

**FINAL MEETING MINUTES
OAKLAND AIRPORT-COMMUNITY NOISE MANAGEMENT FORUM**

April 17, 2013

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1. INTRODUCTIONS

The April 17, 2013 Oakland Airport-Community Noise Management Forum meeting was called to order at 6:33 p.m. by the Forum's Facilitator, Michael McClintock. Mr. McClintock welcomed the Forum members and guests. He introduced the Port's new Airside Operations Manager, Matt Davis, and San Leandro's new elected representative, Councilmember Benny Lee. He also introduced Alameda's new elected representative, Councilmember Tony Daysog. Next, he asked the Forum members and advisors to introduce themselves for the benefit of the audience:

Forum Members/Alternates Present:

Walt Jacobs, Co-Chair/Citizen Representative, Alameda
Tony Daysog, Elected Representative, Alameda
Jesse Arreguin, Elected Representative, Berkeley
Barbara Halliday, Elected Representative, Hayward
Edward Bogue, Citizen Representative, Hayward
Michael McEneaney, Elected Representative, Marin County
Benny Lee, Elected Representative, San Leandro
Subru Bhat, Citizen Representative, Union City
Kristi McKenney, Acting Director of Aviation

Staff Members/Advisors:

Marilyn Mora, Assistant Director of Aviation
Joanne Karchmer, Port Public Affairs
Matthew Davis, Airside Operations Manager
Larry Galindo, Noise Office, Port of Oakland
Wayne Bryant, Noise Office, Port of Oakland
Jesse Richardson, Noise Office, Port of Oakland
Susan Fizzell, Noise and Environmental Office
Vince Mestre, Acoustical Consultant, Landrum & Brown
Gene Reindel, Acoustical Consultant, Harris Miller Miller & Hanson
Harvey Hartmann, Airspace Consultant
Jeff Dickinson, Assistant Chief Pilot, Southwest Airlines
James Baas, FedEx
Don Kirby, FAA NorCal TRACON
Sean Cullinane, FAA Air Traffic Manager, Oakland Tower
Courtney Meredith, Hayward Executive Airport
Valerie E. Jensen, CSR, Stenographer
Mike McClintock, Forum Facilitator

2. ANNOUNCEMENTS

A. Acceptance of 4th Quarter 2012 Noise Report

The facilitator announced this as the “Acceptance of the Fourth Quarter Noise Report.” He said, typically, we receive and file, unless there are any questions, additions or otherwise. He said if there were no questions he would entertain a motion to receive and file. Motion was received and seconded. Motion carried.

B. San Francisco Roundtable Meeting Report

The facilitator announced the next item under announcements was the San Francisco Roundtable meeting report. He said the Forum members are aware of our good working relationship with the San Francisco Roundtable, and that we are working to enhance this relationship through joint field trips to the FAA’s Northern California TRACON (NCT) facility. On April 3, Larry Galindo and the facilitator attended an SFO Roundtable meeting. It was an interesting meeting and there were a number of subjects discussed that were germane to the Forum. For example, the City of Brisbane is concerned about overflights, i.e., departures from Oakland International Airport. Larry Galindo discussed this issue with Brisbane’s Roundtable representative. There were also good technical presentations, including a very detailed and informative discussion on RNP (required navigation performance) and RNAV (area navigation) and what they would mean for San Francisco International Airport. The Roundtable wants to be involved in any FAA discussions on the concentration of aircraft flight tracks over certain areas and wants to have the FAA look at the possibility of dispersing flight tracks over areas where there might be an excessive concentration.

One of the things the Roundtable was doing was a phased Noise 101 presentation. They would select a particular noise topic and have someone give a presentation on that at their meeting. It seemed to be a good way to keep their members current and to fill in the gaps between having NOISE 101 every two years. Larry Galindo also offered that the RNP/RNAV presentation was very worthwhile and beneficial. He noted also, that the Roundtable chairperson, Jeffrey Gee, had extended the invitation for him and the facilitator to attend the meeting. Chairperson Gee is very supportive of the joint NCT tours. Michael McEneaney said this was good news, but we still needed to get San Jose to join with us. Galindo replied that San Jose’s noise program is not as robust as Oakland’s, but that doesn’t mean that we can’t reach out to them. He said that there could be an opportunity to bring all three communities together on the development of some specific noise abatement operational procedures. McClintock noted that today’s San Francisco Chronicle said that San Jose International Airport was having to lay people off and that he suspected that community outreach may not be high on their agenda because of financial difficulties.

3. CORRESPONDENCE

A. Jet Aviation Flight Services Letter

Under correspondence item three, McClintock noted that the Port had received a letter from Jet Aviation Flight Services requesting modernization of the OAK noise abatement program

re: North Field jet departures. Captain Ali Varasteh of Jet Aviation Services addressed the Forum on behalf of his employer. He said his employer operates four business jets out of Oakland. He said Oakland is their home and as part of their commitment to the community, they have relentlessly worked to comply with the noise abatement program at OAK and have remained in compliance. However, he said, over the past few years their participation in the program has been very costly to them.

