14 CFR PART 150 UPDATE

NOISE TECHNICAL ADVISORY GROUP (NTAG) MEETING

Thursday, September 18, 2008 1:30 p.m. – 3:30 p.m.

San Diego International Airport, Commuter Terminal,

3rd Floor, Noise Monitoring Room

Meeting Summary

Introductions

Mr. Dan Frazee, Director of Airport Noise Mitigation welcomed the NTAG members and reminded everyone about the Toll Free Telephone Number to leave comments about the study and the Part 150 website. He then introduced Mr. Paul Webb, Project Manager for the Part 150, who thanked all the members for participating. He then turned the meeting over to Mr. Gene Reindel, the Project Manager from Harris Miller Miller & Hanson Inc. (HMMH). Mr. Reindel introduced the consulting team: Mr. Bob Behr, the assistant project manager from HMMH, Ms. Chris Eberhard, the public outreach consultant from CommuniQuest, and Mr. Ken Brody, the land use consultant from Mead & Hunt. Each NTAG member introduced themselves and the organization they represent.

Project Review and Schedule

Mr. Reindel reminded the group that a Part 150 study is a voluntary federal program and that this is an update to the original study completed in 1989. He noted that there have been approximately 250 such studies completed at airports around the United States. As it is a federally funded study, Part 150 provides national standards for analysis.

Mr. Reindel welcomed the members and reminded them that they should have received three memos, and then he proceeded to discuss the Part 150 handout. Next he reviewed the project schedule. Mr. Reindel noted that for the September Milestones the team was to present the Noise Exposure Map (NEM), however the Federal Aviation Administration (FAA) has not yet approved the nonstandard modeling procedures for the hill effects, the 3.5 degree approach angle, and the

aircraft substitutions. He discussed the potential for finalization and submittal of the NEM to the FAA in December. He reviewed the meeting agenda: Noise Exposure Map Status, Effectiveness of Existing Noise Compatibility Program (NCP) Measures, Submittal Requirements for NCP, Potential Noise Abatement Measures, Land Use Strategies, Group Discussion/Questions and Issues, and finally Next Steps and Wrap Up.

Noise Exposure Map Update

Mr. Reindel gave an update on the Noise Exposure Map noting that the document is ready to go assuming the FAA approves the adaptation of the INM, which takes into consideration, among other things, the "hill effect". The FAA may request HMMH redo the modeling with the new INM version 7.0a. The FAA review is underway regarding three issues: two aircraft substitutions (with approval expected), arrival contour adjustment (the FAA requested more information which was provided), and the "hill effect" contour adjustment (the FAA has requested more information which HMMH provided). The NEM will be provided to the NTAG and the public for review and comment once the FAA has rendered a decision on the nonstandard modeling procedures.

Noise Compatibility Program Overview

Mr. Reindel reviewed the proposed 27 measures in the existing NCP of 1989: 5 noise abatement measures, 2 land use measures, 3 noise mitigation measures, and 17 program implementation measures. The FAA approved 19 of these measures and the San Diego County Regional Airport Authority (the "Authority") then known as the San Diego Unified Port District implemented 26 measures with some of the measures having been in place prior to the NCP study.

The Authority recommends continuing 17 measures, discontinuing 5 measures, and amending 5 measures. Mr. Reindel then reviewed the measure effectiveness handout and discussed the following existing measures:

- Restrict noisy aircraft
- Restrict nighttime operations through a nighttime departure curfew - reduces CNEL exposure and 10-dB penalty,
- Limit development of noncompatible land use around the airport – little undeveloped land
- Require new residential structures to comply with a 45 dB CNEL interior noise level
- Eliminate aircraft noise impact at six schools within airport environs
- Provide noise relief and make nearly eight hundred homes noise compatible
- Penalize curfew violation
- Continue use of noise and operations monitoring systems,
- Maintain a relationship with the community through the Noise Information Office and the Airport Noise Advisory Committee.

