

APPENDIX M

Meeting Summaries



The Ohio State University Airport

Part 150 Committee

Meeting #1 – SUMMARY

9 – 11 a.m.

September 19, 2007

MedFlight Training Room

2827 W. Dublin Granville Rd., Columbus, 43235

This is a draft summary of the first meeting of the Part 150 Committee, which is comprised of interested entities invited by the University to provide input into the OSU Airport FAR Part 150 Noise and Land Use Compatibility Study. The Study will quantify existing and future aircraft noise exposure and provide recommended measures on how to reduce incompatible noise levels on noise sensitive uses surrounding OSU Airport. Members of the Committee represent organizations that use the airport as well as affected political jurisdictions, agencies and neighborhoods.

The following summarizes key informational and action items from the meeting.

Participants

Part 150 Committee Members Present

City of Columbus, Kevin Wheeler

City of Dublin, Paul Hammersmith

City of Worthington, David Zoll

Village of Riverlea, Steven Mershon

Franklin County, Matthew Brown

Mid-Ohio Regional Planning Commission, Ahmad Al-Akhras

Sharon Township, John Oberle

Northwest Civic Association, John Schmidt

We Oppose Ohio State University Airport Expansion, Jane Weislogel

Columbus Regional Airport Authority, David Wall

Midwest (OSU) Air Traffic Control, Deral Carson

Port Columbus Air Traffic Control (FAA), Chris Lenfest

Aircraft Owners & Pilots Association, E.J. Thomas

Columbus Flight Watch, Don Peters

Labcorp, Autin Lanz

MedFlight, Mark Reynard

Cardinal Health, Jeff Wheeler

Personal Aircraft Owners, Jay DuRivage

OSU Flight Education, Charles Ventola

Columbus Chamber of Commerce, Chaz Fruetel

Part 150 Committee Members Not Present

Perry Township, Robert Myers
Ohio State Highway Patrol, Lt. Mike Stein
Ohio Regional Business Aircraft Association, appointee to be named
Worthington Industries, Lowell Dowler
Experimental Aircraft Association, Dick Wetherald
Thrifty Car Rental, Todd Greenleaf

OSU/Consultant Core Working Team Members Present

David Full, Brad Wentz and Neal Westlund (RS&H); Steve Alverson and Ron Seymour (ESA Airports); Marie Keister (Engage); Dean Bud Baeslack, Doug Hammon, Cathy Ferrari, Kathy Dillow and Robert Haverkamp (OSU); Bill Habig and Latane Montague (consultants)

Public Observers

Gary Bollinger, Dennis Shea, Mayor Mary Jo Cusack, Kim Nixon-Bell, Amanda Cooper, Lisa Allen, Rosemarie Lisko, Vera Tedrick, Mo Samimy, Alan Harding, Bob Tedrick, John Ehlers, Allan Chace, John Mayfield and Ernest Gubry

Media Present

Gregory Jones of Northwest News and Channel 10/WBNS TV

Materials Available at the Meeting

- Agenda (*sent in advance*)
- Operating Framework and Decision-Making Graphic (*sent in advance; see updated “Decision-Making Framework” per Committee input*)
- Part 150 Committee Roster (*See the updated “Part 150 Committee Roster” per Committee input*)
- Core Working Team Roster
- PowerPoint Presentation (*See the updated “Part 150 Committee Presentation” per Committee input*)

Meeting Summary

Meeting Introductions

Marie Keister, the facilitator for the Part 150 Committee, convened the meeting at 9 a.m. Dean Bud Baeslack welcomed the Part 150 Committee and thanked them for agreeing to participate in the Part 150 Noise and Land Use Compatibility Study.

He explained the genesis of this process, which is in response to the Airport Advisory Committee’s request two years ago for a more complete analysis of potential noise impacts around OSU Airport. He summarized the Part 150 Noise and Land Use Compatibility proposal and selection process, which resulted in the submission of six

consultant proposals and OSU interviews of three finalists. All of the proposals were submitted by nationally-recognized airport noise experts.

Dean Baeslack summarized the national credentials and experience of the selected Reynolds, Smith & Hills consultant team, which has:

- Worked at more than 300 U.S. airports in the past 10 years
- Completed noise studies at over 200 airports world-wide
- Recently completed over two dozen Part 150 studies
- Completed the recent Part 150 study at the world's busiest airport, Atlanta's Hartsfield-Jackson International Airport
- Completed several recent Part 150 studies at smaller general aviation airports very similar in profile to OSU Airport
- More than 180 aviation industry professionals in 32 offices nation-wide

Dean Baeslack highlighted the various study components that exceed the requirements of Federal Aviation Regulation (FAR) Part 150 Study, such as noise measurements, single event analysis and a review of the current noise complaint process.

Dean Baeslack explained that, as dean of the OSU College of Engineering, which oversees the OSU Airport, he is responsible for this initiative and would welcome comments at any time.

Ernest Gubry, Environmental Protection Specialist in the FAA Detroit Airports District Office, also said a few words of welcome, noting the FAA's appreciation of the public's involvement in the process.

Review of Meeting Goals

Ms. Keister summarized the goals for the meeting, which were to:

- Introduce the noise consultant team and Part 150 Committee members
- Discuss the operating framework for the Part 150 Committee
- Create understanding between the overall noise study process and the Committee's input
- Summarize the components and schedule for the Part 150 Noise and Land Use Compatibility Study
- Discuss potential noise measurement locations
- Identify and prioritize key stakeholder issues
- Recap next steps

In keeping with the first goal, everyone seated at the Part 150 Committee table was asked to introduce themselves and their organizations. Consultant team members also identified themselves and their role on the project. Ms. Keister noted that each Part 150 Committee member had a packet of information that included a draft Committee roster and a list of "Core Working Team" members, which includes members of the consultant team, OSU Airport representatives and other consultants to OSU who are participating in the day to

day study effort. (See the “Core Working Team” and updated “Part 150 Committee Roster” handouts).

Operating Framework for Committee and Decision-Making Process by OSU and FAA

Ms. Keister reviewed the purpose and operating guidelines of the Part 150 Committee, as well as the overall decision-making framework. (See “Operating Framework” and updated “Decision-Making Framework” handouts.) She indicated that the Part 150 Committee, which is not required by a Part 150 Study but is a best practice shown to be successful on similar projects across the U.S., is an important component of the public involvement effort. She emphasized the Committee is advisory in nature and that the Committee does not need to come to consensus on all study issues, as all input will be forwarded in its entirety to OSU Airport and University officials, and ultimately the FAA when the final document is submitted. OSU will select final recommendations and forward them to the FAA for their review and approval. She also noted that Part 150 Committee meetings are open to the public, but that the focus will be on first ensuring that Committee members have the opportunity to share their comments and questions. When time permits, the public will be invited to ask questions and provide comment. Other public involvement and education opportunities will include public open houses and a public hearing, a project Website, Study newsletters and outreach to the media.

Ms. Keister noted that her role as facilitator is to clarify, communicate and to keep the Part 150 Committee and consultant team on track and on time.

Review of the Overall Study Process and Schedule

Ms. Keister re-introduced David Full, the project manager for the RS&H Consultant Team.

Mr. Full provided an overview (see the updated “Part 150 Committee Presentation”) of the credentials and experience of the RS&H Team, including over 24 Part 150 studies (See “Project Team Resumes”). He said that Part 150 Study Task Manager Steve Alverson and Deputy Task Manager Ron Seymour from ESA Airports were former noise officers at Denver Stapleton International and Seattle-Tacoma International airports, respectively, and have years of experience with noise and related land use issues. Marie Keister of Engage Communications is an experienced facilitator and public involvement expert who will oversee public involvement efforts.

Mr. Alverson then provided the Part 150 Study overview (see “Part 150 Committee Presentation”), first recapping that a FAR Part 150 Study is:

- A program an airport can voluntarily undertake to address noise and land use compatibility concerns
- Its components are established by the FAA and include evaluating:
 - ✓ Existing conditions (land use, zoning, etc.)
 - ✓ The existing noise environment
 - ✓ The future noise environment
 - ✓ Noise abatement alternatives

- ✓ Land use alternatives
 - ✓ And making recommendations
- Study recommendations approved by the FAA become eligible for federal funding and implementation.

Mr. Alverson also explained what a Part 150 Study is not:

- It is not an airport master plan, environmental review document or safety study.
- It is not an opportunity to close the airport, as a Part 150 study assumes an operating airport with the scheduled future development plans reflected in the future-year noise contours. Mr. Alverson explained, for example, that the proposed runway extension in the most recently adopted Master Plan (in 1990) would be assumed in the future development plans when developing the future year noise contour maps. This allows the consultant team to consider its full impact in the analysis and make recommendations accordingly.
- It is not a forum to explore non-aviation uses of the airport property.

Mr. Alverson clarified roles and responsibilities of the airport, the FAA, local governments, residents and pilots, who ultimately have the responsibility for the operation of the aircraft and are responsible for following noise abatement procedures while adhering to all safety measures. He summarized the FAA regulatory framework and the study goals, which include:

- Documenting current and future noise levels around OSU Airport
- Reviewing current noise abatement flight tracks and procedures
- Reviewing the current aircraft noise complaint process
- Evaluating additional noise abatement opportunities
- Providing opportunity for community input
- Developing recommendations for noise abatement and noise mitigation measures

Mr. Alverson explained that aviation system users pay for the aviation system, including researching and mitigating the impacts of noise. He discussed the airport and aircraft operational needs, explaining that:

- Airports must be available for users 24 hours a day due to interstate commerce regulations
- Airports balance working with communities on airport noise concerns with maintaining a viable airport for the region
- Aircraft must take off and land into the wind, which determines which runways are used
- Aircraft climb as quickly as possible on departure to reach cruise altitude
- Aircraft use visual approaches for landing during good weather and instrument approaches for landing during bad weather. This may result in slightly different flight patterns based on weather conditions.
- Aircraft will deviate from the typical flight patterns to avoid severe weather as needed

Mr. Alverson showed a graphic outlining the Part 150 Study process, illustrating how once the consultant team received the “notice to proceed” from the University, it immediately began collecting data in a number of areas to look at current and proposed airport operations, aircraft fleet mix, flight procedures, land uses and zoning around the airport and population data. Noise measurements will take place in 12 areas surrounding the airport.

The outcome of Phase 1 of this effort will be noise exposure maps, or NEMs, for both existing and forecast conditions. These draft maps will be reviewed with the Part 150 Committee in late January/early February 2008. These maps will be submitted to the FAA for their review and acceptance. Upon acceptance of the NEMs, the study will move into Phase 2, which is to look at noise abatement and land use alternatives and develop recommendations for a noise compatibility program to reduce incompatible land uses. After seeking input from the Part 150 Committee and the public, recommendations will be forwarded to University officials for their consideration. They will forward their recommendations to the FAA for final review and approval.

Additional Noise Measurement Locations

After reviewing the project schedule with the Committee, Mr. Alverson showed a map of 12 potential areas where noise measurements could be performed. These areas are based on initial analysis of noise complaints, the location of aircraft flight tracks and the location of the previous OSU Part 150 NEMs. He asked that the Committee review the locations and let the team know after the meeting if they have additional locations or specific addresses that should be considered.

