



APPENDIX K ADVISORY COMMITTEE MEETING SUMMARIES



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K.1 Materials Related to the First Advisory Committee Meeting, March 6, 2013



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Akron-Canton Airport (CAK) Part 150 Update Study MEETING NOTES	
	<i>a better way to go.</i>
	
Meeting	First Meeting of the CAK Part 150 Update Study Advisory Committee
Meeting Location	Second Floor Conference Room, CAK Terminal
Meeting Date and Time	March 6, 2013, 5:30 - 7:00 P.M.
Prepared by	Stephanie Tresso, Engage Public Affairs
Version	March 26, 2013

1. OVERVIEW

This memorandum summarizes the first meeting of the Akron-Canton Airport (CAK) Part 150 Update Study Advisory Committee, held on March 6, 2012 from approximately 5:30 to 7:00 p.m. in the second floor conference room of the CAK terminal, including:

- Topics discussed and materials presented.
- Major questions asked and answered at the meeting, or which will be answered following the meeting.
- Decisions / consensus reached by Advisory Committee members.
- Follow-up actions to be undertaken and responsible parties.

2. MEETING MATERIALS

Two items appended to this memorandum provide materials relevant to documenting the meeting:

- Meeting sign-in sheets, with Advisory Committee member attendance noted by their initials in the first column, and non-member attendance recorded on a separate sign-in sheet.
- The PowerPoint presentation discussed in Section 4.

3. INTRODUCTIONS

Mr. Rick McQueen, CAK President & CEO opened the meeting at 5:30 p.m.

He welcomed the attendees, introduced other CAK staff in attendance, and then asked other Advisory Committee members and other meeting attendees to introduce themselves, including their affiliations.

Mr. McQueen then discussed the Advisory Committee members' roles and responsibilities, including taking information presented at the meetings back to their organizations. He also gave an overview of Part 150 basics and CAK precedents, the scope of the study – which is primarily to identify and quantify the noise impacts of the airport and to mitigate noise impacts – and the public consultation schedule.

Mr. McQueen turned the meeting over to Ted Baldwin of Harris Miller Miller & Hanson Inc. (HMMH), the Part 150 Update Study consulting team Project Manager.

Mr. Baldwin introduced other consulting team members in attendance, including Justin Divens of HMMH and Kevin Clarke of RW Armstrong, and summarized his own background and experience.

Mr. Baldwin noted that Engage Communications would be preparing meeting notes which would be limited to a high level summary of the meeting to identify decisions made at the meetings, commitments that participants made for follow-up actions, and questions that attendees requested be addressed at subsequent meetings.

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4. PRESENTATION

Mr. Baldwin made a presentation on based on the appended PowerPoint, addressing:

- Advisory Committee roles and responsibilities
- Part 150 basics and CAK precedents
- Scope and schedule
- Public consultation
- Likely issues
- Next major steps

4.1 Discussion

Committee members initiated discussion of the following matters:

4.1.1 Single Event Noise and the Trend Toward a Quieter Airplane Fleet

Mr. Baldwin noted that single event noise levels associated with individual aircraft operations were likely to be a primary focus of the study, as shown on graphical examples presented on slide 12 of the PowerPoint.

Mr. Skipper asked if the planes on the slide 12 are representative of the airplanes at CAK.

Mr. Baldwin replied that the slide presented these types as initial general examples. The consultant team will update this analysis to reflect the types of aircraft that operate most frequently at CAK once the 2014 and 2018 baseline and five-year forecast fleet mixes have been prepared. He noted that there also will be an analysis of the routes the planes take, with the single event contours prepared for actual arrival and departure paths commonly taken at CAK.

Mr. Skipper asked if these analyses would be presented at the next meeting.

Mr. Baldwin replied the analyses will be presented at the third or fourth meeting, because the consultant team will still be assembling data on the existing and forecast fleet mixes when the second Advisory Committee meeting is held. He noted that the committee would have the opportunity to request

4.1.2 Noise Measurement Program Plans

The most extensive discussion at the meeting related to plans for the noise measurement program that will be undertaken during the week starting the date of the next Advisory Committee meeting. Mr. Baldwin noted that the meeting and measurements are tentatively scheduled for late May or early June, to be in a time period when the weather is likely to be favorable for measurements and residents are likely to be more aware of aircraft noise because of open windows and more time spent outdoors.

Slide 15 of the PowerPoint summarizes the general purposes and parameters of the measurement program.

Slides 16 and 17 present initial measurement locations for committee consideration, including:

- Three neighborhoods with close-in residences off the southwest end of Runway 5/23
- A close-in residential neighborhood off the northeast end of Runway 5/23
- A close-in residential neighborhood off the north end of Runway 1/19
- A close-in residential neighborhood off the south end of Runway 1/19

Mr. Baldwin noted that these locations were recommended based on the following primary criteria:

- They are in areas with noise-sensitive land uses.
- They are close to the airport, where aircraft noise levels are likely to be relatively high.
- They are near to or directly under major flight paths.

Mr. Baldwin then asked the Advisory Committee members to offer suggestions for additional or alternate locations and also for issues of particular concern that the measurement program should address, such as light

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aircraft, helicopters, engine run-ups, start-of-takeoff-roll noise, thrust-reverse noise, etc. *No committee members had any immediate suggestions.*

Mr. Baldwin then said with Mr. McQueen's permission he would email the Advisory Committee members a memorandum expanding on the preliminary measurement location recommendations, with a request for further input. Mr. McQueen agreed.

5. NEXT MAJOR STEPS

Mr. Baldwin noted that over the next few months the consultant team will continue work on inventory tasks related to noise modeling and land use database development.

The next Advisory Committee meeting will be held in the second quarter of 2013. The exact date will be determined as soon as possible and advance notice sent to the committee. The agenda for the next meeting is anticipated to include:

- Noise 101: "Everything you ever wanted to know about decibels but were afraid to ask!"
- Finalize generalized measurement sites.
- Review 1997 Noise Exposure Map results and approved Noise-Compatibility Program elements.
- Review status of noise modeling and land use inventory efforts.

Mr. Baldwin asked the Advisory Committee for other suggestions regarding topics to address at the next meeting. *No committee members had any immediate suggestions.*

6. OTHER ADVISORY COMMITTEE QUESTIONS, REQUESTS, AND DISCUSSION

Mr. Baldwin asked attendees if there were any other background matters of interest that they would like addressed at or prior to the next meeting.

Mr. Skipper asked for confirmation that the CAK's last noise study was in 1997. Mr. Baldwin confirmed that was the date.

Mr. Skipper stated that since the 2004 expansion of Runway 5/23, it has become "tremendously noisier," and "it is hurting me." He observed that Southwest is flying old planes that are loud. Delta's MD 80s also are old and very loud.

Mr. Baldwin said the consultant team will work with the carriers to obtain information on the specific aircraft fleet being used at CAK. This will help the consultant team do accurate forecasting.

Mr. Baldwin noted that airlines are continuing to transition their fleets to newer planes are both more fuel efficient and quieter, and observed that the fuel-efficiency benefits provided airlines with a significant incentive to invest in more new quieter aircraft.




7. ADJOURNEMENT

Mr. McQueen thanked attendees once again for coming to the meeting and participating in the study.

Mr. Baldwin encouraged attendees to review the maps of potential measurement locations in the front of the room and offer any suggestions to the consulting team members.

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Akron-Canton Airport (CAK) Part 150 Update Study SIGN-IN SHEET				
 <i>a better way to go.</i>  HARRIS MILLER MILLER & HANSON INC. 				
Meeting	First Meeting of the CAK Part 150 Update Study Advisory Committee			
Location	Second Floor Conference Room, CAK Terminal			
Date	March 6, 2013			
Time	5:30 - 7:00 P.M.			
Advisory Committee Members				
Initials	Committee Member Name	Representing	Email	Phone
<i>RT</i>	Armen, Don <i>Raymond</i>	McKinley Air Transport	mckcharter@msn.com	
<i>TB</i>	Baldwin, Ted	HMMH	ebaldwin@hmmh.com	781-852-3123
<i>JB</i>	Benekos, Jim	North Canton	jbenekos@northcantonohio.com	
	Beyes, Larry	JM Smucker - Flight Operations	larry.beyes@jmsmucker.com	
	Campbell, Robert	Timken - Flight Operations	robert.campbell@timken.com	
<i>KL</i>	Clarke, Kevin	RW Armstrong	kclarke@rwa.com	800-321-6959 x 390
	Dehne, DeeAnn	FAA - Air Traffic Control Tower	deeann.dehne@faa.gov	
	Delaney, Katy	FAA - Detroit Airports District Office	Katherine.s.delaney@faa.gov	734-229-2900
<i>JED</i>	Divens, Justin	HMMH	jdivens@hmmh.com	781-98203101
<i>TFB</i>	Fite, Todd	First Energy - Flight Operations	tfite@firstenergycorp.com	
	Gordon, John	Ultimate Air Center	jgordon@ultimatejetcharters.com	
<i>ML</i>	Grossman, Mike	Castle Aviation	skyking@castleair.com	<i>330-284-1702</i>
<i>SA</i>	Haws, Scott	Plain Township	shaws@plaintownship.com	<i>330 904 9100</i>



Advisory Committee Members				
Initials	Committee Member Name	Representing	Email	Phone
CK	Kostiuk, Chris	Goodyear - Flight Operations	chris_kostiuk@goodyear.com	
	Kuzyk, Myron	DAL Global Station Manager (UAL, DAL)	myron.kuzyk@delta.com	
	Lyon, Marilyn	Jackson Township	mlyon@jacksontwp.com	
RBM	McQueen, Rick	Akron-Canton Airport	rmcqueen@akroncantonairport.com	330-499-4059
	Mentzer, Robert	HMMH	rmentzer@hmmh.com	781-852-3156
	Nau, Robert	Stark County Regional Planning Commission	ranau@co.stark.oh.us	
JO	O'Dell, James (Captain)	Ohio Army National Guard	james.j.odell.mil@mail.mil	614.336.6111 6116
	Paquette, Steve	Stark Development Board	steve@starkcoohio.com	
	Puckli, Paul	RW Armstrong	ppuckli@rwa.com	800-321-6959 x 381
	Rebadow, Rick	Greater Akron Chamber of Commerce	rebadow@greaterakronchamber.org	
KJK	Ripple, Kevin	Akron-Canton Airport	kripple@akroncantonairport.com	
	Saunier, Dennis	Canton Regional Chamber of Commerce	dennys@cantonchamber.org	
	Segedy, Jason	Akron Metro. Area Transportation Study (AMATS)	JSegedy@AkronOhio.gov	
	Sharkey, Bryan	Southwest Airlines	bryan.sharkey@wnco.com	
ACS	Skipper, Anthony	North Canton residential area	AnthonySkipper46@gmail.com	330.499.8982
	Stabl, Jake	Goodyear - Flight Operations	jake_stabl@goodyear.com	
	Whitney, John (Major)	Ohio Army National Guard	john.k.whitney.mil@mail.mil	614.336.6103
	Walters, Jamie	Jackson Township	jwalters@jacksontwp.com	
	Wiethe, Wayne	City of Green	wwiethe@cityofgreen.org	
CHW	Wirtz, John	Akron-Canton Airport Authority Board Member	wirtzlaw@yahoo.com	
	Wyatt, David	PSA Station Manager (US Airways)	david.wyatt@usairways.com	
	Tresso, Stephanie	Engage	stresso@ murphyepson, com	614-221- 2885 x15



Non-Advisory Committee Attendees				
Initials	Name	Representing	Email	Phone
KSR	Kevin S. Rippe	CAK		419-4059
BLS	Brittany Siroki	FAA-AIR TRAFFIC CONTROL	brittany.l.siroki@faa.gov	419-3818
*	Tedd Laps			
	Ray Proud	McKINLEY AIR, INC	cakpilot@aol.com	330 283 9610



Part 150 Update Study Advisory Committee Kick-Off Meeting



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March 6, 2013



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AGENDA

- Introductions
- Advisory Committee roles and responsibilities
- Part 150 basics and CAK precedents
- Scope and schedule
 - Public consultation
- Likely issues
- Next major steps
 - Noise measurements
 - Continuing data collection
- Discussion



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INTRODUCTIONS – LEAD AIRPORT, FAA, AND CONSULTING TEAM STAFF

- Akron-Canton Airport
 - Rick McQueen, President and CEO
- Federal Aviation Administration
 - Katy Delany, Detroit ADO Community Planner
 - DeeAnn Dehne, CAK Air Traffic Control Tower Manager
- Consulting Team
 - Ted Baldwin and Justin Divens, HMMH
 - Kevin Clarke and Paul Puckli, RW Armstrong



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INTRODUCTIONS – OTHER ADVISORY COMMITTEE REPRESENTATION

- Local Jurisdictions
- Airport Tenants
- Aircraft Operators
- Business Entities
- Transportation Groups
- Other Stakeholders with Potential Interest



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ADVISORY COMMITTEE ROLES AND RESPONSIBILITIES

- Membership covers full range of “stakeholders”
- Committee members are responsible for
 - Reviewing materials in advance of meetings
 - Assisting in obtaining data of value
 - Identifying gaps or inadequacies in technical work
 - Representing the interests of their organizations
 - Communicating progress with their constituents
 - Sharing their constituents’ concerns and feedback



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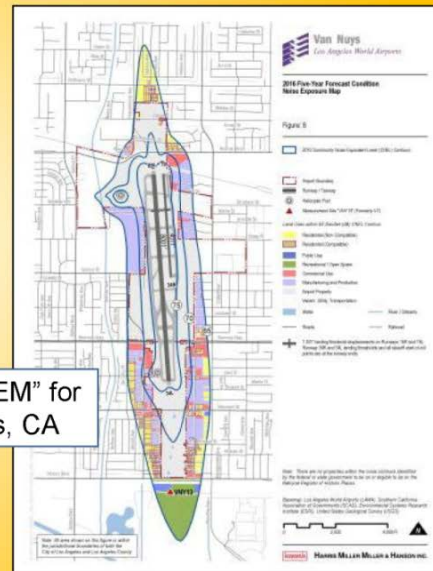
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WHAT IS PART 150?

- *Voluntary* FAA process
- Noise Exposure Maps
 - Year of submission
 - Forecast year – usually 5-year
 - FAA “accepts”
- Noise Compatibility Program
 - Noise abatement
 - Compatible land use
 - Continuing program
 - FAA “approves” measures
- Public consultation

Recent “NEM” for Van Nuys, CA



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CAK PART 150 PRECEDENTS

- 1988 study
 - 1998 and 1993 NEMs
- 1997 update
 - Led by HMMH, as subcontractor to AirTech
 - 1994 and 1999 NEMs
- NCP Records of Approval are on the CAK website
www.akroncantonairport.com/about/part-150



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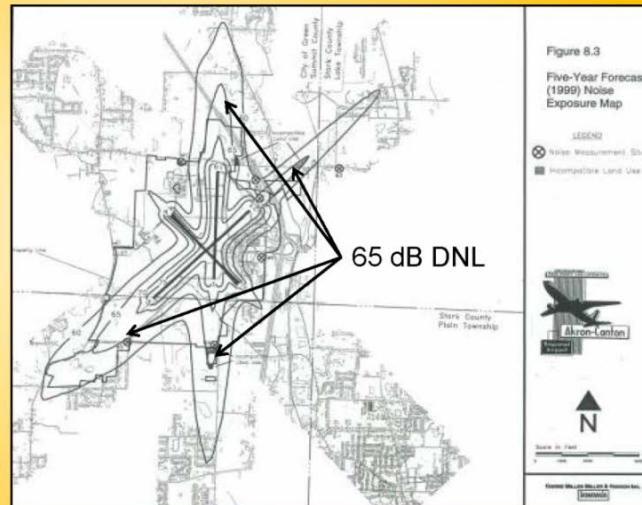


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1997 NOISE EXPOSURE MAP

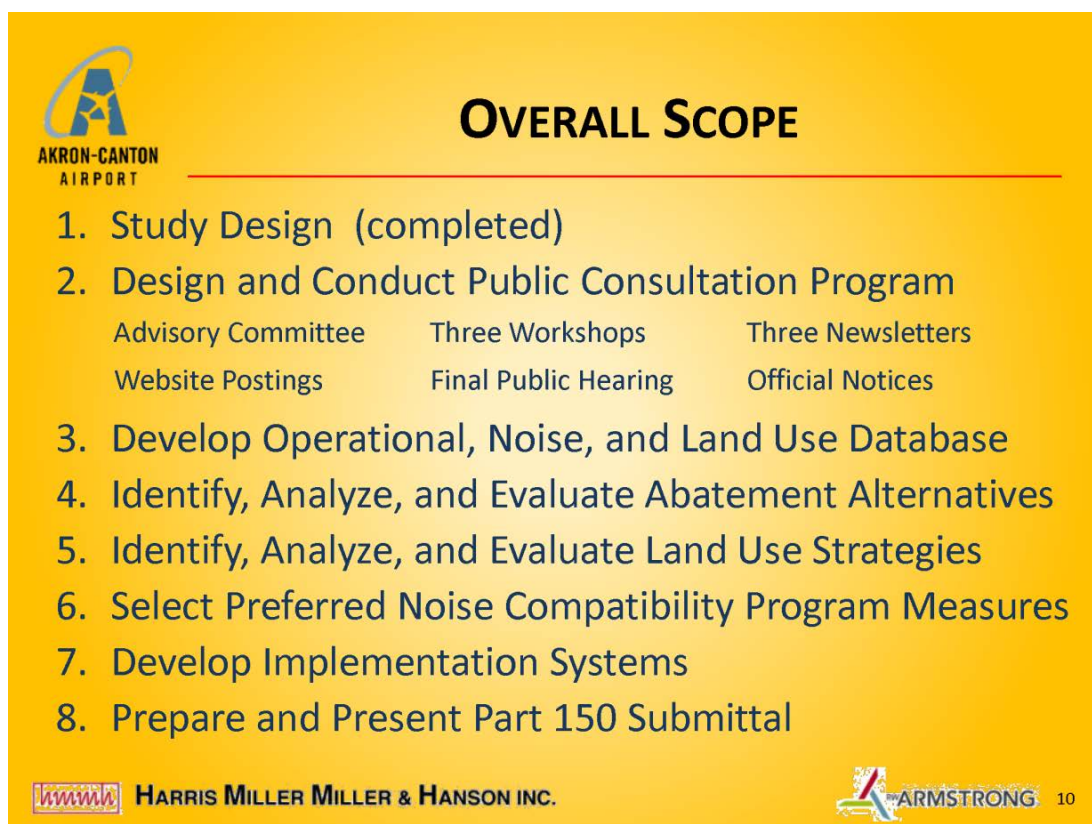
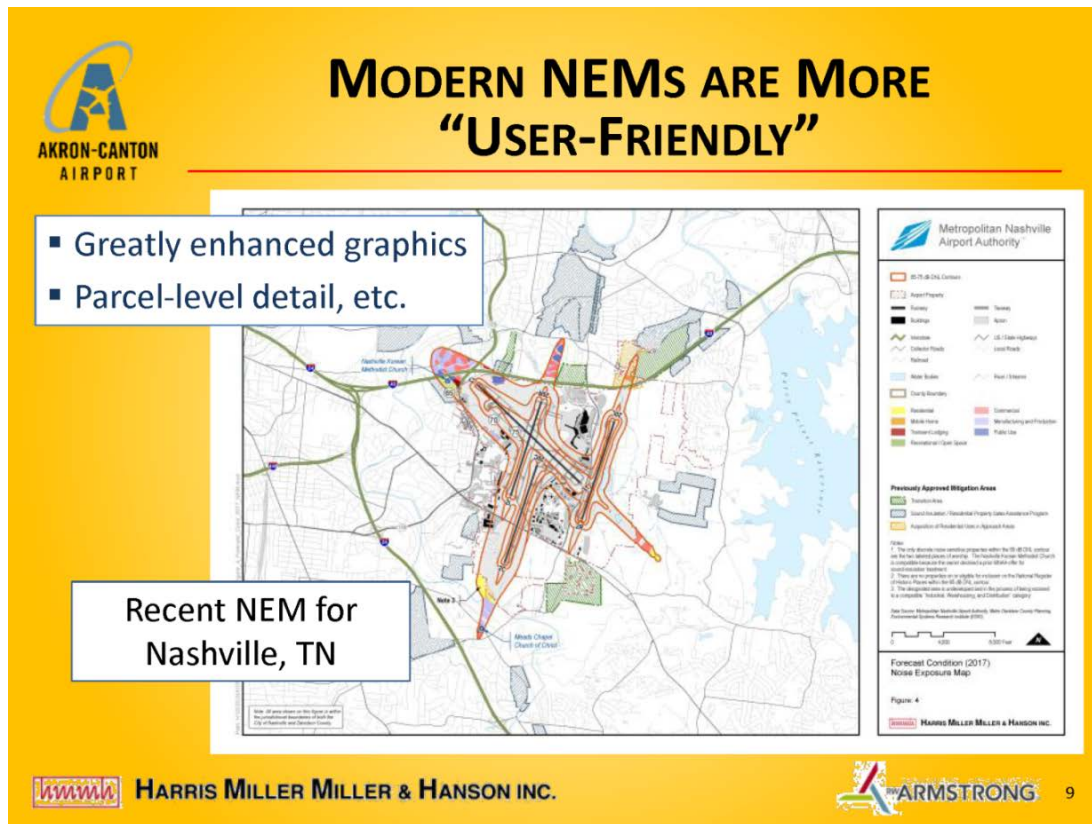
- FAA requires use of the Day-Night Average Sound Level (DNL)
 - Describes total annual aircraft noise exposure
 - 10 decibels (dB) added to noise from night flights (10 pm – 7 am)
- All land uses are considered compatible inside 65 dB DNL
- *We will teach "Noise 101" at the next meeting!*



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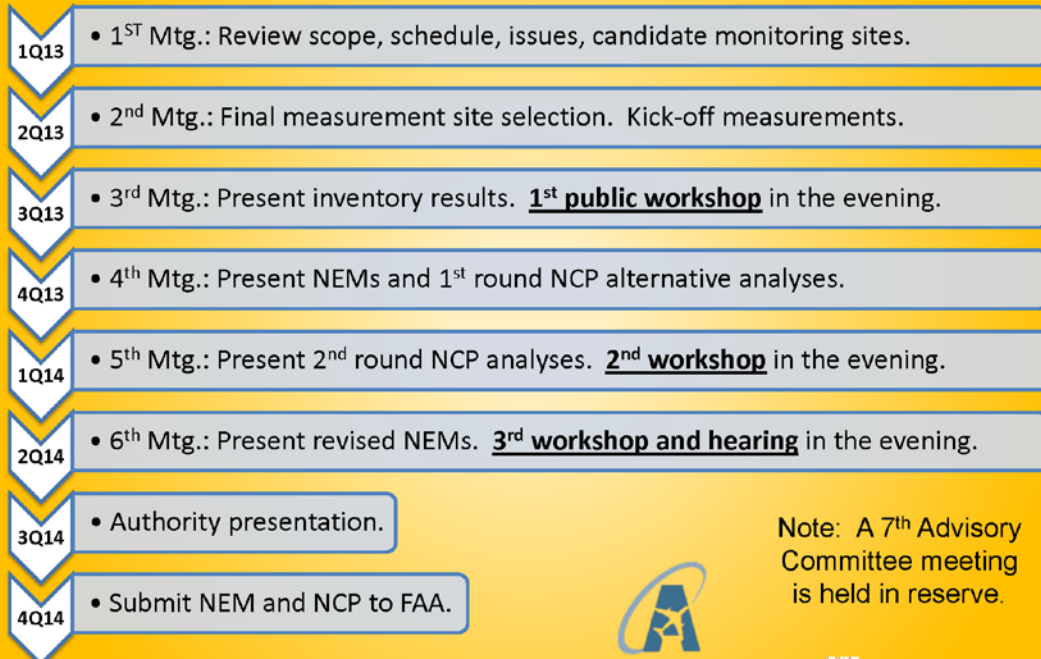


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ANTICIPATED SCHEDULE



Note: A 7th Advisory Committee meeting is held in reserve.



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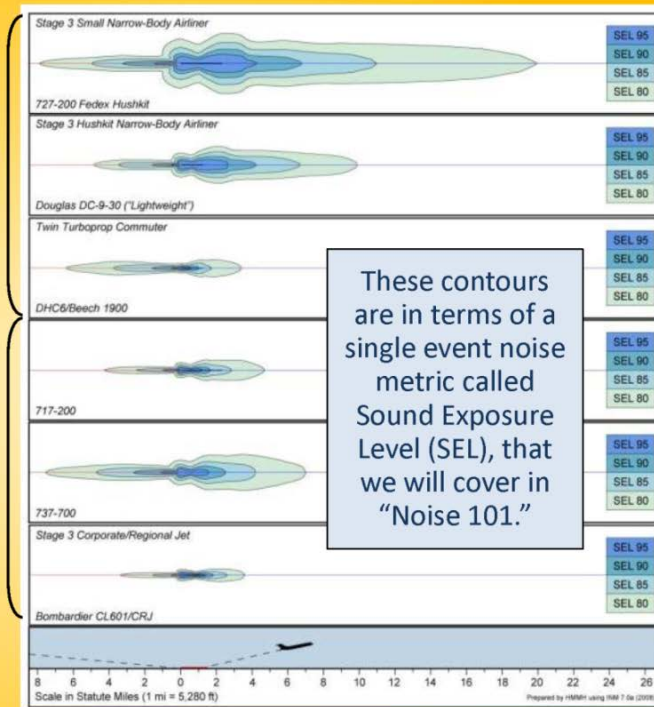


1997

Single event noise is likely to be a major issue of concern.

