

Noise Brochure



Prepared by the

 **Greater Orlando Aviation Authority**

and the

Aviation Noise Abatement Committee



Overview of Brochure



This brochure is intended to provide aircraft noise information related to Orlando International Airport (OIA) and Orlando Executive Airport (OEA). This brochure summarizes noise exposure information for those located within aircraft arrival and departure corridors or for those individuals who are considering locating in the vicinity of these airports. Specifically the brochure includes:



- An overview of aircraft noise exposure
- A summary of the noise abatement programs established at both airports
- A discussion of the role of the Aviation Noise Abatement Committee (ANAC) in the review of noise issues
- A description of the roles and responsibilities of those implementing the noise abatement measures
- A summary of the Noise and Operations Monitoring System (NOMS) and Noise Abatement Office (NAO)

Aircraft Noise Exposure

Aircraft noise exposure can extend miles beyond the limits of an airport. Most noise impacts occur when aircraft are on their final approach to or initial departure paths from the airport. Since there is a wide range of sensitivity to noise, the perceived extent of noise annoyance for an individual is largely dependent on his or her personal reaction to it. The noise heard at any given point on the ground can also vary widely due to a number of factors:

- Generally, older jet aircraft are louder than newer ones. New aircraft noise exposure standards must be met by the fall of 2003
- Generally, departing aircraft are louder than arriving aircraft
- Aircraft departing for distant destinations are louder than those traveling to closer destinations (aircraft with greater fuel load cannot climb as rapidly)
- An aircraft arriving or departing at night is generally perceived to be louder than the same aircraft arriving or departing during the day (a person's sensitivity to noise is greater during sleeping hours)

Weather conditions can also affect the noise level of aircraft:

- Low cloud cover may increase the noise level by reflecting back to the ground
- Pilots may be directed to avoid thunderstorm activity by flying outside normal arrival and departure routes
- Very low cloud cover may require aircraft to use an instrument landing resulting in longer approaches



Thunderstorm activity

Noise exposure can also change as a result of the construction of new runways and runway extensions. A fourth runway is under construction at OIA. This will result in new areas being affected by aircraft flyover activity.



Fourth runway layout

Although operations at OIA and OEA have increased, noise exposure has been reduced in many areas around these facilities. This is a result of:

- Quieter aircraft technology developed by the industry
- Mandatory requirements by the Federal government to phase out noisier aircraft
- The implementation of noise abatement procedures

About the Airports

OIA and OEA, which are public airports and part of the National Airspace System (NAS) are owned by the City of Orlando and operated by the Greater Orlando Aviation Authority (GOAA). GOAA consists of a seven member board. Five members are

appointed by the governor of the State of Florida, one member is selected from the Orlando City Council and one member is selected from the Orange County Commission. The Authority provides direction to its executive director and staff which operate the day-to-day activities of the airports.



Orlando International Airport

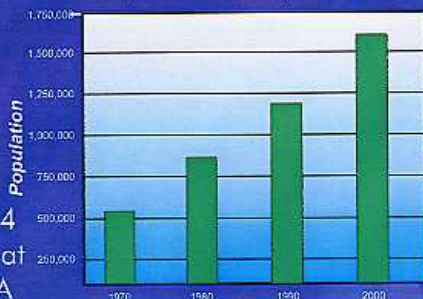
OIA is located southeast of Orlando. One of the 15th busiest airports in the United States, OIA provides service to and from cities throughout the U.S. and the world. With increased tourism, business and industry in the greater



Orlando Executive Airport

Orlando area, OIA has grown to keep pace with demands for passenger and air cargo service. Economic analyses indicates that OIA supports approximately 60,000 direct and indirect jobs. Direct and indirect impact on the local economy is approximately \$14 billion per year. Growth is forecast at OIA in the years ahead and GOAA is expanding the facility to meet those demands.

Metropolitan Orlando Population Growth



Major areas of expansion currently underway at OIA include a fourth runway to be located approximately 4,300 feet east of and parallel to the existing easternmost runway and the addition of aircraft gates, terminal facilities and support facilities within the existing property boundaries of OIA.

OEA is a major General Aviation (GA) facility located east of downtown Orlando and is designated as a reliever facility for OIA. This allows OIA to focus on providing air carrier service while OEA accommodates general aviation, ambulance services, police helicopters, and extensive business aviation needs. Increases in general aviation aircraft activity are projected for OEA and the Authority is expanding and modernizing facilities to meet these needs. In addition, major terminal expansion has recently been completed by OEA's fixed base operators (FBOs).