Questions and Comments (Responses in Italics)

1. The Worthington representative, David Zoll, said it was important that Worthington have confidence in the process. To that end, he asked that the team forward their resumes to the Committee, which Mr. Full agreed to do. (*See “Resumes and Credentials of RS&H Team”, distributed with this Meeting Summary.*) Mr. Zoll asked Mr. Alverson about the team’s experience working with the new version, 7.0, of the Integrated Noise Model (INM), and what training they’ve had in this area. *Mr. Alverson explained that version 7.0 is the most recent update to the INM which was released by FAA in June 2007. ESA Airports is incorporating this new version of the INM on all new projects, but is also using the prior version for those projects already underway. He explained that from a user’s standpoint, there is virtually no difference between the previous version of the INM and version 7.0. He compared the version change to Microsoft issuing software updates – the former program works, but the more recent version has some additional features. He noted that FAA does not mandate or provide training on this software, but several consultants provide the training, including his firm, ESA Airports. Also, he noted that Lindsay Baumaister, the chief aircraft noise modeler on this project, is on the FAA’s software design committee, thus had extensive firsthand experience with the product. Mr. Zoll asked where she is located. Mr. Alverson said she is located in Florida. Mr. Zoll asked that ESA also*

- provide additional information on who will be doing the noise modeling on this project and their experience with the software, *which Mr. Alverson agreed to do.*
2. Mr. Zoll expressed concern that the Committee will not have an opportunity to comment on the inputs to the INM before the development of the NEMs. He is interested in ARTS data, aircraft fleet mix, flight tracks, OSU Airport tower operations and wind direction on day of data collection. To ensure the output of the INM is credible, Mr. Zoll asked to see the INM inputs prior to the development of the Noise Exposure Maps. *Mr. Alverson agreed to share the INM input data. Mr. Seymour added that the NEMs will still be considered draft when presented to the Committee, and at the public open house, in late January/early February 2008. This will allow the Committee and public an opportunity to comment on the NEMs prior to their finalization.*
 3. Mr. Zoll commented that the public will perceive the noise monitoring locations to be inadequate, with measurements not being conducted long enough. He said he was not concerned about the length of the measurements because he knows that data are not used to develop the NEMs and that noise measurements are mainly to keep the public occupied, but he felt as though the public might be concerned. *Mr. Alverson noted that as scientists they like to gather as much data as possible, but there are always time and budget limits that control how long and at how many sites they measure. He said that it is important to note that the measurements are above and beyond the Part 150 requirements. Although the measurements will be compared to the modeled noise levels, he expects that there will be differences between the modeled and measured levels because the modeled noise levels are representative of the annual average day of operations at the Airport.*
 4. Jane Weislogel, WOOSE representative, asked when the noise monitors were going up. *Mr. Full noted they will be put in place for seven days starting October 17th or 18th, so that they can measure noise before, during and after OSU's homecoming football game, which is expected to generate increased aircraft operations at the Airport before and after the game.*
 5. Ms. Weislogel commented that OSU Airport has unknown night flights, and asked if the team is interested in knowing the type of aircraft at night when they are conducting monitoring. *Mr. Alverson said yes, and that this issue comes up often in the many noise studies they conduct. He said that although they would like to have personnel spend the night with some of the noise monitors to address this very issue, it is difficult if not impossible to identify specific aircraft due to darkness. He said they would use a variety of sources to try to identify nighttime flights. In all noise monitoring locations, personnel will have a log so they can note what is occurring in the air and vicinity as measurements are taking place.*
 6. Don Peters, Columbus Flight Watch representative, asked if the noise monitors are primarily used to measure single events or ongoing and ambient noise on the

- east side of the airport, which is caused by the highway, motorcycles and trains. *Mr. Alverson said the monitors will measure the single event and cumulative noise levels of all noise sources and that personnel staffing the monitors will identify the sources on their logs.*
7. A member of the public asked for the address of the Website. *Ms. Keister said the address was being finalized and would be sent to the Committee with the meeting summary, which is expected to be forwarded by e-mail next week. Update: The Website address is www.OSUAirportPart150.com and will be accessible to the public late the week of October 1st.*
 8. A member of the public asked for clarification on where OSU fits in the approval process. *Mr. Alverson explained that all Committee and public input, as well as technical recommendations, would be forwarded to OSU Airport and University officials for their review. They would then forward the recommendations they accept to the FAA, along with all Committee and public input. Robert Haverkamp, OSU Counsel, noted that the OSU President and his senior cabinet would likely participate in this approval process. Update: the presentation was updated to clarify this process.*
 9. A member of the public asked if the study team will include Committee input in its final recommendations to OSU and FAA. *Mr. Alverson noted that the Committee and public will have opportunities for input. All input will be summarized in the study documents and forwarded to OSU and the FAA.*
 10. A member of the public asked whether the team would consider adding a location to the west and southwest of the airport to capture helicopter noise on that side of the airport. *Mr. Alverson said that he appreciated the input and asked for the location of where the monitor should be located.*
 11. Several members of the Committee and public provided addresses to be considered for noise monitoring locations.

Goals, Issues and Concerns

Ms. Keister said that the consultant team was aware of many issues and concerns, but wanted to hear directly from the many interests represented by the Committee, and to also get a sense of priority on goals and issues. She asked each Committee member to write a study goal/desired outcome, issue or concern, one to a page, on the three Post-it notes they were provided. Mr. Alverson gave some guidance on the purpose of the Part 150 Study, which is to reduce incompatible land uses within the 65 dB Day-Night Average Sound Level (DNL) contour of the airport. The study team collected the Post-it notes and put them on five flip chart pages on a wall. Ms. Keister then asked each Committee member to take the four red dots they were provided and put one by each of the four goals and/or issues they thought were the most important.

The (unedited) results of the exercise include:

- Acceptance of study even if results are not what was hoped for by all interested parties (11 dots)
- Enable OSU Airport to expand to meet the needs of the aviation community (9 dots)
- Credible noise contour map – existing and future (6 dots)
- Provide Part 150 Study in which community can have confidence (5 dots)
- Support for all users – aviation, business needs, and all community members (4 dots)
- Develop compatible flight track locations to best meet the needs of the airport and community (4 dots)
- Promote economic development in the area (3 dots)
- When, where and how will the 050 degree turn be addressed? (3 dots)
- Follow 150 rules (2 dots)
- Understanding and acceptance that OSU airport is a cog in the wheel of the NAS (*National Aviation System*) – the needs of the smaller don't translate to the needs of the bigger (2 dots)
- Identify mitigation measures (2 dots)
- Realistic noise solutions (2 dots)
- Insure study is accurate and includes all inputs (2 dots)
- Concern: inputs will fail to accurately reflect actual noise impacts (1 dot)
- Have neighbors of airport understand safety vs. noise (1 dot)
- Noise monitoring event/DNL impact of topography to east (river/ridge) (1 dot)
- Evaluate effectiveness of continued operation of 50 degree turn and alternatives to that departure (1 dot)
- Public input/confidence in process (1 dot)
- Build trust with surrounding community (1 dot)
- Find a short term solution to reduce noise at night while the noise study takes place (1 dot)
- Perpetual criticism by WOOSE of study process elements (1 dot)
- Fine – “please get on with it” (1 dot)
- Move on
- Current noise addressed and resolved before new build
- Have reliable and approved recommendations so Master Plan can be finalized
- Support business needs and keep the local communities happy
- Keep community informed of steps by airport and users to reduce noise
- Have aviation environment of OSU Airport and surrounding area to know each other and understand their needs and concerns
- Reduce noise contours as much as possible to limit exposure experienced by residential areas
- Develop recommendations for land use alternatives that are compatible with noise contours
- Make recommendations to local zoning officials as to zoning code updates/overlay districts
- What are the primary areas where the noise is a problem at night?
- Aircraft user mix – impact on noise (including night monitoring)
- Establish approach and departure minimums regarding flight path to minimize noise – perhaps higher than present. Can approach be greater than 3 degrees?

- Where will single event noise be addressed?
- Develop limited but effective noise abatement process for pilots
- Airport improvements north runway extension and associated ILS system for Runway 27 right

Next Steps/Action Items

Mr. Full reviewed the next steps, which include:

1. Launch of the project website
2. Noise measurements starting October 17th or 18th
3. Review of the existing noise complaint process
4. Review of existing and future noise exposure
5. Preparation of draft Noise Exposure Maps for Committee and public review
6. The second Part 150 Committee meeting and first public meeting in late January/early February

Ms. Keister noted that this Part 150 Committee meeting was held in the morning to accommodate the schedules of the FAA representatives, but that future meetings could be held in the morning or afternoon. Committee meetings would need to allow time for the Core Working Team to set up for the public meeting that would be held that same evening.

Committee members indicated 2 to 4 p.m. would be a better time than morning or from 1 to 3 p.m. One member noted that it would be nice if the Committee meetings could be held at night so more of the public could attend. *Ms. Keister noted that the Committee meetings are open to the public, but that the public meetings would be held in the evenings so more could attend.* A member of the public suggested that 7 to 9 p.m. would be better than 6 to 8 p.m. *Ms. Keister agreed to hold the public meetings from 7 to 9 p.m.*

Ms. Keister recapped the action items identified at the meeting: *(Updates in italics)*

- Committee members should review the Committee roster for accuracy and send edits to Ms. Keister at mkeister@engagepublicaffairs.com.
- Committee members should provide addresses and/or additional input on noise monitoring locations to Ms. Keister.
- Ms. Keister to send resumes of the consultant team to the Committee, and highlight the team's experience with the Integrated Noise Model.
- Ms. Keister to send a Meeting Summary, meeting documents and Part 150 Study website address to the Committee.
- Ms. Keister, working with the consultant team, will respond to Mr. Zoll's request for information on the noise model data inputs. *As a result of this action item, a technical subcommittee of the Part 150 Committee is being created to review the data inputs to the Integrated Noise Model. More information on this will be forwarded to the Part 150 Committee.*

Questions/Comments

1. Jay DuRivage, Personal Aircraft Owners representative, asked for as much notice as possible on meeting dates to ensure Committee members could attend. *Ms.*

Keister said the next meeting date would be available and distributed to Committee members at least six to eight weeks in advance of the meeting. She said it is difficult to select a date now because the team is dependent on collecting data from outside sources and must allow time to complete the work, but it will do its best to notify the Committee as soon as a date can be finalized.

Adjourn

Ms. Keister thanked MedFlight for the use of their facility, thanked everyone for coming and participating in the discussion and then adjourned the meeting at 11 a.m.



The Ohio State University Airport

Part 150 Committee

Meeting #2 – SUMMARY¹

2-4 p.m.

April 24, 2008

MedFlight Training Room

2827 W. Dublin Granville Rd., Columbus, 43235

This is a summary of the second meeting of the Part 150 Committee, which is comprised of interested entities invited by the University to provide input into the OSU Airport FAR Part 150 Noise and Land Use Compatibility Study. The Study will quantify existing and future aircraft noise exposure and provide recommended measures on how to reduce incompatible noise levels on noise sensitive uses surrounding OSU Airport. Members of the Committee represent organizations that use the Airport as well as affected political jurisdictions, agencies and neighborhoods.

The following summarizes key informational and action items from the meeting.

