## **APPENDIX I**

**Newsletters** 



Newsletter #1 April 2008

# PART 150 STUDY NEWSLETTER

## Public Open House!

Thursday, April <u>24, 2008</u>

7 to 9 p.m.

Presentation at 7:30 p.m.

OSU Airport Hangar 1 (Entrance next to Barnstormer Restaurant) 2160 West Case Road Columbus, OH 43235

## **Contact Us!**

#### Part 150 Study

Learn more about the Part 150 Study and leave comments any time at **www. OSUAirportPart150.com.** 

#### **OSU Airport**

2160 West Case Road Columbus, OH 43235

www.OSUAirport.org

## OSU AIRPORT KICKS OFF NOISE AND LAND USE COMPATIBILITY STUDY

The Ohio State University has initiated a Federal Aviation Regulations (FAR) Part 150 Noise and Land Use Compatibility Study (Part 150 Study) for its airport.

The Part 150 Study, whose components are set by the Federal Aviation Administration (FAA), will allow the University to address potential noise impacts and develop programs to increase compatibility of land uses around the airport. This compatibility can be accomplished by two primary avenues: noise abatement and land use planning. The following are the key steps in the Part 150 Study process:

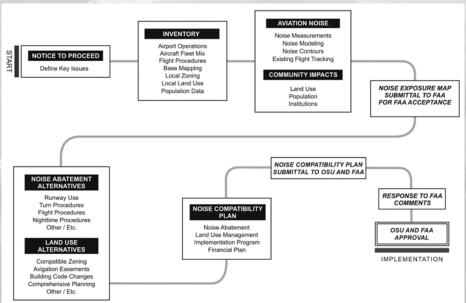
#### Step 1: Develop Noise Contour Maps (Fall 2007 – Spring 2008)

Noise contours are developed based on aircraft operations occurring at the airport today, as well as predictions on operations at least five years in the future. The noise contours are lines that depict equal levels of aircraft noise exposure around the airport. These contours are overlaid on updated maps to determine what land uses are present in the highest noise levels around the airport.

Draft Noise Exposure Maps for OSU Airport and other key

continued inside...

### FAR Part 150 Process



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Part 150 Study information will be shared with the public at an open house from 7 to 9 p.m. on Thursday, April 24, 2008 at OSU Airport Hangar 1. This open house will include several information stations, staffed by the consultants conducting the study, to answer questions. There will be a formal presentation at 7:30 p.m.; otherwise feel free to drop by any time between 7 and 9 p.m.

Based on public input and additional technical analysis, the study team will further refine the noise exposure maps and submit them to the University and the FAA for review and acceptance.

#### Step 2: Evaluate Potential Noise Compatibility Alternatives (Summer – Fall 2008)

Alternatives to reduce potential noise impacts around the airport may include both aircraft operational procedures as well as land use measures. Typical recommendations may include the establishment of noise abatement flight tracks and working with local jurisdictions to prevent future development in the most noise affected areas. The recommendations for OSU Airport will be specific to the impacts identified in the noise exposure maps.

#### Study Outcome: Noise Compatibility Program (Winter 2008 – Spring 2009)

The final product is a Noise Compatibility Program (NCP). The

NCP contains noise compatibility measures recommended for implementation. The NCP is reviewed by OSU and the FAA in detail. FAA approval typically takes about 180 days. Those recommendations approved by OSU and the FAA will become eligible for federal funds in the implementation phase.

#### Noise Contour Maps in Development Now

As described above, the study is currently in step 1, developing Noise Contour Maps for OSU Airport. This is how this occurs:

#### **Aircraft Noise Modeling**

The standard methodology for analyzing the noise conditions at airports involves the use of a computer simulation model. The FAA has approved two models for use in preparing noise contours - NOISEMAP and the Integrated Noise Model (INM). NOISEMAP is most often used at military airports, while the INM is most often used at civilian airports like OSU's. The INM version 7.0, the latest version, was developed by the Transportation Systems Center of the United States Department of Transportation at Cambridge, Massachusetts and is undergoing continuous refinement. Airport specific data that is used in the model to develop the noise contours include:

**Daily Operations:** Current and forecast aircraft takeoffs and landings. The total number of aircraft operations over a 12-

month period is used for noise modeling.

**Aircraft Fleet Mix:** The various types of aircraft using the airport now and in the future. Identifying the fleet mix is important because certain aircraft are noisier than others.