They have experienced adverse implications from compliance with the noise abatement program, including inefficiencies of fuel management, reductions in productivity, and most importantly, the cost of time. As an example, he said, is the noise abatement policy that requires jet aircraft to taxi from the north side of the airport to the south side. He said in doing so, we lose approximately 12 to 15 minutes right now, and they'll probably lose 18 minutes in taxiing time in the future. He said this policy was implemented over 40 years ago and was in response to the types of aircraft in operation nearly 50 years ago. His company believes that an exception to the current policy should be allowed for aircraft that are compliant with today's higher standards of noise compatibility. By way of background, he said his company had upgraded its fleet approximately three years ago, and in the process, paid an extra amount to make sure that the airplanes that they acquired were actually Stage 4 noise compliant, when the current standard is only Stage 3.

Captain Varasteh said his company believes that the current noise policy creates a great amount of waste, with little or no benefit to the community, by not allowing jet aircraft to takeoff from North Field, when some of these jets can operate at lower noise levels than some propeller aircraft. He asked that balance be brought to his operation, which would have minimal impact on the community. He said his organization would like to work with the Port, the air traffic controllers and the community to modernize Oakland's North Field noise abatement policy. He suggested that someone should look at some of the noise control policies in Southern California and in Europe. It was his belief that there are three areas most of these programs use that aren't being capitalized on at OAK: (1) noise level should be the defining criterion, rather than type of aircraft; (2) an acceptable noise level should be established for all aircraft departing from North Field; and (3) the use of tailored departure procedures would also help to minimize any potential impacts. Lastly, he asked for a time window during which North Field jet departures would be allowed, particularly during normal business hours. He said that he was very optimistic that by working together a workable solution could be found. The facilitator asked Captain Varasteh what is it that he would like the Forum to do. McClintock explained that because the Forum does not make, nor implement policy for the Airport, it can only advise and recommend potential actions. He said about the only thing that the Forum could do at this point would be to request through the acting aviation director and the acting executive director of the Port, to have the Port and the City of Alameda get together and talk about what may or may not be done, because the North Field jet departure procedure is part of a legal agreement. McClintock said he thought the Forum could support Jet Aviation Flight Service's request to review and discuss any potential changes to the procedure, but that was about all the Forum could do.

Captain Varasteh said he'd like the Port to explore the possibility of some type of RNAV departure procedure for North Field jet operations, because without such, the North Field is not being operated efficiently and that this is becoming more and more costly for the tenants. He said his organization, as well as the other North Field jet operators, want to be good neigh-

bors, but if the airport and the community don't support efforts to find a reasonable way for them to operate efficiently, it becomes very difficult for them to accept a voluntary program that does not consider the impact on North Field users as well. He added that the North Field users want to have good standing with the community. That is the main reason why they have, at great cost to themselves, continued to voluntarily comply with the North Field jet departure restriction.

McClintock responded that the Forum is very much aware of the efforts of North Field operators to comply with the noise abatement procedures, and that one of the items on the agenda tonight is a discussion of an awards program for those operators who are complying with the Port's noise abatement procedures. He said that the Forum understood his concern that his company was operating with more quiet, state-of-the-art aircraft than are in the majority of the corporate aircraft fleet today, but these procedures are costing not only time, but money in terms of the extra fuel being burned in taxiing to South Field for takeoff. All things considered, McClintock said, the best the Forum can do at this time is to recommend that the City of Alameda and the Port of Oakland get together to review Jet Aviation Flight Services request and see if there is any potential for accommodation.

Larry Galindo commented that the present policy for North Field jet departures has not been reviewed by all parties to the settlement agreement for some time and that there are a growing number of jet pilot refusals to the requirement that they taxi to South Field for takeoff. Galindo said that this should be looked into along with an evaluation of Jet Aviation's request to see if there's any benefit to the community in modifying the jet departure procedure. He said that whatever would be done, would have to be mutually agreed upon by both the Port and the City of Alameda.

Red Wetherill, president of CLASS, said he wanted to remind the Forum that the settlement agreement was in 2002, not 1976. He said, the 1976 agreement was more or less a gentlemen's agreement between the developer, the City of Alameda and the Port of Oakland, and was rolled into the 2002 settlement agreement. This is the agreement that was upheld by the Court. The parties on one side were the Port of Oakland and CLASS, Keep Jets Over The Bay, and the City of Alameda (called CORC--Citizens Observation and Reporting Committee). James Nelson commented that he believed that a move like this would be detrimental to the Port's overall noise abatement program. He said that there are a number of procedures that are designed to reduce noise in the community, and if any of these restrictions are relaxed what is to stop the relaxation of others. He said that today's jet aircraft are quieter than those of 10 years ago, but they still make noise. To the extent they still make noise, moving those aircraft departures back to the North Field would be a step in the wrong direction in terms of noise control. He said he would like to see a fairly-detailed, in-depth review of the noise impact that would result from this.