Participants

Part 150 Committee Members Present

City of Columbus, Vince Papsidero

City of Dublin, Paul Hammersmith

City of Worthington, David Zoll

Village of Riverlea, Steven Mershon

Franklin County, Matthew Brown

Mid-Ohio Regional Planning Commission, Chris Gawronski

Northwest Civic Association, Bill Carleton

We Oppose Ohio State University Airport Expansion, Jane Weislogel

Columbus Regional Airport Authority, David Wall

Midwest (OSU) Air Traffic Control, Gary Bollinger

Port Columbus Air Traffic Control (FAA), Chris Lenfest

Ohio Highway Patrol, Lt. Mike Stein

Aircraft Owners & Pilots Association, E.J. Thomas

Columbus Flight Watch, Don Peters

¹ This Summary is intended to provide a paraphrased overview of presentations made, materials discussed, questions asked and comments made. It is not intended to be a word-for-word representation of the Part 150 Committee proceedings.

Labcorp, Austin Lanz
MedFlight, Mark Reynard
Cardinal Health, James Porterfield
OSU Flight Education, Charles Ventola
Columbus Chamber of Commerce, Chaz Fruetel
Worthington Industries, Lowell Dowler
Personal Aircraft Owners, Jay DuRiverage
Experimental Aircraft Association, Dick Wetherald

Part 150 Committee Members Not Present

Perry Township, Robert Myers
Sharon Township, John Oberle
Ohio Regional Business Aircraft Association, Doug Stewart
Thrifty Car Rental, Todd Greenleaf

OSU/Consultant Core Working Team Members Present

David Full and Don Andrews (RS&H); Steve Alverson and Ron Seymour (ESA Airports); Marie Keister (Engage); Nawal Taneja, Doug Hammon, Cathy Ferrari, Kathy Dillow and Michael St. Clair (OSU); Bill Habig and Latane Montague (consultants)

Public Observers

Mayor Mary Jo Cusack, Worthington Councilmen David Foust and Lou Goorey, Rich Belisle, Melanie Dickman, John Ehlers, Rosemarie Lisko, Vera Tedrick, Bob Tedrick, Scott Whitlock

Media Present

None

Materials Available/Reviewed at the Meeting

- Agenda (*sent in advance*)
- Part 150 Committee Goals and Objectives
- Frequently Asked Questions
- Draft Day-Night Average Sound Level (DNL) Contour Maps
- PowerPoint Presentation

Meeting Summary

Meeting Introductions

Marie Keister, the facilitator for the Part 150 Committee, convened the meeting at 2 p.m. Introductions were made and discussion ground rules were reviewed. Ms. Keister asked that Committee members save their questions and comments for the end of each segment of the presentation. Public comment would be allowed at the end of the meeting.

The meeting purpose was to update the Part 150 Committee on the technical analyses completed to date and to present the draft Day-Night Average Sound Level (DNL) contours for OSU Airport.

Review of Work Completed To Date

David Full, Reynolds, Smith & Hills (RS&H) Consultant Team and OSU Airport Part 150 Study Project Manager, reviewed the work that had been completed since the last Part 150 Committee meeting was held on September 19, 2007. Noise measurements had been conducted, extensive data collection had occurred and a Technical Subcommittee was formed to review the inputs to the Integrated Noise Model (INM). The Subcommittee met two times since September, and provided helpful review to ensure the accuracy of the inputs. (*See Technical Subcommittee meeting materials and the related Technical Memorandum at <http://www.osuairportpart150.com/previous.html>.*)

Mr. Full reviewed the meeting agenda, which included a review and discussion of:

- Aircraft Operations Inputs
- Flight Track and Runway Use Inputs
- Day-Night Average Sound Level (DNL) Contour Results
- Sound Exposure Level (SEL) Contours
- Noise Measurement Results
- Public Comment and Questions
- Action Items and Next Steps

Aircraft Operations Inputs

Don Andrews, RS&H Part 150 Study Project Officer, expanded on how the Technical Subcommittee process helped the consultant team review aircraft operations and other model inputs. He explained that there is no one single source of data available, and that the team used the following to develop inputs for the INM: based aircraft and hangar waiting lists and forecasts, FlightAware and Port Columbus Noise Office Standard Terminal Automation Replacement System (STARS) data, interviews with aircraft operators and air traffic control tower staff, industry best practices and professional judgment.

He noted that it was unusual to have access to the 55,312 flight records made available by the Port Columbus Noise Office. For security reasons, this data is restricted from public review by the FAA.

Mr. Andrews then explained how the consultant team followed these six, industry-standard steps to arrive at the aircraft operational fleet mix:

1. Prepared a first-level sort
2. Created a Master Look-up Table
3. Reassembled Table B-1 at “Model Combination” level
4. Equalized arrivals/departures
5. Prepared allocations for FY 2007

6. Prepared 2012/2027 fleet mix

Mr. Andrews went into extensive detail on steps 5 and 6, explaining how allocations are conducted; how law enforcement, military, single/multi-engine and helicopter flights are accounted for; and how the team arrived at its conclusions (*see Part 150 Committee Presentation*).

Questions and Comments (Responses in Italics)

1. WOOSE representative Jane Weislogel asked if the team used the actual number of touch and go operations from Port Columbus Noise Office data or if estimates were used. *Mr. Andrews said actual touch and go operations in the Port Columbus records were used. These were double-checked using OSU Air Traffic Control Tower records.*
2. Worthington representative David Zoll asked if it would have made a material difference in the total number of operations if unknown aircraft had been allocated to arrivals and departures before assigning them to various aircraft types. (In other words, would there have been a change in outcome had steps four and five been conducted in reverse order.) *Mr. Andrews said it would have not made a difference or affected the accuracy of the outcome.*
3. Cardinal Health representative James Porterfield shared that Santa Monica's airport is trying to restrict aircraft by size, but with modern business jets size has little to do with the noise generated. Some small aircraft generate more noise than larger jet aircraft.

Introduction to Aircraft Noise Modeling

Mr. Steve Alverson, Part 150 Study Task Manager, presented a series of slides that provided an introduction to aircraft noise modeling. He said that noise modeling must comply with Federal Aviation Regulation (FAR) Part 150 requirements, which include using:

- The current FAA-approved Integrated Noise Model (INM) Version 7.0
- Annual-average day aircraft operations
- Aircraft types from the INM's database
- FAA-approved aircraft substitutions
- The Day-Night Average Sound Level (DNL) metric to assess impact

The noise modeling must not alter standard INM departure and arrival profiles or create aircraft substitutions without FAA approval, and may not use noise measurements to modify the INM aircraft noise database.

Questions and Comments (Responses in Italics)

1. WOOSE representative Jane Weislogel asked if the model would account for the turn to the 50 degree heading (over Worthington that pilots make when they depart to the east of the airport) and whether it was allowed to show this turn. *Mr. Alverson said slides later in the presentation would show that the turn to a 50*

degree heading was reflected in the model. It was not necessary to ask for permission to show this, as it was in the data that was collected.

Flight Track and Runway Use Inputs

Mr. Alverson reviewed several slides showing sample flight tracks that occur today and that are forecast to occur in the future. He showed how the turn to a 50 degree heading was reflected in the 2007 flight tracks of jets departing to the east of the Airport. He said that the consultant team developed over 1,400 modeled flight tracks at OSU Airport – more than the number of modeled flight tracks developed for the FAR Part 150 Study at Atlanta Hartsfield-Jackson International Airport, the second busiest airport in the world. Mr. Alverson said that a sampling of flight tracks would be displayed at the public open house to be held later that evening, and would also be available for viewing after the meeting at www.OSUAirportPart150.com.

There were no questions or comments about this segment of the presentation.

Day-Night Average Sound Level (DNL) Contours

Mr. Alverson presented the draft 2007, 2012 and 2027 DNL contours. He said that the modeling indicates that the 65 DNL contour – the FAA’s threshold for determining noise impact -- falls mainly within Airport property. Land uses falling outside the 65 DNL contour are considered compatible according to FAA guidelines. While not required by the FAA, OSU Airport also asked the consultant team to look at the 60 DNL contours, which were also displayed on the maps shared with the Part 150 Committee.

Mr. Alverson said that variations of the contours during 2007, 2012 and 2027 are driven by jet noise. In 2007, the 65 DNL contours extend further to the west of the Airport than the east because prevailing winds are usually from the west, so aircraft take off in that direction most often. Helicopter operations add to the noise contours on the north end of the Airport property. In 2012, the noise contours shift to the north because jets are expected to use the north runway if it is extended as proposed in the OSU Airport Master Plan. The 2027 noise contour is similar to 2012. While noisier aircraft are expected to be retired by then due to their age, potential noise reduction would be expected to be offset by the increased number of jet operations.

Mr. Alverson also noted that City of Worthington representative David Zoll had asked at a prior meeting that the consultant team run the model to analyze noise contours under a “no build” scenario, which would assume that the north runway was not extended as assumed in the 2012 modeling forecast. While not required by the FAA, OSU Airport also asked the consultant team to look at this. Mr. Alverson then showed the draft 2012 noise contours with and without the north runway extension. He indicated the noise contour around the south runway would be longer than it would be if the north runway was extended, and the 60 DNL would also reach more of the surrounding community.

There were no questions or comments about this segment of the presentation.

Sound Exposure Level (SEL) Contours

Mr. Alverson showed the sound exposure levels (SEL) for several types of jet and propeller aircraft departures, demonstrating Mr. Porterfield's earlier comment that larger jets aren't always noisier than smaller aircraft. Showing these contours helps increase understanding on how noise affects sensitive areas. They will also be used during the noise compatibility phase of the Part 150 Study.

Questions and Comments (Responses in Italics)

1. Mr. David Zoll asked when SEL contours would be reflected on the noise contour maps. *Mr. Alverson said this would occur during Phase 2 of this study effort, when noise abatement strategies would be considered. Mr. Alverson also noted that there are no federal guidelines on SEL contours, but that the analysis would help everyone increase their understanding on how SELs affect the communities surrounding the Airport.*

Noise Measurement Results

Mr. Alverson displayed the 13 sites where noise measurements were taken for seven continuous days in October, when OSU Airport experienced heavier traffic during The Ohio State University's football homecoming week. Sites were chosen to capture information relating to OSU flight training operations, the turn to a 50 degree heading over Worthington, helicopter operations and other noise sensitive areas. Consultant team members monitored each noise measurement site, taking notes and observing operations. They also reviewed FlightAware data during the measurements.

Mr. Alverson showed the range of noise measurements at each location, which illustrated both the volume and duration of noise events. The measured levels fell within the range of the modeled levels, but modeled levels were generally higher than the measured levels. That is, the model erred on the side of assuming more noise impact.