Good news: The fleet is getting quieter!

2013



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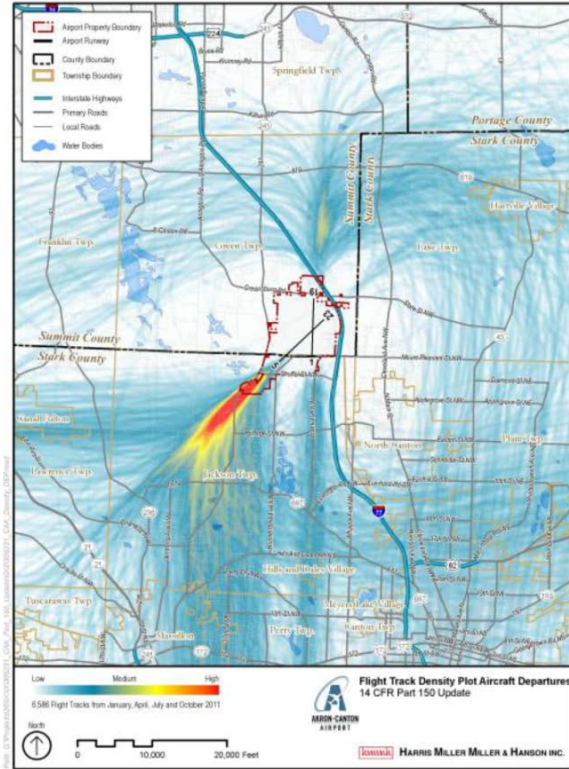




Flight paths and runway use are likely to be other major issues of concern.

Departures

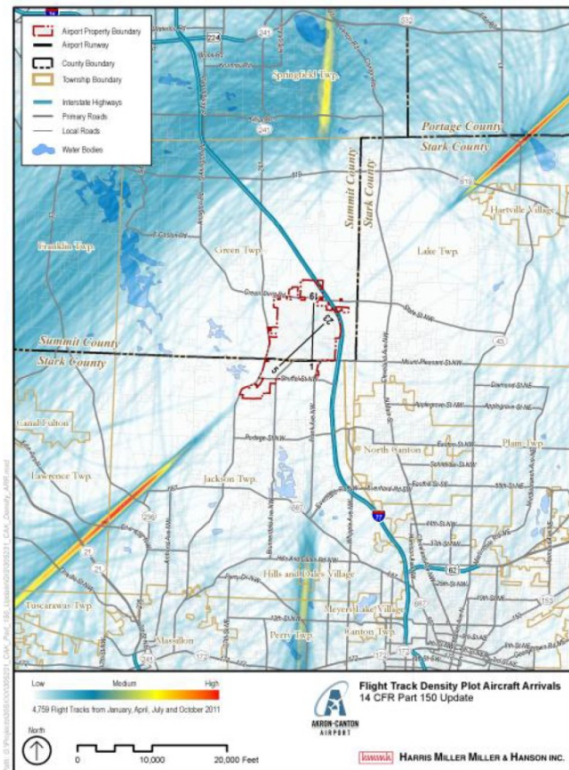
This "flight track density plot" is for flight tracks from January, April, July, and October 2011 that we will use to develop many noise modeling inputs.



Flight paths and runway use are likely to be other major issues of concern.

Arrivals

This "flight track density plot" is for flight tracks from January, April, July, and October 2011 that we will use to develop many noise modeling inputs.





NOISE MEASUREMENT PROGRAM

- *Surprise: Not a Part 150 requirement!*
- However, they are valuable for:
 - Assessing reasonableness of modeling
 - Sampling representative aircraft events
 - Describing non-aircraft noise conditions
- We will conduct a one-week program
 - Anticipated to be in May or June
 - Three noise monitors and staff
 - Reasonable expectation would be ten measurement locations
 - Measurement durations will vary based on site circumstances
 - Typically one to three days per site



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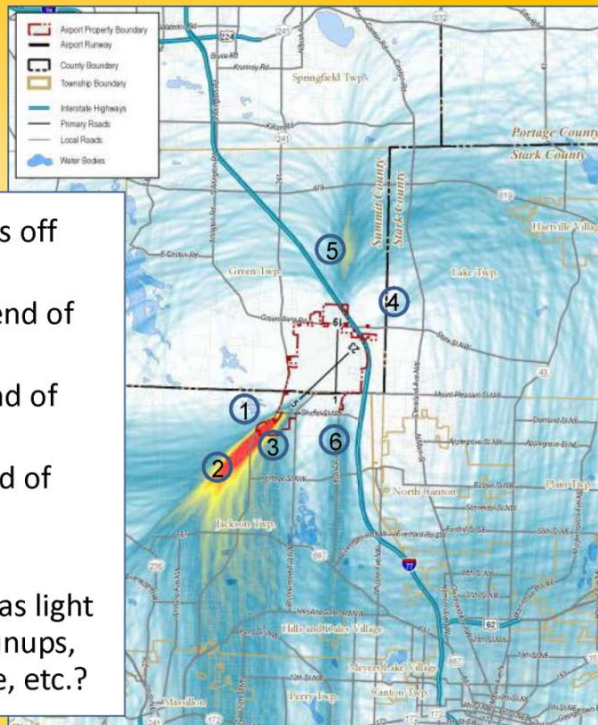


Generalized Measurement Locations for Consideration

- 1, 2, and 3. Close-in residences off SW end of Runway 5/23
4. Close-in residences off NE end of Runway 5/23
5. Close-in residences off N end of Runway 1/19
6. Close-in residences off S end of Runway 1/19

Committee suggestions?

Are there special issues, such as light aircraft, helicopters, engine runups, start-of-takeoff, thrust-reverse, etc.?



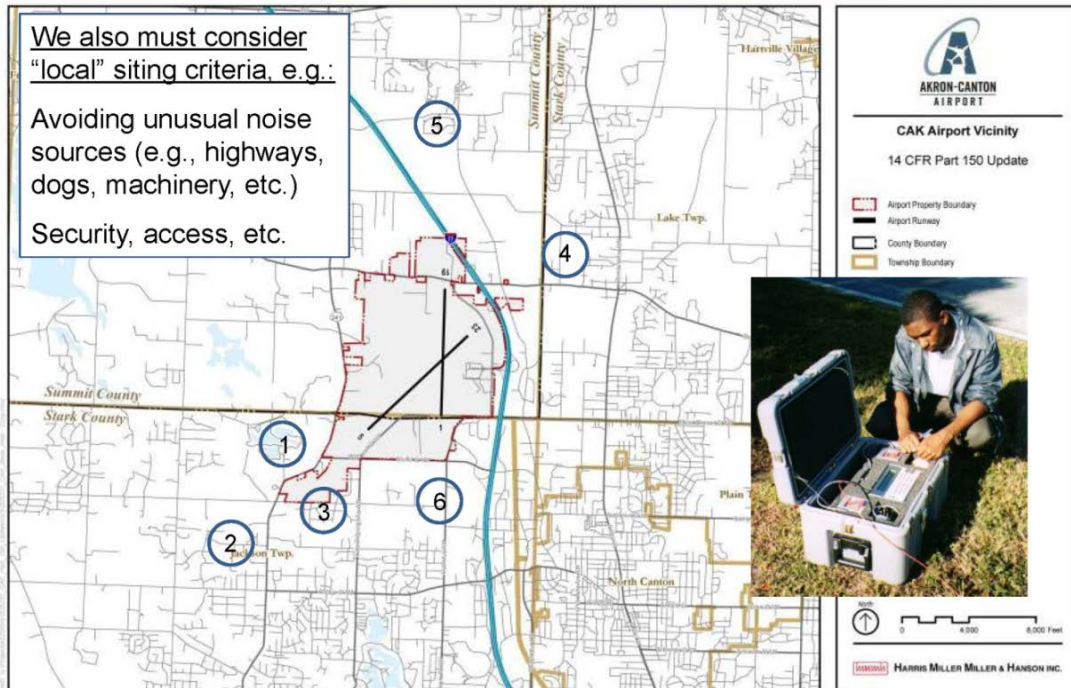
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POTENTIAL MEASUREMENT LOCATIONS



NEXT COMMITTEE MEETING

- Noise 101: *"Everything you ever wanted to know about decibels but were afraid to ask!"*
- Finalize generalized measurement sites
- Review 1997 Noise Exposure Map results and approved Noise Compatibility Program elements
- Review status of noise modeling and land use inventory efforts
- Other background matters of interest?



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DISCUSSION

*Thank you for your attention and participation.
We look forward to working with you!*



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K.2 Materials Related to the Second Advisory Committee Meeting, June 4, 2013



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 Akron-Canton Airport (CAK) Part 150 Update Study MEETING NOTES  	
Meeting	Second Meeting of the CAK Part 150 Update Study Advisory Committee
Meeting Location	Second Floor Conference Room, CAK Terminal
Meeting Date and Time	June 4, 2013, 5:30 - 7:00 P.M.
Prepared by	Stephanie Tresso, Engage Public Affairs
Version	June 26, 2013

1. OVERVIEW

This memorandum summarizes the Akron-Canton Airport (CAK) Part 150 Update Study Advisory Committee’s second meeting, held on June 4, 2013 from approximately 5:30 to 7:00 p.m. in the CAK terminal’s second floor conference room.

2. MEETING MATERIALS

Two items appended to this memorandum provide materials relevant to documenting the meeting:

- Meeting sign-in sheets, with Advisory Committee member attendance noted by their initials in the first column, and non-member attendance recorded on a separate sign-in sheet.
- The PowerPoint presentation discussed in Section 4.

3. INTRODUCTIONS

Mr. Rick McQueen, CAK President & CEO opened the meeting at 5:30 p.m. He welcomed the attendees, introduced other CAK staff in attendance, and then asked Advisory Committee members to introduce themselves and identify their affiliations. There were no non-member attendees.

4. PRESENTATION

Mr. McQueen turned the meeting over to Ted Baldwin of Harris Miller Miller & Hanson Inc. (HMMH), the Part 150 Update Study consulting team Project Manager.

Mr. Baldwin, assisted by Mr. Aaron Lofurno of RW Armstrong, Inc. (RWA), made a presentation based on the appended PowerPoint, addressing the following major topics.

4.1 “Noise 101”

Mr. Baldwin introduced the basic noise terminology we will use this study, following Part 150 requirements.

4.2 Overview of the Measurement Sites and Program

Mr. Baldwin noted that the proposed monitoring sites had been refined based on input received from Advisory Committee members at and following the first (March 6, 2013) meeting, as discussed in the April 12, 2013 HMMH Project Memorandum that had been distributed to the Committee members. Six sites were identified, as discussed at the first Committee meeting and the follow-up memorandum, and as shown in the appended PowerPoint presentation.

He noted that he and his associate (Justin Divens) had been able to install noise monitors when they arrived the day before the Committee meeting (i.e., June 3, 2012), and had already completed most or all of a day of measurements at Sites 1, 5, and 6 shown in the appended PowerPoint presentation. He noted it was a fortunate situation that the wind had been out of the north when they arrived the preceding day, permitting them to measure at Sites 5 and 6 off the two ends of the “secondary” runway (01/19). He indicated that they expected to move those monitors to measure operations off the ends of the primary runway (5/23) during most or all of the remainder of the measurement session, since that runway is used

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the most frequently. He also indicated it was likely that a monitor would be left at Site 1 for the duration of the measurement visit.

Mr. Baldwin invited committee members to observe at a measurement site, with a request that they call him in advance to coordinate. He said the consultant team may request further assistance in siting the monitors. He asked whether any Committee members had questions or suggestions regarding the measurement locations. There were none.

4.3 Review of the 1997 Part 150 Noise Exposure Maps (Mr. Baldwin)

Mr. Baldwin presented a figure showing the 1999 five-year forecast-case Noise Exposure Map contours from the 1997 study, which depicted the limited number of parcels zoned or in use for noncompatible (residential) purposes, which included two dwelling units and an estimated five residents. He reminded the committee that this study will include Noise Exposure Maps for 2014 and 2019 forecast operations, and that drafts are scheduled to be presented later this year.

4.4 Review of the Status of the Noise Modeling and Operational Inventory Processes

Mr. Baldwin noted that the noise modeling and operational inventory processes were well underway, with the flight operations data collection complete, draft modeling tracks under internal review, runway use approved by CAK staff and the Federal Aviation Administration (FAA) Airport Traffic Control Tower (ATCT) staff at CAK, and draft 2014 and 2019 fleet mixes under review by consulting team and CAK staff members. He stated that the Advisory Committee will receive the final draft of the proposed modeling inputs to review and discuss at the next meeting.

4.5 An Update on the Land Use Inventory Process

Mr. Lofurno summarized the status of the land use inventory process. He noted that data collection was based largely on coordination with the City of Green Planning and Development staff and the Stark County Regional Planning Commission staff. He indicated that the baseline data collection is complete, and presented a high-level overview of the results in two graphics in the appended PowerPoint.

Mr. Lofurno asked if the Committee members had any information to share on any planning initiatives underway or projected for the general study area.

The following major items were raised and discussed:

- Mr. Skipper noted that Jackson Township has a master plan and that he was surprised they had referred Mr. Lofurno to the MPO (Metropolitan Planning Organization). Mr. Baldwin asked if Jackson is an unincorporated or incorporated township. Mr. Skipper said it is unincorporated. Mr. Baldwin said that MPOs generally oversee land use in unincorporated areas.
- Mr. Skipper said there is a potential condominium development to the southwest of the airport and whether it could be a problem to address with developers. Mr. Baldwin replied this study will give the airport the data needed to have that conversation with the developers. The intent is to reach out to all residents and potential developers within the general vicinity of the 65 decibel (dB) Day-Night Average Sound Level (DNL) contour.

5. GENERAL QUESTIONS AND DISCUSSION

- Mr. Skipper asked when the Part 150 process was established. Mr. Baldwin replied the Congress required FAA to establish Part 150 in 1979. It was codified in 1981 and has been modified several times since then. The FAA is currently reviewing and researching the 65 dB DNL land use compatibility guideline cutoff. However, he indicated it was likely that changes to that guideline would not be made for five to ten years.
- Mr. Janecko asked how the U.S. compares with the rest of the world with regard to compatibility guidelines. Mr. Baldwin replied the U.S. is generally consistent with most other countries. The World Health Organization uses more detailed land use categories.

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- Mr. Janecko asked if there is a difference in taking sound readings in the summer versus winter; specifically, would the leaves on the trees in the summer result in lower noise levels? Mr. Baldwin replied that the presence or absence of leaves has essentially no effect, since leaves do not have the size or mass to impede the propagation of sound. They are more of a visual barrier; people often are more sensitive to noise exposure when they can see the source. Moreover, he noted that measuring in warmer months tends to present a "worse-case" situation because aircraft have to use higher power levels to operate in warmer conditions. In addition, during warmer months more people are outside and have their windows open when indoors, so they are exposed to more noise. He noted that wind speed and direction have more of an effect on noise levels; wind blowing from the source toward the receiver will tend to increase levels, and vice versa. He also noted that temperature inversions, which can occur at any time of the year, can also result in noise from aircraft on or near to the ground to carry further.
- Mr. Skipper asked that in preparation for the next meeting, could the consultant team show the different ways a noise event could get to 65 dB. He noted that he had noise monitor of his own that measures 80 dB in his yard. Mr. Baldwin said the measurement results would include presentation of a broad range of aircraft types and operations, and information on both single event and cumulative noise measurements that he felt would answer this question.
- Mr. Janecko suggested that if the Noise 101 presentation was included in the public workshop, it would be helpful to make it less technical, especially slide 17 in the appended PowerPoint. Mr. Baldwin said that was his intention.
- Mr. Janecko asked if the turnout from local governments and other entities was disappointing. Mr. McQueen replied that the airport has been in touch with Jackson Township and other cities and townships in the area. Mr. Baldwin noted he was very pleased with the participation from the aviation community.

6. NEXT MAJOR STEPS




Mr. Baldwin noted that the next Committee meeting would include a summary of the measurement results, operational data collection, and draft contours, and that the first public workshop would be held the evening of that same day. The general timeframe is late August or early September. Mr. Baldwin said the study's first newsletter will be distributed via email before the public workshop. He asked Committee members to send him email addresses of people who should be included in its distribution, and that he could also provide members with an electronic copy of the newsletter to distribute themselves, which several attendees indicated they would prefer.

7. ADJOURNMENT

Mr. Baldwin adjourned the meeting.

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Akron-Canton Airport (CAK) Part 150 Update Study SIGN-IN SHEET				
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Meeting	Second Meeting of the CAK Part 150 Update Study Advisory Committee			
Location	Second Floor Conference Room, CAK Terminal			
Date	June 4, 2013			
Time	5:30 - 7:00 P.M.			
Advisory Committee and Consulting Team Members				
Initials	Name	Representing	Email	Phone
<i>TB</i>	Baldwin, Ted	HMMH	ebaldwin@hmmh.com	781-852-3123
<i>JB</i>	Benekos, Jim	North Canton	jbenekos@northcantonohio.com	330-499-3465
	Beyes, Larry	JM Smucker - Flight Operations	larry.beyes@jmsmucker.com	
	Campbell, Robert	Timken - Flight Operations	robert.campbell@timken.com	
	Clarke, Kevin	RW Armstrong	kclarke@rwa.com	800-321-6959 x 390
	Dehne, DeeAnn	FAA - Air Traffic Control Tower	deeann.dehne@faa.gov	
	Delaney, Katy	FAA - Detroit Airports District Office	Katherine.s.delaney@faa.gov	734-229-2900
<i>JD</i>	Divens, Justin	HMMH	jdivens@hmmh.com	781-98203101
	Fite, Todd	First Energy - Flight Operations	tfite@firstenergycorp.com	
	Gordon, John	Ultimate Air Center	jgordon@ultimatejetcharters.com	
<i>MG</i>	Grossman, Mike	Castle Aviation	skyking@castleair.com	
	Haws, Scott	Plain Township	shaws@plaintownship.com	
<i>PH</i>	Janecko, Phil	North Canton residential area	philj135@yahoo.com	
	Kostiuk, Chris	Goodyear - Flight Operations	chris_kostiuk@goodyear.com	



Initials	Name	Representing	Email	Phone
<i>AK</i>	Kuzyk, Myron	DAL Global Station Manager (UAL, DAL)	myron.kuzyk@delta.com	
	Lapps, Todd	Akron-Canton Airport	tlapps@akroncantonairport.com	
	Lyon, Marilyn	Jackson Township	mlyon@jacksontwp.com	
<i>RBN</i>	McQueen, Rick	Akron-Canton Airport	rmcqueen@akroncantonairport.com	330-499-4059
	Mentzer, Robert	HMMH	rmentzer@hmmh.com	781-852-3156
	Nau, Robert	Stark County Regional Planning Commission	ranau@co.stark.oh.us	
	O'Dell, James (Captain)	Ohio Army National Guard	james.j.odell.mil@mail.mil	614.336.6111
	Paquette, Steve	Stark Development Board	steve@starkcoohio.com	
<i>RP</i>	Proud, Ray	McKinley Air, Inc.	oakpilot@aol.com	
	Puckli, Paul	RW Armstrong	ppuckli@rwa.com	800-321-6959 x 381
	Rebadow, Rick	Greater Akron Chamber of Commerce	rebadow@greaterakronchamber.org	
<i>KSR</i>	Ripple, Kevin	Akron-Canton Airport	kripple@akroncantonairport.com	
<i>DS</i>	Saunier, Dennis	Canton Regional Chamber of Commerce	dennys@cantonchamber.org	
	Seadler, James	US Airways / Piedmont Facilities	james.seadler@usairways.com	
	Segedy, Jason	Akron Metro. Area Transportation Study (AMATS)	JSegedy@AkronOhio.gov	
	Sharkey, Bryan	Southwest Airlines	bryan.sharkey@wnco.com	
<i>BLS</i>	Siroki, Brittany	FAA - Air Traffic Control Tower	Brittany.L.Siroki@faa.gov	
<i>ACS</i>	Skipper, Anthony	North Canton residential area	AnthonySkipper46@gmail.com	
	Stabl, Jake	Goodyear - Flight Operations	jake_stabl@goodyear.com	614 221 2885 x15
<i>ST</i>	Tresso, Stephanie	Engage Public Affairs	stresso@murphyepson.com	
	Whitney, John (Major)	Ohio Army National Guard	john.k.whitney.mil@mail.mil	614.336.6103
	Walters, Jamie	Jackson Township	jwalters@jacksontwp.com	
	Wiethe, Wayne	City of Green	wwiethe@cityofgreen.org	
	Wirtz, John	Akron-Canton Airport Authority Board Member	wirtzlaw@yahoo.com	
	Wyatt, David	PSA Station Manager (US Airways)	david.wyatt@usairways.com	
	t.b.d.	t.b.d.	t.b.d.	
	t.b.d.	t.b.d.	t.b.d.	



Part 150 Update Study Second Advisory Committee Meeting



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June 4, 2013



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AGENDA

- “Noise 101” presentation
 - Basic terminology we will be using in this study
- Discuss measurement sites and program
- Review 1997 Part 150 Noise Exposure Map results
 - Review Noise Compatibility Program at a later meeting
- Review status of noise modeling and land use inventory
- Next major steps
- Discussion



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2



WHAT IS “NOISE”?

- Sound is pressure variation our ears can detect
 - An *objective* quantity
- Noise is “unwanted sound”
 - A *subjective* quantity
- We relate sound and noise by considering *effects*
 - Annoyance
 - Speech interference
 - Sleep disruption

Effects are a topic for another session



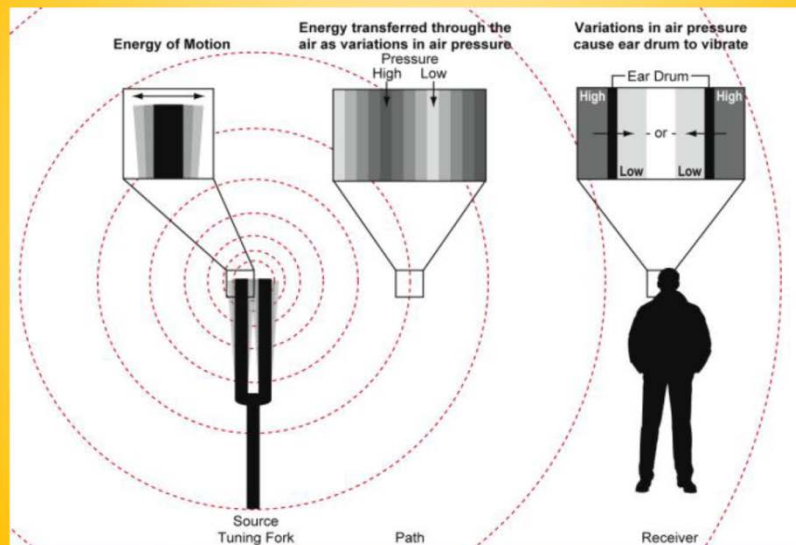
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3



SOUND PRESSURE: VARIATIONS IN AIR PRESSURE THAT TRAVEL FROM SOURCE TO RECEIVER



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4



THE DECIBEL SCALE

- We use a *logarithmic* scale – *decibels, or dB* – to express sound levels and noise levels – *Why?*
- We can hear sound pressures over a HUGE range
 - 0.000000003 to 0.003 pounds per square inch (psi) – the threshold of hearing to the threshold of pain
- Decibels compress this range to match the way we interpret sound pressures
 - 0 to 140 dB
- We “hear” in decibels.



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5



REAL-TIME DECIBEL CHANGE “RULES OF THUMB”

- In a laboratory test, a 1 dB change is generally detectible
- In a normal environment, a 3 dB change is generally the threshold of detectability
 - Why? Distinct A:B comparisons are rare
- A 6 dB change is clear in most day-to-day situations
- In general, a 10 dB change seems twice as loud

These “rules” do not apply to cumulative exposure



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CAUTION: DECIBEL ADDITION ISN'T ORDINARY MATH!

- Decibels are a logarithmic quantity, so...
- Two equal sources:
 - $60 \text{ dB} + 60 \text{ dB} = \del{120 \text{ dB}} \text{ 63 dB}$
- Four equal sources:
 - $60 \text{ dB} + 60 \text{ dB} + 60 \text{ dB} + 60 \text{ dB} = \text{66 dB}$
- Ten equal sources:
 - $60 \text{ dB} + 60 \text{ dB} + 60 \text{ dB} + 60 \text{ dB} + 60 \text{ dB} +$
 $60 \text{ dB} + 60 \text{ dB} + 60 \text{ dB} + 60 \text{ dB} + 60 \text{ dB} = \text{70 dB}$
- *We are more sensitive to small changes in level and less sensitive to large changes*



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DECIBELS ALONE DON'T DO THE JOB...

