



Ted Stevens Anchorage International Airport (FAR) Part 150 Noise Compatibility Study Update

Study Input Committee Summary Notes
July 9, 2014 1:30 p.m. Airfield Maintenance Facility

<i>NAME</i>	<i>AFFILIATION</i>	<i>PRESENT</i> ✓
Staff and Consultants		
John Parrott	ANC	✓
Scott Lytle	ANC	✓
Katie Gage	ANC	✓
Teri Lindseth	ANC	✓
Leslie Grey	FAA	✓
Ryk Dunkelberg	Barnard Dunkelberg & Company (Mead & Hunt)	✓
Kate Andrus	Barnard Dunkelberg & Company (Mead & Hunt)	✓
Rachel Jones	Barnard Dunkelberg & Company (Mead & Hunt)	✓
Christian Valdes	Landrum and Brown	✓
Eva Welch	AECOM	✓
Mary Vigilante	Synergy Consultants	✓
 Committee Members and Members of the Public		
Breck Tostevin	Turnagain Community Council	✓
Merle Akers	Turnagain Community Council	✓
Mary Lee	Citizen Representative	✓
Jim Seeley	LHD Pilot Association	✓
Thede Tobish	MOA	✓
Bob Auth	Sand Lake Community	✓
 Other		
Susan Olsen	Member of the public	✓
Cathy Gleason		✓

Summary Notes

Mr. Dunkelberg began the ninth meeting of the Federal Aviation Regulations (FAR) Part 150 Noise Compatibility Study Update Input Committee by presenting the meeting agenda as follows:

- ▶ **Introduction**
- ▶ **Presentation of Future (2020) Noise Exposure Map**
- ▶ **Presentation and Discussion of Draft Noise Compatibility Program Recommendations**
- ▶ **Next Steps**

Introduction

Mr. Dunkelberg welcomed the committee back and gave a brief overview of the agenda for this meeting. He then identified the next steps for the Part 150 Study Update process. This meeting presented the Future Noise Exposure Map, as well as the draft noise abatement, land use, administrative, and facility recommendations.

Presentation of Future (2020) Noise Exposure Map

The Part 150 Team presented the Future Noise Exposure Map, which includes two operational considerations that are reasonably foreseeable as baseline conditions:

- Master Plan Phase 2 Modification of Preferential Runway Use System
- Required Navigation Procedure (RNP) to Runway 33

The Future NEM can be considered effectively the same as the Future Combined Recommendation NEM because none of the noise abatement recommendations would affect the DNL noise contours once implemented. Several noise abatement recommendations are recommended for implementation; the noise abatement recommendations would not alter the size or location of the DNL noise exposure contours, but may reduce single event noise or help prevent additional noise issues in the future. The Future NEM 65 DNL contour was used to create a Preliminary Sound Insulation Eligibility Boundary, which, when finalized, will become the boundary defining potential eligibility for sound insulation.

Presentation of Draft Noise Compatibility Program Recommendations

The team then proposed a set of draft Noise Compatibility Program recommendations, which are comprised of noise abatement, land use, administrative, and facility recommendations. Options were examined previously under these categories, and recommendations were chosen based upon whether they met the overall goal of the Study to reduce the number of people affected by noise, as well as public and Study Input Committee comments, feasibility, suitability, and cost.



Next Steps

Mr. Dunkelberg explained the next steps, which include further refining the recommendations to formulate the final recommendations, and finalizing the complete Noise Compatibility Program, including preparation of a summary chapter. A public open-house meeting will be held, likely in September 2014, to present the draft Part 150 Study to the public. Subsequent to this meeting, a notice for an official public hearing will be released. The public hearing will be held on the final Part 150 Study, at which the final recommendations will be presented and the public will have an opportunity to submit additional comments that will become a part of the official public record. The public can also submit comments electronically or by mail during the 30 day comment period surrounding the public hearing. The public hearing will likely occur in October 2014. Responses to these official comments will be included in an appendix of the Study.

The Final Part 150 Study will then be submitted to FAA. The submission will consist of two distinct components: 1) the Noise Exposure Map (NEM), and 2) the Noise Compatibility Program (NCP). Each recommendation in the NCP will be either approved or disapproved individually.

The following questions and comments occurred during the meeting:

Comment: The Turnagain Community Council is opposed to a noise barrier project because it would constitute a high concrete wall located very close to the homes near the Lake Hood gravel strip, and would create issues with aesthetics and drainage, and would necessitate tree removal. It would also benefit only those homes in the area that would be closest to the barrier.