Questions and Comments (Responses in Italics)

1. Worthington Industries representative Lowell Dowler asked if for the future cases the model takes into consideration anticipated changes in technology based on past experience, such as the elimination of Stage 1 jets and the introduction of the new Stage 4 standard. *Mr. Alverson said the model does not include aircraft that have not been developed yet. Currently, there is no legislation to retire Stage 3 jets, so the model does not assume they will be gone. However, in 2027 there were assumptions made that aircraft older than 40 years would be retired, just based on their age. Mr. Alverson added that there is nothing in the model that would predict what a Stage 4 aircraft would sound like. There is a chance that the contours could actually be smaller—but the modeling process takes a more conservative approach and shows a worst case scenario for the forecasted noise contours.*

2. Columbus Flight Watch representative Don Peters asked if the use of new navigation aids was assumed in the model, such as implementing a new glide slope to the west. Would these types of navigation aids and the north runway extension have a quieting effect? *Mr. Alverson said the team's profile research on the C560 and Beechjet aircraft arrivals found many hold downs further to the east of the Airport. These aircraft come into the Airport on a three degree glide slope starting at about five nautical miles. Mr. Alverson added that all noise forecasts assumed the extension of the north runway, as called for in the Master Plan.*
3. Ms. Jane Weislogel asked if the noise measurements were of single events. *Mr. Alverson said yes. Single events are 10 to 12 decibels higher than the maximum levels because both loudness and duration are accounted for.*
4. Experimental Aircraft Association representative Dick Wetherald commented that when Honda introduced its Very Light Jet (VLJ) at an air show two years ago, they told the crowd to be quiet so they could hear it. *Mr. Alverson agreed that these aircraft are very quiet, and are designed to travel to airports without current jet service.*

Public Comments and Questions

Facilitator Marie Keister invited the general public and other Committee members to make comments and ask questions.

1. Public observer Scott Whitlock asked Mr. Alverson to clarify whether one month of data was used to develop jet flight tracks, and whether Port Columbus data was used for this analysis. *Mr. Alverson said that seven days of data from four periods of the year were used to develop flight tracks, equaling 28 days of data for each segment of runway use type. Flight tracks for touch and go operations were based on actual operations on seven days throughout the year. AirScene data was used to develop flight track information.*
2. Mr. Whitlock commented that while developing the fleet mix, Mr. Andrews said he equalized the arrivals and departures at the group level. Could that have been done at the aircraft type level? *Mr. Andrews said the team reviewed this question and found with one aircraft type there would have been 20 more operations out of approximately 80,000 annual operations had it been done this way. To do this in all cases would have significantly increased the work without significantly increasing the accuracy of the outcome.*
3. Mr. Whitlock asked if the team could have equalized the arrivals and departures using the N (aircraft tail) numbers. *Mr. Andrews said the team could have done this, but it would have been much more work and not have changed the outcome of the modeling.*
4. Mr. Whitlock asked how the team knew that to be the case. *Mr. Alverson said the Cessna Citation, for example, has several engine types but under FAA guidelines on substitutions they are considered one equivalent type of aircraft in the model.*

Mr. Andrews commented that it is unusual to see this level of detail at a general aviation airport, having developed over 1,400 modeled flight tracks and reviewed 55,000 plus operations. The amount of digging for detail on the data is extraordinary.

5. Mr. Zoll asked if the runway use percentages for jets were based on wind direction, and were the percentages determined based on actual tower counts for the year? *Mr. Andrews said these percentages were based on tower counts for the entire year.*
6. Mr. Zoll asked if the runway use percentages for jets were consistent with runway headings had wind been the sole determining factor. *Mr. Alverson said the team hadn't looked at that yet, but during the next study phase might look at ways that runway use could be shifted to improve compatibility.*
7. Mr. Zoll asked that the team indeed look at this. He also asked if it was typical for SEL maps to be provided at this time, or to be provided during the next phase of study. *Mr. Alverson said there is no FAA requirement to produce SEL maps in a Part 150 Study. However, the SEL information was developed because OSU Airport and the consultant team knew the community would be interested in seeing them and that it would increase everyone's understanding of the development of the DNL contours. This provides people an opportunity to give more informed input.*
8. Mr. Zoll asked that, given that the noise contour maps don't show the 65 DNL past the perimeter of the Airport's property, will the FAA allow this effort to move into the proposed noise compatibility phase of the Part 150 Study? *Mr. Alverson agreed that 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. However, the University understands that noise concerns continue to exist, and remains committed to further exploring noise abatement strategies. To that end, OSU Airport and the consultant team are actively working to secure the FAA's support and funding for Phase II of this study process. This next step would evaluate a broad range of aircraft operational procedures and land use practices to help further reduce aircraft noise exposure on surrounding neighborhoods.*
9. Ms. Weislogel thanked the consultant team for its extra work. She said OSU Airport is a busy airport, and expressed her opinion that (OSU) wants it to be busier with (additional) jet aircraft. As a result, more than the standard Part 150 Study was necessary.

Next Steps

Project Manager David Full reviewed the next steps, which included:

- Finalizing the draft DNL Contours. Comments should be provided to Marie Keister by May 24th.
- Finalizing the Noise Exposure Maps (NEM) Report and submitting them to OSU Airport to certify their accuracy before submitting them to the FAA
- Initiating the Noise Compatibility Program phase of the study upon approval of the FAA
- Developing preliminary noise mitigation measures, which would include both operational and land use alternatives
- Ongoing community outreach

Mr. Full explained that the noise compatibility aspect of the Part 150 Program was developed by the FAA to address non-compatible land uses within the 65 DNL noise contour. Any Noise Compatibility Program (NCP) must be formally approved by the FAA. While the FAA is reluctant to approve NCP measures that do not reduce impacts within the 65 DNL contour, OSU Airport is committed to working to obtain FAA approval of an updated Noise Compatibility Program.

Ms. Keister reminded everyone that the public open house would be held later that day, from 7 to 9 p.m. at the OSU Airport hangar, and that comment forms would be available at the meeting and could be turned in at the meeting or later by mail or e-mail. All materials presented or displayed at the public meeting would be posted on the project web site within one to two business days.

Adjourn

Ms. Keister adjourned the meeting at 3:45 p.m.



The Ohio State University Airport

Part 150 Study Public Meeting #1
SUMMARY¹

Meeting Time and Location

April 24, 2008, 7 to 9 p.m. – presentation at 7:30 p.m. – at OSU Airport Hangar 1 (entrance next to Barnstormer Restaurant), 2160 West Case Rd., Columbus, OH 43235.

Meeting Attendance and Format

Eighty members of the public attended the public open house. Media representatives included Suburban News Press, This Week News, WOSU Radio and WMCH-TV4. Participants entered the OSU Airport Hangar, where they signed in, received a name tag and picked up handouts and directions on how to proceed through the five information stations, which included:

- ✓ Station #1 (red): The Federal Aviation Regulation (FAR) Part 150 Process

This station summarized, with exhibits, the process, roles and regulatory framework for a Part 150 Noise and Land Use Compatibility Study (Part 150 Study); noise study goals; and airport and aircraft operational needs

- ✓ Station #2 (green): Aircraft Operations

This station featured exhibits summarizing the existing and forecast annual operations, the aircraft fleet mix, flight tracks and runway use at OSU Airport. These provide the data inputs to the Integrated Noise Model (INM), which then calculates the noise contours surrounding the OSU Airport today and in the future.

- ✓ Station #3 (orange): Aircraft Noise Modeling

¹ This summary is intended to provide a paraphrased overview of presentations made, materials discussed, questions asked and comments made. It is not intended to be a word-for-word representation of the Part 150 Study public meeting proceedings.

Station 3 provided details on the INM and noise metrics, then displayed the draft 65 Day-Night Sound Level (DNL) contours – the FAA’s threshold for determining noise impact – surrounding the Airport in 2007, 2012 and 2027. Exhibits also displayed sound exposure levels for jet and propeller aircraft.

✓ Station #4 (purple): Aircraft Noise Measurements

This station explained where and when noise measurements were taken and highlighted the results.

✓ Station #5 (blue): Closing/Comments

Refreshments were located on tables at this last station, where attendees could also fill out and leave comment forms.

Colored balloons at each station and arrow signs on the floor helped orient participants. Consultant and Airport staff members were located at each station to provide information, answer questions and listen to public comment. Aircraft were located just outside the hangar to enable participants to see the types of planes that use the Airport.

Materials Available/Reviewed at the Meeting

- Part 150 Open House Instructions
- Frequently Asked Questions
- Station Exhibits
- PowerPoint Presentation: Background, Findings and Highlighted Exhibits
- Comment Form

Pre-Meeting Publicity

- Newspaper ads in This Week News (Dublin and Worthington editions; circulation 42,579) and Suburban News Press (Dublin, Northwest and Worthington editions; circulation 44,055)
- News release sent electronically to all local media; pre-meeting articles appeared in This Week and Suburban News Press; radio and television reports aired on WOSU AM and FM and WCMH-TV4
- Meeting date and purpose published in newsletter mailed to approximately 200 addresses on OSU Airport mailing list and e-mailed to all e-mail distribution lists (approximately 500 names and organizations)
- E-mail notification to Part 150 Committee, appointing agencies, elected officials, community officials and to those who have expressed an interest in the Part 150 process
- Signage on the Worthington Village Green located at the square of Worthington at SR 161 and US 23

Study Team Participants

- David Full, Don Andrews, Brad Wente (RS&H)
- Steve Alverson and Ron Seymour, Mike Alberts, Monica Newhouse (ESA Airports)
- Marie Keister (Engage)
- Bill Habig and Latane Montague (consultants)
- Doug Hammon, Cathy Ferrari, Elizabeth Ike, Cecilia Lammers, Robert Haverkamp, Dean Bud Baeslack (OSU)

Meeting Summary

Meeting Introductions

Marie Keister, facilitator and lead for the OSU Airport Part 150 Study public involvement effort, invited attendees to be seated for the 7:30 p.m. overview presentation of the OSU Airport Part 150 Study process and draft Day-Night Average Sound Level (DNL) contours for OSU Airport. Ms. Keister then introduced Mr. Steve Alverson, Part 150 Study Task Manager with the RS&H Consultant Team.

Introduction to Aircraft Noise Modeling

Mr. Alverson provided the Part 150 Study overview (*see “Part 150 Public Open House Presentation”*), first recapping that a FAR Part 150 Study is:

- A program an airport can voluntarily undertake to address noise and land use compatibility concerns
- Its components are established by the FAA and include evaluating:
 - ✓ Existing conditions (land use, zoning, etc.)
 - ✓ The existing noise environment
 - ✓ The future noise environment
 - ✓ Noise abatement alternatives
 - ✓ Land use alternatives
 - ✓ And making recommendations
- Study recommendations approved by the FAA become eligible for federal funding and implementation.

Mr. Alverson also explained what a Part 150 Study is not:

- It is not an airport master plan, environmental review document or safety study.
- It is not an opportunity to close the airport, as a Part 150 study assumes an operating airport with the scheduled future development plans reflected in the future-year noise contours. Mr. Alverson explained, for example, that the proposed runway extension in the most recently adopted Master Plan (in 1990) would be assumed in the future development plans when developing the future year noise contour maps. This allows the consultant team to consider its full impact in the analysis and make recommendations accordingly.
- It is not a forum to explore non-aviation uses of the airport property.

