffic and the design, establishment, and publication of standardized flight operations procedures, including instrument approach procedures, standard instrument departure procedures, and new flight procedures into and out of the airport (49 U.S.C. 40103(b) and 44721 and 14 CFR Part 95).

c. Determinations through the aeronautical study process (14 CFR Part 77), regarding any off-airport obstacles that might obstruct the navigable airspace under established standards and criteria (49 U.S.C. 40103(b) and 40113).

d. Approvals to develop new video maps and publications for the proposed federal action and associated airspace.

e. Designations of controlled airspace and revised routing (14 CFR Parts 71 and 75).

Approved: J G McCartney 5/24/06

John G. McCartney
Acting Area Director
FAA, Eastern Terminal Service Area

Date

This decision, including any potential subsequent actions approving a grant of federal funds to Miami International Airport is taken pursuant to the 49 U.S.C. § 40101 et seq. (Part A) and 49 U.S.C. § 47101 et seq. (Part B), and constitutes a final order of the Administrator which is subject to review by the courts of appeals of the United States in accordance with the provision of 49 U.S.C. § 46110.