Question: When determining the siting of the ground run-up enclosure (GRE), would noise escaping the opening of the GRE be considered? If the opening was pointing toward neighborhoods, would there be a great deal of noise resulting from that?

Answer: The direction of the open end of the GRE must be based upon wind considerations. There would not be very much noise escaping from the open end or bouncing around within the GRE. The analysis shows that based on preliminary orientation, the GRE would provide large reductions in ground run-up noise for people living near the airport.

Question: Were the close-in and distant departure procedures the only option examined in this Study related to in-flight procedures? Why were not the close-in and distant noise abatement options not recommended, and what effect would they have on noise levels?

Answer: Yes, they were the only in-flight options examined. They were not recommended because although both options would reduce noise in certain locations either close to or farther from the airport, they would not affect the 65 DNL noise contour. However, it is important to



keep in mind that the preferential runway use system in place at the Airport does a great deal to reduce noise levels by directing aircraft operations over water when possible.

Question: Why is the Future 65 DNL noise contour concentrated/bulging toward the east?

Answer: The bulge in the contour is created by general aviation operations at Lake Hood Seaplane Base (LHD). Although the Airport cannot control the number of operations at LHD, a Fly Quiet Program could be developed that could help to reduce noise on a voluntary basis, and such a program is a recommendation in this NCP.

Question: It has been my observation that many aircraft taking off from LHD make a turn over Spenard Beach Park that takes them over Turnagain neighborhood. Why are these flight tracks/operations seemingly not represented in the 65 DNL noise contour?

Answer: These operations were included in the model. However, they do not “bulge out” the 65 DNL contour following that exact curve because there was not a sufficient amount of traffic and/or tracks to generate such display in the cumulative contour modeling. Although these types of operations would certainly be experienced as potentially disruptive Single Event Noise Level (SEL) events, the 65 DNL contour is nonetheless the standard threshold used in relation to measuring noise for federally-funded noise reduction measures.

Question: Is the measure for voluntary reduced use of reverse thrust a new measure? How well would pilots respond to and follow this measure?

Answer: Yes, it is a new measure for this Part 150 Study Update. It is not really possible to predict how often pilots would use this measure due to its voluntary nature. Some would likely reduce their use of reverse thrust, whereas others may not choose to do so for a variety of reasons. It is important to note that the Airport cannot monitor nor enforce this measure.

Question: Have other airports implemented the voluntary reduced use of reverse thrust, and how effective has it been for them?

Answer: Yes, this type of recommendation has been implemented quite often, primarily at medium to large commercial service airports. As mentioned above, its effectiveness varies greatly. It would not be possible to measure progress or the frequency of pilots using reduced reverse thrust because it is not monitored or tracked.

Comment: It has been my observation that the majority of aircraft taking off at LHD do so to the southeast, overtop of neighborhoods. I feel that this trend of operations to the southeast is not



properly represented in the noise contours. In addition, I also feel that the contours are not accurate due to the fact that noise monitoring in the Lake Hood area took place during the winter, when there would presumably be fewer operations taking place than times of the year when the lake is not frozen.

Answer: Noted. Both summer and winter noise monitoring took place. The monitoring was used to help validate the INM results and the results tracked very well with the results from the noise monitoring.

Question: Why is the 65 DNL contour the threshold for sound insulation, but the noise notification area would possibly be based on the 60 DNL contour?

Answer: Decisions that are based on federal funding must utilize the 65 DNL noise contour as threshold by law. However, local land use decisions that are not based on federal funding may use other noise criteria. The 60 DNL is often used as the basis for the noise notification area because a large proportion of noise complaints often come from within the 60-65 DNL noise contour band. People living outside of the 65 DNL will experience noise, and so expansion of the notification area out to the 60 DNL contour is usually advised to ensure that potential residents within the 60, as well as 65 DNL, are also notified about the potential to experience aircraft noise at the location.

Question: Regarding potential future disclosure requirements for the 65 DNL contour, should we not now be informing these residents that they are within the Future 65 DNL contour in case such a recommendation would be implemented?

Answer: Implementation of disclosure statements and/or buyer notification is up to the local jurisdiction having land use authority, and the actual process through which it would be adopted and implemented could vary. If such a measure were adopted, property owners within the notification area would certainly be notified during that process.

Question: What data goes into the future contours? How common is a buyer notification overlay?