- *Sound quality* matters
Sources with the same overall dB level may “sound” different



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DECIBELS ALONE DON'T DO THE JOB...

- *Duration* matters

Longer durations increase exposure, even for sources with the same dB level



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DECIBELS ALONE DON'T DO THE JOB...

- *Time of day* matters



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THESE (AND OTHER) VARIABLES REQUIRE A “FAMILY” OF NOISE METRICS

- FAA dictates use of “A-weighted” decibels (dBA)
 - Maximum level (Lmax)
 - Sound Exposure Level (SEL)
 - Equivalent Level (Leq)
 - Day-Night Average Sound Level (DNL or Ldn)
- Part 150 “codifies” this requirement
- Consistent with basically worldwide practice



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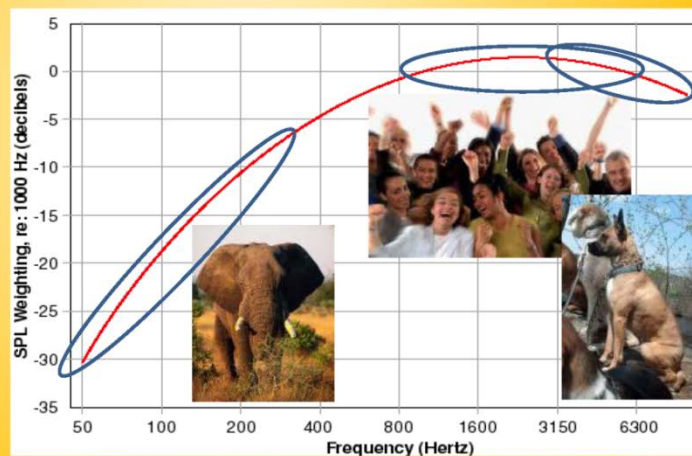


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WHAT IS THE A-WEIGHTED SOUND LEVEL?

- Our ear is not equally sensitive to all frequencies
- A-weighted decibels measure sound the way we “hear” it



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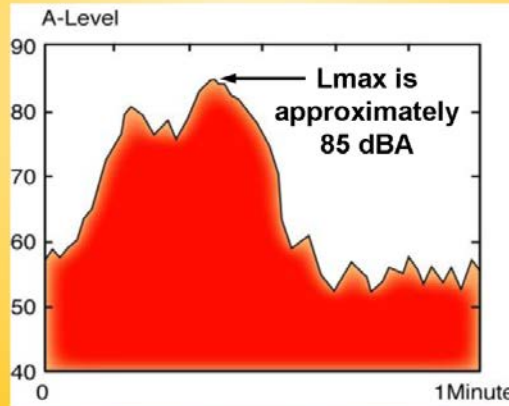
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SINGLE EVENT NOISE METRICS:

MAXIMUM SOUND LEVEL (L_{MAX})

- The simplest way to describe a discrete noise “event” is its maximum sound level, L_{max}



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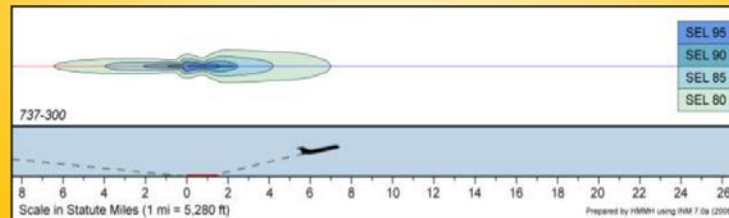
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SINGLE EVENT NOISE METRICS:

SOUND EXPOSURE LEVEL, SEL

- *Duration matters:* A longer event may seem “noisier,” even if it has a lower or equal L_{max} (and vice-versa)
- SEL measures the total “noisiness” of an event by taking duration into account
 - For aircraft, it is generally 7 to 12 dB higher than L_{max}
- We will use it to depict aircraft single event contours




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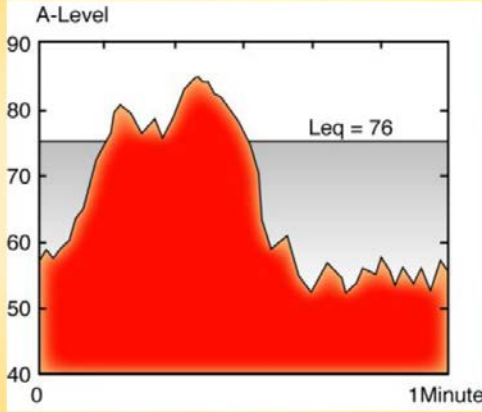





CUMULATIVE EXPOSURE OVER TIME:


EQUIVALENT SOUND LEVEL (LEQ)

- Constant sound level that contains the same amount of energy as the time-varying sound
- Can be measured for any time interval
- Hourly level is common
- Can be described crudely as the “average” level






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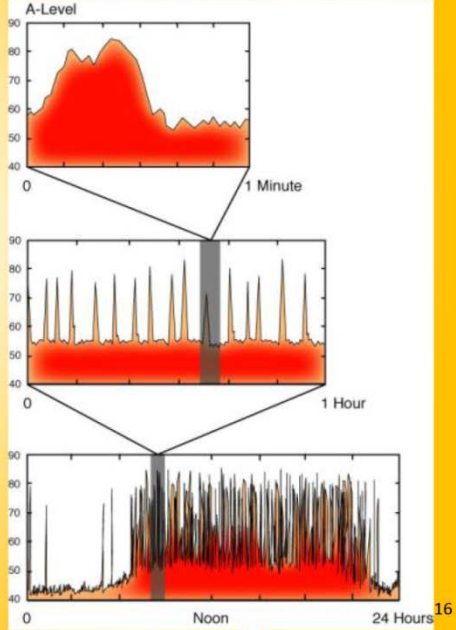



CUMULATIVE EXPOSURE OVER TIME:

DAY-NIGHT AVERAGE SOUND LEVEL (DNL)

- Describes 24-hour exposure
- Noise from 10 pm to 7 am is factored up by 10 dB
 - “Penalty” is equal to counting each night aircraft 10 times
- Sometimes abbreviated Ldn

DNL is the only measure that Part 150 requires us to consider



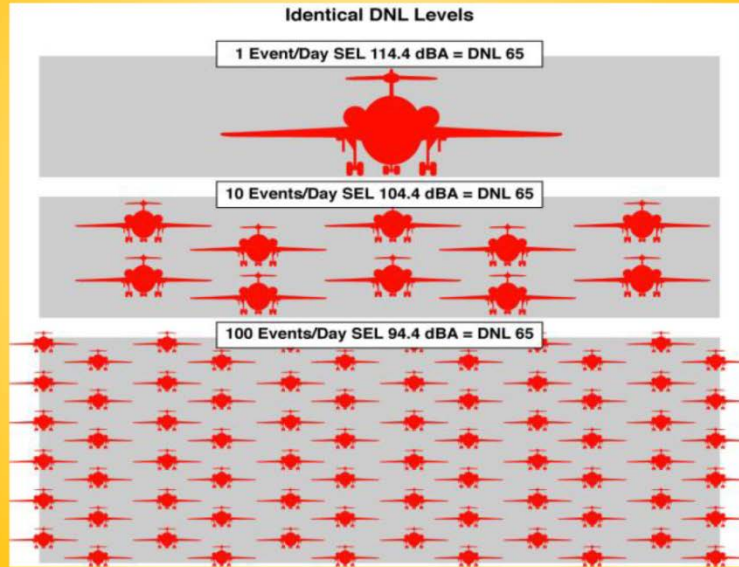


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A GIVEN DNL CAN COME FROM MANY DIFFERENT COMBINATIONS OF EVENTS



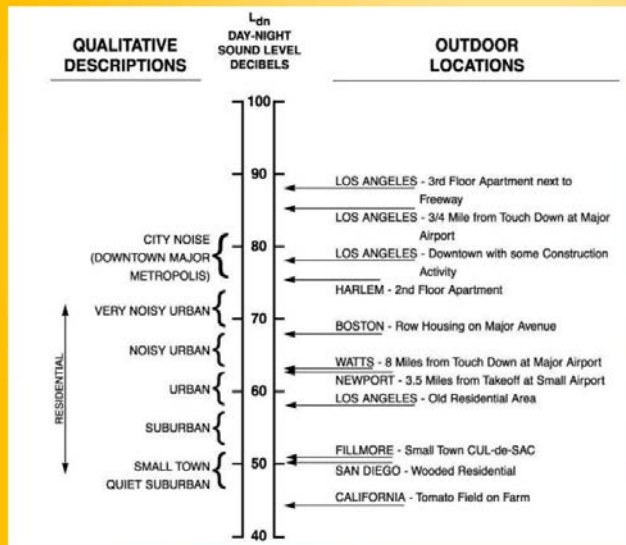
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DNL EXAMPLES



Part 150 guidelines consider all land uses "compatible" below 65 dB DNL

FAA considers 1.5 dB the minimum significant change above 65 dB DNL

Source: United States Environmental Protection Agency, Information on Levels Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, March 1974, p. 14.



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NOISE METRIC SUMMARY

- The decibel is a complex logarithmic quantity based on sound pressure
- A-weighted decibels correlate well with how we hear
- Sound (“noise”) levels can be expressed many ways
 - Instantaneous maximum (Lmax)
 - Single event dose (SEL)
 - Short-duration exposure (Leq)
 - Long-duration exposure (DNL)
- Best metric to use depends on purpose
- FAA requires us to use DNL in a Part 150 study



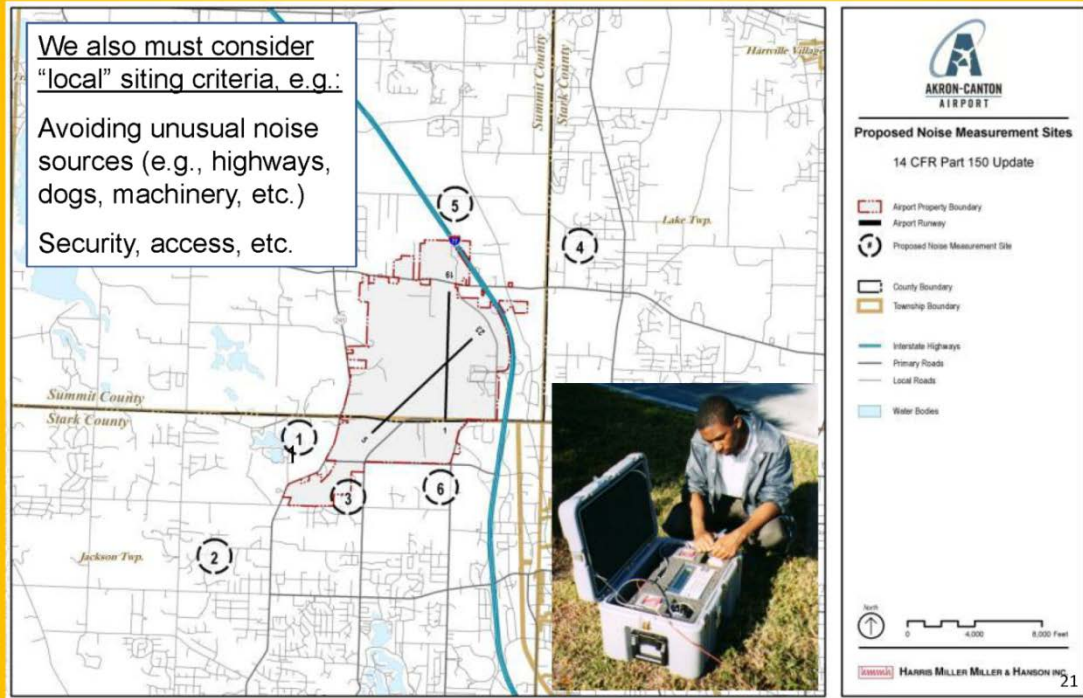
NOISE MEASUREMENT OVERVIEW

- We are underway
 - Already up and running at some sites
- Scheduled to continue into next Monday p.m.
- With advance notice, please join us to observe
 - Individuals or very small groups only, please!
 - Contact Ted at 781.367.5930 or tbaldwin@hmmh.com
- We may request further siting assistance
- Thank you for your input to date

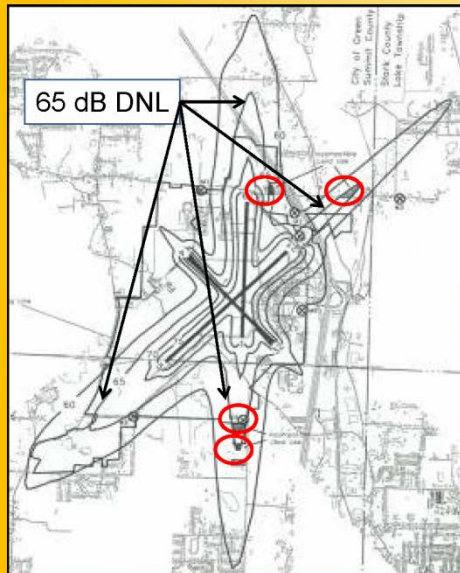
Think positive weather thoughts!



GENERALIZED MEASUREMENT LOCATIONS



1999 FORECAST CASE NOISE EXPOSURE MAP FROM 1997 STUDY



- Very little **non-compatible land use** within 65 dB DNL
- Estimated only two dwelling units and five residents
- Figure showed 60 dB DNL for informational purposes only
 - FAA discourages depicting on official Maps today
- We are preparing 2014 and 2019 Maps
 - Results later this year



OPERATIONAL INVENTORY STATUS

- Flight operations data collection completed
 - Draft modeling tracks under internal review
 - Draft runway use under internal review
- Draft 2014 and 2019 fleet mixes under review
 - Based on FAA-approved master plan forecasts
 - FAA guidance and approvals requested as required

We do not see any roadblocks or delays



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LAND USE INVENTORY STATUS

- Exhibit "A" Property Map - *ongoing*
 - Identify all airport property and easements
- Land Use / Zoning Data Collection - *complete*
- Based on coordination with
 - City of Green Planning & Development
 - Stark County Regional Planning Commission

Should we be talking to any other land use control entities?



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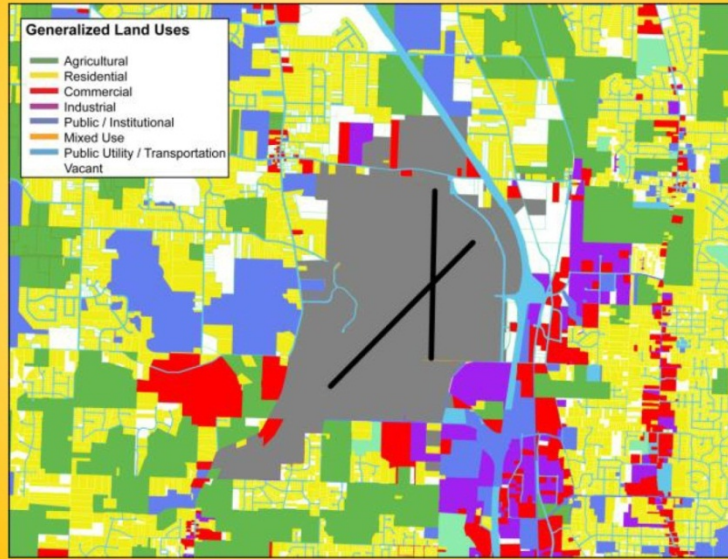


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GENERALIZED LAND USE



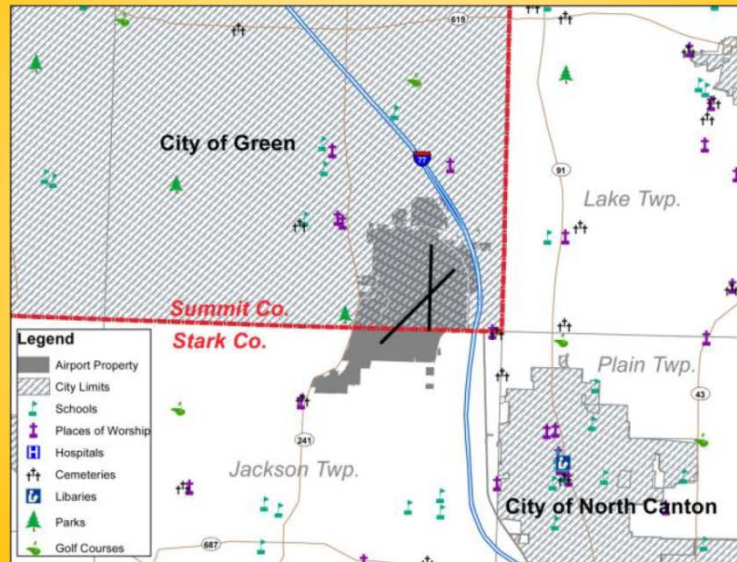
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DISCRETE SENSITIVE RECEPTORS



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NEXT COMMITTEE MEETING

- Present and discuss inventory results
- Present and discuss measurement results
- Conduct first public workshop in evening
 - We would like to schedule the Committee meeting earlier in the day to accommodate the workshop
- Newsletter will go out before the workshop
 - We continue to seek input to email distribution list



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DISCUSSION

Thank you for your attention and participation.



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K.3 Materials Related to the Third Advisory Committee Meeting, October 30, 2013




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Akron-Canton Airport (CAK) Part 150 Update Study

MEETING NOTES



 HARRIS MILLER MILLER & HANSON INC.

Meeting	Third Meeting of the CAK Part 150 Update Study Advisory Committee
Meeting Location	Second Floor Conference Room, CAK Terminal
Meeting Date and Time	October 30, 2013, 1:30 – 3:00 pm
Prepared by	Stephanie Tresso, Engage Public Affairs
Version	November 19, 2013

1. OVERVIEW

This memorandum summarizes the Akron-Canton Airport (CAK) Part 150 Update Advisory Committee’s third meeting held on October 30, 2013 from approximately 1:30-3:00 pm in the CAK Terminal Second Floor Conference Room.

2. MEETING MATERIALS

Two items appended to this memorandum provide materials relevant to documenting the meeting:

- Meeting sign-in sheets, with Advisory Committee member attendance noted by their initials in the first column, and non-member attendance recorded on a separate sign-in sheet.
- The PowerPoint presentation discussed in Section 4.

3. INTRODUCTIONS

Mr. Rick McQueen, President & CEO of the Akron-Canton Airport (CAK) opened the meeting at 1:30 p.m. He welcomed the attendees, and then asked Advisory Committee members to introduce themselves and identify their affiliations. There were no non-member attendees.

4. PRESENTATION

Mr. McQueen turned the meeting over to Ted Baldwin of Harris Miller Miller & Hanson Inc. (HMMH), the Part 150 Update Study consulting team Project Manager. Mr. Baldwin introduced other consulting team members in attendance, including Justin Divens of HMMH, and Kevin Clarke and Rob Lafayette of CHA, CAK’s prime consultant.

4.1 Project Status

Mr. Baldwin reviewed steps completed to date in the study process, the upcoming schedule, and the format and content planned for the first Public Workshop scheduled from 5-7 pm that evening in the 2nd floor CAK meeting space.

He noted that the project was still on schedule to be completed in late 2014, and that the next Advisory Committee meeting was anticipated to be scheduled in January 2014.

4.2 Inventory Report

Mr. Baldwin reviewed the organization and primary purposes of the Inventory Report:

- Set study context for interested parties
- Solicit feedback on noise modeling assumption

4.3 Draft Noise Modeling Inputs

Mr. Baldwin noted that the FAA’s Integrated Noise Model (INM) must be used for the Part 150 study, and identified the primary required inputs:

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Akron-Canton Airport Part 150 Update Study

Meeting Notes: Third Advisory Committee Meeting, October 30, 2013

Version: Draft for CAK review, November 18, 2013

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- FAA-approved operations forecast for 2014 and 2019, including FAA-approved modeling types
- Physical description of the airport layout (same for both years)
- FAA-approved runway utilization rates from 2011 radar data sample (same for both years)
- Flight track geometry and use from 2011 radar data sample (same for both years)

Mr. Baldwin noted that the Inventory Report presents full detail on the draft modeling assumptions for each of these categories, and also summarizes FAA requirements, data sources, data processing undertaken, and other technical steps.

As an example of the flight track inputs, Mr. Baldwin presented a figure showing modeling tracks for fixed-wing departures.

As an example of the runway use inputs, Mr. Baldwin presented a figure illustrating FAA-approved runway use for groups of aircraft that have similar usage.

As an example of the forecast activity and fleet mix inputs, Mr. Baldwin reviewed a figure illustrating FAA-approved activity levels and fleet mixes for 2014 and 2019, using a 2011 baseline.

4.4 Noise Measurements

Mr. Baldwin summarized the noise measurement program undertaken at six locations in the inventory phase and provided an overview of the results presented in the Inventory Report, which cover four major areas:

- Total Day-Night Average Sound Level, DNL, measured at each site
- Daily DNL values measured at each site
- Hourly Equivalent Sound Level, Leq, values measured at each site
- Maximum Level, Lmax, values measured at each site

Mr. Baldwin presented a chart summarizing the daily and overall DNL measurements at each site. He noted that the daily DNL from all sources at the six sites – including aircraft and non-aircraft noise – ranged from 49-64 DNL; i.e., all measure DNL values were below the FAA's 65 DNL noise-land use compatibility guideline.

He also presented and explained sample Lmax and Leq graphics from two representative sites, to assist committee members in reviewing the full range of results presented in the Inventory Report.

5. GENERAL QUESTIONS & DISCUSSION

The following items and questions were raised and discussed:

- Mr. Janecko asked if noise levels from the different measurement sites would be available at the public workshop. Mr. Baldwin said they would be available to review one-on-one with attendees. Mr. Janecko said his neighbors would specifically be interested in Site 3. Mr. Baldwin confirmed that the Site 3 materials will be available at the Workshop.
- Mr. Skipper observed that in addition to Runway 5 arrivals and Runway 23 departures, which fly directly over or by his neighborhood (Willowdale), he and his neighbors also hear Runway 5 departures. Mr. Baldwin noted the measurements reflected this situation; while Runway 5 departures fly away from Willowdale, start-of-takeoff-roll noise was measured in many instances, as was Runway 1 start-of-takeoff-roll noise.
- Mr. Janecko asked for the definition of "day." Mr. Baldwin said it is between 7 a.m. and 10 p.m., as required in the calculation of DNL. Mr. Janecko asked if the data could be broken down by day and night. Mr. Baldwin pointed out that the Leq values showed hourly levels throughout the day for each site. He said that HMMH could provide separate day and night Leq levels at the next meeting.
- Mr. Skipper asked for clarification that when calculating DNL ten decibels (dB) are added to nighttime noise levels. Mr. Baldwin confirmed that is correct and noted the adjustment was mathematically equal to considering each nighttime noise event to be equal to ten identical daytime events.
- Mr. Skipper asked if the noise measurements indicated there will be any incompatible land use. Mr. Baldwin replied that the measurements suggest it is unlikely. The FAA requires use of modeled annual noise contours for this purpose.

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Akron-Canton Airport Part 150 Update Study

Meeting Notes: Third Advisory Committee Meeting, October 30, 2013

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- Mr. Wieth of the City of Green asked why there were only two days of measurements at Site 5, where the measured DNL values were 63 and 64 dB. Why not go back? Mr. Baldwin explained that the measurements at Sites 5 and 6, to the north and south of Runway 1/19 were during the period when that was the primary runway in use. Mr. Baldwin noted that the FAA requires airports to use modelled DNL for full years of activity in determining land use compatibility, and that measurements were permitted for informational purposes only. He stated that comparisons of measured versus modeled levels would be provided at the next committee meeting.
- Mr. Wieth asked if Site 6 was on Frank Road. Mr. Baldwin said it was, and noted that it was at a residence that the FAA approved for acquisition after the last Part 150 study, but the owners had declined the airport's purchase offer.
- Mr. Skipper shared a map from a December 2004 document prepared for the Environmental Assessment for the proposed extension of Runway 5/23. Mr. Skipper asked if the Part 150 update would review the predictions made in that study, which seemed to show larger DNL contours. Mr. Baldwin noted that the EA was based on data that are now at least 10 years old, and that there had been a much more rapid transition to quieter aircraft types than forecast at that time. As required by the FAA, the Part 150 study will take into account the most recent information available. Mr. Baldwin said it would be reasonable to compare the fleet mix that was projected in the EA to the current activity.
- Mr. Skipper asked if current operations have increased or decreased compared to the 2004 projections. Mr. McQueen said the trend has been downward. CAK activity peaked at around 120,000 – 125,000 operations per year in the 1980s
- Mr. Skipper noted that business jets seemed to be the loudest aircraft operating at the airport. Mr. Baldwin said Congress has required that older noisier "Stage 1 and Stage 2" business jets be phased out by 2016, whereas those categories of airline jets were phased out in the 1980s and 1990s. Mr. Skipper's observations are consistent with the federal delay in phasing out noisier business jets.
- Mr. Wieth commented that he finds the Air National Guard helicopter training to be the loudest activity, particularly to the south and west of the airport. Mr. Baldwin noted that the noisiest activity affecting any geographic area around the airport varies with flight track use, and that Mr. Wieth's observation is consistent with the flight tracks for the Air National Guard helicopter training circuits presented in the Inventory Report.
- Mr. Skipper asked if the measurements revealed any night run ups. Mr. Baldwin said no run up measurements were observed. Mr. Skipper noted he had not heard any lately and they seemed to be less common in the past. Mr. McQueen said one operator currently does run ups and those runups have been moved to a more remote area on the airfield to mitigate the noise. Mr. Wieth noted that Chautauqua Airlines, which no longer operates at CAK, was formerly a major source of runup noise.
- Mr. Clarke said he had noted a general decrease in noise levels. Mr. Skipper said that perception is not universal and that there still are noisy individual events. Mr. Baldwin said both observations are correct. While total noise exposure is down, it is normal for people to remember the isolated incidents. He noted again that, consistent with FAA requirements, the DNL contours will reflect noise over the two entire study years, not just the week measured in June.