Mr. Reindel reviewed the FAA requirements for the NCP measures:
- Land acquisition,
- Barriers or shielding,
- Sound insulation,
- Preferential runway use,
- Flight procedures,
- Use restrictions,
- Other actions beneficial for noise control or impact,
- Other actions recommended by FAA or the Authority.

For each measure analyzed, but not proposed, the Authority must provide a discussion on why the measure was not recommended for inclusion. For each measure proposed, the Authority must provide a relative contribution to the overall effectiveness of the program, persons responsible for implementation, and feasibility of implementation including any governmental actions, costs, and sources of funding. The Authority must also determine the effect of the overall program on reducing noise exposure to individuals and noncompatible land uses and preventing the introduction of additional noncompatible land uses.

Potential New Noise Abatement Measures

Mr. Reindel proceeded to discuss the potential new measures:
- Fly Quiet Program (FQP),
- Noise Abatement Departure Procedures (NADP) similar to what John Wayne Airport has currently,
- Preferential nighttime runway use program, the effect of the use of Runway 9 for early morning arrivals,
- New departure routes from Runway 27,
- Area Navigation (RNAV) arrival procedures.

During the initial discussion, Mr. Tait Galloway asked, “Is ‘public buildings’ defined to include schools, libraries, and day care? Now the definition only includes schools. The variance has an issue with public community centers”. Mr. Reindel answered, “It is not just schools or libraries, but that they have to look at the use of the building. A gymnasium would not meet the sound insulation requirements because it is not a noise-sensitive room. The FAA will rule on a case-by-case basis.” Mr. Frazee also commented that the California Noise Standards represent noise sensitive buildings differently than the FAA. The FAA looks at all noncompatible land uses when reviewing the NEM.

Mr. Galloway asked, “The purpose of the 150 is to get FAA funding for noise mitigation, correct?” Mr. Frazee replied “Yes.” Mr. Galloway asked, “Will the Fly Quiet Program work with the airlines?” Mr. Frazee responded, “We have an air carrier recognition program which scores the air carrier on a monthly basis based on what type of aircraft they fly, time they fly, etc. This can affect the communities as far as they are concerned. The Fly Quiet Program would expand the current program to

give more awareness of the airport and aircraft operations to the community and to be realistic about what an aircraft can and cannot do."

Mr. Galloway asked, "Is it effective? Is there any real benefit?" Mr. Frazee answered, "Yes." Mr. Reindel commented that San Francisco Airport did a Fly Quiet Program and the airlines did not like it at first, but once it was accepted they were very supportive. Ms. Sjohnna Knack, who worked previously at San Francisco Airport, added that it took a while for the airlines to be supportive, but they were supportive in the end.

Mr. Galloway asked, "How effective is the John Wayne Airport noise abatement procedure?" Mr. Frazee answered, "The FAA approved the John Wayne Airport noise abatement procedures which were implemented to meet community noise restrictions. The procedures are within the performance limits of the aircraft and comply with the various air carrier rules." Mr. Frazee also added that John Wayne Airport will not happen again, that it was grandfathered in and in order to get it at San Diego they would have to do a Part 161 study.

Mr. Billy Self commented that John Wayne Airport won't happen again because then all airports would have their own Noise Abatement Departure Procedures which then makes it dangerous to fly. He also added that 80-90% of procedures are distant (far-out). He noted that Love Field did a study on a distant departure procedure and there were no significant noise level changes. Mr. Self went on to say that air carriers do not feel it makes a difference in noise because the faster you clean up the aircraft, the faster you can get out. He also mentioned a study that was done at San Antonio Airport and he indicated that the FAA did not see any changes. Mr. Self indicated that Southwest would be willing to share the data and would be willing to do similar tests at SAN. He also commented that standardization is a safety concern. He believes that the John Wayne Airport procedure should not be talked about because it will not happen again.