Sheriff helicopters at OEA



GA activity at OEA

Noise Abatement Program Summary

Noise Abatement Programs have been established at OIA and OEA. These programs include noise exposure reductions through establishment of:

- Operational procedures
- Federal legislation
- Compatible land use plans

Most of these airport operating procedures were established and have been in effect since the late 1970's and early 1980's. Occasionally, minor modifications to these procedures occur when they are shown to reduce noise exposure to the overall community. Changes to operational procedures will result whenever a new runway is placed into operation. OIA plans to open a fourth runway in late 2003. Environmental and noise studies have been completed which establish the basis for its operation.

Federal legislation mandated air carrier/air cargo and aircraft manufacturers to stricter noise standards. Aircraft operators must comply with this legislation by the end of 2003. Existing aircraft which do not meet the new standards must be replaced or retrofitted (aircraft weighing over 75,000 lbs.). The resulting noise reduction would benefit communities affected by these aircraft serving OIA.

GOAA has acquired property in high noise exposure areas to improve the compatibility between off-airport land use and aircraft overflight activity. Local governments have enacted ordinances that require future development to be compatible with aircraft noise exposure. In addition, certain areas around OIA and OEA are subject to aviation easements, waiver of claim, and/or notice of aircraft activity. These represent forms of notification that overflights occur today or will occur in the future as a result of growth in aircraft activity and planned runway development. It should be noted that there are off-airport areas affected by aircraft operations that do not include a site specific notification. Information concerning aircraft activity and noise exposure at specific sites can be obtained by contacting the Noise Abatement Officer 407.825.2674.

Primary Aircraft Overflight Areas

The four exhibits shown on the following pages represent the primary final arrival corridors and initial departure corridors for aircraft operating at OIA and OEA. These corridors represent where the majority of aircraft overflights occur, however, some aircraft overflights will occur outside of these flight tracks. The arrows shaded in blue are the primary arrival corridors. Arrows shaded in green are the primary departure corridors. The size of the arrows on all exhibits indicates the relative arrival and departure activity. The larger the arrows, the greater the number of aircraft operations.

Exhibit 1 depicts aircraft flow to the south at OIA. This represents the primary flow of aircraft at the airport, occurring about 85 percent of the time. Exhibit 2 depicts northerly flow at OIA. This represents the primary areas of overflights the remaining 15 percent of the time. It should be noted that a fourth runway on the east side of the airport is under construction. The flight corridors presented on Exhibits 1 and 2 include the primary locations of arrivals and departures operating to and from this new runway.

Exhibit 3 depicts the primary flight corridors for west flow at OEA. Exhibit 4 depicts the primary flight corridors for east flow at OEA. West flow at OEA occurs approximately 40 percent of

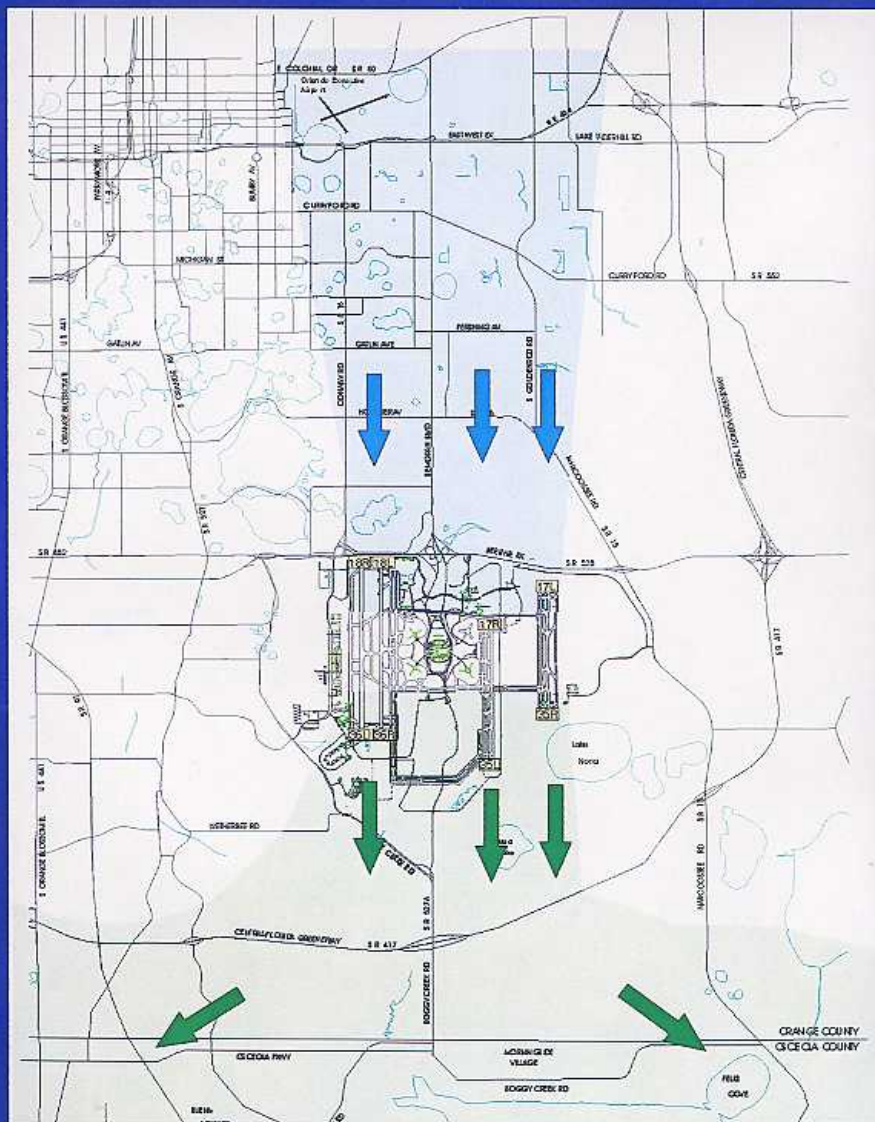
the time. East flow occurs about 60 percent of the time. The noisiest locations for OIA and OEA are generally the closest to the airports and toward the center of the corridors.