6. MAJOR NEXT STEPS

Mr. Baldwin requested that Advisory Committee members review the draft modeling assumptions presented in the Inventory Report and provide any feedback or questions as soon as possible. (In a follow-up email sent to all committee members, a November 20, 2013 deadline was established.) Once committee member input is received and addressed as necessary, HMMH and CHA will prepare the draft 2015 and 2019 noise contours and land use analyses that are required for a formal Noise Exposure Map submission.

The next Advisory Committee meeting is projected to be in January 2014. The anticipated agenda will include:




- The draft 2015 and 2019 contours and associated land use analyses
- A review of the existing Noise Compatibility Program
- Discussion of first-round Noise Compatibility Program alternative analyses

7. ADJOURNMENT

Mr. Baldwin adjourned the meeting.

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Akron-Canton Airport (CAK) Part 150 Update Study SIGN-IN SHEET				
 <i>a better way to go.</i>  HARRIS MILLER MILLER & HANSON INC. 				
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	Beyes, Larry	JM Smucker - Flight Operations	larry.beyes@jmsmucker.com	
	Campbell, Robert	Timken - Flight Operations	robert.campbell@timken.com	
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	Dehne, DeeAnn	FAA - Air Traffic Control Tower	deean.dehne@faa.gov	
	Delaney, Katy	FAA - Detroit Airports District Office	Katherine.s.delaney@faa.gov	734-229-2900
JD	Divens, Justin	HMMH	jdivens@hmmh.com	781-98203101
	Fite, Todd	First Energy - Flight Operations	tfite@firstenergycorp.com	
	Gordon, John	Ultimate Air Center	jgordon@ultimatejetcharters.com	
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	Kostiuk, Chris	Goodyear - Flight Operations	chris_kostiuk@goodyear.com	



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RBN	McQueen, Rick	Akron-Canton Airport	rmcqueen@akroncantonairport.com	330-499-4059
	Mentzer, Robert	HMMH	rmentzer@hmmh.com	781-852-3156
	Nau, Robert	Stark County Regional Planning Commission	ranau@co.stark.oh.us	
	O'Dell, James (Captain)	Ohio Army National Guard	james.j.odell.mil@mail.mil	614.336.6111
	Paquette, Steve	Stark Development Board	steve@starkcoohio.com	
	Proud, Ray	McKinley Air, Inc.	oakpilot@aol.com	
	Puckli, Paul	RW Armstrong	ppuckli@rwa.com	800-321-6959 x 381
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	Ripple, Kevin	Akron-Canton Airport	kripple@akroncantonairport.com	
DBS	Saunier, Dennis	Canton Regional Chamber of Commerce	dennys@cantonchamber.org	
	Seadler, James	US Airways / Piedmont Facilities	james.seadler@usairways.com	
	Segedy, Jason	Akron Metro. Area Transportation Study (AMATS)	JSegedy@AkronOhio.gov	
	Sharkey, Bryan	Southwest Airlines	bryan.sharkey@wnco.com	
	Siroki, Brittany	FAA - Air Traffic Control Tower	Brittany.L.Siroki@faa.gov	
ACS	Skipper, Anthony	North Canton residential area	AnthonySkipper46@gmail.com	
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	Tresso, Stephanie	Engage Public Affairs	stresso@murphyepson.com	
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	Walters, Jamie	Jackson Township	jwalters@jacksontwp.com	
WLV	Wiethe, Wayne	City of Green	wwiethe@cityofgreen.org	
CPH	Wirtz, John	Akron-Canton Airport Authority Board Member	wirtzlaw@yahoo.com	
	Wyatt, David	PSA Station Manager (US Airways)	david.wyatt@usairways.com	
	t.b.d.	t.b.d.	t.b.d.	
	t.b.d.	t.b.d.	t.b.d.	



Non-Advisory Committee Attendees				
Initials	Name	Representing	Email	Phone
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PART 150 UPDATE STUDY THIRD ADVISORY COMMITTEE MEETING



AKRON-CANTON
AIRPORT

a better way to go.®

October 30, 2013

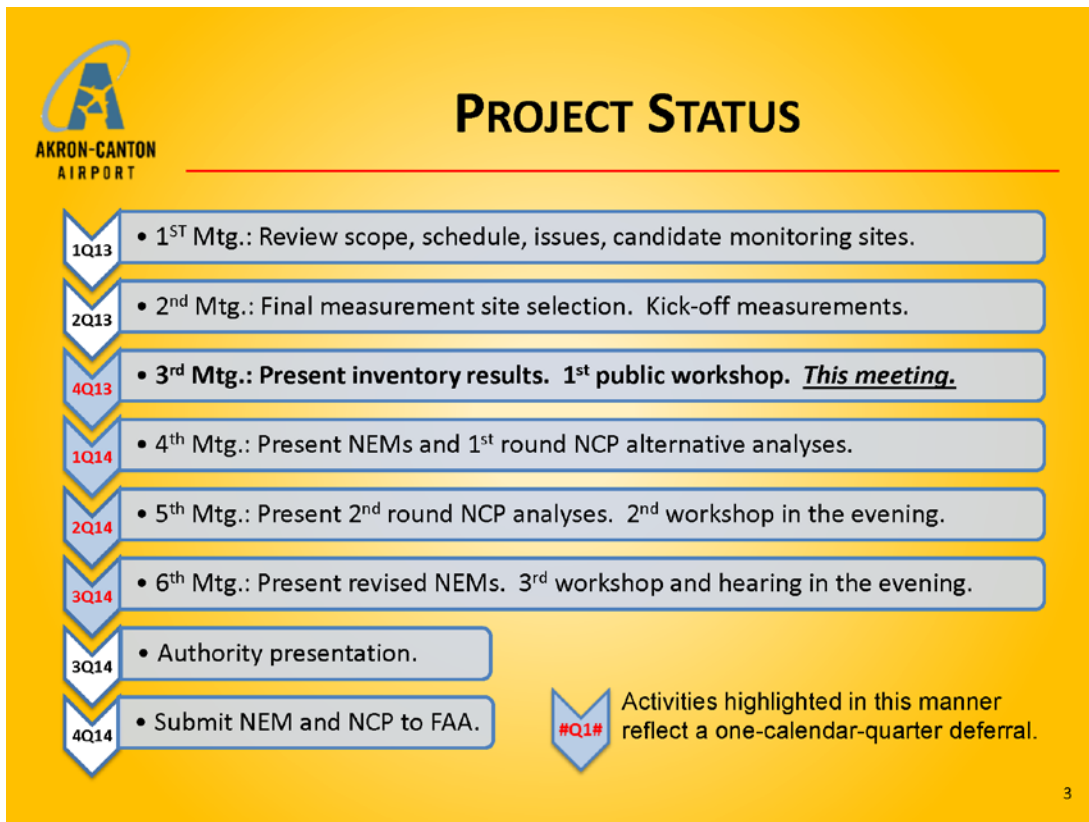


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AGENDA

- Project status
- Tonight's workshop
- Project Introduction and Inventory Report
 - Purpose and organization
 - Overview of noise modeling inputs
 - Overview of measurement program and results
- Next steps
- Discussion



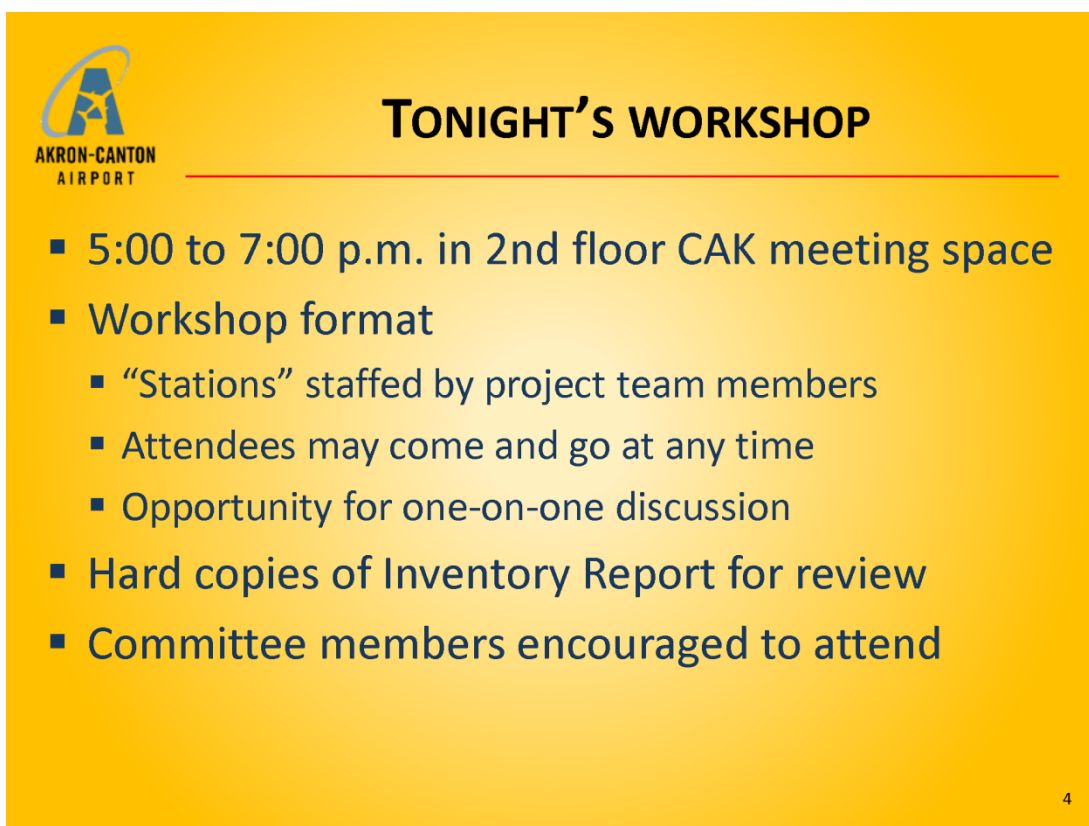
PROJECT STATUS

AKRON-CANTON AIRPORT

- 1Q13 • 1ST Mtg.: Review scope, schedule, issues, candidate monitoring sites.
- 2Q13 • 2nd Mtg.: Final measurement site selection. Kick-off measurements.
- 4Q13 • 3rd Mtg.: Present inventory results. 1st public workshop. ***This meeting.***
- 1Q14 • 4th Mtg.: Present NEMs and 1st round NCP alternative analyses.
- 2Q14 • 5th Mtg.: Present 2nd round NCP analyses. 2nd workshop in the evening.
- 3Q14 • 6th Mtg.: Present revised NEMs. 3rd workshop and hearing in the evening.
- 3Q14 • Authority presentation.
- 4Q14 • Submit NEM and NCP to FAA.

#Q1# Activities highlighted in this manner reflect a one-calendar-quarter deferral.

3



TONIGHT'S WORKSHOP

AKRON-CANTON AIRPORT

- 5:00 to 7:00 p.m. in 2nd floor CAK meeting space
- Workshop format
 - "Stations" staffed by project team members
 - Attendees may come and go at any time
 - Opportunity for one-on-one discussion
- Hard copies of Inventory Report for review
- Committee members encouraged to attend

4



“INVENTORY REPORT”

- *Introductory* information
 - Part 150 overview, FAA checklists
 - Public consultation elements and participants
 - Noise terminology and evaluation
- *Inventory* information
 - Draft noise modeling inputs
 - Noise measurement program and results
- Two primary purposes
 - Set study context for all interested parties
 - Solicit feedback on modeling assumptions

5



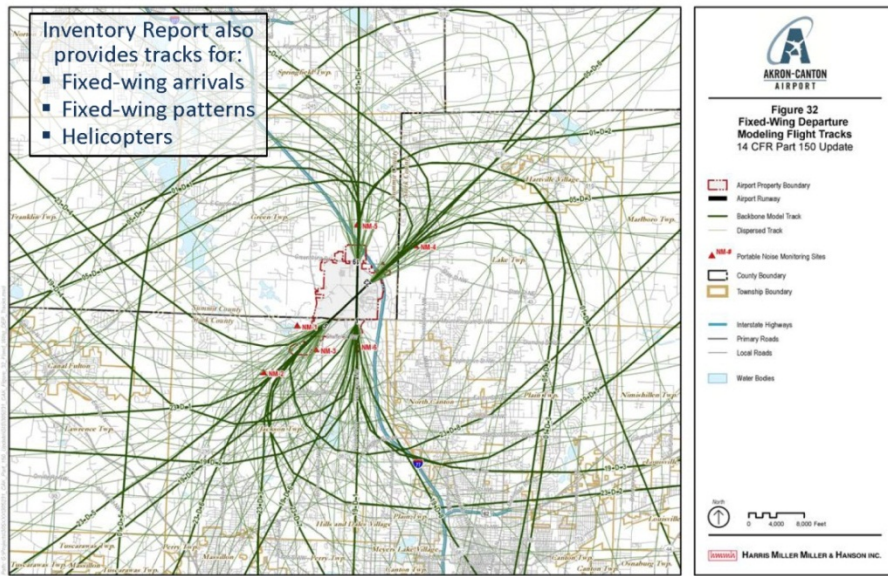
DRAFT NOISE MODELING INPUTS

- We must use the FAA’s Integrated Noise Model (INM)
 - Model includes aircraft noise and performance data
- Required INM inputs include:
 - Aircraft operations forecast for 2014 and 2019
 - FAA-approved level and mix of activity
 - FAA-approved modeling types
 - *Note: All other modeling inputs are the same for both years*
 - Physical description of the airport layout
 - Runway utilization rates (from 2011 radar data sample)
 - Flight track geometry and use (from 2011 radar data sample)

6



EXAMPLE OF MODELING TRACKS FOR FIXED-WING DEPARTURES



7



FAA-APPROVED RUNWAY USE

Inventory Report provides for groups with similar usage:

- Air carrier jets (≥ 90 seats) and all military fixed-wing
- Regional jets (< 90 seats)
- General aviation jets
- Turbo-propeller aircraft
- Piston-propeller aircraft

Runway Use Example for Air Carrier Jets and Fixed-Wing Military Aircraft						
Runway	Arrivals			Departures		
	Day	Night	Total	Day	Night	Total
1	11%	15%	12%	24%	23%	24%
5	15%	32%	19%	4%	2%	3%
19	26%	21%	25%	11%	9%	10%
23	48%	32%	44%	62%	66%	63%
Total	100%	100%	100%	100%	100%	100%

8



FAA-APPROVED ACTIVITY LEVELS AND FLEET MIXES FOR 2014 AND 2019

Aircraft Type	2011 Baseline	2014 Forecast	2019 Forecast	Annual Average Growth Rate
Narrow-Body Airline Jet	13,473	11,151	13,096	-0.4%
Regional Jet > 50 Seats	2,785	8,269	15,824	24.3%
Regional Jet ≤ 50 Seats	14,888	11,903	5,184	-12.4%
Single Engine Piston	10,936	11,039	11,229	0.3%
Multi-Engine Piston	3,502	3,523	3,547	0.2%
Turbo Propeller	10,023	10,193	10,482	0.6%
Business Jet	23,204	23,554	24,144	0.5%
Military Jet	24	24	24	0.0%
Rotor	2,570	2,570	2,570	0.0%
Total Operations	81,405	82,225	86,100	0.7%

Inventory report presents full detail required for modeling, including INM aircraft types, day-night split, and departure stage length (surrogate for aircraft weight).

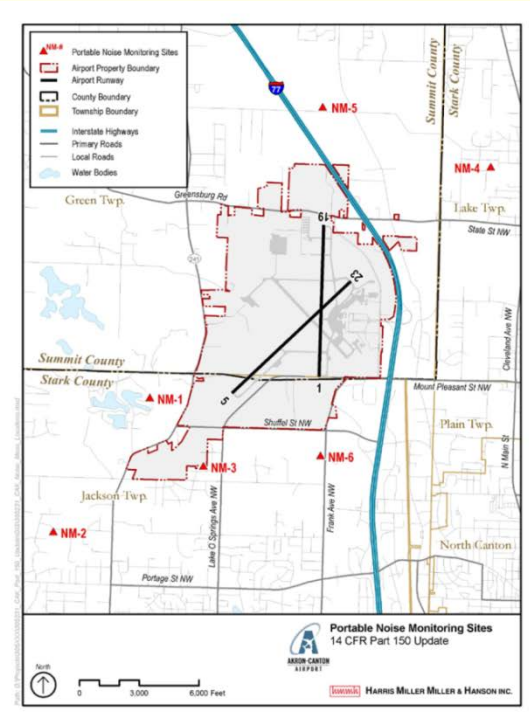


NOISE MEASUREMENTS

Inventory Report presents

- Total DNL
- Daily DNL
- Hourly Leq
- Maximum Levels

#	Address	Approx. Hours	
		Monitor	Log
1	95 Spruce Dr.	159	20
2	7601 Pine Ridge St.	66	6
3	6167 Redford Rd.	141	20
4	3527 Northgate St.	74	4
5	2475 Wise Rd.	26	5
6	7979 Frank Ave.	27	4





DAY-NIGHT AVERAGE SOUND LEVEL MEASUREMENTS

- Daily DNL from all sources ranged from 49-64 dB
 - Included effect of periods of rain on June 6th

Site #	Daily DNL (dBA)								Overall DNL (dBA) ²
	Mon. June 3	Tues. June 4	Wed. June 5	Thurs. June 6	Fri. June 7	Sat. June 8	Sun. June 9	Mon. June 10	
1	49 ¹	54	52	64	51	52	50	58 ¹	57
2	-	-	-	-	51 ¹	53	50	52 ¹	52
3	-	55 ¹	54	56	51	56	52	55 ¹	54
4	-	51 ¹	55	54	54 ¹	-	-	-	54
5	63 ¹	64 ¹	-	-	-	-	-	-	64
6	60 ¹	59 ¹	-	-	-	-	-	-	59

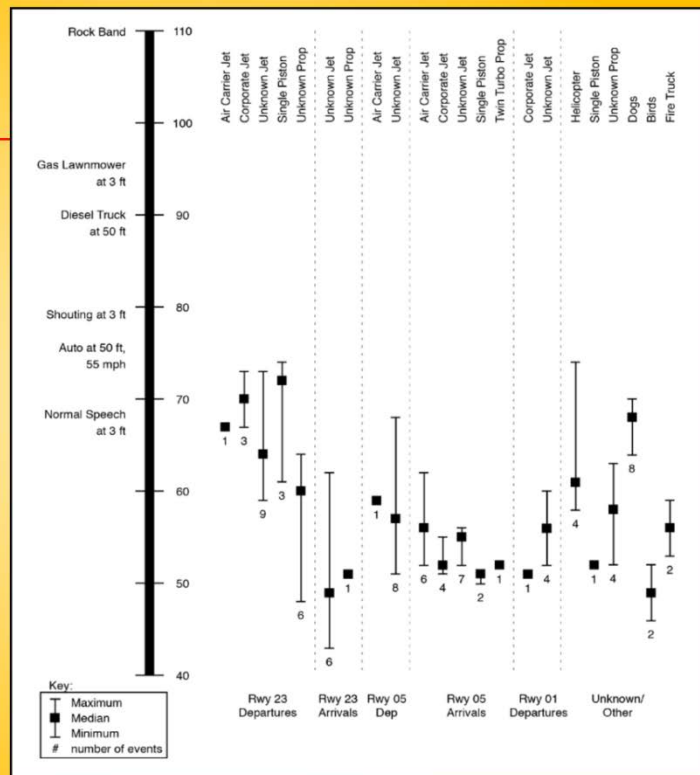
¹ DNL for partial day calculated using proper weighting of day and night contributions.
² Overall DNL values calculated using proper weighting of day and night contributions.

11



Example of Maximum A-Weighted Level (Lmax) Measurements from Site 1

Inventory Report presents similar detail for all sites.

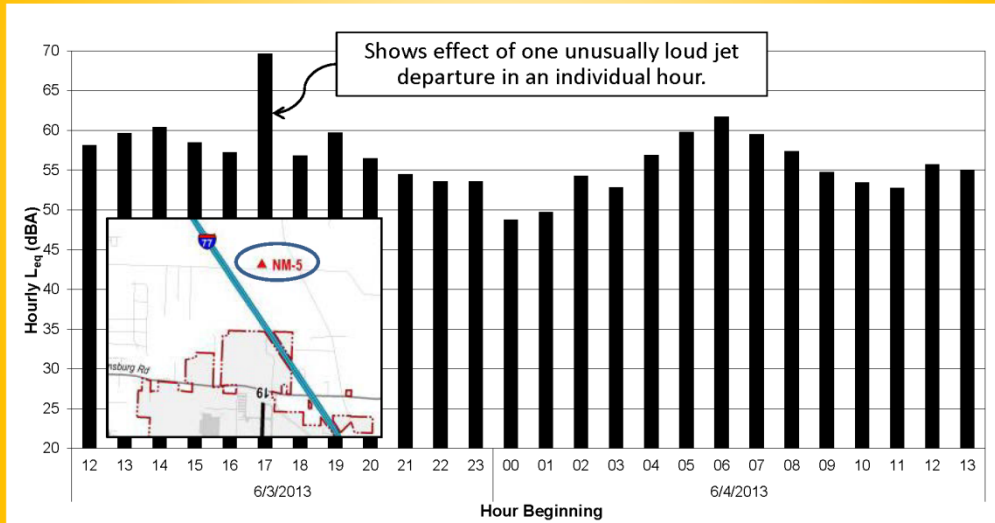


12



HOURLY EQUIVALENT SOUND LEVEL (LEQ) MEASUREMENTS

Example from Site 5



13



WRAP-UP

- *Within two weeks, if possible, please provide feedback regarding noise modeling assumptions*
- Next Committee Meeting
 - Present 2014 and 2019 Noise Exposure Maps
 - Present compatible land use analysis
 - Present first-round noise abatement analysis
- Discussion

Thank you for your assistance!



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K.4 Materials Related to the Fourth Advisory Committee Meeting, March 5, 2014



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 Akron-Canton Airport (CAK) Part 150 Update Study MEETING NOTES 	
<i>a better way to go.</i> 	
Meeting	Fourth Meeting of the CAK Part 150 Update Study Advisory Committee
Meeting Location	Second Floor Conference Room, CAK Terminal
Meeting Date and Time	March 5, 2014, 1:30 – 3:00 P.M.
Prepared by	Stephanie Tresso, Engage Public Affairs
Version	March 31, 2014

1. OVERVIEW

This memorandum summarizes the Akron-Canton Airport (CAK) Part 150 Update Study Advisory Committee’s fourth meeting held on March 5, 2014 from approximately 1:30-3 pm in the CAK Terminal’s Second Floor Conference Room. This meeting was a replacement for the meeting originally scheduled for February 5, 2014, that was deferred due to winter storm conditions that made driving hazardous.

2. MEETING MATERIALS

Three items appended to this memorandum provide materials relevant to documenting the meeting:

- Meeting sign-in sheets, with Advisory Committee member attendance noted by their initials in the first column, and non-member attendance recorded on a separate sign-in sheet.
- The PowerPoint presentation discussed in Section 4.
- The amended version of Table 8 from the September 2013 “Inventory Report” that corrected some typographical errors in the summary of runway use, as discussed in Section 5.

3. INTRODUCTIONS

Mr. Rick McQueen, President & CEO of the Akron-Canton Airport (CAK) opened the meeting at 1:30 p.m.

He welcomed the attendees, and then asked Advisory Committee members and other attendees to introduce themselves and identify their affiliations.

Mr. McQueen turned the meeting over to Ted Baldwin of Harris Miller Miller & Hanson Inc. (HMMH), the Part 150 Update Study consulting team Project Manager. Mr. Baldwin introduced other consulting team members in attendance, including Justin Divens of HMMH, Aaron Lofurno, and Paul Puckli of CHA, and Stephanie Tresso of Engage Public Affairs.

4. PRESENTATION

Mr. Baldwin made a presentation based on the appended PowerPoint presentation.

4.1 Project Status

Mr. Baldwin reviewed steps completed to date in the study process and discussed the schedule and next steps.

4.2 Noise Exposure Map Contours and Criteria

Mr. Baldwin reviewed the draft 2014 and 2019 Noise Exposure Map contour figures. He pointed out the areas on the contours where engine maintenance runups and Ohio Army National Guard (OANG) helicopter operations affected the contours. He noted that, following FAA’s Part 150 land use compatibility guidelines, there are no noncompatible land uses within the 65 decibel (dB) Day-Night Average Sound Level (DNL) contour for either year, and that the FAA considers all land uses compatible with aircraft noise outside of that contour.