Mr. Reindel stated that SDCRAA was asked to look at the John Wayne Airport procedure in their variance and therefore it is required to be considered in this Part 150. Mr. Self said he applauds SAN for wanting to do the study but Boeing and Southwest designed the procedure at John Wayne Airport. Mr. Reindel indicated that Boeing is part of the HMMH team on this project. Mr. Peter Drinkwater commented that he does not want just the aircraft company but also the operator to be involved in the study.

Mr. Drinkwater asked Mr. Self to explain the John Wayne Airport departure procedure. Mr. Self states, it is not really a close-in procedure, a regular departure at 800 feet power cut back. Southwest does their power cut back at 1000 feet AGL (above ground level). Mr. Drinkwater asked the FAA FSDO representative Mr. Jerry Pendzick, "How did the FAA approve this?" Mr. Pendzick indicated he did not know the details of the approval. Mr. Drinkwater then asked, "Is the FAA responsible if an accident happens?" Mr. Self interjected that the American Airlines DC-10 accident in Chicago was an engine loss on takeoff.

Mr. Pendzick replied that the profile development is done very carefully. The FAA works with Boeing and the air carriers to make sure they will not ask the airplane to

do something it cannot, and/or asking the people (meaning pilots) to do too much (beyond their capabilities). Lessons were learned in Chicago.

Mr. Drinkwater asked, “Who takes liability, would it be the pilot?” Mr. Pendzick responded that the goal of the certificate holder is to train the pilots to execute the standard procedures, and the pilots must comply. Mr. Drinkwater indicated that Mr. Self said the procedure is not safe. Mr. Self responded that, no, he didn’t say that, he said that it makes no more noise. Mr. Drinkwater again asked “Is John Wayne Airport not safe?” Mr. Self replied, “Yes it is safe but you are at a minimum safety envelope, your margin of safety goes way down.” Mr. Drinkwater asked, “Does the air carrier insurance go up when they fly their aircraft into John Wayne Airport?” The general consensus was that it did not.

Mr. Galloway asked, “Is what Southwest is offering to do within the scope of the Part 150?” Mr. Frazee said, “Yes, it can be done either as part of the 150 or outside of this study.” Mr. Frazee added that Southwest can do the same experiment at SAN as done at Dallas and San Antonio of a close-in and far-out departure procedure with an observer in the aircraft and have it fly over the noise monitors.

Mr. Self asked, “Did Boeing use a Single Event Noise Exposure Level with different weights?” He was referring to the slide of the three noise contours with standard departure procedure, the proposed departure procedure and the John Wayne Airport departure procedure depicted. Mr. Behr responded that “No, they (Boeing) did not.” Mr. Pendzick added that it depends on geography, weight, and aircraft limitations. Mr. Galloway asked, “What is the standard procedure versus the proposed departure procedure?” Mr. Reindel answered the proposed has a more drastic increase in deck angle, to add power and reduce flaps at 1000 feet. Just because a 737 can do it does not mean that other aircraft like the MD-80 can do it.”

Mr. Galloway commented, “The green contour depicted is John Wayne which we are told will not be done again and it is not good at the take-off end, the neighbors would get more noise; the blue contour is theoretical or does it have any benefit?” Mr. Reindel answered, “It is both; now it is theoretical but it can be implemented. The purpose of this discussion is to find what can maximally be done.” Mr. Galloway asked, “Will the FAA deny this proposed measure?” Mr. Reindel said, “The first thing to do would be to go to the airlines.” Mr. Galloway asked, “Can you do something like this, to put it in the INM and develop contours of CNEL?” Mr. Drinkwater added, “You are saying John Wayne Airport won’t be repeated yet you’re saying we have to look at John Wayne Airport, is that correct? Is there is a mandate that we have to study John Wayne Airport, correct?” Mr. Reindel indicated that they are not sure the FAA is saying no. Mr. Pendzick replied that the price tag is expensive. Mr. Reindel added that Mr. Self said no. He says, FAA has not said that, but every airport is not going to be a John Wayne Airport. Mr. Galloway asked, “Are we decreasing noise but at the same time decreasing margin of safety?” Mr. Pendzick responded, yes, it’s all about risk mitigation, it’s a big deal. It’s his job to identify risk and reduce it for air carriers. He also added that air carriers will not look at it because of safety and it incorporates an extra expense to implement.