***Air Traffic Control Tower
Orlando Executive Airport***

ORLANDO INTERNATIONAL AIRPORT

South Flow (85% of time, seasonally)



LEGEND

- Arrivals
- Departures



Exhibit 1

Aviation Noise Abatement Committee

The Aviation Noise Abatement Committee (ANAC) is a volunteer citizen committee organized in 1978 to find ways of reducing the impact of aircraft noise in the community. The Committee reviews noise complaints and recommends changes in aircraft operational procedures or land use controls to reduce aircraft noise around OIA and OEA.



Aviation Noise Abatement Committee

ANAC is comprised of 10 voting members, 7 are local citizens selected by their governments to represent various communities or interests in the area. The Greater Orlando Aviation Authority (GOAA) selects 3 members; one is a citizen from the community at large, one is a member of the GOAA staff and one is a representative from Orlando Executive Airport.

ANAC is technically supported in an advisory capacity by the Authority's Noise Abatement Officer, the Federal Aviation Administration's Orlando Air Traffic Control Tower personnel, land planners from local jurisdictions, and noise/land use consultants.

ANAC meetings are advertised and held monthly. Public attendance and input is encouraged. Meeting dates can be confirmed by calling the Noise Abatement Officer at 407.825.2674.

For current listing of ANAC members and the communities they represent, contact the Noise Abatement Officer at 407.825.2674 or reference our web page, www.orlandoairports.net/goaa/noise

Noise Abatement Implementation Responsibilities

Effective implementation of a noise abatement program requires the cooperation and coordination of numerous participants, each having unique responsibilities. For OIA and OEA, these participants include:

ANAC

which is responsible for reviewing community input and recommending noise control measures to the Aviation Authority.



Federal Government



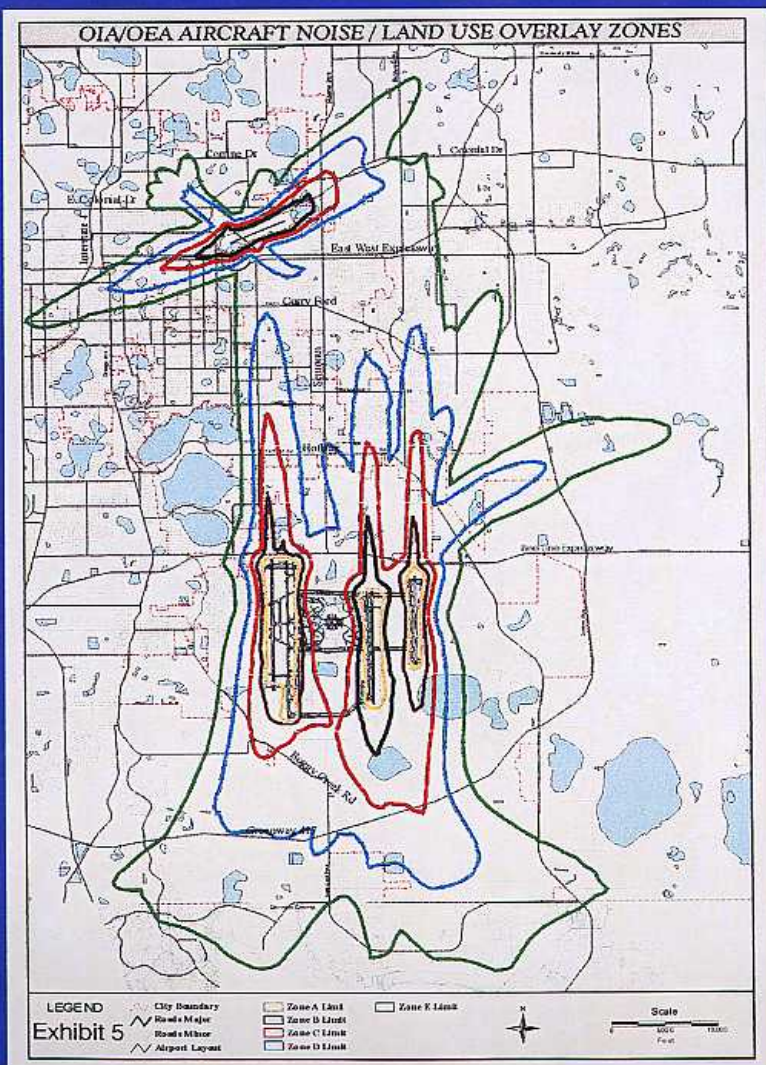
which has the authority and is responsible for controlling aircraft noise by regulating source emissions. The FAA's Air Traffic Control has the authority to implement noise abatement operational procedures which have been recommended by the airport proprietor and have been shown to be consistent with air safety and all legal requirements.