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He pointed out that due to the Stark County land use database coding the land use in the Willowdale community as “lodge hall / amusement park,” materials distributed prior to the meeting showed the area to be commercial use. The figures in the PowerPoint correctly show the area as residential.

Mr. Skipper noted there is one church within the 60 DNL contour, but none within the 65 DNL. Mr. Janecko noted a doctor’s office at Frank Avenue and Applegrove Street; on further examination, it was determined to be outside 60 dB DNL. There also was discussion of a Greek Orthodox Church on the west side of the airport, which also was determined to be outside 60 dB DNL. Mr. Baldwin pointed out that these uses are compatible with noise exposure below 65 dB DNL.

4.3 Measured vs. Modeled DNL

Mr. Baldwin discussed the PowerPoint slide that compares measured and modeled DNL, and discussed the primary reasons for any differences. He pointed out that the January 9, 2014 background memorandum for the meeting provided a detailed site-by-site discussion. He noted that, with the exception of Site 5, the differences were well within expected tolerances when comparing short-term measurements to annual noise exposure.

He explained that the larger difference at Site 5 – where the measured DNL was five decibels more than the modeled level – was likely due to two primary factors: (1) the monitor was deliberately installed at the site on a day when Runway 1 was the primary runway in use, since Runway 1 departures pass close to or directly over the site, and (2) an MD-88 departure resulted in the highest aircraft noise level measured at any site during the measurements, whereas a departure in that unusually noisy aircraft type is forecast to fly over that site less than once every eight days.

Mr. Janecko noted that the comparison supported his neighbor’s observation that the measurement period appeared to be during a relatively quiet week, and appreciated the fact that the modeled exposure was higher.

4.4 Day vs. Night Exposure

In response to a request at the previous committee meeting, Mr. Baldwin presented a slide that compared average day (7 a.m. – 10 p.m.) and night (10 p.m. – 7 a.m.) noise exposure to DNL. The results reveal that night operations are a more significant contributor to overall DNL when the 10-dB nighttime penalty is taken into account, suggesting that it would be most valuable to focus noise abatement analyses on nighttime abatement alternatives, in particular preferential runway use. He noted this is a positive result, since the tendency for both activity levels and wind speeds to be lower at night increase the feasibility of nighttime preferential runway use.

4.5 Noise Exposure of Commercial versus Corporate Jets

In response to another request at the previous committee meeting, Mr. Baldwin presented the figures that compared DNL resulting from total operations to that resulting from all jet operations alone, commercial jet operations alone, and corporate jet operations alone.

- Mr. Skipper asked if corporate jets could be directed to use Runway 1-19 rather than 5-23. Mr. Beresh, who was representing the FAA Air Traffic Control Tower staff at the meeting, said they can try, but many factors impact which runway is used, with the final decision being the pilot’s.
- Mr. Baldwin said that the study can look at preferential runway use as an informal noise abatement option. He noted that the FAA has not approved a formal (mandatory) preferential runway use program at any airport since 1978.

4.6 Initiating the Noise Abatement and Compatible Land use Analyses

Mr. Baldwin stated that the next step in the Part 150 is to identify and analyze noise abatement and compatible land use alternatives. To provide committee members with initial information to consider in assessing preferential runway use, he reviewed the figures in the PowerPoint presentation showing DNL contours for hypothetical days when all operations are on each of the four individual runways.

He requested that committee members call or email him by March 19 with suggestions for other noise abatement or compatible land use alternatives to consider.

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4.7 Noise Exposure from Representative Individual Aircraft Types

In response to another request at the previous committee meeting, Mr. Baldwin presented the “arrival-departure” contours for seven representative aircraft types included in the PowerPoint presentation.

- Mr. Skipper asked if the Boeing 737-700 and 717-200 aircraft shown were Stage 3 or 4. Mr. Baldwin stated they could be either based on their exact configuration, but they were at least Stage 3.
- Mr. Skipper asked if the FAA is phasing out Phase 3 aircraft. Mr. Baldwin replied there is no planned phaseout of Stage 3 jets at this time
- Mr. Skipper asked if all Stage 2 aircraft are phased out. Mr. Baldwin replied that all civil Stage 2 jets weighing 75,000 pounds or more were phased out by January 2000 and that lighter Stage 2 jets must be phased out by January 2016.
- Mr. Skipper asked if Southwest taking out its old 737-300s is part of an FAA mandate. Mr. Baldwin replied no.
- Mr. Skipper asked what it would take to ban Lear 35s. Mr. Baldwin replied literally an act of Congress.
- Mr. McQueen noted that higher fuel burn also dissuades operators from using older noisier aircraft.

In response to this general discussion, Mr. Baldwin agreed to prepare additional arrival-departure contours for a broader range of aircraft types, including the Boeing 737-300, for presentation at the next meeting.

4.8 Environmental Assessment versus Part 150 Forecast

In response to another request at the previous committee meeting, Mr. Baldwin presented the comparison of the Part 150 forecast to that from the 2004 Environmental Assessment (EA) on the lengthening of Runway 5/23, which is included in the PowerPoint presentation.

Mr. Baldwin observed that the EA forecast was much higher in all categories except regional jets, due to higher overall operations at the time of the study.

In response to a related request, Mr. Baldwin agreed to prepare a comparison of the 65 dB DNL contours from the EA and the last Part 150 to the updated 2014 case.

5. GENERAL QUESTIONS & DISCUSSION

Mr. Baldwin passed out an amended version of Table 8 from the September 2013 “Inventory Report” that corrects some typographical errors in the summary of runway use. A copy of that amended table is attached to this memorandum.

The following items and questions were raised and discussed:

- Mr. Janecko said that as his neighborhood development has gotten older, more people are retiring and spending time at home. He asked if a phone hotline could be created for people to call during noise events to compile them. He suggested a simple idea for residents to “rate” the relative noisiness of each event, such as on a one-to-ten scale. He gave the example that at 11:30 this morning his house shook.
- Mr. Baldwin stated that the study will make straightforward recommendations regarding addressing citizen noise reports. He said that good recordkeeping goes a long way.
- Ms. VanAuken said that residents can currently report noise events on the airport’s website, under the customer feedback link, using the noise issue category.
- Mr. McQueen noted that not everyone is comfortable going online to make a report about noise and the airport would research a phone hotline.
- Mr. Skipper asked when reporting noise incidents, how important is time?
- Mr. McQueen said as long as it is within a five-minute window the airport can identify the flight.
- Mr. Janecko asked if it would be possible to publish updates on noise event on a regular basis to show progress and identify issues.

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Akron-Canton Airport Part 150 Update Study

Meeting Notes: Fourth Meeting Advisory Committee, March 5, 2014

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- There was a discussion about land use within the 60 and 65 dB DNL contours. Mr. Lofurno asked for compatible land use options. Mr. Baldwin said he does not want to see residential development pushing close to the 65dB area, saying he hoped local jurisdictions would regulate resident development in the 60-65 dB zone. There was then a discussion about residential development near the airport and the philosophies of different local governments.
- Mr. Puckli of CHA suggested an option of creating an overlay district with the City of Green, Jackson Township, and Stark County, similar to one that was created in Dayton several years ago. There was additional discussion about an overlay district.
- Mr. Skipper asked if another option would be to create countywide policies to not allow residential development within 60 dB DNL. He noted that the Jackson Township Master Plan says there will not be any residential development within the 65 dB DNL contour, but that appears to be irrelevant at this time, because within the Township that contour is on airport property or over compatibly zoned land for which the airport has an avigation easement.
- The CHA representatives stated that they would be taking the lead in coordinating outreach to county and township representatives to investigate their interest in providing some sort of compatible land use buffer that goes beyond the 65 dB DNL contour.

6. MAJOR NEXT STEPS

Mr. Baldwin said the next Advisory Committee meeting will be in late spring or early summer 2014, and that the second public workshop would be held on that day.

A sixth meeting will be held about two months after the fifth one. There will be a presentation to the Airport Authority board in November.




Meeting attendees were reminded that ideas for noise abatement and compatible land use alternatives should be sent to Mr. Baldwin or Mr. McQueen as soon as possible, and by March 19, if feasible.

7. ADJOURNMENT

Mr. Baldwin adjourned the meeting.

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Akron-Canton Airport (CAK) Part 150 Update Study SIGN-IN SHEET				
 <i>a better way to go.</i>  				
Meeting	Fourth Meeting of the CAK Part 150 Update Study Advisory Committee			
Location	Second Floor Conference Room, CAK Terminal			
Date	March 5, 2014			
Time	1:30 - 3:00 P.M.			
Advisory Committee and Consulting Team Members				
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	Delaney, Katy	FAA - Detroit Airports District Office	Katherine.s.delaney@faa.gov	734-229-2900
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Initials	Name	Representing	Email	Phone
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	McQueen, Rick	Akron-Canton Airport	rmcqueen@akroncantonairport.com	330-499-4059
	Mentzer, Robert	HMMH	rmentzer@hmmh.com	781-852-3156
<i>ROT</i>	Nau, Robert	Stark County Regional Planning Commission	ranau@co.stark.oh.us	
	O'Dell, James (Captain)	Ohio Army National Guard	james.j.odell.mil@mail.mil	614.336.6111
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	Ripple, Kevin	Akron-Canton Airport	kripple@akroncantonairport.com	
	Saunier, Dennis	Canton Regional Chamber of Commerce	dennys@cantonchamber.org	
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	Stabl, Jake	Goodyear - Flight Operations	jake_stabl@goodyear.com	
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	Wiethe, Wayne	City of Green	wwiethe@cityofgreen.org	
<i>AM</i>	Wirtz, John	Akron-Canton Airport Authority Board Member	wirtzlaw@yahoo.com	
	Wyatt, David	PSA Station Manager (US Airways)	david.wyatt@usairways.com	
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	t.b.d.	t.b.d.	t.b.d.	



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AL	AARON LUKONIC	CHA	AL.lukonic@CHA-Compliance.com	



PART 150 UPDATE STUDY FOURTH ADVISORY COMMITTEE MEETING



March 5, 2014



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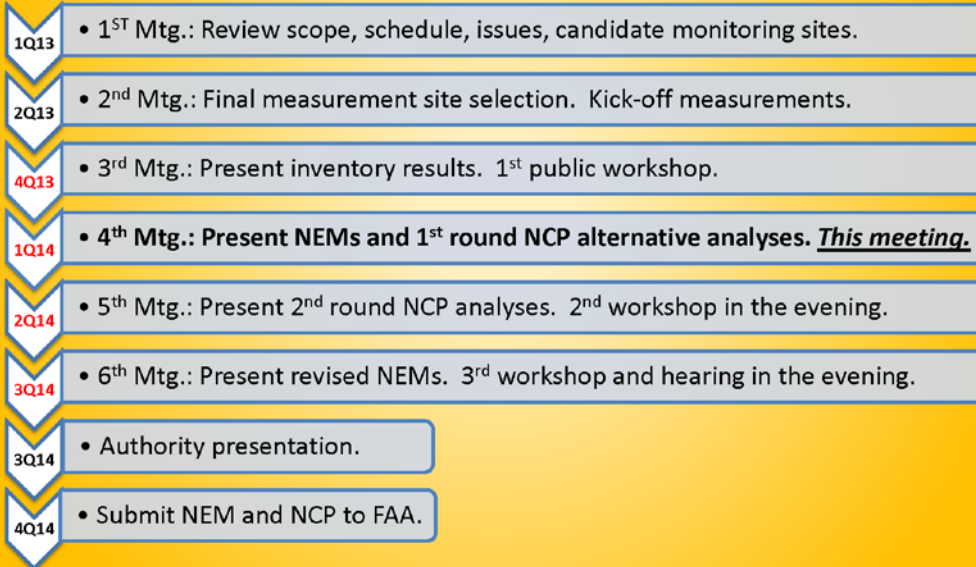


AGENDA

- Project status
- Draft 2014 and 2019 Noise Exposure Map contours
- Land use data collection, analyses, and discussion
- Noise issues raised in previous meetings
- Initiating first-round noise abatement analyses
- Comparison of EA and Part 150 forecasts
- Next steps
- Discussion



PROJECT STATUS



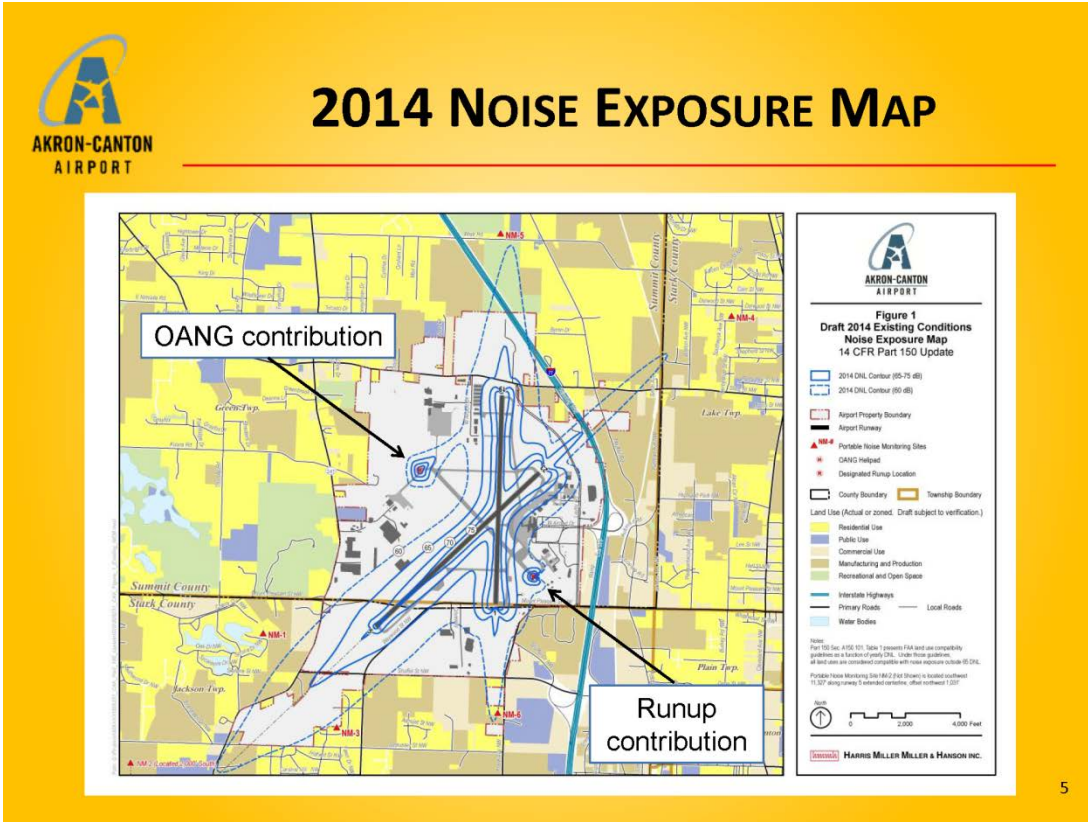
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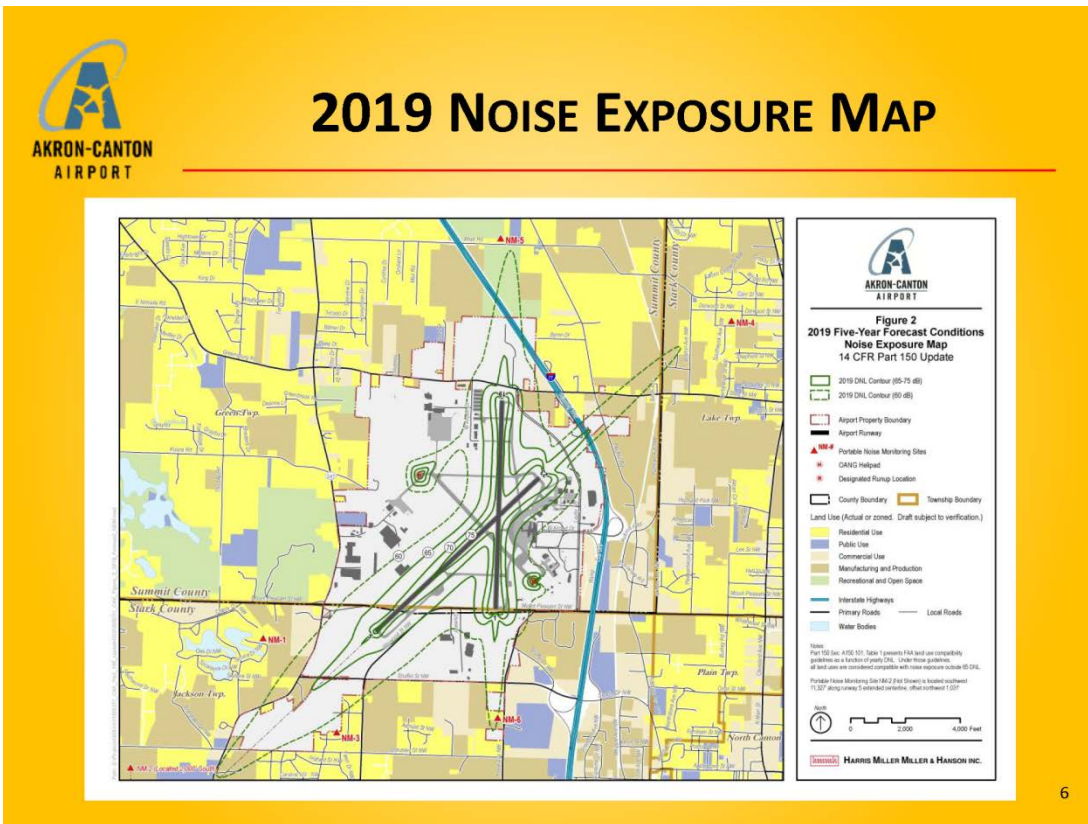
DRAFT NOISE EXPOSURE MAP CONTOURS

- 2014 Existing Conditions
- 2019 Forecast Conditions
- Table in memorandum addresses FAA requirements
- Figures depict
 - 65, 70, and 75 dB DNL contours as required by FAA
 - 60 dB DNL for informational purposes only

4



5



6



LAND USE

- Data collection
 - Sources, assumptions, updates, mapping
- Analyses
 - Non-compatible land uses
 - Sensitive land uses
 - Easements
- Discussion

7



PREVIOUSLY RAISED NOISE ISSUES

- Comparison of measured and modeled levels
- Day versus night exposure
- Corporate jet exposure
- Commercial jet exposure
- Ohio Army National Guard helicopter exposure
- *Total jet exposure added for reference*
- *Commercial jet exposure added for reference*
- “Single event” contours

8



MEASURED VERSUS MODELED DNL

- Discussed in detail in report
- Agreement is within expected limits

Site	Overall DNL Measured at Site	Hours of Measurements at Site	2014 Annual Average Day Modeled DNL	2014 Difference (Measured Minus Modeled)
1	57	159	56	1 dB
2	52	66	56	-4 dB
3	54	141	59	-5 dB
4	54	74	55	-1 dB
5	64	26	59	5 dB
6	59	27	60	-1 dB

9



DAY VERSUS NIGHT EXPOSURE

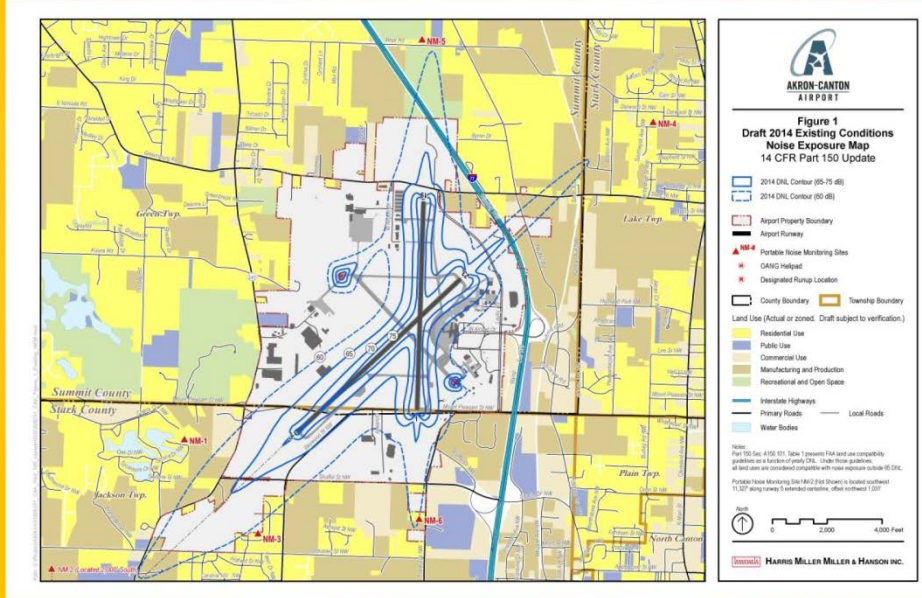
Night activity is a significant contributor when 10 dB “penalty” is added to actual nighttime levels

Site	Modeled DNL for Forecast 2014 Annual Average Day Operations				
	Overall (Modeled DNL)	Daytime (7 am - 10 pm) L_{eq}	Day L_{eq} Difference from DNL	Night (10 pm - 7 am) L_{eq}	Night L_{eq} Difference from DNL
1	56	54	-2	48	-8
2	56	53	-3	48	-8
3	59	57	-2	51	-8
4	55	52	-3	48	-7
5	59	57	-2	51	-8
6	60	58	-2	52	-8

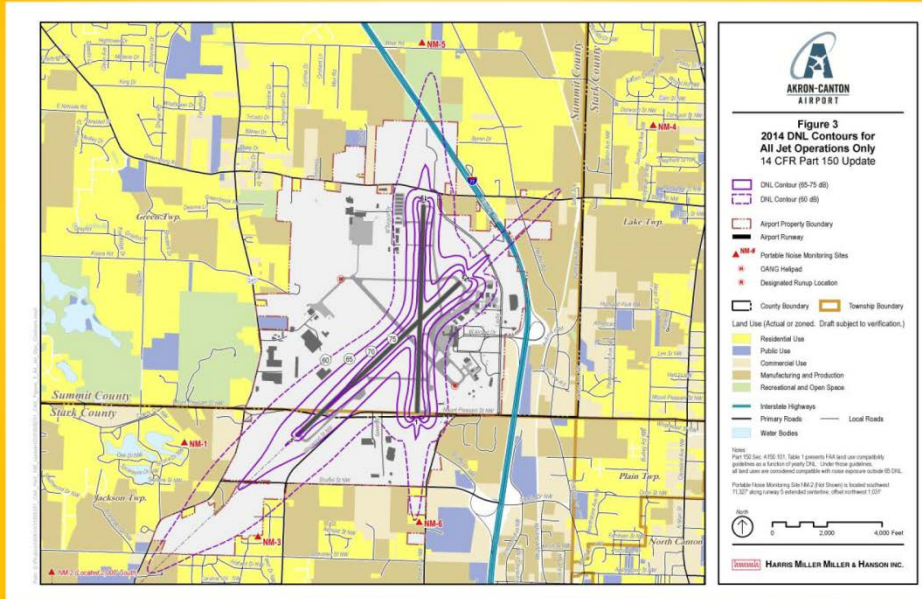
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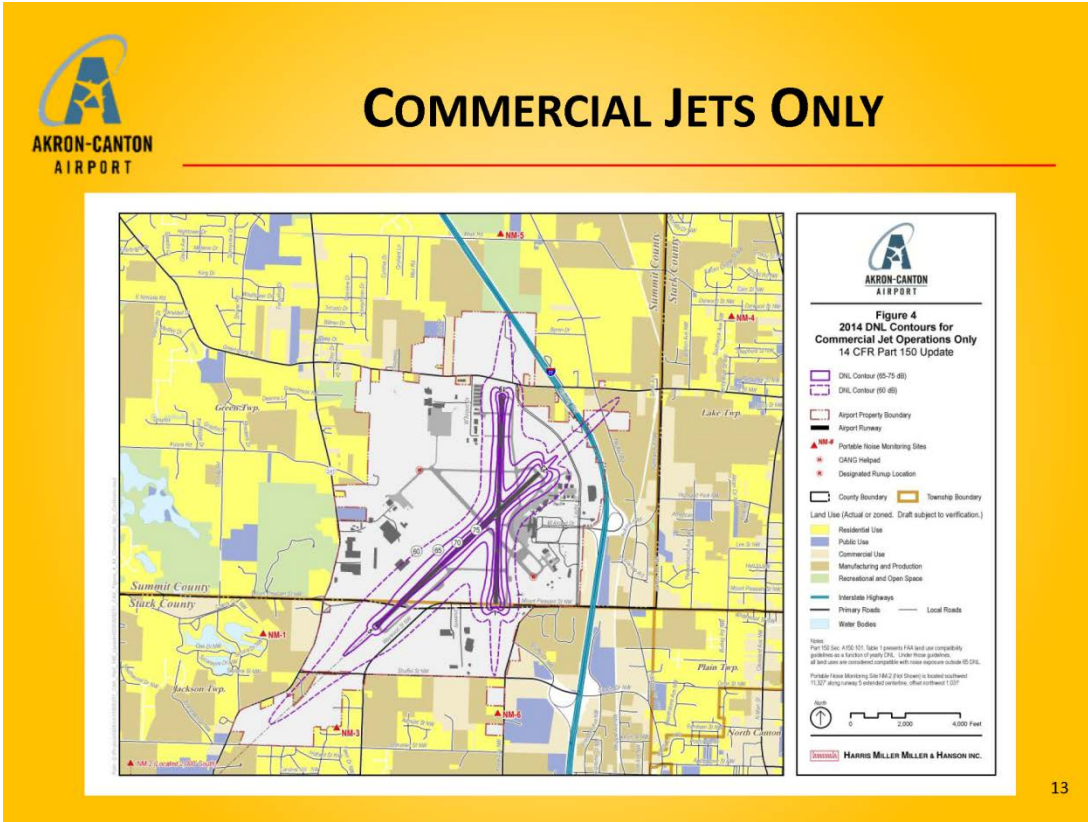