McClintock responded that he understood where everyone was coming from, but from the Forum's perspective he felt that it would be premature for the Forum to undertake any action until the parties to the issue have had a chance to get together to explore their options. He asked for a motion to recommend that the Port of Oakland, the City of Alameda, and other involved parties get together to review Captain Varasteh's request, and that staff report back to the Forum on the results of those discussions. Walt Jacobs moved approval. Seconded by Mr. McEneaney. McClintock asked if any discussion. Jacobs responded that everyone needed

to keep in mind that the Noise Forum advises the head of the Port, and the head of the Port decides what they're going to do relative to any action that they may take. So the recommendation doesn't go to the City of Alameda or anybody else; it goes to the head of the Port, and the Port will make a decision about whether they want to move forward with it. McClintock called for the question. Motion was approved with one "no" vote (James Nelson).

4. APPROVAL OF MINUTES (JANUARY 16, 2013)

Facilitator McClintock submitted the draft minutes of the January 16, 2013 Forum meeting for approval. The facilitator said that Forum members had received copies of the draft minutes with their agenda materials. He asked if there were any corrections or additions. The facilitator noted that he had received correspondence from Larry Galindo pointing out an error in the Draft Minutes. That error had to do with a discussion of Allegiant Airlines at the North Field/South Field working groups meeting. The facilitator had said that Allegiant Airlines had sent a representative to the meeting. This statement was incorrect. Allegiant did not send a representative to the meeting, but the comment attributed to Allegiant was as indicated. So this needs to be considered a correction to the draft minutes. He asked if there were any other changes, corrections, errors, or omissions that anybody saw in the Draft Minutes. He said, if there were none, he would consider a motion for approval with the indicated correction. Councilmember Arreguin moved approval. Motion was seconded. The question was called and approved unanimously.

5. CO-CHAIRS ELECTION

The facilitator announced the next agenda item as the election of Co-Chairs. He noted that the Forum normally holds its elections in July. However, as a result of Diana Souza being replaced by Benny Lee, we need to elect a new elected Co-Chair. Benny Lee said that he would like his name placed in nomination for the elected Co-Chair. It was decided at the Forum's January meeting to hold this election at the April meeting because the July meeting would not be a business meeting due to the awards ceremony. This also means that we will be electing a citizen Co-Chair tonight as well. Walt Jacobs has advised that he would stand for re-election, and would like to be nominated. The term for both Co-Chairs in this election will go from tonight's meeting to the July 2014 meeting.

McClintock asked for a second to Walt's self-nomination. Seconded by Edward Bogue. McClintock asked if there were additional nominations for the Citizen Co-Chair. There being none, Walt Jacobs was re-elected to the position by acclamation. The facilitator next asked for a second to Councilmember Lee's self-nomination. Michael McEneaney seconded the nomination. McClintock asked if there were any additional nominations. There being none, Mr. Lee was elected as the Forum's Elected Co-Chair.

6. PUBLIC COMMENT

The facilitator announced that this was the time for members of the public to speak on issues not on the agenda but relevant to airport noise at Oakland International Airport. Forum advisor, Harvey Hartmann, suggested if the Forum was interested in being briefed by Bridgenet, the company that made the animated airspace presentation to the SFO Community Roundtable, he would try to arrange it. Ms. McKenney said that this was a good presentation and it

would be a good idea to schedule this for an upcoming meeting. The facilitator noted that Wafaa Aborashed had provided him with a communication and asked her if she wished to speak to the Forum. Ms. Aborashed stated she was with the Davis West Neighborhood Group in San Leandro, and was formerly associated with the Northfield Group. She said that her neighborhood had been receiving “a lot of rumbling” during the night after 1:00 a.m., and it is very disruptive.

She said that they have families with children in their neighborhood and if awakened at 2:00 a.m., cannot get back to sleep until 4:00 a.m. Her concern was that this early morning noise was disruptive, and she wants to know why it is happening because they have not heard it before. And, even with double pane windows the noise still wakes them up. She said she feels as if all the work done previously to reduce noise over her neighborhood has been in vain. She also expressed her concern with the air pollution coming from the airport. The facilitator reminded Ms. Aborashed that she had made another request in her letter—to move the location of the Forum meetings to the airport. McClintock replied that there was not a good place at the airport to hold Forum meetings. However, he had discussed with Larry Galindo and Councilmember Lee the prospect of holding a special meeting in San Leandro. Mr. Lee affirmed that he would work with Wafaa to try to organize such a meeting. Ms. Aborashed said she wanted the meetings at the airport to enhance the public participation process for San Leandro residents because the Port Board Room is too far from San Leandro and it is expensive to get there.

James Nelson offered that he thought holding a community meeting in San Leandro would be a good idea. Jesse Arreguin commented that he thought this was a good idea too, and that a similar meeting be held in Alameda; as these two communities were the most impacted by aircraft noise. Councilmember Halliday asked if staff could comment on Wafaa’s concern that “something has changed,” and she also seemed to be saying “it’s really bad in the middle of the night.” Benny Lee answered that he had received a number of e-mails from former San Leandro Mayor, Tony Santos with similar complaints. Larry Galindo responded that there are several issues that have been raised. The nighttime noise can be an engine test in our ground run up enclosure (GRE) which are logged in, but without a correlation with actual dates and times, the sources cannot be identified. He said the main issue is likely nighttime operations. The lower ambient noise environment at night makes those noise events more perceptible to the community.