Mr. Alverson clarified roles and responsibilities of the airport, the FAA, local governments, residents and pilots, who ultimately have the responsibility for the operation of the aircraft and are responsible for following noise abatement procedures while adhering to all safety measures. He summarized the FAA regulatory framework and the study goals, which include:

- Documenting current and future noise levels around OSU Airport
- Reviewing current noise abatement flight tracks and procedures
- Reviewing the current aircraft noise complaint process
- Evaluating additional noise abatement opportunities
- Providing opportunity for community input
- Developing recommendations for noise abatement and noise mitigation measures

Mr. Alverson explained that aviation system users pay for the aviation system, including researching and mitigating the impacts of noise. He discussed the airport and aircraft operational needs, explaining that:

- Airports must be available for users 24 hours a day due to interstate commerce regulations
- Airports balance working with communities on airport noise concerns with maintaining a viable airport for the region
- Aircraft must take off and land into the wind, which determines which runways are used
- Aircraft climb as quickly as possible on departure to reach cruise altitude
- Aircraft use visual approaches for landing during good weather and instrument approaches for landing during bad weather. This may result in slightly different flight patterns based on weather conditions.
- Aircraft will deviate from the typical flight patterns to avoid severe weather as needed

Mr. Alverson showed a graphic outlining the Part 150 Study process, illustrating how the consultant team has been collecting data in a number of areas to look at current and proposed airport operations, aircraft fleet mix, flight procedures, land uses and zoning around the airport and population data. Noise measurements took place in 13 areas surrounding the airport.

The outcome of Phase 1 is the noise exposure maps, or NEMs, for both existing and forecast conditions. These draft maps, available to the public for review today and online, will be finalized based on public input and additional technical analysis, and submitted to the FAA for their review and acceptance later this year. In the meantime, the OSU Airport Part 150 Study will move into Phase 2, which is to look at noise abatement and land use alternatives and develop recommendations for a noise compatibility program to reduce incompatible land uses. After seeking input from the Part 150 Committee and the public, recommendations will be forwarded to University officials for their consideration. They will forward their recommendations to the FAA for final review and approval.

Mr. Alverson explained that noise modeling must comply with Federal Aviation Regulation (FAR) Part 150 requirements, which include using:

- The current FAA-approved Integrated Noise Model (INM) Version 7.0
- Annual-average day aircraft operations
- Aircraft types from the INM's database
- FAA-approved aircraft substitutions
- The Day-Night Average Sound Level (DNL) metric to assess impact

The noise modeling must not alter standard INM departure and arrival profiles or create aircraft substitutions without FAA approval, and may not use noise measurements to modify the INM aircraft noise database.

Flight Track and Runway Use Inputs

Mr. Alverson reviewed several slides showing sample flight tracks that occur today and that are forecast to occur in the future. He showed how the turn to a 50 degree heading was reflected in the 2007 flight tracks of jets departing to the east of the Airport. The consultant team developed over 1,400 modeled flight tracks at OSU Airport – more than the number of modeled flight tracks developed for the FAR Part 150 Study at Atlanta Hartsfield-Jackson International Airport, the second busiest airport in the world. Mr. Alverson said a sampling of flight tracks were displayed at information station #2, and would also be available for viewing after the meeting at www.OSUAirportPart150.com.

Day-Night Average Sound Level (DNL) Contours

Mr. Alverson presented the draft 2007, 2012 and 2027 DNL contours. The modeling indicates that the 65 DNL contour – the FAA's threshold for determining noise impact -- falls mainly within Airport property. Land uses not within the 65 DNL contour are considered compatible according to FAA guidelines. While not required by the FAA, OSU Airport also asked the consultant team to look at the 60 DNL contours, which Mr. Alverson then presented.

Mr. Alverson said that variations of the contours during 2007, 2012 and 2027 are driven by jet noise. In 2007, the 65 DNL contours extend further to the west of the Airport than the east because prevailing winds are usually from the west, so aircraft take off in that direction most often. Helicopter operations add to the noise contours on the north end of the Airport property. In 2012, the noise contours shift to the north because jets are expected to use the north runway if it is extended as proposed in the OSU Airport Master Plan. The 2027 noise contour is similar to 2012. While noisier aircraft are expected to be retired by then due to their age, potential noise reduction would be expected to be offset by the increased number of jet operations.

Mr. Alverson also noted that, while not required by the FAA, the City of Worthington and OSU Airport had requested that the consultant team run the model to analyze noise contours under a “no build” scenario, which would assume that the north runway was not extended as assumed in the 2012 modeling forecast. Mr. Alverson then showed the draft 2012 noise contours with and without the north runway extension. He indicated the noise

contour around the south runway would be longer than it would be if the north runway was extended, and the 60 DNL would also reach more of the surrounding community.

Sound Exposure Level (SEL) Contours

Mr. Alverson showed the sound exposure levels (SEL) for several types of jet and propeller aircraft departures. Showing these contours helps increase understanding on how noise affects sensitive areas. While not required, they will also be used during the noise compatibility phase of the OSU Airport Part 150 Study.

Noise Measurement Results

Mr. Alverson displayed the 13 sites where noise measurements were taken for seven continuous days in October, when OSU Airport experienced heavier traffic during The Ohio State University's football homecoming week. Sites were chosen to capture information relating to OSU flight training operations, the turn to a 50 degree heading over Worthington, helicopter operations and other noise sensitive areas. Consultant team members monitored each noise measurement site, taking notes and observing operations. They also reviewed FlightAware data during the measurements.

Mr. Alverson showed the range of noise measurements at each location, which illustrated both the volume and duration of noise events. The measured levels fell within the range of the modeled levels, but modeled levels were generally higher than the measured levels. That is, the model erred on the side of assuming more noise impact.

Next Steps

Mr. Alverson reviewed the next steps, which included:

- Finalizing the draft DNL Contours. Participants were encouraged to fill out comment forms.
- Finalizing the Noise Exposure Maps (NEM) Report and submitting them to OSU Airport to certify their accuracy before submitting them to the FAA
- Initiating the Noise Compatibility Program phase of the study upon approval of the FAA
- Developing preliminary noise mitigation measures, which would include both operational and land use alternatives
- Ongoing community outreach

Mr. Alverson explained that the noise compatibility aspect of the Part 150 Study was developed by the FAA to address non-compatible land uses within the 65 DNL noise contour. Any Noise Compatibility Program (NCP) must be formally approved by the FAA. While the FAA is reluctant to approve NCP measures that reduce impacts beyond the 65 DNL contour, OSU Airport is committed to working to obtain FAA approval of an updated Noise Compatibility Program.

Public Comments and Questions (Responses in Italics)

Facilitator Marie Keister invited the general public to make comments and ask questions.

1. How will the results of the noise monitoring be used? Will loud single (noise) events be considered in the contour? *Onsite noise monitoring information allows the study team to compare single event noise with cumulative noise exposure levels developed by the Integrated Noise Model, shown here on the draft Noise Exposure Maps. Monitoring also helps everyone understand how aircraft noise levels compare to other community noise sources. While the FAA does not require this in the Part 150 Study process, the next phase of this effort will review the noise complaint data and the noise monitoring results to gain a better understanding of how single events are affecting communities surrounding the Airport. Phase 2 will also look at how noise abatement strategies could be used to address concerns.*
2. You are using meaningless, inaccurate data. Many complaints are counted as one complaint. There are very old planes being flown by student pilots.
3. There are up to 16,000 air taxi/commuter-type operations. How many are based at OSU Airport? *There are no scheduled commercial operations at OSU Airport and the Airport has no plans for such “commercial” operations by air carriers. There were approximately 3,400 operations in the “air taxi/commuter” category of the OSU Airport activity forecast for 2007. Don Andrews, RS&H Part 150 Study Project Officer, explained that within the context of the aviation forecasting, the “air taxi/commuter” category refers to any scheduled or non-scheduled for-hire operations by aircraft with 60 or fewer seats. While there are no scheduled for-hire operations at OSU Airport, and the Airport is not aware of any locally based air-taxis, there are of course non-scheduled for-hire operations, such as air-taxi or charter aircraft operations. Such operations are a non-commercial for-hire type of activity, but the operations are conducted by the same type of aircraft that make up the private and corporate aircraft in the general aviation fleet and fly the same kind of mission profiles as the general aviation fleet. Mr. Alverson explained that as a federally funded general aviation airport, OSU Airport cannot restrict for-hire activity.*
4. Night flights are not usually student pilot flights, but are flights that are used for medical purposes. I’m a cancer survivor; these flights are critical to saving people’s lives.
5. Worthington has a rich historical heritage. Quiet is needed for enjoyment, and OSU Airport’s increased operations bring more noise and increase the chance for a crash. This diminishes our ability to quietly enjoy the historical elements of our area. The negative impacts of extending a runway at OSU Airport would be extreme.
6. Air pollution and odors from aircraft make those of us living on West Case Road have to go indoors. Have environmental studies looked at these types of impacts? Will there be an environmental assessment during this Part 150 Study? *An environmental review under the National Environmental Policy Act (NEPA)*

would occur at the very end of the Part 150 Study process, if the Part 150 Study process results in the need for any Federal approvals or decisions that trigger NEPA. For example, if the Noise Compatibility Program contains recommended changes to departure flight tracks or other changes to air traffic control procedures, and if the FAA finds that those changes are acceptable and feasible from an operational/aviation safety perspective, the FAA would then need to evaluate those changes to determine if there are potential environmental impacts. If there is potential for environmental impact, for example, due to the shifting of noise from one community to another that would result from changing existing flight tracks, those impacts would need to be evaluated under NEPA prior to the FAA's final decision to implement such changes.

7. Mr. Alverson said that an increase of 10 decibels is twice as loud. Actually, in my expert opinion, sound doubles with a 3 decibel increase. *Mr. Alverson indicated that a doubling of the sound energy results in a 3-dB increase in noise exposure, but it takes about a 10-dB change before people would judge that a new noise level is twice as loud.*
8. Local flight tracks would increase on the south runway if the north runway was extended, correct? In Orange County, California there are flight restrictions for certain hours and aircraft are required to arrive/depart at a steeper angle. Have those types of restrictions been considered here? *Mr. Alverson indicated that the 1990 Aircraft Noise and Capacity Act severely limited airport proprietors' ability to put curfews in place. Airports with curfews that existed in 1990 were grandfathered under the act. Noise compatibility strategies will be considered during the second phase of this study, which will begin later this year.*

Ms. Keister encouraged everyone to visit the information stations, and that comment forms could be turned in at the meeting or later by mail or e-mail. All materials presented or displayed at the public meeting would be posted on the project web site within one to two business days.

Post-Meeting Follow-up

- Media coverage resulted in This Week News, Suburban News Press, NBC 4 and WOSU Radio
- All meeting materials were posted on the web site
- Public comments were accepted until May 24, 2008



The Ohio State University Airport

Part 150 Committee
Meeting #3: SUMMARY¹

Meeting Time and Location

November 6, 2008, 2 - 4 p.m. – MedFlight Training Room
2827 W. Dublin Granville Road, Columbus 43235

Participants

Part 150 Committee Members Present

- City of Columbus, Vince Papsidero
- City of Dublin, Paul Hammersmith
- City of Worthington, David Zoll
- Village of Riverlea, Mayor Mary Jo Cusack
- Franklin County, Matthew Brown
- Mid-Ohio Regional Planning Commission, Chris Gawronski
- Northwest Civic Association, Bill Carleton
- We Oppose Ohio State University Airport Expansion, Jane Weislogel
- Sharon Township, John Oberle
- Columbus Regional Airport Authority, David Wall
- Midwest (OSU) Air Traffic Control, Deral Carson
- Port Columbus Air Traffic Control (FAA), Chris Lenfest
- Ohio Highway Patrol, Lt. Mark Groves
- Aircraft Owners & Pilots Association, E.J. Thomas
- Columbus Flight Watch, Don Peters
- Labcorp, Austin Lanz
- MedFlight, Mark Reynard
- Cardinal Health, James Porterfield
- OSU Flight Education, Charles Ventola
- Worthington Industries, Lowell Dowler
- Personal Aircraft Owners, Jay DuRivage
- Experimental Aircraft Association, Dick Wetherald

¹ This summary is intended to provide a paraphrased overview of presentations made, materials discussed, questions asked and comments made. It is not intended to be a word-for-word representation of the Part 150 Study public meeting proceedings.