Runway Use: Wind speed and direction together with runway length are the primary factors that determine which runways are used and how often. Air traffic controllers designate the flow of aircraft arrivals and departures into the wind. Under calm wind conditions, air traffic control has more flexibility to vary the directional flow of aircraft.

#### **Flight Corridors and Corridor**

**Use:** Flight corridors are established for use in the model by obtaining information from the University's flight tracking system and other sources, including Port Columbus International Airport. These corridors represent the paths that aircraft typically follow when approaching or departing the airport.

**Day/Night Use:** Following FAA guidelines, day is defined as 7 a.m. to 10 p.m.; night is from 10 p.m. to 7 a.m. The number of aircraft that use the airport during daytime or nighttime hours is an important factor in the calculation of Day-Night Sound Levels (DNLs). The contribution of each night operation to the total noise exposure is weighted to account for the greater annoyance of noise at night.

#### STUDY TEAM OF NATIONALLY-RECOGNIZED AIRPORT EXPERTS

The engineering firm of Reynolds, Smith and Hills, Inc. (RS&H) was selected to oversee the OSU Airport Part 150 Study. RS&H, headquartered in Jacksonville, Florida, is one of the airport industry's leading facilities and infrastructure consulting firms. San Francisco-based ESA Airports, one of the top firms for conducting aircraft noise analyses and preparing environmental documentation, will conduct the noise analysis as a subcontractor to RS&H. Local firm Engage Communications is leading the public involvement effort.

#### **NOISE AND LAND USE: ROLES AND RESPONSIBILITIES**

#### **OSU Airport**

OSU Airport's administration is responsible for planning and assisting with implementing actions designed to reduce the effect of noise on residents of the surrounding area. Such actions might include noise abatement ground procedures, land acquisition and other controls that do not discriminate, create an unsafe situation, impede the management of the national air navigation system or interfere with interstate or foreign commerce. Any operational procedure recommended by the airport administration must be approved by the FAA.

## Federal Aviation Administration (FAA)

The FAA's Air Traffic Control is

responsible for the movement of aircraft on both the airfield and in the air and has the authority to implement noise abatement operational procedures which have been recommended by the airport proprietor. Any noise mitigation procedure must be consistent with air safety and all legal requirements.

#### **Local Governments**

Local governments have the responsibility to provide land use planning, zoning and housing regulations that limit land uses near the airport to those compatible with airport operations.

#### **Pilots**

The pilot has the ultimate responsibility for the operation of the aircraft. Although the FAA assigns runways, flight tracks and altitudes, the pilot still maintains

the authority to make the final judgment.

#### **Air Travelers**

Air travelers and shippers generally bear the cost of noise reduction measures through the payment of airline ticket taxes, waybill taxes and passenger facility charges. These funds are used in assisting with the evaluation and implementation of operational procedures and land use mitigation measures.

## Residents and Prospective Residents

Residents in areas surrounding the airport have been providing input regarding noise concerns. They are also encouraged to understand procedures that can and cannot be taken to minimize the effect of aircraft noise.

#### **NOISE MEASUREMENTS**

Noise measurements were conducted for this study from October 18 through October 26, 2007. Seven monitors were used to collect noise measurement data at 13 sites located around OSU Airport during the eight-day collection period. Four sites had noise monitors for seven continuous days. The remaining nine sites each had a monitor for at least 24 continuous hours to capture measurements associated with the changing operational flow of the airport. See <a href="www.OSUAirportPart150.com">www.OSUAirportPart150.com</a> for a map of these locations. Noise measurement data will be presented at the public open house in April.

Data collected from noise measurements is primarily used for information on ambient noise levels around the airport and noise associated with single event operations at a particular location. On site monitoring information also allows the study team to compare single event and cumulative noise levels with noise exposure levels developed by the Integrated Noise Model. Contrary to popular belief, noise measurement data is not used to develop the noise contours. The FAA does not allow noise measurement data to be used this way and sets a strict requirement that only FAA-approved computer models be used for noise contour development.

#### **NOISE COMPLAINTS**

Noise complaints can provide helpful information on noise concerns in the community.

Noise complaint data from OSU Airport, as well as from local jurisdictions and interest groups, is being reviewed to gain a clear picture of local noise issues. As with noise measurements, noise complaint data does not influence the noise contours or their development. Noise contour development is based on operational data only.