Mayor Santos’ issue had to do with Southeast Plan takeoffs over San Leandro. Galindo said he spoke with Mr. Santos and pointed out to him that the jet takeoffs were, for the most part compliant with approved procedures, but in some cases—especially where a thunder cell or other extreme weather condition were present-- the FAA cannot give them the prescribed right turn. As to the question of why the jets don’t make the right turn over the Bay during the day under Southeast plan operations, the answer is that it would conflict with SFO traffic. Larry noted that he would welcome an outreach meeting to the San Leandro community, because when you get to multiple issues, it is a good idea to sit down and take a hard look, investigate, and develop facts and data from the noise monitoring system.

Mr. Matt Pourfarzaneh said that he lives on the Harbor Bay headland and that he has the same problem as Wafaa for the past couple of years. He said he called the noise office regularly and received reports back from them. He offered to forward them to anyone interested, but

noted that the main source of the noise between 1:00 and 4:00 a.m. was FedEx. Jim Nelson asked if FedEx had increased its operations. Jim Baas answered that it had not. Wafaa asked about what was happening with the “hush house.” McClintock responded that the airport does not have a hush house. It is a ground run-up enclosure or GRE. Wafaa replied that she calls it a hush house. McClintock said that this was misnomer and that the two are entirely different entities. Larry Galindo said that the GRE is used by the airlines to test aircraft engines after undergoing maintenance. He said this usually occurs at night or early in the morning so that the aircraft can be ready for its scheduled flight time. The purpose of the GRE is to reduce jet engine noise during the run up and that approval for nighttime or early morning testing is only given when the airline has a morning departure. By using the GRE, engine test noise is reduced by 17 dB, which represents a significant reduction in noise. In 2010, there were 300 run-ups in the GRE. In 2011 there were 80 and in 2012 there were 69. So the activity in the ground run up enclosure is going down, but for what reasons he did not know. McClintock asked if all engine run-ups used the GRE? Galindo said that any run-ups involving air carrier aircraft use the GRE, but that there may be some exceptions for North Field. However, those are very rare and involve small jets or turboprops. Wafaa complained that if the GRE is not being used it would be a waste of tax money. She reiterated that she wanted answers as to what was going on in her neighborhood between 2:00 a.m. and 4:00 a.m.

Mr. Bill Harrison of Hayward said he wanted to thank Larry Galindo and Jesse Richardson for their response to the concerns expressed by he and his wife over the marked increase in air traffic over their home. According to the information they received there has been a 34 percent increase in air traffic within two miles of their home between 7:00 a.m. and 4:00 p.m., and with this increase in activity has come an increase in noise. He said the noise was disturbing and degrading their quality of life. He asked what the cause of this increased traffic is and what can be done about it? Larry Galindo confirmed that the noise office had sent the Harrisons the results of its investigation of a complaint that came in about a week ago regarding a specific day. There was a spike in aircraft operations within a two-mile radius of their home for that day compared to a year ago, some 62 operations versus 101. The increase was attributed to three things. The Harrisons live under the instrument approach to Runway 27 right at Oakland. On that particular day, there was a steady stream of instrument approaches to Runway 27R. In addition to that, as was reported to the Forum at a previous meeting, there was a based carrier at Oakland by the name of Ameriflight. They had a base at Oakland for many years, and they moved to Hayward. So the flight tracks represented their activity, which are regularly scheduled daily departures to Long Beach and Sacramento and places where they ship small packaged goods. Ameriflight’s departure tracks are in close proximity to the Harrison’s home, which, as Mr. Galindo phrased it, “very unfortunately located right in the ‘solar plexus of noise’ from Hayward, San Francisco and Oakland air traffic.” Larry said that he would assign staff to undertake additional noise monitoring and report back. Mr. Harrison said that he and his wife appreciated Mr. Galindo’s help.

There being no one else who wished to address the Forum, the facilitator closed the public comment period.

7. HELICOPTER ISSUES FOLLOW-UP AND HMMH REPORT

The facilitator opened the discussion on this subject by noting that at the Forum’s January meeting there were some questions raised concerning helicopter issues among Forum member

communities. He reported that he, Larry Galindo, and Harvey Hartmann met with Councilmembers Halliday and Arreguin on February 20 to develop a work scope and address helicopter issues in the East Bay. Subsequent to this discussion, Galindo and McClintock organized the notes of the meeting into the following categories: Helicopter issues; questions to be answered; what can the Oakland Noise Office do; and what can the Forum do? These notes were all presented to the Forum in the memo that was associated with the agenda item. McClintock said that he was not going to discuss them individually because Gene Reindel was here to present the results of HMMH's review of recent helicopter activity in the East Bay and perhaps answer some of these questions.