Part 150 Committee Members Not Present

- Columbus Chamber of Commerce, Matt McCollister
- Perry Township, Robert Myers
- Ohio Regional Business Aircraft Association, Doug Stewart
- Thrifty Car Rental, Todd Greenleaf

OSU/Consultant Core Working Team Members Present

- Brad Wentz (RS&H); Steve Alverson, Ron Seymour and Mike Alberts (ESA Airports); Marie Keister and Trish Fodor (Engage); Doug Hammon, Cathy Ferrari, Cecilia Lammers, Kathy Dillow and Mike St. Clair (OSU); Bill Habig and Latane Montague (consultants)

Public Observers

- Lisa Allen (Rep. Jim Hughes' office), Ray Dutton, Alan Harding, Rosemarie Lisko, John O'Keefe, Bob Tedrick, Stacy Weislogel, Scott Whitlock

Media Present

- Candy Brooks, *This Week (Worthington) News*

Materials Available/Reviewed at the Meeting²

- Agenda (*sent in advance*)
- PowerPoint Presentation

Meeting Summary

Meeting Introduction

Marie Keister, the facilitator for the Part 150 Committee, convened the meeting at 2 p.m. Introductions were made and discussion ground rules were reviewed. Ms. Keister asked that Committee members save their questions and comments for the end of each segment of the presentation. Public comment would be allowed at the end of the meeting.

Ms. Keister then introduced Mr. Steve Alverson, Part 150 Study Task Manager with the RS&H Consultant Team, to give two presentations addressing the status of Noise Exposure Maps (NEMs) and an overview of the Noise Compatibility Plan (NCP).

Review of Noise Exposure Maps

Mr. Alverson summarized study progress so far, including:

- Two Part 150 Committee meetings – the first to initiate the study, provide background and identify goals; the second to review the noise contours at OSU Airport.

² All meeting materials are available at www.osuairportpart150.com.

- Two Part 150 Technical Subcommittee meetings, where data inputs used in the Integrated Noise Model (INM) were reviewed and adjusted based on subcommittee feedback and additional technical analysis.
- One public meeting, where the public was briefed on the Part 150 Noise and Land Use Compatibility Study process, and they reviewed and provided feedback on the draft noise exposure contours produced by the model.
- The noise modeling effort, findings and public comments related to the development of the NEMS were summarized in a draft Noise Exposure Map Report, which will be submitted to the Federal Aviation Administration (FAA) before the end of this year. This draft document was sent to Part 150 Committee members in late October for their review and input.

Mr. Alverson then presented a series of slides showing the noise exposure maps for OSU Airport. Mr. Alverson explained the noise exposure maps would be on display at the Open House this evening for the public to review and provide comment. These maps and the accompanying report will be finalized based on Part 150 Committee and public feedback received by December 6th, and then submitted before the end of the year to the University and the FAA for their review and approval. Mr. Alverson also reviewed the overall process for the Part 150 effort, and explained that Phase 1, the NEM development phase, was coming to an end.

Questions and Comments (Responses in Italics)

1. Worthington representative David Zoll asked where were the Sound Exposure Level (SEL) maps? *Mr. Alverson said that SEL contours for the 10 most represented aircraft types were completed and presented in April, and are included in the appendices of the draft NEM Report, which were sent to each Part 150 Committee member. The appendices of the report are on the CD that was included with the document. The SEL metric will also be used to evaluate various noise compatibility options during the next phase of study, which we are starting today.*
2. WOOSE representative Jane Weislogel said she noticed that the flight tracks to the east, as indicated on the 2008 noise contours, show jets turning 050 degrees when departing OSU Airport, and some other aircraft types going straight. Why? Also, the maps with future forecasts show all the training flights using the south runway. Will all of the training flights move there? *On the first question, Mr. Alverson noted that the flight tracks indicated on the maps, for both jets and turboprop aircraft, reflects information received from current radar flight track data. On the second question, Mr. Alverson explained that, for modeling and forecasting purposes, the team assumed that the flight tracks on the south runway would be replicated on the extended north runway. The exception is for the training pattern tracks, which are expected to be a mirror image of today's training activity on the south runway. This relocation of the training pattern activity to the south runway is expected to occur to provide separation from the jet activity on the north runway. While some aircraft will continue to use the north runway for training, most will shift to the south.*

***What is a Noise Compatibility Program?
Elements of a Noise Compatibility Program***

Mr. Alverson explained that a Noise Compatibility Program (NCP) is:

- A Federal Aviation Regulation Part 150 program developed by the FAA to address non-compatible land uses with the 65 Day-Night Level (DNL)³
- A program that must be formally approved by the FAA

He noted that the FAA is reluctant to approve NCP measures that do not eliminate, reduce or prevent non-compatible land uses in the 65 DNL. Mr. Alverson then summarized criteria for review NCP measures at OSU Airport:

- Develop a balanced and cost effective program for reducing noise without limiting airport utility, aviation efficiency or adversely affecting safety
- Improve the overall noise environment, while not shifting noise from one community to another
- Measures for reducing the highest noise levels affecting the greatest number of people, without adversely affecting one community over another, will be given highest priority
- NCP measures must be technically and legally feasible, and approved by the FAA (flight procedures) and local governments (land use measures)
- Measures subject to FAR Part 161 evaluation will not be part of the study recommendations

Mr. Alverson explained that FAR Part 150 provides guidance for comprehensive aircraft noise control programs. Noise management falls into three categories: operational procedures – abatement; land use measures – mitigation; and administrative measures. He walked through details of these various categories.

Ideas on these various noise compatibility strategies will be solicited from local citizens, OSU Airport, air traffic control personnel and other stakeholders – starting with this Part 150 Committee meeting and the public meeting to be held later this evening. As the consultant team evaluates the various ideas, it will be looking closely to ensure that none

³ Day-Night Average Sound Level (DNL) was developed as a single number measure of community noise exposure. DNL was introduced as a simple method for predicting the effects on a population of the average long term exposure to noise. DNL is an enhancement of the Equivalent Sound Level (Leq) metric through the addition of a 10 decibel (dB) penalty for nighttime (10 p.m. to 7 a.m.) noise intrusions. The incorporation of the 10 dB penalty is in recognition of the increased annoyance that is generally associated with noise during the later night hours. DNL employs the same energy equivalent concept as Leq and uses a 24- hour time integration period. DNL was developed under Environmental Protection Agency (EPA) guidance and reflects extensive research into the relationship between noise exposure and human annoyance.

of the strategies simply moves noise from one community to another, which conflicts with the FAA's policy of not shifting noise from one community to another.

Mr. Alverson noted that there are already a number of specific noise compatibility alternatives the consultant team will review, based on the scope of work developed with OSU Airport. These include:

- Assess a side-step approach to Runway 27R
- Use of Rt. 315 for routing of arriving and departing aircraft to and from the north
- Use of RNAV overlay procedures
- Use of continuous descent approach to Runway 27R and Runway 27L
- Use of noise barriers or ground run-up enclosures
- East departure heading
- Training and traffic patterns on the north side of the Airport
- Departure headings and arrival corridors for nighttime flights

There were no questions or comments from the Part 150 Committee.

Discussion: Noise Concerns and Ideas

Mr. Alverson presented a list of noise concerns the consultant team has developed based on input from Part 150 Committee members, the public, OSU Airport and a review of noise complaint data. Noise concerns include:

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

Ms. Keister asked committee members whether they considered the list to be all-inclusive, and to add their thoughts to the list of noise concerns.

Comments on Noise Concerns and Ideas

1. Riverlea representative Mayor Mary Jo Cusack said "no", and pointed out that arrivals are coming all night from the east, even at 4 a.m.
2. Ms. Weislogel said that AirScene does not track the start of take off noise on western departures.
3. Mayor Cusack said that Riverlea is specifically concerned about noise at Southington. Jets are flying over Southington, as are some propeller planes. Helicopters are flying over both Southington and Olentangy Boulevard.
4. Bill Carleton, representative of the Northwest Civic Association, said his community doesn't hear much (else) but helicopters.

Discussion: Noise Compatibility Program Ideas

Ms. Keister asked Part 150 Committee members for their ideas on potential noise compatibility strategies.

Comments

1. Mr. David Wall, Columbus Regional Airport Authority, said it is important to keep flight tracking systems up-to-date. Perhaps consult vendors about the latest technology.
2. Ms. Weislogel suggested re-educating new pilots. They are not flying the Rt.161 route, but are flying over houses. Training is key to remind them which route to take.
3. Ms. Weislogel said U-turns used to be a problem, which LabCorp addressed. The newer pilots may indeed need refresher training to keep to the agreed procedures.
4. Mr. Thomas suggested considering using a continuous descent approach. Thirty nautical miles out, the aircraft powers back, flaps are up and engines lowered. It is an aircraft's quietest configuration. It is standard at 30 miles out when flaps are down to power up for landing. However, pilots are starting this 5-7 miles out, just east of Riverlea, and prepping for landing right over Riverlea. Continuous descent could help Riverlea.
5. Another committee member commented that for safety, gear and flaps should be put down prior to Riverlea, and noted that Cleveland Avenue and Rt. 161 is 5 miles away. An ILS should be installed on the south runway.
6. Deral Carson, representative of Midwest (OSU) Air Traffic Control, commented on the helicopter issue. "I worked with MedFlight 3-4 years ago to set up routes in lower populated areas. We rerouted helicopter flights. It seems to help get helicopters down quicker. The sooner they land, the lower the noise quotient is. This is good practice."
7. Mr. Carson said that full Instrument Landing System (ILS) – which allows the aircraft to follow a standard three-degree approach -- is impossible on the south due to space constraints, but it may work with an electronic glide slope. The extension of the north runway should have room for full ILS.
8. A committee member asked whether a glide slope would put the plane higher than GPS. Another committee member responded that GPS approaches follow the same three-degree glide slope that would be part of an ILS. Without GPS or an ILS, aircraft follow a step-down approach and may be powering up or down over Riverlea, which is likely what the residents hear.
9. Mr. Zoll said it would be helpful to have a graphic to show step down verses glide slope approach.