2014 NOISE EXPOSURE MAP

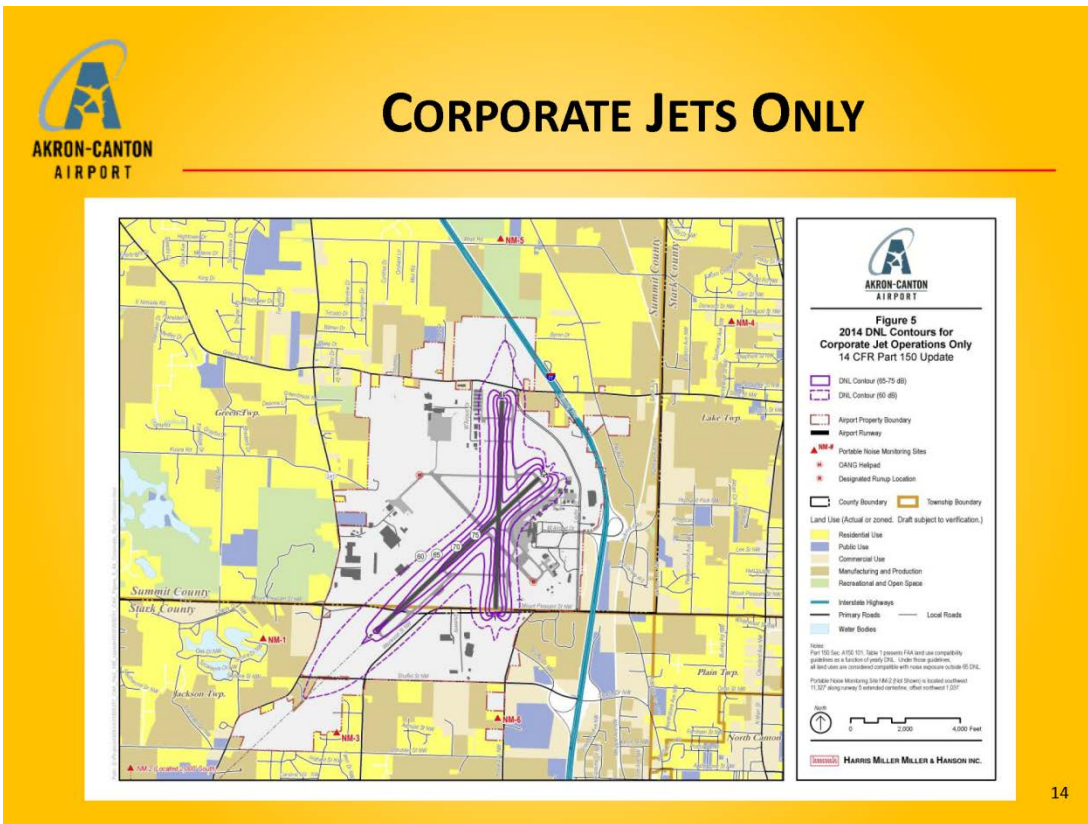


TOTAL JET EXPOSURE





13



14

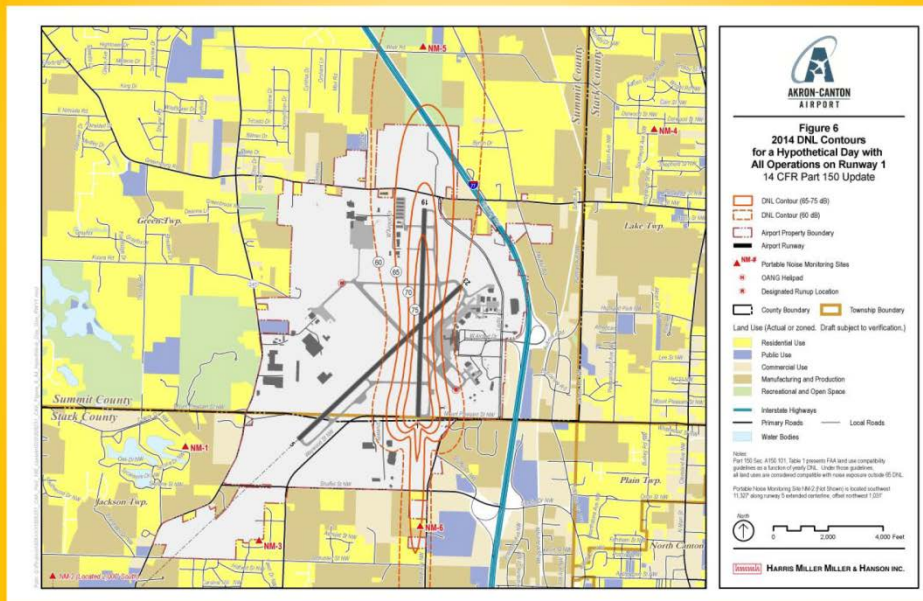


INITIATE NOISE ABATEMENT ANALYSES

- Consider contours for hypothetical days when all operations are on each of four runway ends
 - Useful for considering preferential runway use
- Other committee ideas?

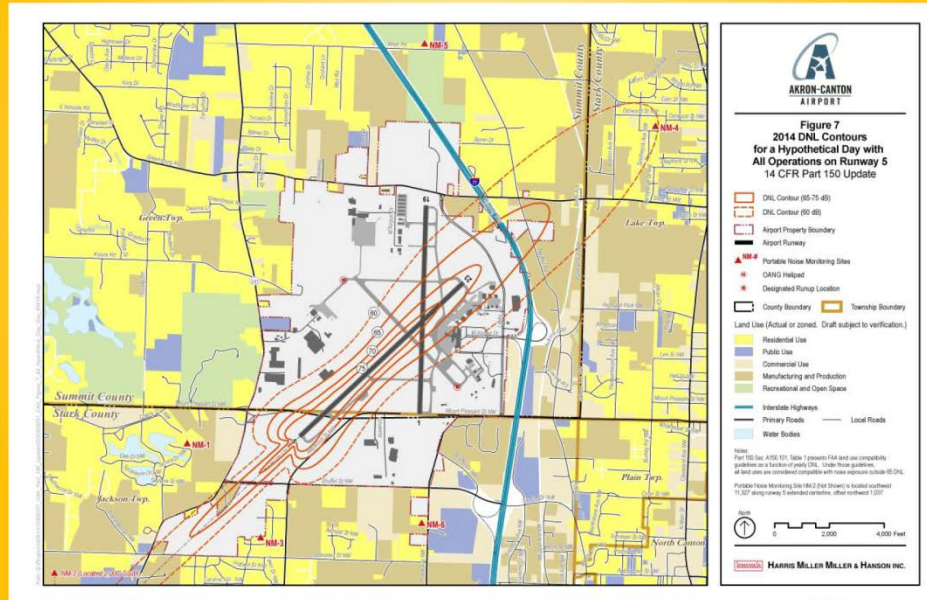


DAY WITH ALL OPERATIONS ON R/W 1





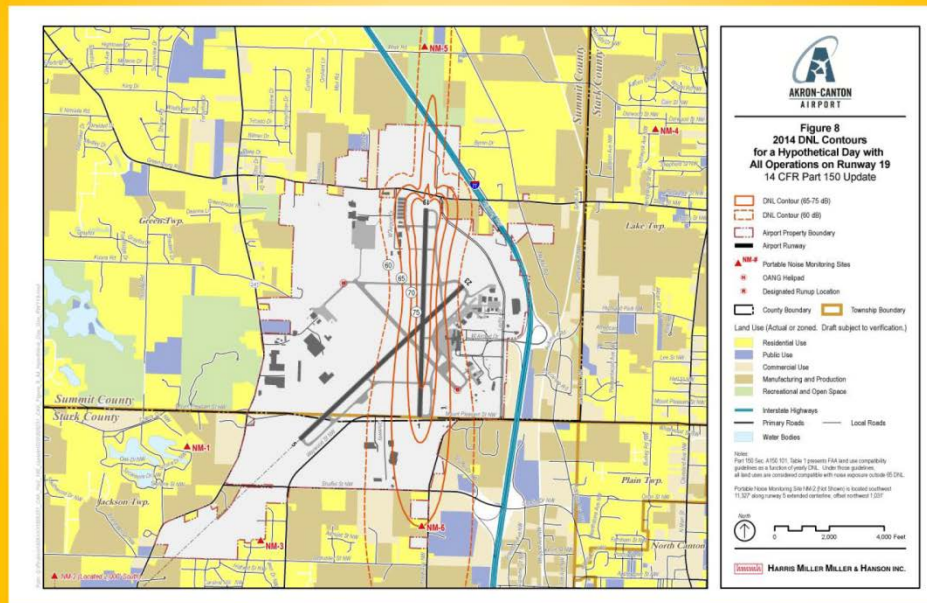
DAY WITH ALL OPERATIONS ON R/W 5



17



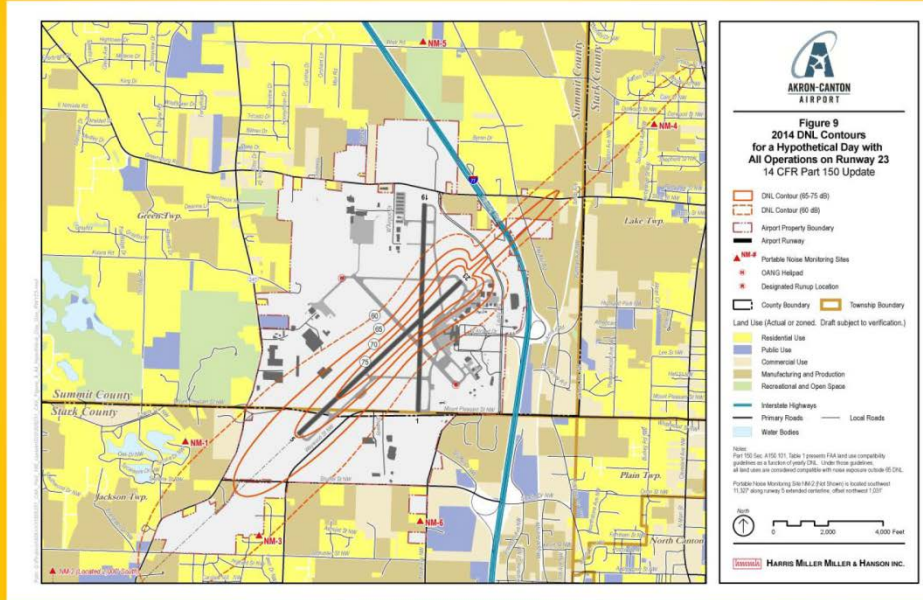
DAY WITH ALL OPERATIONS ON R/W 19



18



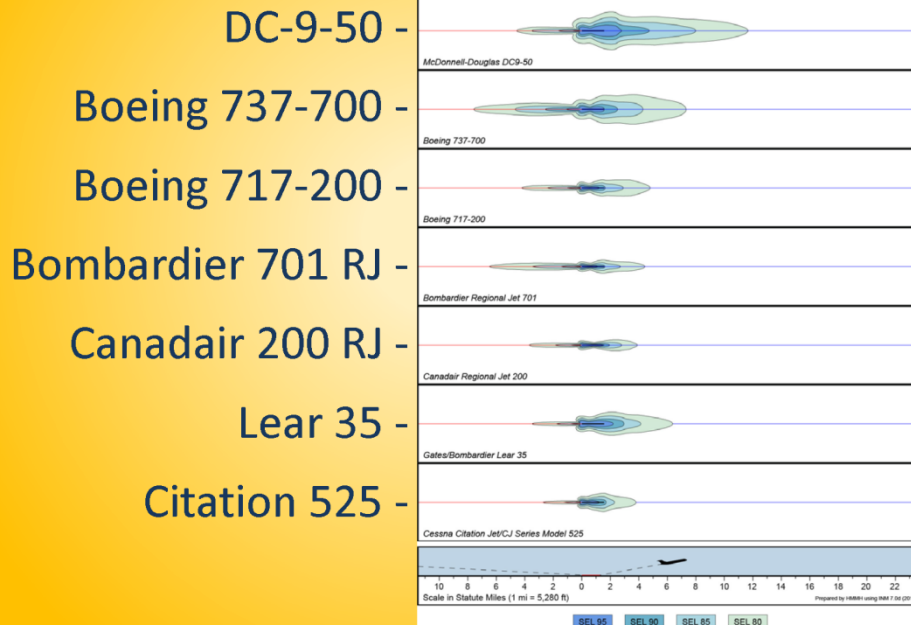
DAY WITH ALL OPERATIONS ON R/W 23



19



ARRIVAL-DEPARTURE CONTOURS



20



EA VERSUS PART 150 FORECAST

EA forecast was much higher in all categories except regional jets, due to higher overall operations at the time of the study (125,000 annual operations in 2003)

General Aircraft Type	2015 Forecast from 2004 EA	2011 Actual	2014 Forecast for Part 150	2019 Forecast for Part 150
Airliner	21,170	13,473	11,151	13,096
Regional Jet	20,440	17,673	20,172	21,008
Single Propeller	35,770	10,936	11,039	11,229
Multi-Propeller	35,040	13,525	13,716	14,029
Business Jet	32,120	23,204	23,554	24,144
Military Jet	n.a.	24	24	24
Rotor	4,380	2,570	2,570	2,570
Total	148,920	81,405	82,225	86,100

21



NEXT STEPS, DISCUSSION

- Ideas for noise abatement options?
 - *Follow up within two weeks if you think of any more*
- Ideas for compatible land use options? (*Ditto*)
- Next Committee Meeting
 - Present additional analyses
 - Second workshop
- Other discussion?

Thank you for your assistance!



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Table 8 Fixed-Wing Runway Use by Major Aircraft Type Category
Source: HMMH, based on four-month Passur data sample from 2012

Air Carrier Jets (≥ 90 seats) and All Military Fixed-Wing	Arrival			Departure			Touch-and-Go			Total		
	Day	Night	Total	Day	Night	Total	Day	Night	Total	Day	Night	Total
Runway 1	11%	15%	12%	24%	23%	24%	Not applicable			19%	19%	19%
Runway 5	15%	32%	19%	4%	2%	3%				8%	18%	10%
Runway 19	26%	21%	25%	11%	9%	11%				17%	15%	17%
Runway 23	48%	32%	44%	62%	67%	62%				56%	48%	54%
Total	100%	100%	100%	100%	100%	100%				100%	100%	100%
Regional Jets (< 90 seats)	Arrival			Departure			Touch-and-Go			Total		
	Day	Night	Total	Day	Night	Total	Day	Night	Total	Day	Night	Total
Runway 1	16%	24%	18%	25%	25%	25%	Not applicable			21%	25%	22%
Runway 5	12%	23%	14%	3%	1%	3%				7%	9%	7%
Runway 19	29%	17%	27%	13%	11%	12%				19%	13%	18%
Runway 23	42%	36%	41%	60%	63%	60%				52%	54%	53%
Total	100%	100%	100%	100%	100%	100%				100%	100%	100%
General Aviation Jets	Arrival			Departure			Touch-and-Go			Total		
	Day	Night	Total	Day	Night	Total	Day	Night	Total	Day	Night	Total
Runway 1	14%	14%	14%	25%	25%	25%	Not applicable			21%	22%	21%
Runway 5	16%	17%	16%	1%	0%	1%				7%	5%	7%
Runway 19	26%	28%	26%	17%	11%	16%				20%	16%	20%
Runway 23	45%	41%	44%	57%	63%	58%				52%	57%	53%
Total	100%	100%	100%	100%	100%	100%				100%	100%	100%
Turbo-Propeller Aircraft	Arrival			Departure			Touch-and-Go			Total		
	Day	Night	Total	Day	Night	Total	Day	Night	Total	Day	Night	Total
Runway 1	11%	4%	8%	19%	16%	19%	Not applicable			16%	6%	14%
Runway 5	14%	2%	8%	4%	3%	4%				7%	3%	6%
Runway 19	28%	22%	25%	19%	13%	19%				22%	20%	21%
Runway 23	47%	72%	59%	58%	68%	59%				55%	72%	59%
Total	100%	100%	100%	100%	100%	100%				100%	100%	100%
Piston-Propeller Aircraft	Arrival			Departure			Touch-and-Go			Total		
	Day	Night	Total	Day	Night	Total	Day	Night	Total	Day	Night	Total
Runway 1	7%	8%	7%	23%	4%	20%	0%	0%	0%	16%	5%	14%
Runway 5	15%	38%	18%	5%	4%	5%	0%	0%	0%	10%	14%	10%
Runway 19	49%	29%	47%	20%	21%	20%	75%	0%	75%	33%	24%	32%
Runway 23	29%	25%	28%	52%	71%	55%	25%	0%	25%	42%	57%	44%
Total	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%



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K.5 Materials Related to the Fifth Advisory Committee Meeting, May 29, 2014




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Akron-Canton Airport (CAK) Part 150 Update Study

MEETING NOTES



 HARRIS MILLER MILLER & HANSON INC.

Meeting	Fifth Meeting of the CAK Part 150 Update Study Advisory Committee
Meeting Location	Second Floor Conference Room, CAK Terminal
Meeting Date and Time	May 29, 2014, 1:30 – 3:00 P.M.
Prepared by	Stephanie Tresso, Engage Public Affairs
Version	June 13, 2014

1. OVERVIEW

This memorandum summarizes the Akron-Canton Airport (CAK) Part 150 Update Study Advisory Committee’s fifth meeting held on May 29, 2014 from approximately 1:30-3 pm in the CAK Terminal’s Second Floor Conference Room.

2. MEETING MATERIALS

Two items appended to this memorandum provide materials relevant to documenting the meeting:

- Meeting sign-in sheets, with Advisory Committee member attendance noted by their initials in the first column, and non-member attendance recorded on a separate sign-in sheet.
- The PowerPoint presentation discussed in Section 4.

3. INTRODUCTIONS

Mr. Rick McQueen, President & CEO of the Akron-Canton Airport (CAK) opened the meeting at 1:30 p.m.

He welcomed the attendees, and then asked Committee members and other attendees to introduce themselves and identify their affiliations.

Mr. McQueen turned the meeting over to Ted Baldwin of Harris Miller Miller & Hanson Inc. (HMMH), the Part 150 Update Study consulting team Project Manager. Mr. Baldwin introduced other consulting team members in attendance, including Justin Divens of HMMH; Aaron Lofurno, Kevin Clarke and Paul Puckli of CHA; and Stephanie Tresso of Engage Public Affairs.

4. PRESENTATION

Mr. Baldwin and Mr. Lofurno made a presentation based on the appended PowerPoint presentation.

4.1 Project Status

Mr. Baldwin reviewed steps completed to date in the study process and discussed the schedule and next steps.

4.2 Noise Exposure Map Contours

Mr. Baldwin reviewed the completed 2014 and 2019 Noise Exposure Map contour figures. He noted that, following FAA’s Part 150 land use compatibility guidelines, there are no noncompatible land uses within the 65 decibel (dB) Day-Night Average Sound Level (DNL) contour for either year, and that the FAA considers all land uses compatible with aircraft noise outside of that contour. He noted that the only sensitive use within the 60 to 65 DNL contour interval is residential, located primarily to the southwest of the airport. However, that use is considered compatible in that contour interval.

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Akron-Canton Airport Part 150 Update Study

Meeting Notes: Fifth Meeting Advisory Committee, May 29, 2014

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4.3 Additional Arrival-Departure Contours

Mr. Baldwin reviewed the expanded range of arrival and departure contours for commercial jets and general aviation aircraft.

Mr. Skipper asked if the Boeing 737-300 meets Stage 3 aircraft criteria. Mr. Baldwin said yes, and that in most instances it meets Stage 4 criteria.

Mr. Skipper commented that MD80s are still the loudest aircraft in the fleet and asked how they compared to others shown in the presentation. Mr. Baldwin said they fell between the DC-9-5- and Boeing 717. He offered to do another round of noise contours. Mr. Skipper declined the offer.

4.4 Preferential Runway Analyses

Mr. Baldwin summarized the process by which preferential runway cases were evaluated. He noted that preferential use of Runway 19 when in the south flow resulted in the highest "benefit-cost" ratio; i.e., the number of residents removed from within the 60 dB DNL contour to the number of operations affected.

Mr. Skipper asked if safety overruns are the same on all runways. Mr. McQueen replied that all meet FAA standards.

Mr. Skipper asked if wind direction will have the greatest influence on whether planes use north or south flow. Mr. Baldwin said that was the case.

Mr. Skipper asked if you remove the differences between the runways and lengths for safety, what is the pilot's greatest influence; e.g., wind, taxi distance, runway length, etc.? Mr. replied that any or all of those could be a factor. Another potential factor is whether a plane would have to cross an active runway to operate on or off the preferred runway. One of the FAA air traffic control representatives noted that, if wind is not an issue, the next most common factor is taxi distance. He also noted that Runway 23 is longer and may be preferred by larger aircraft with higher fuel loads. Mr. Fite, First Energy, said pilots always want to use the longer runway when wind is not an issue. Mr. Baldwin emphasized again that any runway use program would be voluntary.

Mr. Skipper asked to what extent a pilot select which runway to use; i.e., would they comply with a voluntary program? Mr. Baldwin said that – based on his experience at airports around the country – pilots generally comply with the voluntary programs.

Mr. Skipper said from a resident's point of view, the 5A alternative is preferred to 19. Mr. Baldwin explained that option 5A is 24-hour voluntary departure plan. It only positively impacts 10 more residents but impacts 17 operations instead of three.

Mr. Skipper asked if a version of alternative 5A could be run that considered all 236 operations a day in south flow. How significant is it when you look at all operations instead of selected ones? He wishes to keep 5A on the table. Mr. Baldwin said a contour could be run. Mr. McQueen said that night operations are being focused on because of the noise penalty added to nighttime operations. One of the FAA airport traffic control tower representatives at the meeting noted there are very few scheduled departures after 10 p.m. Mr. Baldwin noted that the "night" time period also includes early morning departures before 7 a.m..

Mr. Janecko said 1A and 5A are preferred. He suggested that the options should be narrowed down for general public consumption; e.g., at workshops; for ease of communication, with more discussion of the pros and cons of each. Mr. McQueen emphasized that safety is the top concern. Mr. Baldwin said that FAA input would be sought on the practicality of these options.

At Mr. Skipper's request, Mr. Baldwin said that his team will research levels of compliance with runway use programs around the country.

In response to Mr. Skipper's request at previous meeting, HMMH evaluated the effect of displacing the Runway 5 start-of-takeoff-roll point 1,250 feet to the northeast, Mr. Baldwin replied the analysis showed there was no benefit within the 60 dB DNL contour.

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Akron-Canton Airport Part 150 Update Study

Meeting Notes: Fifth Meeting Advisory Committee, May 29, 2014

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4.5 Analysis of Existing Noise Abatement Measures

Mr. Baldwin summarized the review of existing noise abatement measures. The results fall into three categories: support for continued implementation, continuation with minor adjustment, and continued implementation not supported. The PowerPoint presentation identifies the measures that fall into each category.

The most important results were a recommendation to: (1) modify the Runway 23 jet departure flight track procedure to request that the aircraft maintain runway heading until past 2,500' above mean sea level, which is approximately 1,300' above airport elevation (i.e., to eliminate the option for turning when three nautical miles from the radar), and (2) to ask Runway 19 departures to turn to a heading of 160 degrees (magnetic) at one nautical mile from the radar or as soon as past the runway end (i.e., instead when two miles from the radar).

4.6 Compatible Land Use Analyses

Mr. LoForno gave an update on the recommended compatible land use measures. He said the airport is in compliance with FAA guidelines. He then reviewed the proposed Airport Overlay Zone (AOZ) and its four options.

Mr. Skipper asked if the 60 DNL is adopted as the standard, how the process would work. Mr. McQueen said it was up to the local communities around the airport to adopt more restrictive land use policies. He said the airport and consultants will have meetings with officials in the nearby local jurisdictions to discuss the proposal. Currently the airport is asking jurisdictions if the airport could be notified when they receive a rezoning application, so the airport could also comment on it.

Mr. Janecko said if I sell my house, I could then have a disclosure document that shows that although the house is close to the airport, noise is not an issue. Mr. Baldwin said the noise exposure maps are public documents and effectively serve that purpose.

Mr. Wiethe, City of Green, said the city has a good relationship with the airport and regularly refers developers to the airport to discuss possible noise issues. He said the City of Green already has created an airport overlay district.

5. MAJOR NEXT STEPS

Mr. Baldwin said the next Advisory Committee meeting will be in late summer or early fall 2014, and that the third and final public workshop would be held on the same day.