Mr. Reindel thanked the Forum for the opportunity to report back on a review of helicopter activity in the first quarter of 2013 at Oakland International Airport using the ANOMS system or the Airport's noise monitoring system. He noted that Harvey Hartmann would also speak on FAA regulations as they apply to helicopter operations at the end of the presentation. Reindel said that in their review of recent helicopter activity they looked at helicopter operations by airport, i.e., the airport they operate from, categories of operations, how they fly (is it an overflight, hover, circling?). He said he would cover these issues as well as the number of operations that were captured by the ANOMS system and any helicopter noise complaints. He displayed a series of graphical exhibits that showed, among others, that the most helicopter operations originated from Hayward Executive Airport. The Oakland Airport had only half as many operations. He said also that there were a large number of helicopter operations where the flight origin could not be determined. These may have included some military helicopter operations. Councilmember Lee asked how the helicopter flights were reported. Gene replied that he would have to come back to that question.

He next iterated the types of helicopter operations, including news media, law enforcement, surveillance, medical utilities, and corporate and privately-owned helicopters. He explained the various types of helicopter maneuvers, including overflights, hovering, and circling. Next, he explained how the operational data were captured through the ANOMS System using a series of gates along specific flight corridors. Mr. Reindel asked Wayne Bryant to describe the process used to identify the various helicopters. Bryant said that the radar data that the ANOMS system gets from the FAA indicates aircraft type by letter code, and the helicopters are conveniently indicated by H. So, when they did this inquiry, they requested data on all "H" operations. As a result they were able to gather and analyze data on all of the helicopter operations that penetrated the gates they set up between January and March. The data included the helicopter's ground track as well as its altitude.

Wayne Bryant noted that helicopter flights over the Berkeley hills were notably higher because of the need to get over the hills. Reindel and Bryant presented further information on north flow versus south flow arriving and departing to the north versus to the south and also looked at the number of flights out of each of the facilities -- Hayward, Oakland, San Francisco, etc. They looked at the total number of flights, average flights and the altitudes that they were flying as they passed through the gate. Summarizing some of the findings, it was pointed out that of a total of 121 helicopter flights out of Hayward, the average altitude was 1,000 feet; San Francisco flights were at an average altitude of 2,000 feet. However, it was anticipated that the San Francisco operations were transiting the area, not circling. Councilmember Arreguin asked about average altitudes between south flow and north flow operations out of the various airports. Reindel said the average of all the operations was 1,000 feet, but average

north flow altitude was 1,084 feet and south flow 1,071 feet. Mr. Arreguin said then, that, presumably, there could be a certain percentage of flights below the 1,000 feet average altitude? Reindel agreed that that was a plausible assumption.

Mr. Reindel reviewed the number of helicopter noise complaints to the Port of Oakland. There were 639 helicopter complaints out of a total of 2,366 total complaints in 2012, or 27% of the total. Ranking of complaints by category showed that helicopters were second only to jet operations and three times the number of propeller aircraft complaints. The helicopter complaints were primarily low flight altitude, and loudness and/or hovering. News helicopters were cited in the complaints for hovering or circling, although such complaints were probably more on the side of circling because hovering is a difficult maneuver for helicopters to maintain. Multiple helicopters covering the same news event was also cited as a problem. Law enforcement helicopters were cited for circling over the same area for long periods, as was their low altitudes and noisier equipment. Harvey Hartmann said he and Larry Galindo reviewed the federal regulations governing helicopter flight, including 14 CFR, Part 91.119 "Minimum Safe Altitudes."

Hartmann noted that the basic rule is that all aircraft must fly at an altitude high enough to complete an emergency landing in the event of a power failure. There are no altitude restrictions on helicopter operations if the operation is conducted without hazard to persons or property on the ground, except where the FAA has specifically prescribed routes or altitudes for helicopters. He noted that in some areas there are specifically assigned helicopter routes designated by the FAA. In the Bay Area most of these routes follow freeways and over the bridges. Hayward Executive Airport has published voluntary helicopter noise abatement routes. These routes may or may not be assigned by Air Traffic Control. Hartmann noted that, unlike fixed-wing aircraft, helicopters do not have to operate within airport traffic patterns. Helicopters can do pretty much anything. They can land on a runway, a taxiway, apron, or a designated helipad. At tower controlled airports controllers can direct a helicopter to land at any given spot with a great degree of flexibility. He addressed the issue of "no fly zones" by saying that there are none. There are however restricted classes of airspace, where in some cases, helicopters entering such airspace are under the control of FAA air traffic controllers.

The facilitator asked Vince Mestre if he had any observations. Vince replied that in previous noise news, he had described legislation that was introduced in LA called "The Los Angeles Residential Helicopter Noise Relief Act." That legislation died last year when the Congressman who sponsored it lost his seat. That legislation, unchanged, was reintroduced on February of this year, but it's sponsored by Senators Feinstein and Boxer and the local Congressman from the San Fernando Valley. Now, with Senators Feinstein and Boxer as sponsors, this legislation is getting substantially more attention than it did before. It requires the FAA exercise its legal authority to set guidelines on flight paths and minimum altitudes for helicopter operators over residential areas of Los Angeles County. So this is the case where a community, frustrated in trying to get guidelines put in place, basically chose to seek legislation to deal with the issue. He said he would keep the Forum posted on the progress of this legislation.