Greater Orlando Aviation Authority

which is responsible for planning and implementing actions designed to reduce the effect of noise on residents of the surrounding area. Such actions include noise abatement procedures, land acquisition and other controls that do not discriminate, create an unsafe situation, impede the management of the air navigation system, or interfere with interstate or foreign commerce. (See Exhibit 5)

AIRCRAFT NOISE/LAND USE OVERLAY ZONES MAP



The City of Orlando and Orange County, FL have both adopted ordinances amending previously existing ordinances relating to aircraft noise. Section 58.383 of the Code of the City of Orlando and Section 6 of Orange County Ordinance Number 2000-07 require public notice of the existence of Aircraft Noise/Land Use Overlay Zones Map.

Local Government and Planning Agencies

which have the responsibility for land use planning, zoning and housing regulations, review proposed developments to ensure compatibility with airport operations. Contact the Planning Department at the following agencies for information on land-use ordinances:

City of Orlando

Orange County

City of Belle Isle

Osceola County

East Central Florida Regional Planning Council

Air Carriers, Charter and Cargo Operators



are mandated by the FAA to retire or retrofit older, noisier aircraft to meet more stringent noise (Stage III) standards by 2003. Pilots associated with these entities, and general aviation pilots, have the responsibility to fly aircraft in ways that minimize the impact of noise on people.

Air Travelers and Shippers

generally bear the cost of noise reduction measures through the payment of various waybill and passenger facility fees.



Surcharge on airline tickets

Noise and Operations Monitoring System

The Authority operates a Noise and Operations Monitoring System (NOMS) that provides noise and flight tracking information for OIA and OEA. The system consists of a series of permanent and portable noise monitoring stations used to collect noise exposure data. In addition, the NOMS records flight track information and aircraft altitudes. Data collected from the system is transmitted to a central computer located in the Authority offices. Data is stored and used to evaluate noise complaints, document runway use and flight corridors, assist in the development of noise mitigation measures, identify trends in noise exposure and provide support for the development of noise contours. Specific data related to noise monitoring is available for review at the Noise Abatement Office.



Noise monitor equipment near OIA

Noise Abatement Officer

The Authority has a full-time noise abatement officer on staff. This individual is responsible for operating the NOMS system, supporting ANAC, assisting in the implementation of noise abatement measures, talking with citizens who have questions or complaints regarding aircraft noise and maintaining the latest information related to aircraft noise around OIA and OEA.

Your Input

is very important. The Aviation Authority's Noise Abatement Officer and ANAC actively seek a continuous dialog with community representatives and individuals regarding aircraft noise exposure. If you have questions regarding aircraft noise issues, attend the next ANAC meeting or call the Authority's Noise Abatement Officer. ANAC meetings are normally held on the second Friday of each month but dates can vary. To verify the next meeting date or to speak with the Aviation Authority's Noise Abatement Officer, please contact the:

Noise Abatement Office
Greater Orlando Aviation Authority
Orlando International Airport
One Airport Boulevard
Orlando FL 32827-4399
(407) 825-2674

Noise Hotline: (407) 825-2003
Toll Free: (866) 646-6473
(866) OI-NOISE

Visit our Web Site at: <http://www.orlandoairports.net/goaa/noise>