#### PART 150 STUDY ADVISORY COMMITTEE

A committee representing neighboring municipalities, airport users and other stakeholders has been formed to provide feedback and comment throughout the Part 150 Study. For more information on these meetings, open to the public, see <a href="https://www.OSUAirportPart150.com">www.OSUAirportPart150.com</a>. Membership to the committee is by invitation and includes the following organizations:

#### **Communities**

- · City of Columbus
- City of Dublin
- City of Worthington
- Franklin County
- · Mid-Ohio Regional Planning Commission
- Northwest Civic Association
- · Perry Township
- Sharon Township
- We Oppose Ohio State Airport Expansion (WOOSE)
- · Village of Riverlea

#### **Aviation Industry**

- Columbus Regional Airport Authority
- Midwest (OSU) Air Traffic Control Services, Inc.
- Air Traffic Control/Port Columbus
- Aircraft Owners & Pilots Association
- Columbus Flight Watch
- Ohio Regional Business Aircraft Association

#### **User Groups**

- Lab Corp
- MedFlight
- · Ohio Highway Patrol
- Cardinal Health
- Worthington Industries Corporate Flight Department
- Personal Aircraft Owners
- Experimental Aircraft Association, Chapter 9
- OSU Flight Education
- Thrifty Car Rental

#### **Business**

 Columbus Chamber of Commerce

## **Get Involved!**

Public open houses and a public hearing will be held during the 18-month Part 150 Study. Study progress will be shared during these sessions and the public will be encouraged to provide input. Meeting dates and locations will be published in weekly newspapers, in future editions of this newsletter and at <a href="https://www.OSUAirport.org">www.OSUAirport.org</a> and <a href="https://wwww.osuairport.org">www.osuairport.org</a> and <a href="ht

## More Questions? See the Web Site for Answers!

Part 150 Studies include a number of technical steps including aircraft noise modeling, noise monitoring and measurements and more. For more information on these and other related topics, see <a href="https://www.OSUAirportPart150.com">www.OSUAirportPart150.com</a>.

The Ohio State University Airport 2160 West Case Road Columbus, OH 43235

#### APRIL OPEN HOUSE ATTRACTS CROWD

Eighty people attended the April 24th open house to learn more about the Part 150 Study process and review preliminary findings on the draft noise contours around the Airport.





## **Get Involved!**

Progress on the Part 150 Study is being shared at public open houses held during the course of the Part 150 Study. The upcoming Nov. 6 open house is the second of three that will be held. General public comments are welcome at any time via the website at <a href="https://www.OSUAirportPart150.com">www.OSUAirportPart150.com</a>. Comments specific to the noise exposure maps and draft companion report must be submitted by December 6, 2008.

## Have Questions? See the Web Site for Answers!

The OSU Airport Part 150 Study is following a number of technical steps required by the FAA, and mirrors best practices nationwide. For study materials, answers to frequently asked questions and more, see <a href="https://www.osuairportPart150.com">www.osuairportPart150.com</a>.

The Ohio State University Airport 2160 West Case Road Columbus, OH 43235



Newsletter #2 October 2008

## PART 150 STUDY NEWSLETTER

## Public Open House!

Thursday, November 6, 2008

7 to 9 p.m.

Presentation at 7:30 p.m.

OSU Airport Hangar 1
(Entrance next to
Barnstormers Restaurant)
2160 West Case Road
Columbus, OH 43235

### **Contact Us!**

#### Part 150 Study

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#### **OSU Airport**

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## PHASE II: DEVELOP A NEW NOISE COMPATIBILITY PROGRAM

Now that the results of the first phase of The Ohio State University Airport (OSU) Federal Aviation Regulation Part 150 Noise and Land Use Compatibility Study (Part 150 Study) are nearly ready for review by the Federal Aviation Administration (FAA), the Noise Compatibility Program development phase can begin.

The first phase of the Part 150 Study determined the extent of the noise that exists around the Airport today, and is expected to exist around the airport in the future.

The analysis determined that the 65 Day-Night Sound Level

(DNL) contour – the FAA's threshold for significant noise — falls mainly within Airport property. Land uses falling outside the 65 DNL contour are considered compatible.

While the Airport is not required by the FAA to pursue noise abatement strategies when the 65 DNL noise levels do not reach into residential neighborhoods, the University understands that noise concerns continue to exist throughout the surrounding community, and remains committed to exploring additional noise compatibility strategies. This will be the focus of analysis for the next several months.

## Noise concerns expressed to date have focused on sound generated by:

- Training activity
- Helicopter operations
- Jet operations
- Departure flight tracks
- Nighttime operations

The public will be asked to provide input into potential noise compatibility strategies at the November 6 open house. Those who can't attend may leave their comments on the web site at

www.OSUAirportPart150.com.