Benny Lee said he recently experienced a helicopter hovering among the electrical transmission lines along the Bay Trail in San Leandro. He found out that it was a PG&E maintenance operation that lasted from 4 to 6 hours. He said it was very noisy and many community mem-

bers were curious as to what was happening. Mr. Hartmann said that if it was not PG&E it could have been a contractor doing maintenance work on the power lines. Courtney Meredith said she was informed of the activity and it was a PG&E maintenance operation. Mr. Lee asked how the community could be notified. Ms. Meredith said she signed up on Google alerts for PG&E. She said you can go to Google alerts, and you can sign up with the key words "Pacific Gas & Electric" and "Hayward," or your community. Councilmember Arreguin asked about how the airspace classes are defined. Hartmann replied that they have nothing to do with noise impacts, but are designed to protect the airspace around airports. He said that it would take a lot of time to describe and explain the various airspace classes. However, this information is available on the internet and in the FAA's "Aeronautical Information Manual (AIM)."

Jesse Arreguin said that, helicopters are their own special category and they're supposed to be governed by FAA standards regarding altitudes and routes. If so, who defines this? He said his concern was that there needs to be some sort of regulation with regard to altitude, particularly because that has a big impact in reducing noise. The facilitator asked the FAA tower chief, Sean Cullinane to comment on this. Mr. Cullinane said with respect to routes and altitudes, there are no published helicopter routes in the Bay Area, with the exception of some Special VFR routes. However, there are published helicopter routes and altitudes in the Los Angeles basin. Sean explained the nature of Special VFR Routes and that helicopters, because of their maneuverability, can operate with Special VFR clearance with only about a half mile visibility and no ceiling requirement compared to fixed-wing aircraft that require at least 1 mile visibility and 500 feet clear of clouds for Special VFR operation.

Mr. Arreguin said that the FAA would then have to create its own special regulations regarding helicopters traveling in a specific area, like they did in Southern California? Mr. Cullinane responded that there would have to be a specific need identified to accomplish this along with a required airspace study. Sean said the frequency and type of helicopter operations in the Bay Area do not compare to helicopter operations in Southern California. Councilmember Halliday asked about any regulations concerning the prolonged hovering of helicopters. Sean replied that there were no such regulations, and that news helicopters were allowed to do pretty much as they pleased unless the area was protected by a TFR (temporary flight restriction) as is sometimes imposed over police actions or special events for the safety of the public. Ms. Halliday said she saw the validity in allowing for law enforcement operations, but not for the media. She that Hayward had seen an influx of helicopter operators, particularly traffic helicopters that resulted in a large number of neighborhood complaints as they were learning the best arrival and departure routes. She said the City of Hayward worked with the helicopter operators and came up with the voluntary operating guidelines. Cullinane agreed that this was the way to get things done—through outreach. Barbara asked if there was a danger when several helicopters are operating in proximity to each other. Harvey Hartmann answered that the rule is to see and avoid. James Nelson said that in unrestricted airspace over Berkeley, there are no limitations on helicopter operations. Harvey replied that there were no restrictions, but outreach could be key to controlling some operations.

The facilitator recognized Larry Galindo who had further comments on the helicopter issue. Mr. Galindo thanked the previous commenters for their contributions. He noted that helicopter noise complaints are the second greatest number of complaints that his office has to deal with. He said he understood the frustration of the communities because there is little that can

be done to control helicopter operations. He maintained that outreach and engagement were the best means currently available to inform helicopter operators of the need to be courteous to their neighbors. Larry said that he is working with Hayward to arrange a meeting with helicopter operators to raise awareness and ask for their cooperation. In the past he said, he has found them to be cooperative and helpful if we take the time to reach out to them. Councilmember Arreguin asked if it would be appropriate for elected officials to participate in the proposed meeting? Galindo responded that anyone with an interest in the issue was welcome to attend. Jesse asked if copies of HMMH's PowerPoint presentation could be made available. Edward Bogue said that the helicopter operators were not who we had to get to. He said educating the pilots would be more productive.

The facilitator said here's what he learned tonight. First of all we really covered a lot of ground on the subject, and that staff, consultants, the FAA and others did an excellent job. But, there are still a lot of issues out there. Some of these issues can be addressed at the proposed Hayward meeting. He said that in the memo he provided with the agenda packages there is a proposed action, and that is for the Forum to request the Port to negotiate a scope of work with HMMH to develop and respond to the helicopter issues that have been raised and report back to the Forum through the North Field/South Field Group. Jesse Arreguin said that he would prefer that the consultant report directly to the Forum. McClintock replied that the Forum typically uses the North Field/Southfield Group to work out the issues then report back to the Forum. Councilmember Arreguin moved approval of the request to the Port for further study by HMMH. Seconded by Councilmember Halliday. Motion carried.