Answer: Operations forecasts generated through the recent Master Plan process. It is a fairly common regulation, implemented perhaps about 50% of the time, and is highly dependent upon the local political climate and tendencies toward progressiveness/stringency of the local jurisdiction.

Question: Could the notification requirements take place at the state level instead of the local level? In my opinion, it would be far easier politically to take such action at the state level due to elevating its implementation above local politics. Note that the State of Alaska currently has a disclosure form requiring that the seller disclose noise related issues.



Question: How common are the building code requirements tied to a certain overlay zone?

Answer: Such code requirements are more common in jurisdictions having airports that are fairly constrained by surrounding noise-sensitive land uses. The overlay zone is even based on the 55 DNL in a few cases. Note that the West Anchorage District Plan recommended creation of a noise overlay zone with various restrictions suggested for the zone, including the limiting of certain types of structures in residential areas.

Question: Would the noise overlay zone be based on the existing or future noise contours? What would be the rationale for basing it on future contours when operations forecasts are never exactly accurate, and may not actually come to pass? Please note that the creation of a noise overlay zone could have a negative impact on property values. Also please note that the Turnagain Community Council would likely take an opposing stance to this.

Answer: The noise overlay zone would most likely be based on future contours because it would be in keeping with the long-range comprehensive planning conducted at local planning departments that tends to have a 20-year planning horizon. Utilization of the future contours would constitute mid-range future planning information that would be sufficiently long-range to allow the formation of policy, but is sufficiently short-range to be a fairly accurate prediction. The noise contours can be updated at a later point if needed, and policy adjusted accordingly.

Question: What is an aviation easement and how would it be granted in a noise overlay zone situation?

Answer: An aviation easement grants the right to fly over a property, and would be noted on the plat for the property. In a situation of a noise overlay zone requirement, the property owner would be required to grant an aviation easement as a condition of discretionary land use approvals such as new subdivisions and rezoning. The easement would run with the property.

Comment: Please note that LHD currently does have some Fly Quiet/Pilot Awareness type measures in place, but the effectiveness is nonetheless still a matter of the degree to which the pilots are able to safely follow them during a given operation.

Comment: Effectiveness of Fly Quiet measures for Lake Hood operations would also be a matter of how to enforce or justify asking pilots to follow the Fly Quiet measures for areas not within the 65 DNL contour. In my opinion, although a Fly Quiet program seems like a good idea, these issues cause such a program to be impractical and unenforceable because it is not possible.



Question: Do you have a sense of how well the Fly Quiet program at LHD is working currently?

Answer: ANC currently coordinates and discusses Fly Quiet procedures and noise issues with several pilot organizations at LHD to disseminate information. However, for those pilots outside of the organizations, it is not practicable to attempt to reach out to them on an individual basis. The program is broad-based, versus being focused on individual confrontations dealing with correction of individual pilot generation of noise.

Question: To what degree can any ANC policy deal with individual pilot noise issues on a one-on-one basis?

Answer: There are no policies or authority allowing ANC to attempt to enforce Fly Quiet programs. It is also very difficult to identify the individual pilots whose flights are causing noise issues.

Comment: Some pilots simply do not value placing noise they may be creating above other concerns.

Comment: Some aircraft actually are recommended not to back off on their prop power for safety reasons and/or to protect the mechanical workings of the plane. Therefore, flying more quietly may not be safe due to the proximity of homes in the flight track and the need to reach a high enough altitude to avoid the homes in the event of engine failure or other operational problems.

Question: What are the typical contents of a Fly Quiet brochure?

Answer: Fly Quiet brochures typically remind pilots of noise sensitive areas in the area, promote noise awareness, and request their consideration of the Fly Quiet procedures.

Comment: At the LHD gravel strip, takeoff to the southeast is used frequently, even in good weather, and despite a verbal agreement with the airport in the past that if wind speed was greater than 10 knots out of the southeast, a west departure would be used instead. There should be greater agency involvement to control departures to the southeast. I believe that the contours do not accurately depict takeoffs to the southeast, and that a Fly Quiet program at LHD would not help the matter. I think it is less a matter of resources for controlling this on the part of ANC and the state, than a matter of willpower.

Comment: For the online comment submission form, please create a separate form for submission of noise comments that asks for specific pertinent information for noise comments, including date, time, and address/location of the noise event.

Response: The Airport agrees, and would like to eventually add these additional fields to the form.



Comment: I believe that the average person would prefer to have a specific staff person and hotline to which they can direct their noise comments, rather than to have the response to noise comments be done primarily online, and have the responsibility for reading and responding to the comments spread among several staff persons.