#### **EXISTING NOISE ABATEMENT GUIDELINES**

The University has a voluntary noise abatement program in place to address concerns of local citizens and to meet FAA regulations for a safe environment for aviation activities. Guidelines include:

## **Current Noise Abatement Guidelines for General Operations**

- Observe National Business Aircraft Association Noise Abatement Program
- PLEASE FLY NEIGHBORLY. When possible, avoid flying at low altitudes over noise sensitive areas. Maintain traffic pattern altitude except on departure or arrival. Use best climb speed and climb angle upon departure.
- Traffic pattern altitude for helicopters: 1,500 Mean Sea Level (MSL)
- Traffic pattern altitude for small aircraft: 1,900 MSL
- Traffic pattern altitude for jets: 2,400 MSL
- Use reduced thrust and/or quiet climb procedures when operationally and safely practicable
- Use minimum thrust reversing on landing when feasible
- On approach, fly standard 3-degree glide slope or use Visual Approach Slope Indicator (VASI) lights
- Arrival-departure pairs should use the same runway heading
- Engine maintenance run ups prohibited from 10 p.m. to 7 a.m.
- Voluntary curfew of Stage 2 jets encouraged between 10 p.m. and 7 a.m.
- Avoid Auxiliary Power Unit usage between 10 p.m. and 7 a.m. and more than 1 hour before flight.

## **Current Noise Abatement Guidelines** for Training Operations

- Touch & go operations prohibited between 11 p.m. and 7 a.m.
- Low practice approaches prohibited between 11 p.m. and 7 a.m.
- Jet training prohibited

## Additional Noise Compatibility Strategies to be Explored

At the upcoming public open house, the study team will outline these and other types of air traffic control procedures that other airports have established to reduce noise exposure. The team will also discuss prevention of incompatible land uses. The public will be encouraged to make suggestions.

Based on additional technical analysis and public input, recommendations will be developed and presented for review and comment at a public open house next year. Final recommendations will be submitted to the University and, ultimately, to the FAA for review and approval. Recommendations approved by the FAA will become eligible for federal funds for implementation.

## FAA Supports Next Steps in Noise Compatibility Study

The University has secured the FAA's support and funding to evaluate a broad range of aircraft operational procedures and land use practices to help further reduce noise impacts on surrounding neighborhoods.

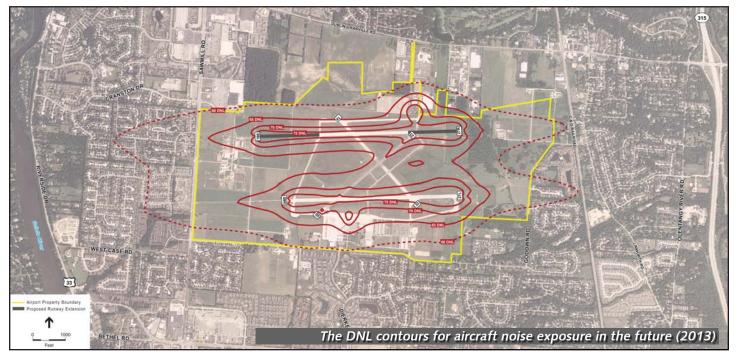
#### THE PURPOSE OF THE OSU AIRPORT PART 150 STUDY

The purpose of the Part 150 Study is to document the existing operating conditions at OSU Airport and evaluate operational procedures and land use measures to reduce aircraft-related noise exposure in the surrounding communities.

The draft noise exposure contour maps and all public meeting materials are available at <a href="https://www.OSUAirportPart150.com">www.OSUAirportPart150.com</a>. Public comments can also be provided at any time via the web site.

#### **NOISE EXPOSURE FINDINGS**





Noise is generated at the OSU Airport during aircraft takeoffs, landings and touch and go training operations. To describe an airport's overall noise environment, the Environmental Protection Agency developed the Day-Night Average Sound Level (DNL), a specific method for assessing and predicting aircraft noise. The FAA requires DNL to be used in the preparation of all Part 150 studies. In addition, the FAA has established noise and land use compatibility guidance based on the DNL noise values.

Draft noise exposure maps showing the Airport's noise contours for 2008, 2013 and 2027 were presented at a public open house on April 24. Revised maps reflecting additional technical review and public input, shown above, will be presented at the next public open house on November 6. The public will have until December 6 to review and return comments on the revised maps and draft Noise Exposure Map Report. The maps and companion report will then be finalized so that they can be submitted to OSU Airport and the FAA before the end of this year.