After these final meetings, there will be a presentation to the Airport Authority board in November.




Mr. Baldwin encouraged CAC members to attend the public workshop being held from 5-7 p.m.

6. ADJOURNMENT

Mr. Baldwin adjourned the meeting.

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Akron-Canton Airport (CAK) Part 150 Update Study SIGN-IN SHEET				
 <i>a better way to go.</i>  HARRIS MILLER MILLER & HANSON INC. 				
Meeting	Fifth Meeting of the CAK Part 150 Update Study Advisory Committee			
Location	Second Floor Conference Room, CAK Terminal			
Date	May 29, 2014			
Time	1:30 - 3:00 P.M.			
Advisory Committee and Consulting Team Members				
Initials	Name	Representing	Email	Phone
<i>TB</i>	Baldwin, Ted	HMMH	ebaldwin@hmmh.com	
	Benekos, Jim	North Canton	jbenekos@northcantonohio.com	
<i>BH</i>	Beresh, John	FAA - Air Traffic Control Tower	john.beresh@faa.gov	<i>330 492-3816</i>
	Beyes, Larry	JM Smucker - Flight Operations	larry.beyes@jmsmucker.com	
	Campbell, Robert	Timken - Flight Operations	robert.campbell@timken.com	
<i>CK</i>	Clarke, Kevin	CHA Companies	kclarke@chacompanies.com	
	Dehne, DeeAnn	FAA - Air Traffic Control Tower	deeann.dehne@faa.gov	
	Delaney, Katy	FAA - Detroit Airports District Office	katherine.s.delaney@faa.gov	
<i>JD</i>	Divens, Justin	HMMH	jdivens@hmmh.com	
<i>TJ</i>	Fite, Todd	First Energy - Flight Operations	tfite@firstenergycorp.com	
	Gordon, John	Ultimate Air Center	jgordon@ultimatejetcharters.com	
	Grossmann, Mike	Castle Aviation	skyking@castleair.com	
	Haws, Scott	Plain Township	shaws@plaintownship.com	
<i>PH</i>	Janecko, Phil	North Canton residential area	philj135@yahoo.com	



Initials	Name	Representing	Email	Phone
	Kostiuk, Chris	Goodyear - Flight Operations	chris_kostiuk@goodyear.com	
	Lapps, Todd	Akron-Canton Airport	tlapps@akroncantonairport.com	
	Lofurno, Aaron	CHA Companies	alofurno@chacompanies.com	
	Lyon, Marilyn	Jackson Township	mlyon@jacksontwp.com	
R.B.M.	McQueen, Rick	Akron-Canton Airport	rmcqueen@akroncantonairport.com	
	Mentzer, Robert	HMMH	rmentzer@hmmh.com	
	Nau, Robert	Stark County Regional Planning Commission	ranau@co.stark.oh.us	
	O'Dell, James (Captain)	Ohio Army National Guard	james.j.odell.mil@mail.mil	
	Paquette, Steve	Stark Development Board	steve@starkcoohio.com	
	Proud, Ray	McKinley Air, Inc.	oakpilot@aol.com	
	Puckli, Paul	CHA Companies	ppuckli@chacompanies.com	
	Pulay, David	Akron Metro. Area Transportation Study (AMATS)	dpulay@akronohio.gov	
	Rebadow, Rick	Greater Akron Chamber of Commerce	rebadow@greaterakronchamber.org	
R.K.C.	Ripple, Kevin	Akron-Canton Airport	kripple@akroncantonairport.com	
	Saunier, Dennis	Canton Regional Chamber of Commerce	dennys@cantonchamber.org	
	Seadler, James	US Airways / Piedmont Facilities	james.seadler@usairways.com	
	Sharkey, Bryan	Southwest Airlines	bryan.sharkey@wnco.com	
	Siroki, Brittany	FAA - Air Traffic Control Tower	brittany.l.siroki@faa.gov	
T.S.	Skipper, Anthony	North Canton residential area	anthonykipper46@gmail.com	
	Stabl, Jake	Goodyear - Flight Operations	jake_stabl@goodyear.com	
J.M.	Tresso, Stephanie	Engage Public Affairs	stresso@murphypeson.com	
	Whitney, John (Major)	Ohio Army National Guard	john.k.whitney.mil@mail.mil	
	Walters, Jamie	Jackson Township	jwalters@jacksontwp.com	
W.D.W.	Wiethe, Wayne	City of Green	wwiethe@cityofgreen.org	
	Wirtz, John	Akron-Canton Airport Authority Board Member	wirtzlaw@yahoo.com	
	Wyatt, David	PSA Station Manager (US Airways)	david.wyatt@usairways.com	
	t.b.d.	t.b.d.	t.b.d.	



Non-Advisory Committee Attendees				
Initials	Name	Representing	Email	Phone
DZ	DAVID ZAKASKI	FAA	DAVID.C.ZAKASKI@FAA.GOV	330-492-9263



PART 150 UPDATE STUDY FIFTH ADVISORY COMMITTEE MEETING



AKRON-CANTON
AIRPORT

a better way to go.®

May 29, 2014



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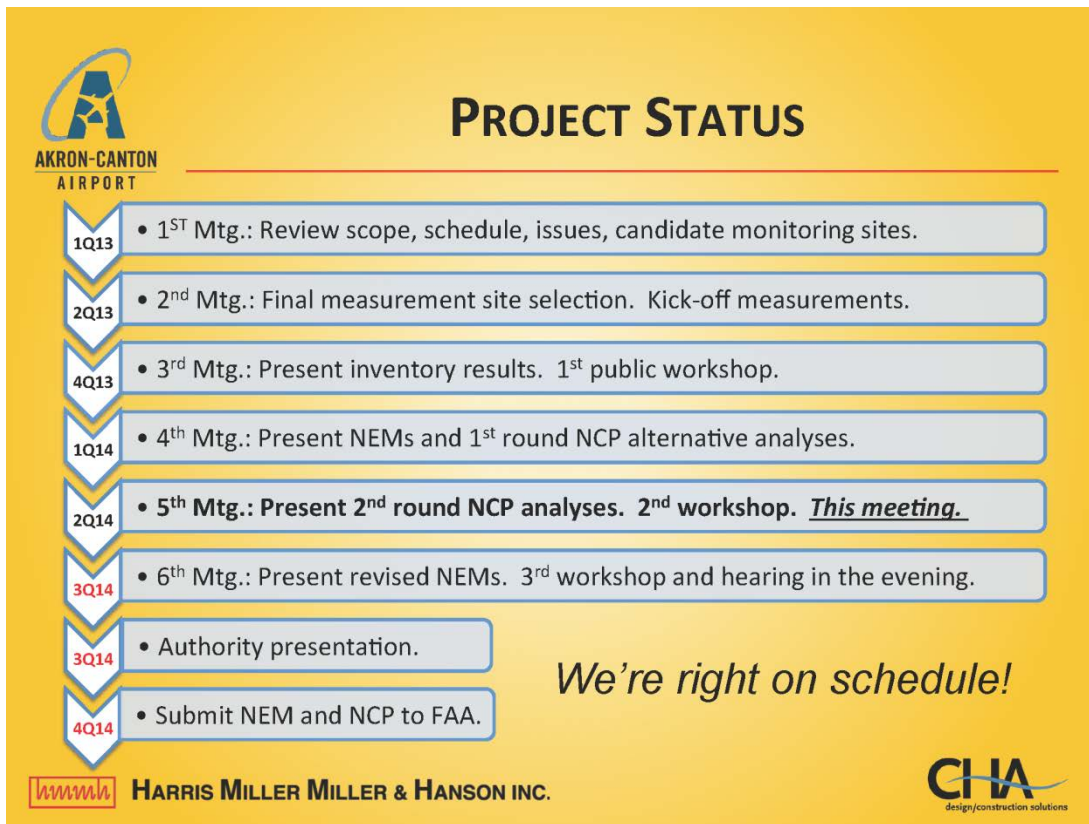
AGENDA

- Project status
- Response to specific requests at 4th meeting
- Noise abatement alternative analyses
- Compatible land use strategy analyses
- Next steps
- Discussion
- Tonight's workshop



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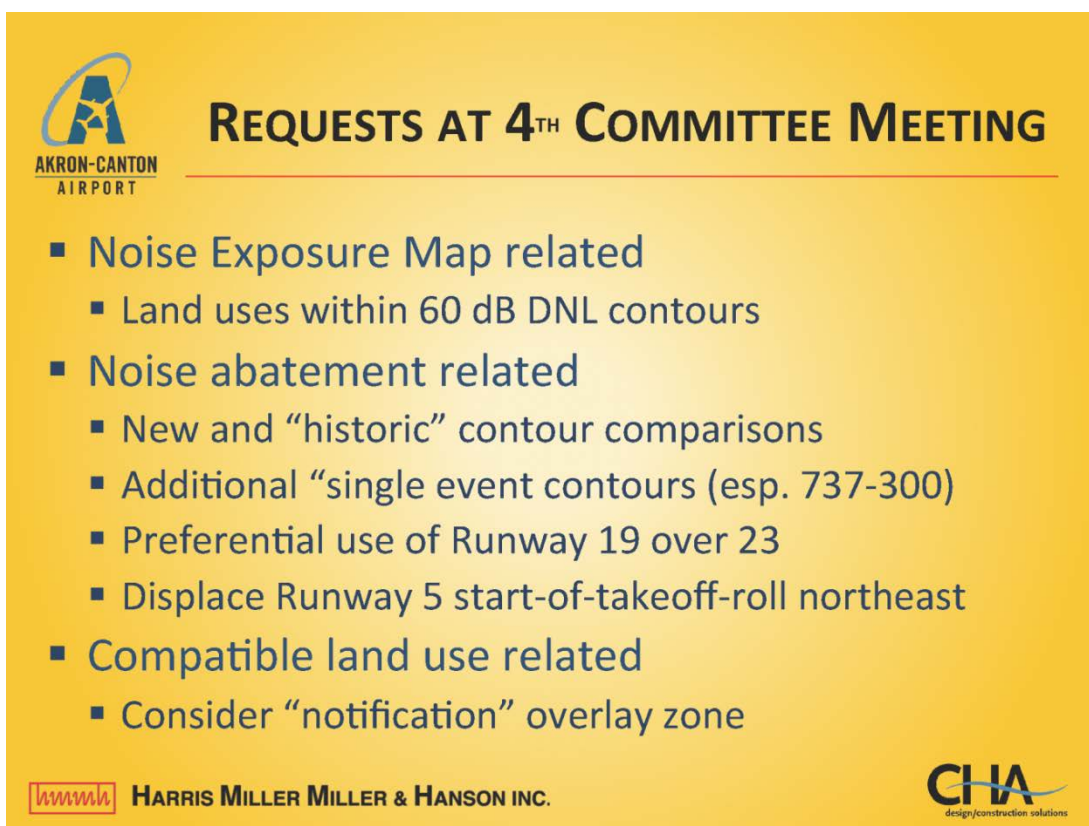
PROJECT STATUS

AKRON-CANTON AIRPORT

- 1Q13 • 1ST Mtg.: Review scope, schedule, issues, candidate monitoring sites.
- 2Q13 • 2ND Mtg.: Final measurement site selection. Kick-off measurements.
- 4Q13 • 3RD Mtg.: Present inventory results. 1ST public workshop.
- 1Q14 • 4TH Mtg.: Present NEMs and 1ST round NCP alternative analyses.
- 2Q14 • 5TH Mtg.: Present 2ND round NCP analyses. 2ND workshop. *This meeting.*
- 3Q14 • 6TH Mtg.: Present revised NEMs. 3RD workshop and hearing in the evening.
- 3Q14 • Authority presentation.
- 4Q14 • Submit NEM and NCP to FAA.

We're right on schedule!



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REQUESTS AT 4TH COMMITTEE MEETING

AKRON-CANTON AIRPORT

- Noise Exposure Map related
 - Land uses within 60 dB DNL contours
- Noise abatement related
 - New and “historic” contour comparisons
 - Additional “single event contours (esp. 737-300)
 - Preferential use of Runway 19 over 23
 - Displace Runway 5 start-of-takeoff-roll northeast
- Compatible land use related
 - Consider “notification” overlay zone

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LAND USES WITHIN 60 DNL CONTOURS

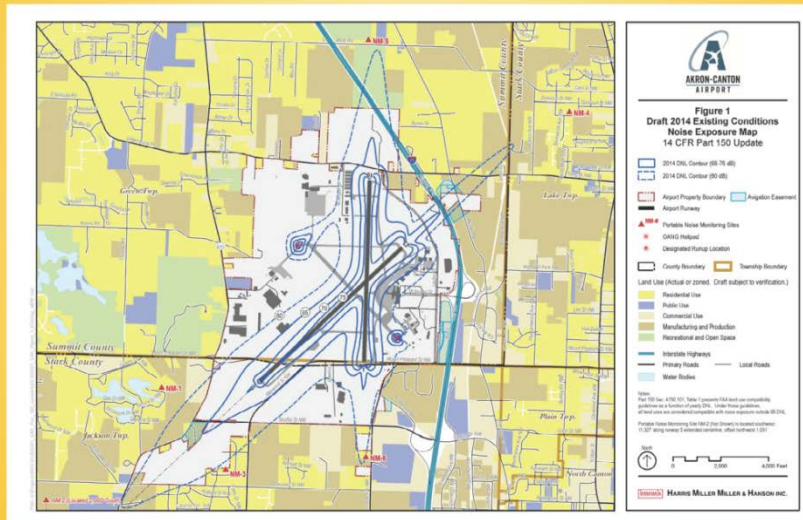
- No sensitive uses within 65 dB DNL
- Residential is only sensitive use within 60 dB DNL
 - Mostly southwest – Rwy 5 approach / 23 departure

Year	Metric	North	Northeast	South	Southwest	Total
2014	Residents	0	2	4	56	62
	Dwellings	0	1	2	24	27
2019	Residents	0	3	4	31	38
	Dwellings	0	1	2	15	18

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2014 NOISE EXPOSURE MAP

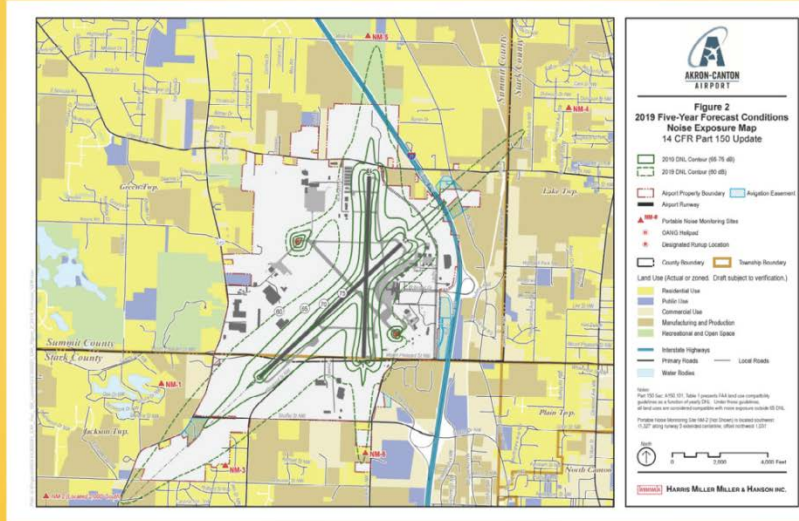


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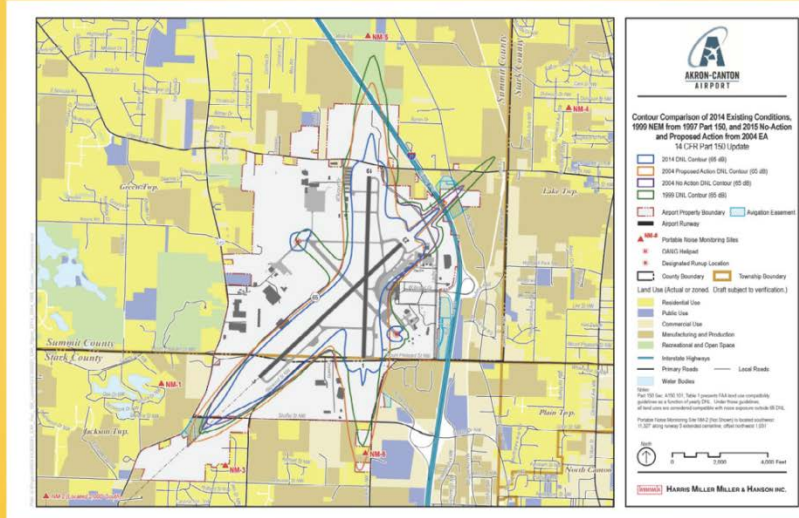
2019 NOISE EXPOSURE MAP



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HISTORIC COMPARISONS (65 DNL ONLY)



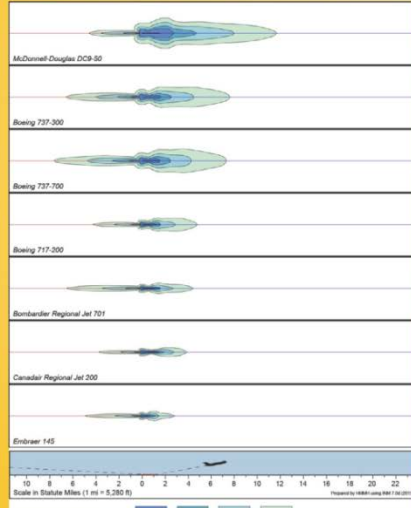
HARRIS MILLER MILLER & HANSON INC.



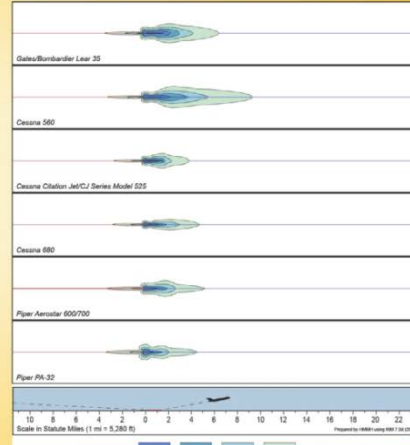


ARRIVAL/DEPARTURE CONTOURS

Commercial Jets



General Aviation Aircraft



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PREFERENTIAL RUNWAY ANALYSES

- Considered broad range of day and night options
 - Evaluated benefit – cost ratio:

$$\frac{\text{Population reduction within 60 dB DNL}}{\text{Number of operations affected}}$$
- Voluntary night preferential use of Runway 19 in south flow was clear winner
 - 30 residents removed from 60 dB DNL
 - Only 3 operations affected per night on average
 - 10 residents benefit per operation – 2X next best option

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NOISE ABATEMENT ANALYSIS SUMMARY

Existing Noise Abatement Measures

- Continuation supported
 - Jet departure procedures
 - Max. climb for helicopters
 - Voluntary reverse thrust limit
 - Runup location / orientation
- Continuation not supported
 - Potential runup enclosure
 - Runup and taxiing procedures
- Minor adjustment supported
 - Runway 23 jet departures fly runway heading – maintain heading *past 2,500' altitude (above mean sea level)*
 - Runway 19 jet departures turn to 160° two miles from radar – *initiate turn at one mile or as soon as past runway end*

Potential New Noise Abatement Measures

Analysis supports

Voluntary night departure use of Runway 19 when in south flow

Analysis does not support

Displace Runway 5 start-of-takeoff-roll point to the north

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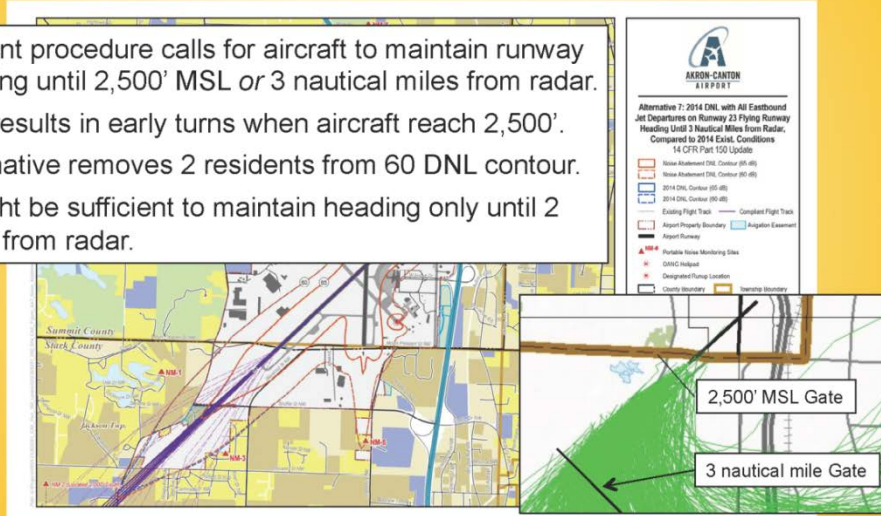
RUNWAY 23 JET DEPARTURES MAINTAIN RUNWAY HEADING BEYOND 2,500' MSL

Current procedure calls for aircraft to maintain runway heading until 2,500' MSL or 3 nautical miles from radar.

This results in early turns when aircraft reach 2,500'.

Alternative removes 2 residents from 60 DNL contour.

It might be sufficient to maintain heading only until 2 miles from radar.



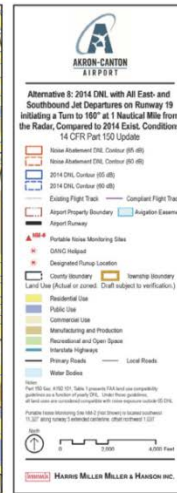
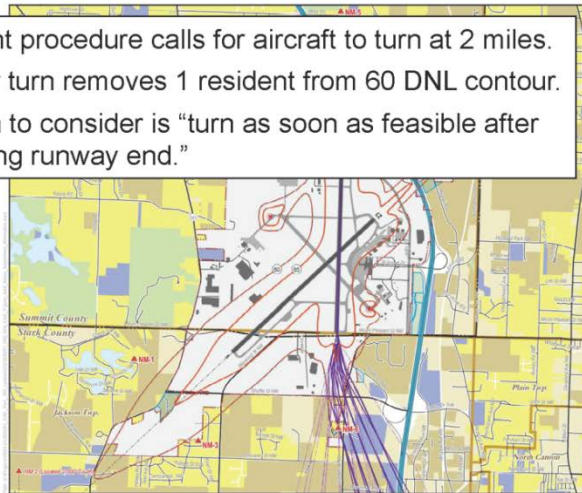
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RUNWAY 19 JET DEPARTURES TURN TO 160° WHEN 1 NAUTICAL MILE FROM RADAR

Current procedure calls for aircraft to turn at 2 miles.
Earlier turn removes 1 resident from 60 DNL contour.
Option to consider is “turn as soon as feasible after crossing runway end.”



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POPULATION ANALYSIS

Case	Residents within 60 dB DNL
2014 Noise Exposure Map	62
Voluntary night departure use of Runway 19 when in south flow	32
Runway 23 jet departures maintain runway heading until 2 or 3 miles from radar	60
Runway 19 jet departures turn to 160° at 1 nautical mile from radar or past runway end	61

**Notes: (1) No residents within 65 dB DNL in any case
(2) Combining all three may increase benefits**

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DISCUSSION

- HMMH proposal: Prepare contours including:
 - Voluntary night departure use of Runway 19 when in south flow
 - Runway 23 jet departures maintain runway heading past 2,500' MSL
 - Runway 19 jet departures turn to 160° 1 nautical mile from radar (when crossing runway end)
- Other suggestions? Questions? Discussion?
- Tonight's workshop

Thank you!