10. James Porterfield, Cardinal Industries representative, said that most jets are not doing full step-down approaches. Continuous descent approaches to varying degrees are now being done on an informal basis through the use of GPS on some jet aircraft. However, it all depends on pilot technique or standard operating procedure. An ILS could improve the accuracy consistency with which pilots fly a continuous decent approach, and would make that type of approach available for aircraft that are not equipped with IFR rated GPS equipment. The difference in noise is how much power is used, which varies by airplane.
11. Mr. Porterfield offered to test different landings and close in procedures (flap settings) using different aircraft. Cardinal Industries flies the Falcon 2000, which is a quiet jet. He suggested looking at the NBAA guidelines, which are generic but helpful within the framework of safety.
12. Worthington Industries representative Lowell Dowler said there are two types of Challengers that they fly. One model is 17 years old and the other is 2 years old. The Challenger 300 is their newest aircraft and is capable of flying up to a 4.3 glide slope. A precision approach -- or LPV (Localizer Performance with Vertical guidance) approach -- may be a good thing to suggest for Don Scott (OSU Airport). Worthington Industries is currently looking at precision approaches with a 3-degree glide slope. He asked whether planes could be visibly seen when the noises happen.
13. Mayor Cusack said Riverlea residents can see the planes, which are very low over Riverlea, perhaps under 150 feet according to Mayor Cusack.
14. Mr. Dowler said the airport is on a plateau at an elevation of 905 feet. Riverlea slopes toward the river and is about 760 feet in elevation at Olentangy Boulevard. So the aircraft can't possibly be that low. That is perception more than reality.
15. Ms. Weislogel commented that Trenton Airport in Mercer County (New Jersey) has a user-friendly set of rules. Awards are given to companies who do not land planes between 11 p.m. and 7 a.m. There are other incentive programs.
16. Mr. Zoll said he looked on the CD sent with the draft Noise Exposure Map Report for the Sound Exposure Level (SEL) maps but did not see them. They would help to illustrate the noise issues for different aircraft. We need noise profiles and sound exposure levels. Would like data on arrivals as well departures for typical aircraft. When will we have this? *Mr. Alverson said SEL arrival and departure contours were produced for the top ten aircraft at OSU and were included in the draft report. Additional SEL maps will be produced, as needed, to evaluate different noise compatibility strategies.*
17. A committee member said for noise issues on eastern departures, look at multiple options with Columbus Regional Airport Authority (CRAA). Have there been

conversations with them to see if they could handle more flights since Port Columbus traffic levels are down?

18. Why are side step approaches being considered in the NCP? That is not common. Is it just allowed under certain visibility conditions?
19. Mr. Carson responded that sideways convergence can be a problem. Especially where there are two speeds involved, as well as multiple runways involved. Training aircraft is coming in one way; jets are coming in another, which is potentially dangerous. It also can disrupt a stabilized approach. Pilots who are concentrating on the approach may not see other pilots.
20. Port Columbus Air Traffic Control representative Chris Lenfest responded that side step approaches are mainly used at Port Columbus at night, when they are the only planes approaching the airport. It brings aircraft in over less noise sensitive areas.

Ms. Keister then asked the Committee for suggestions on possible land use noise compatibility measures.

Land Use-Related Comments

1. Chris Gawronski, MORPC representative, said that Columbus and Franklin County have airport noise zoning overlays, which should be revisited.
2. Vince Papsidero, planning director with the City of Columbus, said the noise zoning overlays need to be consistent with the FAA guidelines for 65 Day-Night Noise Level (DNL) zoning. Residential, business and industrial areas need to be defined.
3. Mr. Gawronski said so far, participation in noise overlay discussions has primarily been from Franklin County and Columbus. He said they need more input from other jurisdictions.

Ms. Keister asked Committee members for additional comments related to training and education, or any other thoughts on possible noise compatibility strategies:

Training, Administration and Other Comments

1. Mayor Cusack asked to return to the helicopter issue, and asked if there is a new flight plan with the south runway? It should go further south and west. Also, a chart that highlights training might be helpful. *Mr. Alverson said that moving helicopters to the south just moves it over a different community. The goal is not to move the noise; it is to reduce or mitigate it. This needs to be understood.*

2. Charles Ventola, representing OSU Flight Education, commented on flight education, noting that the configuration of the training aircraft fleet (at OSU Airport) has changed. Planes have higher performance getting up and out.
3. Mr. Dowler said the altitude of the aircraft is easier to determine on approach and landing. It is harder on departures due to many variables.
4. Sharon Township Trustee John Oberle asked what the standard is regarding shifting noise criteria? Are we looking for changes less than a decibel? *Mr. Alverson said that FAA requires no net increase in the population exposed to noise in one community as a result of shifting operations/noise from another community.*
5. Ms. Weislogel said Chapter Five in the first draft of the NEM Report originally said that, by 2017, there would be a 37% increase in traffic. It was subsequently dropped. Why? Flight traffic is down 51% due to fewer flight instructors and general aviation is down due to high fuel costs. Why would it rise? *Mr. Alverson said committee members should look at Chapter 2 for detail on expected growth. Chapters 2 and 5 should be consistent.*
6. How are touch and go defined? *Mr. Alverson said that every time an aircraft performs a touch and go it is counted as two operations, one landing and one takeoff.*
7. Regarding the 65-decibel contour; can you move it as long as you do not put people into it? Will you look at a 60-decibel noise level or lower? *Mr. Alverson said that the consultant team will be discussing with OSU which DNL contour to use because there are areas where aircraft noise concerns have been expressed such as Worthington that are outside of the 60 DNL contour line. He said we may need to go to a lower DNL value such as 55, but we'll need to discuss that with OSU.*
8. Mr. Zoll commented that SEL maps would help.
9. What will we see in the next round of information you provide us? *Mr. Alverson said the Part 150 Committee would receive a memo that includes a complete list of all the suggested noise compatibility strategies, and then the consultant team's rank ordering of the solutions that show the greatest promise based on technical analysis that will begin this winter.*
10. A comment was made that typically departure complaints outweigh arrivals.
11. Mr. Thomas commented that four different pilots landing the same plane can produce four different decibel levels due to the difference in pilot techniques, aircraft weight, etc. Visual approaches put aircraft right over Rt. 23; however, airplanes are usually powered back.

Ms. Keister concluded the committee discussion and asked the public for their comments.

Public Comments

1. It is important to have building standards. There should be a maximum height for buildings in designated areas of 3-4 stories. Notifications need to be added.
2. Clarify points on approaches. The altitude on the runway is 900 ft., whereas the altitude on High Street is 800 ft. (2 miles from the airport). Are aircraft at 450-500 feet over Riverlea on a 3-degree glide slope? Please confirm. *Mr. Dowler from Worthington Industries said it would be easy for someone to make that calculation.*
3. Looking at the draft NEM, chapter one of the report, data is not fully analyzed supporting the problem in Riverlea and Colonial Hills. We all need better comprehension of the data.
4. Regarding the question on touch and go operations, there is a lot of data on current patterns, which will be helpful. This may not be needed for an FAR Part 150, but that input that will be valuable for community leaders to know.
5. Also, page 21 of the draft NEM Report indicates that the Worthington noise complaint database contains 6,449 complaints. The number is way off. There were actually 9,900 complaints, nearly twice what was reported. The print out had discrepancies. Also, complaints logged from the City of Alrojo were listed in the report. There is no such city. *Mr. Seymour indicated the information was reported as presented in the Worthington noise complaint database. If Alrojo was reported as a city in the database, that is how it was reflected in the report. The team will check on the number of complaints.*
6. We have very consistently asked for maps for four years. In Chapter One, page 15, over 46 percent of the Air Scene complaints could not be correlated to aircraft activity. In 2006, we studied the correlation. Regarding checked noise complaints, 100% were aircraft. The hypothesis of aircraft vs. lawnmower is not likely. Some of the data is simply wrong. My conclusion is that AirScene/ Web-Scene doesn't work in comparison to radar data. *Mr. Seymour said that callers are allowed a certain number of calls in a certain time frame. If they exceed that number, the complaints are counted, but not researched – thus the number of complaints not being correlated.*
7. Is the airport unable to research the calls or just not researching them? The report is misleading.
8. Mayor Cusack asked that the report specify the difference between Riverlea and Worthington. The calls have not always indicated the difference. *Mr. Seymour said this is because some callers who live in Riverlea say that they are from*

Worthington. Complaints are logged by the location the caller reports, including some who classify their location as Worthington/Riverlea.

9. Is WebScene capable of plotting altitude in relationship to terrain? *Yes, but since the altitude is shown at Mean Sea Level, the user needs to subtract the terrain elevation from the altitude shown on WebScene.*

Next Steps

Ms. Keister and Mr. Alverson invited everyone to come to the public meeting/open house that would be held that evening at 7 p.m. at The Ohio State University Airport, Hangar One.

The public will be invited to provide any additional comments on the Noise Exposure Maps and draft submittal by December 6, 2008. At that time, the consultant team will make any final adjustments to the report and submit it to the University for its review and approval before submitting it to the FAA before the end of the year. While the FAA reviews that document for acceptance – which could take several months – the consultant team will focus on seeking ideas and testing the affects of proposed noise compatibility strategies. The consultant team will prepare an interim memo describing preliminary findings, and distribute it to Part 150 Committee members for review and feedback. After additional technical review, the Part 150 Committee and public will reconvene next spring to review recommendations for the OSU Airport Noise Compatibility Program.

Adjourn

Ms. Keister adjourned the meeting at 4 p.m.



The Ohio State University Airport

Part 150 Study Public Meeting #2
SUMMARY¹

Meeting Time and Location

November 6, 2008, 7 p.m. - 9 p.m. – presentation at 7:30 p.m. – at OSU Airport Hangar 1 (entrance next to Barnstormers Restaurant), 2160 West Case Rd., Columbus, OH 43235.

Meeting Attendance and Format

Forty-six members of the public attended the open house. Media representatives included This Week News, Suburban News Press and WNBC-TV4. Participants entered the OSU Airport Hangar, where they signed in, received a name tag and picked up handouts and directions on how to proceed through the four information stations, which included:

- ✓ Station #1 (red): The Federal Aviation Regulation (FAR) Part 150 Process

This station summarized, with exhibits, the process, roles and regulatory framework for a Part 150 Noise and Land Use Compatibility Study (Part 150 Study); noise study goals; and airport and aircraft operational needs

- ✓ Station #2 (green): Noise Exposure Maps

Station 2 displayed the draft 2008 and 2013 Noise Exposure Maps that will be submitted to the FAA for their acceptance.

- ✓ Station #3 (orange): Introduction to Noise Compatibility Program

This station defined what a Noise Compatibility Program is, explained where it fits into the Part 150 Study Process and reviewed criteria for evaluating Noise Compatibility Program ideas. Exhibits also recapped categories of noise concerns expressed to date.

¹ This summary is intended to provide a paraphrased overview of presentations made, materials discussed, questions asked and comments made. It is not intended to be a word-for-word representation of the Part 150 Study public meeting proceedings.

- ✓ Station #4 (purple): Closing/Comments

Refreshments were located on tables at this last station, where attendees could also fill out and leave comment forms.

Colored balloons at each station helped orient participants. Consultant and Airport staff members were located at each station to provide information, to answer questions and listen to public comment.