Mr. Frazee added, “You (the NTAG) could say yes to all measures, but the FAA might not agree, then it becomes the Airport’s job to fund these measures.” Mr. Self said that’s what happened in San Antonio. Mr. Reindel reminded everyone that the purpose of this discussion was to keep their eyes open to all possibilities. If the group determines this is very important, it’s our job to review it. We don’t want to limit anything at this point. What is feasible? Maybe all measures won’t be adopted after a feasibility analysis. Mr. Garret Hollarn also added that they (SDCRAA) looked at John Wayne Airport because of the variance and the community asked what about John Wayne Airport? Mr. John Bennett asked, “There’s a green line off shore is there also a blue line?” Mr. Reindel said, “Yes, but it’s not depicted on the board coverage as it is farther to the west.”

In regards to the nighttime preferential runway use program, Mr. Reindel showed the contours board and asked the NTAG members which is better? “Is it better to have all arrivals come in from the east on the predominant runway or is there a benefit for landings from the west during nighttime periods of few aircraft operations? Mr. Drinkwater asked “Are they downwind landings? What is the missed approach, do they come from the west?” Mr. Mr. Frazee answered, “Yes, these are sometimes downwind landings from the west. From 11:30pm to 6:30am there are about five to ten aircraft arrivals, of which at least five are cargo. One FedEx arrival from Oakland Airport generally arrives across La Jolla landing from the west and creating some noise over the Peninsula that would not necessarily be expected during the curfew period. The direct arrivals from the west allow the aircraft to land and taxi to the cargo ramp in minimum time thereby saving both time and fuel. The arrival from the west also may affect less population with respect to noise.”

Mr. Galloway asked, “Are the arrivals from the east steeper?” Mr. Self added that Portland which had a sharp left turn over the river also worked with the FAA to space aircraft. He also suggested looking at LAX, because there is less noise overall with west arrivals, noting even noise on the ground is impacted. Mr. Hollarn added the ANAC looked at noise levels on the ground and realized it is a question of who gets the most.

Mr. Reindel asked, “The question before the group is after the study is done, do you think it is worth evaluating further a preferential use runway program?” Mr. Galloway asked, “Are we looking for A or B?” Mr. Reindel reminded the group that the consulting team recommends, but the FAA has to approve it. Mr. Reindel asked, “Does the NTAG want this in the Part 150?” Mr. Bennett asked, “One preference doesn’t it depend on weather?” Mr. Reindel answered, “Yes, it depends on the wind rose.” Mr. Frazee added, “Right now aircraft can land on Runway 9 because there is not a lot of traffic as well as not a lot of noise propagation.” Mr. Drinkwater asked, “How often are aircraft impacted by fog?” Mr. Reindel answered, “Runway 9 is the precision runway, and in low visibility all aircraft land Runway 9. Runway 9 has a ceiling of 400 feet for the ILS.”

Mr. Reindel showed the next map of the Runway 27 departure routes. Mr. Galloway asked, “Will North Island be affected by the sharp turn to the left?” Mr. Reindel answered, “Yes, but it could be coordinated.” Mr. Self added that at some airports they use that procedure for General Aviation aircraft, to get the light aircraft out of the

way, but it would depend on the Navy. Mr. Cliff Meyers said that the MCRD, might like it rather than having turbo jets flying over the recruiting station. For the 310-degree departure heading there was a question as to whether it would conflict with Montgomery Field. Mr. Drinkwater said it does conflict with the Montgomery flight paths. Mr. Reindel commented that there are obstacles with everything, and in the end they will choose what is feasible. Mr. Pendzick mentioned that any airspace change would be reviewed by the local Airspace User Group.