Response: We also get noise comments by phone call in addition to the online form. We cannot justify having a single staff person who has sole responsibility for noise comments. The Airport does not believe that switching from a single staff person to the current system has impacted people's ability or willingness to submit their complaints.

Question: How do other airports handle their noise comments?

Answer: Other airports primarily use either a web-based noise comment system or a 1-800 telephone number, and it varies by type of airport and funding available. Recently, due to lack of funding experienced by many airports in recent years, dedicated noise staff and offices have been eliminated in many cases.

Comment: When I submit a noise comment to ANC, I dislike the fact that they often do not state how the specific issue will be resolved. There should be more cross-sharing of information between the Airport, Airport Traffic Control Tower, and FAA on flight tracking and noise issues to help respond better to noise comments.

Response: The Airport has no authority to dictate when or where an aircraft flies.

Comment: Flight tracking is now available through cell phone apps and is very inexpensive. Flight tracking will not help noise issues at LHD because the aircraft using LHD do not have transponders and are not tracked like the aircraft at ANC.

Response: Although the flight tracks available through apps and the internet are not totally accurate, they are a great resource for real-time information. For the acquisition of a flight tracking system for ANC, the system would be used to help tie into comments that are made and provide more information on specific flights to commenters.

Question: Would flight tracking also track ground movement?

Answer: Some of the more expensive flight tracking programs do, but certainly the web-based and transponder-based tracking does not track ground movement.

Question: Would significant new noise-sensitive land use changes cause the Airport to have to update the Part 150 Study?



Answer: The Noise Exposure Maps (NEMs) would likely need to be regenerated, and potentially an update to the entire Part 150 Study, including the Noise Compatibility Program (NCP). Each NEM has a certification block stating the number of people and acres within the 65 DNL or greater contour. It is important to note that new homes built within the published 65 DNL contour would not be eligible for insulation, as only homes constructed prior to October 1, 1998 are eligible for insulation. Also, note that the inclusion of a provision for revision of the Part 150 Study is a regulatory requirement.

Question: Regarding the guideline for revision of the Part 150 Study based upon a percentage difference between forecast operations and actual operations, would the introduction a 15% percent increase in helicopters at an airport also trigger a revision?

Answer: The policy does not specifically refer to the increased in percentage of a single aircraft types for requirements for the revision of Noise Exposure Maps, rather, it is based on the percentage of the operations entirely. In such a case, it would be up to the airport themselves to initiate a revision based on their knowledge that they have experienced a significant change in aircraft type operating at the airport.

Comment: For the facility recommendation on gate electrification, you should be more descriptive in the use of the term “gates,” as some people may not understand what is meant by it.

Response: We agree that the wording should be more specific. The term “gate” as used in the document refers to the passenger aircraft docking gates where the planes load and unload passengers and baggage, and could potentially hook into a Ground Power Unit (GPU) ground source on the terminal building itself, rather than use the Auxiliary Power Unit (APU) on the plane.

Question: For the facility recommendation on gate electrification and preconditioned air, what is the difference between cargo areas and passenger gates?

Answer: The passenger gates have jet bridges connecting them to aircraft, whereas the cargo areas are located out away from the terminal on the aprons because they are only loading/unloading cargo rather than passengers. Both the passenger gates and cargo areas have electrification, but due to their different physical infrastructure, they pose different challenges for installation of electrification and preconditioned air.

Question: How could the use of the electrification and preconditioned air at the passenger gates, rather than using the APU power on the aircraft, be incentivized? It would seem that doing so would provide multiple benefits to the airport and its surroundings, including reduced emissions, reduced noise, and cost savings to the airline.



Answer: The Airport cannot force the airlines to use it. The Airport does not control nor monitor its use. One challenge is that many airlines/pilots prefer to use their on-board APU power because many of the newer aircraft are very sensitive electronically to voltage and amperage changes, and the electricity levels must be finely controlled to avoid damage to the aircraft systems.

Question: Will the Part 150 Study document address the process for determining priorities and implementation?

Answer: No, it will not, because the unpredictability of funding makes it difficult to set strict priorities and implementation schedules. The priorities will remain as implementation of those recommendations first that would reduce the most noise for the most number of people.

Comment: I suggest that during the next Part 150 Study Update, more time is spent on education and input on how the noise contours are formed through the modeling process and what data is used. That would make the process smoother and more understandable for participants and would prevent confusion later in the process.