Materials Available/Reviewed at the Meeting

- Part 150 Open House Instructions
- Frequently Asked Questions
- Station Exhibits
- PowerPoint Presentation
- Comment Forms

Pre-Meeting Publicity

- Newspaper ads in This Week News (Dublin and Worthington editions; circulation 42,579) and Suburban News Press (Dublin, Northwest and Worthington editions; circulation 44,055)
- News release sent electronically to all local media; pre-meeting articles appeared in This Week and Suburban News Press
- Meeting date and purpose published in newsletter mailed to approximately 200 addresses on OSU Airport mailing list and e-mailed to all e-mail distribution lists (approximately 500 names and organizations)
- E-mail notification to Part 150 Committee, appointing agencies, elected officials, community officials, media and to others who have expressed an interest in the Part 150 process
- Signage on the Worthington Village Green located at the square of Worthington at SR 161 and US 23

Study Team Participants

- Brad Wente (RS&H)
- Steve Alverson, Ron Seymour and Mike Alberts (ESA Airports)
- Marie Keister, Trish Fodor and Corey Silver (Engage)
- Bill Habig and Latane Montague (consultants)
- Doug Hammon, Cathy Ferrari, Elizabeth Ike, Cecilia Lammers and Robert Haverkamp (OSU)

Meeting Summary

Meeting Introductions

Marie Keister, facilitator and lead for the OSU Airport Part 150 Study public involvement effort, invited attendees to be seated for the 7:30 p.m. overview presentation of the OSU Airport Part 150 Study progress, the draft Noise Exposure Maps and an introduction to the Noise Compatibility Program phase of the study. Ms. Keister then introduced Mr. Steve Alverson, Part 150 Study Task Manager with the RS&H Consultant Team, who gave a presentation addressing the status of Noise Exposure Maps (NEMs) and providing an overview of the Noise Compatibility Plan (NCP).

Review of Noise Exposure Maps

Mr. Alverson summarized study progress so far, including:

- Three Part 150 Committee meetings – the first meeting initiated the study, provided background and identified goals; the second reviewed the draft noise contours at OSU Airport; and the third, held earlier today, which recapped the status of the NEMs, provided an overview of the Noise Compatibility Program phase of the Part 150 Study, and sought input on noise concerns and ideas to consider in the development of the NCP. These meetings were open to the public.
- Two Part 150 Technical Subcommittee meetings, where data inputs used in the Integrated Noise Model (INM) were reviewed and adjusted based on subcommittee feedback and additional technical analysis. These meetings were also open to the public.
- One public meeting, where the public was briefed on the Part 150 Noise and Land Use Compatibility Study process, and they reviewed and provided feedback on the draft noise exposure contours produced by the model.
- The noise modeling effort, findings and public comments related to the development of the NEMs were summarized in a draft Noise Exposure Map Report, which will be submitted to the Federal Aviation Administration (FAA) before the end of this year for FAA's review and acceptance. This draft document was sent to Part 150 Committee members in late October for their review and input, and posted online at www.osuairportpart150.com/documents

Mr. Alverson then presented a series of slides showing the noise exposure maps for OSU Airport. Mr. Alverson explained that the noise exposure maps were on display at Information Station #2 for the public to review and provide comment. All meeting materials would also be on the project web site within approximately two business days. These maps and the accompanying report will be finalized based on Part 150 Committee and public feedback received by December 6th, and then submitted before the end of the year to the University and the FAA for their review and acceptance. Mr. Alverson also reviewed the overall process for the Part 150 effort, and explained that Phase 1, the NEM development phase, was coming to an end.

***What is a Noise Compatibility Program?
Elements of a Noise Compatibility Program***

Mr. Alverson explained that a Noise Compatibility Program (NCP) is:

- A Federal Aviation Regulation Part 150 program developed by the FAA to address non-compatible land uses within the 65 Day-Night Level (DNL)²
- A program that must be formally approved by the FAA

He noted that the FAA is reluctant to approve NCP measures that do not eliminate, reduce or prevent non-compatible land uses within the 65 DNL. Mr. Alverson then summarized criteria for reviewing NCP measures at OSU Airport:

- Develop a balanced and cost effective program for reducing noise without limiting airport utility or aviation efficiency, or adversely affecting safety
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Mr. Alverson explained that FAR Part 150 provides guidance for comprehensive aircraft noise control programs. Noise management falls into three categories: operational procedures – abatement; land use measures – mitigation; and administrative measures. He walked through details of these various categories.

Ideas on these various noise compatibility strategies will be solicited from local citizens, OSU Airport, air traffic control personnel and other stakeholders for the next few months. Earlier today, ideas were sought from Part 150 Committee members. As the consultant team evaluates the various ideas, it will be looking closely to ensure that none of the strategies simply moves noise from one community to another, which conflicts with the FAA's policy of not shifting noise from one community to another.

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Discussion: Noise Concerns and Ideas

Mr. Alverson presented a list of noise concerns the consultant team has developed based on input from Part 150 Committee members, the public, OSU Airport and a review of noise complaint data. Noise concerns fall under the following categories:

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

At the conclusion of Mr. Alverson's presentation, Ms. Keister opened the floor for questions and comments from the public, asking them for additional noise concerns and their ideas on what the consultant team should explore as they consider components to a new Noise Compatibility Program at OSU Airport.

Public Comments and Questions (OSU Airport and Consultant Responses in Italics)

1. What is 65 DNL? What does this mean to me? *Mr. Alverson explained that Day-Night Average Sound Level (DNL) was developed as a single number measure of community noise exposure. DNL was introduced as a simple method for predicting the effects on a population of the average long term exposure to noise. DNL was developed under Environmental Protection Agency (EPA) guidance and reflects extensive research into the relationship between noise exposure and human annoyance.*
2. I am concerned about the article published in the September 19th edition of *Business First of Columbus* regarding NetJets' donation of three, 10-year old, single engine Cessnas and one twin-engine Cessna from the late 1970's. I applaud NetJets' endeavor to provide educational opportunities to their employees and families; I am concerned, however, with the increase in student pilot traffic and its

- impact on neighboring communities. Per the article, NetJets currently gives roughly 30 lessons per student in a 4-6 month period. That is 850 additional hours of instruction per year flying out of OSU Airport. *Mr. Alverson noted that because airport noise comes mostly from jets – and not as much from non-jet aircraft used by student pilots -- the additional lessons aren't expected to add significant additional noise exposure to nearby communities.*
3. I vehemently disagree. Our street endures endless hours of pilot touch and go (operations). Today, for example, between 4:05 p.m. and 4:50 p.m., a 45-minute window, there were 19 flights – a plane climbing over our home every 2 ½ minutes or so (at 4:05, 4:08, 4:10, 4:16, 4:25, 4:26, 4:29, 4:31, 4:33, 4:34, 4:36, 4:38, 4:39, 4:41, 4:43, 4:45, 4:46, 4:49 pm). I am questioning why, instead of trying to alleviate a known problem, you are feeding it? *Mr. Alverson said the consultant team will look at training activity. Doug Hammon, OSU Airport manager, commented that the donated aircraft are newer and are expected to be quieter than the older aircraft. OSU Airport's intent is to continue to upgrade the student fleet as funds allow.*
 4. I am concerned about sharp turns made by pilots when they take off. As a pilot, I was trained to maintain runway heading to an altitude of 1000 ft. before making turns. In 2007, I saw a plane turning overhead at just 400 ft. from the runway. Now the FAA has approved turning at 300 ft. This has to be changed. That is way too low and is a safety hazard. *Mr. Alverson agreed that safety is always a priority. He said the consultant team will look at whether the first leg of the take-off can be extended for noise abatement purposes.*
 5. Lower flying aircraft are louder than higher flying aircraft. The FAA has to change its rules (so that aircraft fly higher).
 6. We're being told that the noise from the current operations is within the FAA guidelines. I am concerned that there will be an extension of the second runway, so that means that OSU Airport is preparing for more air traffic. There is a plane over my house every 5 minutes and this is not – and will not be -- acceptable. I'm not hearing anything about going outside of FAA regulations. *Ms. Keister noted that one of the purposes of holding this public meeting was to seek community input on ideas on how to address noise concerns. Mr. Alverson added that while the land uses within the 65 DNL contours at OSU Airport do fall within FAA guidelines, the University is committed to working with the community to address their concerns and institute a new noise compatibility program to address noise concerns outside of the 65 DNL contour.*
 7. The “disconnect” is that you are emphasizing compatibility, but we are looking to go beyond (compatibility). OSU and the FAA see the concern and want to go to the next step in the process. We are looking for more information.

Ms. Keister asked the Part 150 Committee members in attendance if they would like to comment on the ideas they shared or learned about earlier today on possible noise compatibility strategies.

8. Ms. Jane Weislogel, representing We Oppose Ohio State University Airport Expansion (WOOSE) on the Part 150 Committee, said that there was a discussion on different ideas to address noise control including:

- Achieving a higher (aircraft) altitude before turning
- Training pilots to make the training pattern wider to avoid repeating the pattern over the same house

9. Mayor Mary Jo Cusack, representing Riverlea on the Part 150 Committee, said that when the consultant team monitored her area, decibel levels ranged from 63.5 to 83.8. The goal is less than 65 decibels.

10. Regarding costs versus benefits, who is benefiting from expansion? Who is bearing the cost? (Are residents bearing a disproportionate share of the cost of this expansion?) *Mr. Alverson said OSU Airport and the FAA pays for all aviation-related studies and investments, as do the users of the airport.*

Ms. Keister asked participants if there were any additional suggestions for the Noise Compatibility Program. There were none.

Ms. Keister then encouraged everyone to visit the information stations, and that comment forms could be turned in at the meeting or later by mail or e-mail. Comments relating to the draft NEM Report should be submitted within 30 days, or by December 6, 2008. Comments and ideas relating to the NCP will be accepted until further notice. She reiterated that all materials presented or displayed at the public meeting would be posted on the project web site within one to two business days.

Post-Meeting Follow-up

- Media coverage resulted in This Week News, Suburban News Press and on NBC 4
- All meeting materials were posted on the web site on November 10, 2008
- Public comments on the Draft NEM were accepted until December 6, 2008

OSU Airport FAR Part 150 Noise and Land Use Compatibility Study. Public Open House

Noise Concerns

Lino (Kilbourn Village)

- Always wears headphones - Is that OK? Do you never experience anything? What is it (D/Night Average Levels)
- Expressed Experienced noise exposures. Yes, you have or you wouldn't be here.

Castle Cross, Worth

Twin Eng. Cts.

10 min
min
45 min
min
Kama Cross - Sept 19 Business 3 10 yr old
1 Single - Concerned on increase in student traffic 850 Additional. Street Endures
19 flights over home every 2 1/2 minutes

Steve A: Will focus on training activity

Doug: Donated Aircraft Have latest engine technology
We are upgrading fleet for tracking system turns sharp.

Greg Dent with Rep *

Tony Hiesch

Tracking System

Preston Way Village

Tom - Safety

2007 plane turned 400 feet.

Trained to turn 1000 ft.

Now FAA has approved 300 ft. Has to be changed

St. Safety is huge. can look at extending 1st leg of flight.

Refresh training for Pilots
monitored

Riverka - When they 63.5 - 83.8 when monitoring home.
St (Course by day, goal is < 65 decibels)

- Is there Regulation?

Allan Lyons - ~~Costs~~ / Benefits Who is benefiting
from Expansion? Who is bearing cost? Is it
proportionate? Are

University Pays for Study - Users of Airports

→