Mr. Reindel then moved on to the RNAV Procedures for Arrivals slide. He said that there would need to be a realistic review of RNAV because it is popular with the airlines. Mr. Self commented that the FAA has initiated a new program that will be overhauling the ATC system. They will basically take away the old land-based navigation system and incorporate the procedures with GPS in the cockpit. “RNP requirements have closer limitations than what we have now. Southwest has outfitted 100% of its fleet with RNAV, a commitment of $2 billion to their fleet. We can probably do more good with RNP than any other procedures.” He noted that there is a tremendous cost to the airlines to do this. Alaska Airlines has done a lot of RNP work. He also noted that SAN has been picked to implement RNP, or use continuous descent approach procedures. With FAA approval, it will reduce the noise.

Mr. Pendzick noted that the NexGen (Next Generation) System of technology is one part of RNP and is the future and should be reviewed. Mr. Frazee added that the FAA has initiated a RNP procedure on the 275 departure heading it might be beneficial to look at implementing on the 290 departure heading as well. Mr. Frazee noted that aircraft can fly a more precise departure track with RNP but the one perceived problem is that it puts all aircraft over the same point or points and that may be an issue for the community.

Land use Strategies Overview

Mr. Reindel turned the meeting over to Mr. Ken Brody, Mead & Hunt, who proceeded with a land-use overview. Mr. Brody indicated that the objective is to reduce land use compatibility conflicts within the airport environs. Mr. Brody indicated that he tried to include a complete list of strategies used at SAN and elsewhere and not rule out or judge it at this point. He presented 13 land use slides, each with a description of the existing strategy and current status, and went on to provide a quick examination of each strategy’s effectiveness, who has responsibility and what are the impediments to implementation:

1) State Airport Noise Regulations Variance,
2) Quieter Home Program,
3) City Zoning Ordinances,
4) Sound Attenuation for New Construction,
5) Avigation Easement Dedication,
6) Avigation Easement Acquisition,

7) Acquisition Assurance Program,
8) Real Estate Transaction Disclosure,
9) Land Use Designations,
10) ALUCP Implementation,
11) City Involvement in ALUCP Preparation,
12) Existing Residential Uses inside 65 CNEL,
13) Limits on New Residential inside 65 CNEL,

Mr. Galloway commented on the Avigation Easement Dedication slide under impediments, that property owners can complain, but the requirement will remain. Ms. Knack commented that she sees a lot of tear downs, and building of multifamily units, and wondered if that triggers an action for an easement.

Mr. Pendzick asked regarding the real estate transaction disclosure, "How is the disclosure specified?" Mr. Brody indicated it is by state law. Ms. Sandi Sawa commented that SDCRAA uses three different tools for the disclosure. She also requested that slide 11 City Involvement in ALUCP Preparation be reworded to have both the city and SDCRAA take responsibility in the implementing tools bullet. Mr. Galloway added that there were other areas where joint responsibility were warranted. Mr. Brody replied that there certainly is overlap on agency responsibilities and appropriate changes can be made. Ms. Sawa also stated that the ALUC has no authority over existing homes, so a person can tear down their house and build a multi-unit building in its place, which goes against the ALUCP.

Mr. Brody indicated that the implementation procedure may be generally over simplified, but we want to provide some determination on how you allow for future development and how guidelines and ordinances are intended to apply.

Next Steps / Wrap-up

Mr. Reindel noted since there had been extensive discussion during the presentation, he would ask if there were other comments or issues that members would like to discuss. Noting none, he stated that the next steps will include obtaining FAA's response to the recommended modeling changes, preparing the Draft NEM and distributing it to the NTAG and public, as well as evaluating potential NCP measures, determining the recommended measures, and preparing the NCP documentation with recommendations to include implementation and monitoring plans.

Mr. Reindel concluded the meeting by reminding the group that the next meeting is scheduled for Thursday, January 15, 2009, but that it could be moved to December of this year if the FAA accepts the NEM adjusted modeling parameters. He thanked everyone for their participation and adjourned the meeting.

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