8. NBAA LETTER AND FOLLOW-UP

The facilitator said that when he put this on the agenda he had hoped to have some significant information, but it has been very difficult to make contact with the Western Regional representative of the NBAA. But as he understands it, in talking with Vince and others, this whole program, the BARR aircraft registration numbers, is kind of in limbo right now. The FAA has not come out with a notice of proposed rulemaking. In effect, there's really nothing to report. Vince Mestre added that the rule, as it stood in August 2011 when the FAA put BARR into place, remains in effect. That makes it difficult, but not impossible, for the general public to identify aircraft that participate in BARR. For airport staff, they have access to other data sources, and they can identify those aircraft. Even the general public can if they're willing to do a little bit of work. There is an app on iPhone that will tell you how to bypass BARR. McClintock asked if there was anything new or changed in terms of any new policy recommendations on the part of the FAA. Mestre said there were no changes. McClintock asked Larry Galindo about whether aircraft with blocked ID are a problem for his office. Larry replied that it is not a big problem at this time, but blocked aircraft are increasing, and could create problems of identification if they have a noncompliant operation. McClintock said that it appeared at this time that about the only thing that could be done would be to continue to monitor the program.

9. ALLEGIANT AIR UPDATE

The facilitator said that at the January Forum meeting, staff was directed to contact Allegiant Air with a request to attend the Forum's April 17 meeting. He said he had been provided with contact information for Allegiant Air's owner, Allegiant Air Travel Company of Las Vegas.

The facilitator said he had provide members with a memo with some background on Allegiant, the fleet size, destinations and other information, but the bottom line on this is that he did talk with the station manager for the airport. He responded that currently only the MD-80 series aircraft serve Oakland. Allegiant has bought at least one B-757, and are purchasing Airbus A-319s or A-320s, which are relatively quieter aircraft. It is very difficult to get any information out of airlines about their future fleet plans until they commit to an order, and even then they can change their minds. He said he believed that we've done as much as we can with Allegiant, although he's been working with Ernie Delli-Gatti on some issues that he wanted to have addressed. But it all comes back down to the fact that, again, the Forum doesn't make policy or implement policy, and the Port, as an airport proprietor, does not get into the cockpit or make business decisions for airlines. He said he thinks we have gone about as far as we can go with this issue. Allegiant is not doing anything wrong. The aircraft they're flying are fully certified by the FAA.

10. NOISE OFFICE REPORT

Larry Galindo said he had a few brief announcements:

A. Forum Tour of New FAA Air Traffic Control Tower

Galindo said that he had worked out a schedule to tour the new OAK air traffic control tower. He said the tour would take place on May 8, beginning with coffee and donuts in the North Field Conference Room. He asked anyone interested in joining the tour to call him. Larry added that some interest had been expressed with regard to a tour of the FedEx facility. He said this tour was tentatively scheduled for May 22. He thanked Jim Baas for making the arrangements.

B. Forum Fly Quiet Awards Program

Larry said that his staff had been working diligently with Forum members, the two Co-Chairs, and Will Fernandez to establish a structure for the Fly Quiet Awards Program. Many airports, such as San Francisco and, also, some southland airports, have Fly Quiet Awards Programs for compliant aircraft with their noise procedures. So now we are ready to roll out our first Fly Quiet Awards program on July 17. This will be a special meeting with no business other than the awards ceremony. It will also be a dinner meeting at the Oakland Aquatics Center. There will be five awards covering categories from the airlines to general aviation, and also to our private corporate jet operators and companies. McClintock said that Larry will provide more information as we get closer to that date.

11. NOISE NEWS UPDATE

Vince Mestre said he had two presentations. First would be noise news and second would be a discussion about the accuracy of the OAK radar system, which he would get to later in the agenda. His first item dealt with the International Civil Aviation Organization (ICAO), a U.N. specialized agency which, aside from the U.S., oversees all the world's airline and cargo operations. It has a committee called CAEP -- the Committee on Aviation Environmental Protection. This committee has adopted new, stricter noise guidelines for aircraft. This will be stage 5. The stage 5 noise limits are about 7 dB stricter than the stage 4 regulations. The stage 4 regulations were last adopted in 2001, and they really weren't much of a challenge for aircraft manufacturers to comply with. He said, as has been discussed before, new technolo-

gy is resulting in quieter and more efficient aircraft. The 70 dB goal is a non-trivial improvement in noise reduction. It goes into effect for large aircraft in 2017. That means any larger aircraft that is certified for sale anywhere in the world will have to meet the new stage 5 limits, and smaller aircraft will have to comply if manufactured after 2020. ICAO has no authority in any given nation, so each of the nations that belong to ICAO by treaty individually have to approve these standards. So the FAA will introduce or will have Congress address a stage 5 rule for U.S.-manufactured aircraft, and we'll expect that to happen in the near future. The U.S. General Accountability Office (GAO) has not been very friendly to noise issues and noise mitigation. It actually produced reports critical of the way the FAA spends its money on noise control. The FAA has responded back to the GAO and Congress with a letter that says, "Hey, the noise set aside for the Airport Improvement Program is actually important, and we need that money for noise mitigations to maintain the capacity and not constrain the growth of the nation's air transportation system." So the FAA has taken up the charge of defending money for noise mitigation in light of the GAO's rather unfriendly review of the way noise monies are spent.