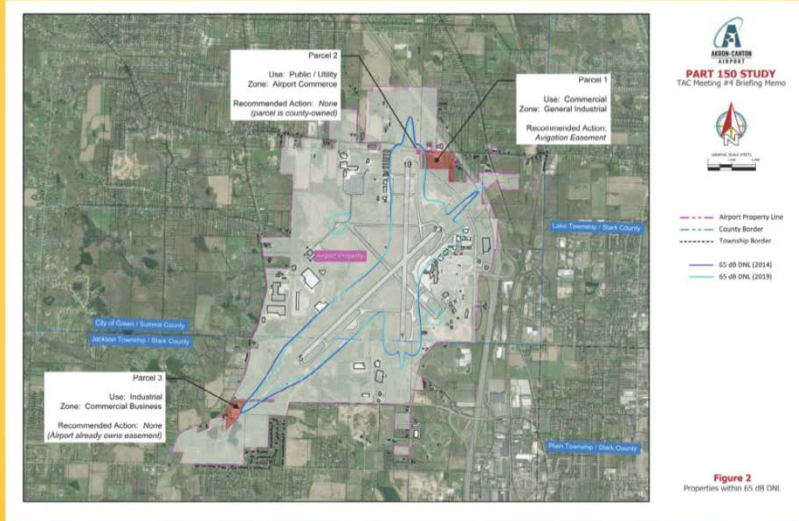
LAND USE STRATEGIES

Measure	Benefit
Acquire Avigation Easement at 3066 Greensburg Rd.	<ul style="list-style-type: none"> • Prevents future incompatibility issues • Provides additional "buffer" area for the Airport • Opportunity to protect Airport's Airspace
Implement Airport Overlay Zone (AOZ)	<ul style="list-style-type: none"> • Promotes future compatible land uses • Airport and local officials have opportunity to review and comment on proposed development • Existing and new residents would be notified on noise conditions and abatement efforts
Subdivision Regulations in AOZ	<ul style="list-style-type: none"> • Potential noise impacts could be minimized by enacting site plan and building code regulations • Could include minimum sound insulation requirements for new residential developments
Fair Disclosure Regulations in AOZ	<ul style="list-style-type: none"> • Dissemination and explanation of master plan and noise maps to realtors and local officials • Alerts potential residents to CAK operations, noise levels, and noise abatement measures • Could also require informational notices upon the sale or transfer of existing property
Comprehensive Planning	<ul style="list-style-type: none"> • Updated comprehensive plans would discourage incompatible growth around the Airport • Helps coordinate local jurisdictions' planning documents
Capital Improvement Planning	<ul style="list-style-type: none"> • Encourages industrial/commercial uses and discourages residential use • Would only affect vacant tracts of land with the potential for noise-sensitive development





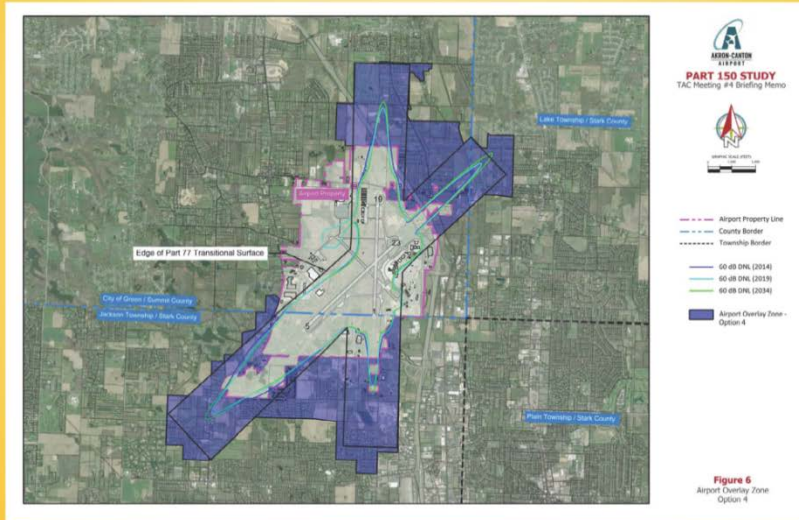
PROPERTIES WITHIN 65 DNL



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PROPOSED AIRPORT OVERLAY ZONE (AOZ)



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K.6 Materials Related to the Sixth Advisory Committee Meeting, September 17, 2014



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Akron-Canton Airport (CAK) Part 150 Update Study MEETING NOTES



a better way to go.



design/construction solutions

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Meeting	Sixth Meeting of the CAK Part 150 Update Study Advisory Committee
Meeting Location	Second Floor Conference Room, CAK Terminal
Meeting Date and Time	September 17, 2014, 1:30–3 P.M.
Prepared by	Stephanie Tresso, Engage Public Affairs
Version	September 30, 2014

1. OVERVIEW

This memorandum summarizes the Akron-Canton Airport (CAK) Part 150 Update Study Advisory Committee's sixth meeting on September 17, 2014 from approximately 1:30-3 p.m. in the CAK Terminal Second Floor Conference Room.

2. MEETING MATERIALS

Three items appended to this memorandum provide materials relevant to documenting the meeting:

- Meeting sign-in sheets.
- The PowerPoint presentation discussed in Section 4.
- Draft FAA Air Traffic Control Tower (ATCT) Standard Operating Procedures offered by the ATCT Manager at the meeting describing the measures that he proposes to support.

3. INTRODUCTIONS

Mr. Rick McQueen, President & CEO of the Akron-Canton Airport (CAK) opened the meeting at 1:30 p.m. He welcomed the attendees, and then asked Advisory Committee members and other attendees to introduce themselves and identify their affiliations.

Mr. McQueen turned the meeting over to Ted Baldwin of HMMH, the Part 150 Update Study consulting team Project Manager. Mr. Baldwin introduced other consulting team members in attendance, including Justin Divens of HMMH, Aaron Lofurno, Kevin Clarke and Paul Puckli of CHA, and Stephanie Tresso of Engage Public Affairs.

4. PRESENTATION

Mr. Baldwin and Mr. Lofurno made a presentation based on the appended PowerPoint presentation.

4.1 Project Status

Mr. Baldwin reviewed steps completed to date in the study process and discussed the schedule and next steps.

4.2 Requests from Fifth Meeting

Mr. Baldwin reviewed requests that were made at the fifth CAC meeting, which included:

Noise abatement related

- Preferential departure use of Runway 19 over 23 on a south-flow day (for both night and 24-hour options)
- Reduce dispersion of Runway 1 departures and 19 arrivals
- Consider barriers along I-77 north of Wise Road
- Request military aircraft fly higher over residences
- Regulate flight times and patterns
- Consider residential sound insulation

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Akron-Canton Airport Part 150 Update Study

Meeting Notes: Sixth Meeting Advisory Committee, September 17, 2014

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Compatible land use related

- Consider “notification” overlay zone
- Meet with local jurisdictions

Mr. Baldwin and Mr. Lofurno addressed these requests using the appended PowerPoint. They noted that detailed responses are provided in the memorandum that CAC members received before the meeting and that is available on the study’s website: <http://www.akroncantonairport.com/about/noise-study/outreach>.

With regard to the preferential runway options under consideration, Mr. Mike Silvius, the new FAA Air Traffic Control Tower Manager, stated the tower will not support of the 24-hour option as defined, for safety reasons. He offered a copy of the appended draft Standard Operating Procedures that defines the measures that he proposes to support and implement. With regard to night preferential runway use, it states, “Runway 19 is designated the primary late night (11 p.m. to 6 a.m.) departure runway, wind and weather permitting.” Mr. Baldwin noted that while this proposal does not cover the first and last hours of the requested 10 p.m. to 7 a.m. time period, for the 11 p.m. to 6 a.m. time period, it is more stringent than the proposed option, since it applies in more than south-flow conditions. It addition, it includes a statement that during the remainder of the day the tower will accommodate pilot requests to use the preferential runway.

Mr. Lofurno reviewed the land use recommendation for the adoption of an “Airport Overlay Zone” (AOZ), within which land use jurisdictions will provide the Authority with notice of proposed land use actions, to ensure it has the opportunity to identify and comment on any potential noise or airspace compatibility issues. He noted that CAK staff and consultants have notified and met with each affected jurisdiction on a preliminary basis and received positive feedback supporting this proposal, including: Stark County Regional Planning Commission, Stark Development Board, City of Green, Jackson Township and Lake Township.

4.3 Noise Compatibility Program Recommendations

Mr. Baldwin then presented the Noise Compatibility Program recommendations that Mr. McQueen has proposed to the CAK Board, and that were documented in a memorandum provided to the Advisory Committee in advance of the meeting and that are posted on the project website. Those measures include:

Noise Abatement

- Existing measures supported (FAA approved on voluntary basis)
 - NA1 - Jet use of noise abatement departure procedures
 - NA2 - Air traffic control tower approve maximum climb for OANG helicopters
 - NA3 - Pilots restrict nighttime use of reverse thrust
 - NA4 - Eastbound Runway 23 jet departures fly runway heading until 3 nautical miles from radar, or 2,500’ MSL (1,300’ AGL)
 - NA5 - Eastbound and southbound Runway 19 jet departures turn to a heading of 160 degrees at 2 nautical miles from the radar
 - NA6 - Use designated maintenance runup location / orientation
- Existing measures not supported
 - NA7 - Ground runup enclosure
 - NA8 - Engine runup and taxiing procedures
- New measure supported for proposed voluntary implementation
 - NA9 - Night preferential use of Runway 19 when in south flow

Land Use

- Implement Airport Overlay Zone (existing “LU4”)
 - Local jurisdictions will provide notice of land use actions in AOZ, to ensure CAK has the opportunity to comment on potential noise or airspace issues

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Akron-Canton Airport Part 150 Update Study

Meeting Notes: Sixth Meeting Advisory Committee, September 17, 2014

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- CAK representatives met with local officials in July to discuss; received positive feedback and input on AOZ boundary
- Boundary based on FAA “transitional” obstruction “surfaces” adjusted to follow major roads and parcel boundaries
- Jurisdictions will incorporate into comprehensive plans, zoning ordinances, or other mechanisms as appropriate
- Based on Advisory Committee and jurisdiction input, no other prior or new strategies are recommended

Program Management

- Continue existing FAA-approved measures
 - PM1 - Noise complaint receipt and response
 - PM3 - Public information and pilot outreach
 - PM4 - Noise abatement contact
 - PM5 - Air terminal information service (ATIS) advisory
 - PM6 - Airside informational signs
 - PM7 - Noise Exposure Map and Noise Compatibility Program review and revision
- Do not pursue ongoing noise monitoring (PM2), since no measures require for implementation

Mr. Silvius requested that Airport staff record the time and location of noise complaints in order to best identify the noise event. He also said that the Tower will support Program Management Measure 5, but only to the extent of a very limited message, such as “noise abatement procedures in effect.” He also commented that he would not support any airside signage that included any specific noise abatement instructions (such as maintain runway heading, turn to heading X, or use runway X when feasible), since they might lead to pilot confusion if a sign contradicted Tower staff instructions. Todd Fite, chief pilot with First Energy Flight Operations, concurred.

5. MAJOR NEXT STEPS

Mr. Baldwin said there would be a public workshop this evening in the same room from 5-7 p.m. There will be a presentation to the Authority’s board tomorrow morning. A full draft of the study will be available for review and comment for 30 days, beginning in late October. It will be on the study’s website and at the Airport’s administrative offices. The Part 150 documentation will be submitted to the FAA by December 12. Mr. Baldwin said after the FAA finds the study in compliance, the Airport will notify committee members and the general public of the final comment period. It also will be noted in the Federal Register.

Mr. Baldwin thanked Mr. Silvius for attending the meeting and for his active participation. Mr. Baldwin then asked if there were any final questions.

Airport staff member Todd Lapps asked, once the FAA approves the study who gets the information out to the pilots? What will that information consist of? Mr. Baldwin said HMMH and CHA will provide sample guidance materials.

Mr. Lapps asked if you announce on ATIS that noise abatement measures are in effect, and pilots ask what noise abatement measures, where could they find them? Mr. Silvius said staff in the Tower could read the measures to pilots. He said the measures also could be shared at upcoming association meetings that pilots attend. Mr. Baldwin said that the measures also will be on the Airport’s website.

Mr. Lapps asked who is responsible for updating the measures? Mr. Baldwin said it is the Airport’s responsibility.

Mr. Fite, with First Energy Flight Operations, said at most airports your point of contact is the noise abatement staff, or the information is on an airport’s website. Mr. Fite stressed that pilots need a trusted source for the information and that the airport’s website is the best option.

Mr. Baldwin again thanked attendees for their time and active participation in the committee.

6. ADJOURNMENT

Mr. Baldwin adjourned the meeting.

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Akron-Canton Airport (CAK) Part 150 Update Study SIGN-IN SHEET				
	<i>a better way to go.</i>		HARRIS MILLER MILLER & HANSON INC.	
Meeting	Sixth Meeting of the CAK Part 150 Update Study Advisory Committee			
Location	Second Floor Conference Room, CAK Terminal			
Date	September 17, 2014			
Time	1:30 - 3:00 P.M.			
Advisory Committee and Consulting Team Members				
Initials	Name	Representing	Email	Phone
<i>TB</i>	Baldwin, Ted	HMMH	ebaldwin@hmmh.com	
<i>JB</i>	Benekos, Jim	North Canton	jbenekos@northcantonohio.com	
	Beresh, John	FAA - Air Traffic Control Tower	john.beresh@faa.gov	
	Beyes, Larry	JM Smucker - Flight Operations	larry.beyes@jmsmucker.com	
	Campbell, Robert	Timken - Flight Operations	robert.campbell@timken.com	
	Clarke, Kevin	CHA Companies	kclarke@chacompanies.com	
	Delaney, Katy	FAA - Detroit Airports District Office	katherine.s.delaney@faa.gov	
<i>JD</i>	Divens, Justin	HMMH	jdivens@hmmh.com	
<i>TZ</i>	Fite, Todd	First Energy - Flight Operations	tfite@firstenergycorp.com	
	Gordon, John	Ultimate Air Center	jgordon@ultimatejetcharters.com	
	Grossmann, Mike	Castle Aviation	skyking@castleair.com	
	Haws, Scott	Plain Township	shaws@plaintownship.com	
<i>GP</i>	Janecko, Phil	North Canton residential area	philj135@yahoo.com	
	Kostiuk, Chris	Goodyear - Flight Operations	chris_kostiuk@goodyear.com	
Initials	Name	Representing	Email	Phone
<i>TL</i>	Lapps, Todd	Akron-Canton Airport	tlapps@akroncantonairport.com	
<i>AL</i>	Lofurno, Aaron	CHA Companies	alofurno@chacompanies.com	
	Lyon, Marilyn	Jackson Township	mlyon@jacksontwp.com	
<i>RM</i>	McQueen, Rick	Akron-Canton Airport	rmcqueen@akroncantonairport.com	
	Mentzer, Robert	HMMH	rmentzer@hmmh.com	
	Nau, Robert	Stark County Regional Planning Commission	ranau@co.stark.oh.us	
	O'Dell, James (Captain)	Ohio Army National Guard	james.j.odell.mil@mail.mil	
	Paquette, Steve	Stark Development Board	steve@starkcoohio.com	
	Proud, Ray	McKinley Air, Inc.	oakpilot@aol.com	
<i>PP</i>	Puckli, Paul	CHA Companies	ppuckli@chacompanies.com	
	Pulay, David	Akron Metro. Area Transportation Study (AMATS)	dpulay@akronohio.gov	
	Rebadow, Rick	Greater Akron Chamber of Commerce	rebadow@greaterakronchamber.org	
<i>KR</i>	Ripple, Kevin	Akron-Canton Airport	kripple@akroncantonairport.com	
	Saunier, Dennis	Canton Regional Chamber of Commerce	dennys@cantonchamber.org	
	Seadler, James	US Airways / Piedmont Facilities	james.seadler@aa.com	
	Sharkey, Bryan	Southwest Airlines	bryan.sharkey@wnco.com	
<i>MSA</i>	Silvius, Michael	FAA - Air Traffic Control Tower	Michael.silvius@faa.gov	317-431-0206
	Siroki, Brittany	FAA - Air Traffic Control Tower	brittany.l.siroki@faa.gov	
	Skipper, Anthony	North Canton residential area	anthonykipper46@gmail.com	
	Stabl, Jake	Goodyear - Flight Operations	jake_stabl@goodyear.com	
<i>SA</i>	Tresso, Stephanie	Engage Public Affairs	stresso@murphyepson.com	
	Whitney, John (Major)	Ohio Army National Guard	john.k.whitney.mil@mail.mil	
	Walters, Jamie	Jackson Township	jwalters@jacksontwp.com	
	Wiethe, Wayne	City of Green	wwiethe@cityofgreen.org	
	Wirtz, John	Akron-Canton Airport Authority Board Member	wirtzlaw@yahoo.com	
	Wyatt, David	PSA Station Manager (US Airways)	david.wyatt@usairways.com	
	t.b.d.	t.b.d.	t.b.d.	



AGENDA

- Project status
- Responses to requests at and after 5th meeting
- Noise abatement recommendations
- Compatible land use recommendations
- Program management recommendations
- Remaining steps
- Tonight's workshop / public hearing
- Discussion



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PROJECT STATUS

- 1Q13 • 1ST Mtg.: Review scope, schedule, issues, candidate monitoring sites.
- 2Q13 • 2nd Mtg.: Final measurement site selection. Kick-off measurements.
- 4Q13 • 3rd Mtg.: Present inventory results. 1st public workshop.
- 1Q14 • 4th Mtg.: Present NEMs and 1st round NCP alternative analyses.
- 2Q14 • 5th Mtg.: Present 2nd round NCP analyses. 2nd workshop.
- 3Q14 • 6th Mtg.: Present revised NEMs and NCP. 3rd workshop / hearing. ***This meeting.***
- 3Q14 • Authority presentation. *Tomorrow.*
- 4Q14 • Submit NEM and NCP to FAA.

We're right on schedule!



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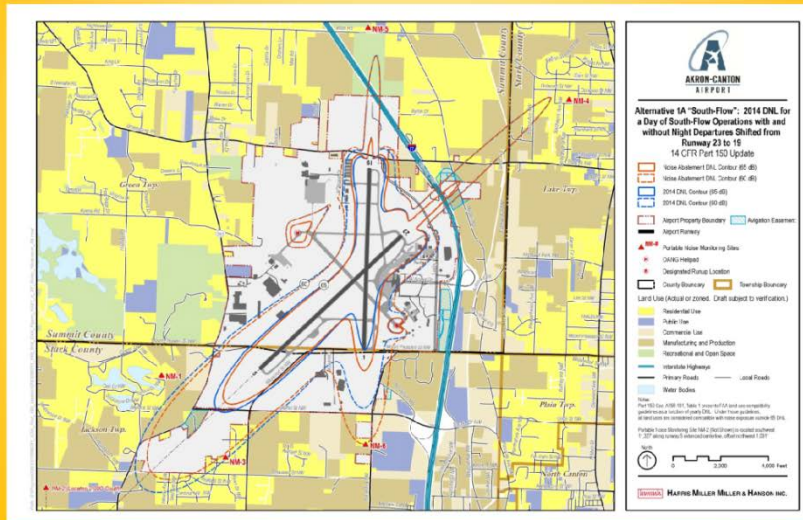
REQUESTS AT (AND FOLLOWING) 5TH MEETING

- Noise abatement related
 - Preferential departure use of Rwy 19 over 23 *on a south-flow day* (for both night and 24-hour options; i.e., Alts 1A and 5A)
 - Reduce dispersion of Rwy 1 departures and 19 arrivals
 - Consider barriers along I-77 north of Wise Road
 - Request military aircraft fly higher over residences
 - Regulate flight times and patterns
 - Consider residential sound insulation
- Compatible land use related
 - Consider “notification” overlay zone
 - Meet with local jurisdictions

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NIGHT PREFERENTIAL DEPARTURES ON RWY 19 OVER 23 ON SOUTH-FLOW DAY

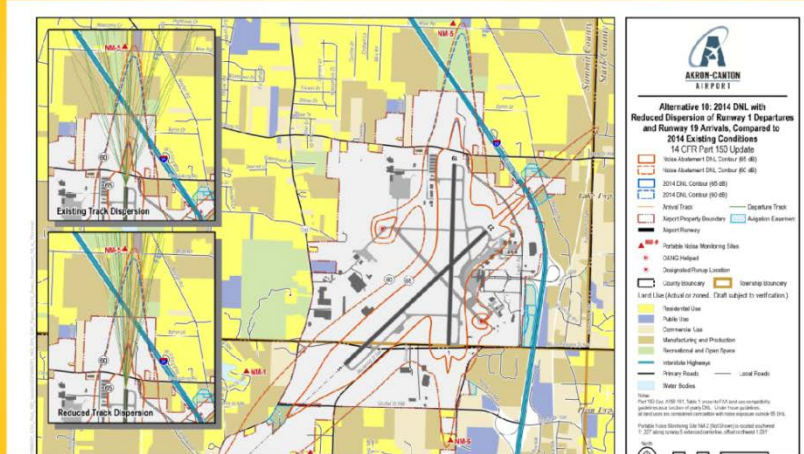


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REDUCE DISPERSION OF RUNWAY 1 DEPARTURES AND 19 ARRIVALS



Negligible change; potentially one less resident north of Runway 1/19 within 60 dB DNL contour.

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CONSIDER BARRIERS ALONG I-77 NORTH OF WISE ROAD

- Interest from Byron Drive area
- Significantly lower terrain west of I-77 would require over 30' barrier
- Barrier would shield only a fraction of exposure to ground-roll noise
- Byron Drive is already shielded by terrain east of I-77
- No benefit within 65 DNL (or even 60 DNL); FAA would not fund
- Detailed discussion (including other factors) in memorandum



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OTHER REQUESTS

- Have military aircraft fly higher over residences
 - Already in place for helicopters
 - Altitude clearances and climb rates for all aircraft governed by safety and performance factors
- Regulate flight times and patterns
 - Formal restrictions would require complex and costly Part 161 study and noise benefit within 65 DNL
- Offer residential sound insulation
 - FAA will not fund outside of 65 DNL contour
- *Detailed individual discussions in memorandum*



NOISE ABATEMENT RECOMMENDATIONS

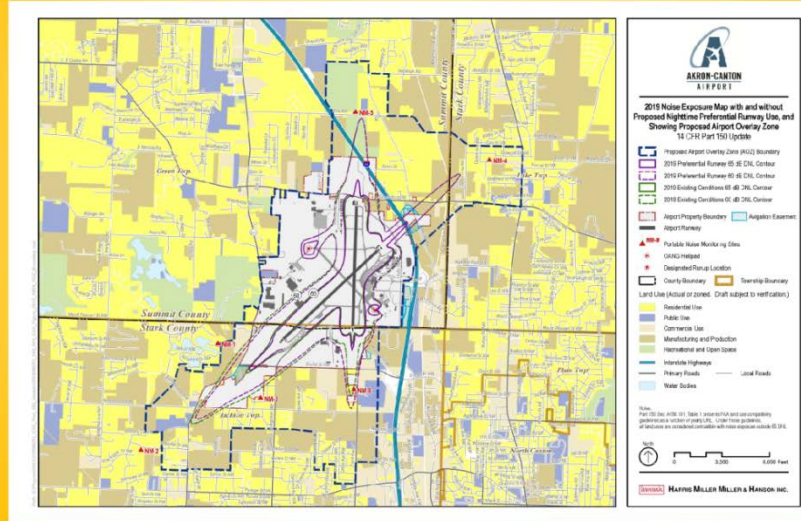
(NUMBERING BASED ON PRIOR FAA APPROVALS, AT FAA REQUEST)

- Existing measures supported (FAA approved on voluntary basis)
 - NA1 - Jet use of noise abatement departure procedures
 - NA2 - Air traffic control tower approve maximum climb for OANG helicopters
 - NA3 - Pilots restrict nighttime use of reverse thrust
 - NA4 - Eastbound Runway 23 jet departures fly runway heading until 3 nautical miles from radar, or 2,500' MSL (1,300' AGL)
 - NA5 - Eastbound and southbound Runway 19 jet departures turn to a heading of 160 degrees at 2 nautical miles from the radar
 - NA6 - Use designated maintenance runup location / orientation
- Existing measures not supported
 - NA7 - Ground runup enclosure
 - NA8 - Engine runup and taxiing procedures
- New measure supported for proposed voluntary implementation
 - NA9 - Night preferential use of Runway 19 when in south flow





2019 NOISE EXPOSURE MAP WITH AND WITHOUT NIGHT PREFERENTIAL RUNWAY, WITH AIRPORT OVERLAY ZONE



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PROGRAM MANAGEMENT RECOMMENDATIONS

- Continue existing FAA-approved measures
 - PM1 - Noise complaint receipt and response
 - PM3 - Public information and pilot outreach
 - PM4 - Noise abatement contact
 - PM5 - Air terminal information service (ATIS) advisory
 - PM6 - Airside informational signs
 - PM7 - Noise Exposure Map and Noise Compatibility Program review and revision
- Do not pursue ongoing noise monitoring (PM2), since no measures require for implementation

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REMAINING STEPS

- **Tonight's workshop and hearing**
 - Submit comments on paper, via website, or verbally to court reporter
- **Full draft report available for review in late October**
 - On website and at airport offices
 - 30-day comment period
- **Final submission to FAA by December 12**
 - After FAA finds submission in compliance, will provide notice of final comment period in Federal Register



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DISCUSSION

Thank you for your participation and input!



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NOISE ABATEMENT. Runway assignments or departure headings are not intended to be so inflexible that they would compromise safety or cause excessive delays. Runway 19 is designated the primary late night (11:00 p.m. to 6:00 a.m.) departure runway, wind and weather permitting.

Between the hours of 11:00 p.m. to 6:00 a.m.

- a. The control tower will clear Ohio Army Air National Guard helicopters to 4,000' above mean sea level (MSL) – 2,800' above ground level (AGL) – or the requested altitude, whichever is lower (usually 2,500' MSL or 1,300' AGL) immediately after takeoff.
- b. Eastbound turbojet aircraft departing on Runway 23 must maintain runway heading until 3 nautical miles from the radar, or until the aircraft is at 2,500' MSL (1,300' AGL).
- c. Eastbound and southbound turbojet aircraft departing on Runway 19 initiate a turn to a heading of 160 degrees at 2 nautical miles from the radar.
- d. Only use designated location for engine maintenance runups.
- e. Starting with the 11:00 p.m. and ending with the 5:00 a.m. ATIS, the following will be broadcasted: "CAK Voluntary noise abatement procedures are in effect"

Between the hours of 6:00 a.m. to 11:00 p.m.

CAK ATCT will provide Normal Operations. If a pilot request to voluntarily use noise abatement departure procedures, CAK ATCT will accommodate the request to the extent possible, wind, weather and traffic permitting.