The Los Angeles World Airports (LAWA), which operates LAX, has submitted its Part 161 analysis to restrict certain stage 3 operations at night -- not ban them, but require them to operate over the ocean. This application has been under development for quite a bit of time. It's now been submitted to the FAA. The FAA will now come back and respond as to whether it's complete or not. If it's complete, then the FAA will have to decide whether they'll accept it or not. If it's not complete, the airport has to go back and fix it up to meet whatever the FAA requires. The airline industry lobbying group, Airlines for America -- that used to be called the Air Transport Association -- and the Cargo Airline Association have come out rather strongly in opposition to the LAX Part 161 application, deeming it unreasonable, unnecessary, unworkable and unduly burdensome. Other than that, it was just fine. Vince said he would continue to monitor the progress on this application.

He discussed a NASA grant to Cranfield University in the United Kingdom to study advanced aircraft propulsion systems. NASA is having them evaluate turboelectric aircraft propulsion producing noise emissions and energy consumption. If you're familiar with how a diesel train works, where they have a diesel generator that generates electricity, which then drives electric motors and the motors drive the wheels, this is evaluating the turboelectric program where we have the turbine generator generate electricity that drives the electric motor to propel the airplane. He said this is a unique concept and he would keep the Forum posted.

He noted that the FAA has issued noise certification standards for tiltrotors. They're the funny-looking airplanes that operate like a helicopter. They lift off the ground like a helicopter, and their engines rotate into a forward position, and they fly like an airplane. An Italian firm is marketing a civilian version. Because there has been no testing procedure for tiltrotor noise certification, the FAA has come up with a rule that says this is how you have to certify a tiltrotor to meet the noise standards for new aircraft. He said, he wouldn't expect to see a civil tiltrotor at the Oakland Airport in the very near future. He next discussed the situation in Hillsboro, Oregon, a city outside of Portland. It has a very busy GA airport. They've been fighting noise issues for a long time, and have adopted an ordinance regulating operations at the airport. The Federal Aviation Administration advised them they were preempted from having those rules. The city council then repealed that ordinance. Now there is a citizens' group challenging the repeal of the ordinance on the grounds that the FAA does not have au-

thority over operations that occur entirely within the State of Oregon; the FAA only has authority if it crosses a state line. Vince said he did not expect this challenge to go very far, but it might be interesting to follow because their challenge of the repeal of the ordinance could result in litigation with the city. This is basically, a fundamental challenge to the authority of the FAA.

Mestre noted that we've talked previously about JetBlue buying the new Airbus A-320 Neo which has new, quieter engines. You'll see a new version of their aircraft that will look new to you but actually won't be the new-engine aircraft; it'll be the old A-320s but with "sharklets." Boeing calls them "winglets;" Airbus calls them "sharklets." They're, basically, little wingtip extensions that make the engines more efficient and improve fuel burn. You should see these operating at Oakland soon. He next addressed the Avgas issue. This is the leaded aviation fuel used for propeller-driven aircraft that we have discussed in the past. There are currently two litigation actions going on in California over this. One is to prohibit the sale of leaded gasoline at airports, period; and the other is litigation to force the EPA to adopt rules to remove lead from aviation fuel. The court has affirmed that the EPA has the authority to do this, but cannot be forced to do it. The EPA has scheduled a decision on leaded Avgas in 2015. This litigation sought to accelerate that. The judge said no, they have to do it, but they can do it in whatever time frame they choose.

On biofuels, Mestre said he could have had 40 articles, but narrowed it down to just a few. The National Resources Defense Council, an environmental advocacy group, has said, "Wait a minute, biofuels are a good idea, but only if the proper feed stock is used. Poorly sourced biofuels using wrong feed stocks may be more damaging to the environment and cause more carbon pollution than if we use regular old, oil-based jet fuel." They've come out and said, "We really need to make sure it's sustainable biofuel before we get all excited about biofuels in jet aircraft." Meanwhile, a consortium of American universities called PARTNER, funded by the FAA to do research on noise emissions, has said these biofuels have different kinds of costs, depending on their feed stock. Basically, it parallels the NRDC study, but for different reasons. They identified, in soybean oil used as feed stock, the subsidy would have to be almost three dollars per gallon, and they used that to justify or to get the airlines to use it. If the biofuel is based on oil seed crops that would be used on other than fallow land, the subsidy required 35 cents a gallon. Kind of behind all this is using corn or soybean oil for biofuels is actually worse than if you just use jet fuel right off the bat. As for airlines operating on biofuels, KLM is going to actually use biofuels for a 25-week program in which all their flights between JFK and Amsterdam will be biofuel based.

As for the drone situation, Mestre said that the FAA is seeking volunteer areas to do testing of mixing drones into the national airspace. He did not expect the FAA to pick a Bay Area site for this, but probably one in the Midwest or Houston. The FAA will use these test sites to develop certification and navigation requirements for drones operating in civil airspace. Oakland has been selected as a test site, but this will be simulation modeling only. He said that his company had been selected to perform the analyses for the FAA's Unmanned Aerial Systems Office. Mestre next discussed an all-electric light sport aircraft being built in the Czech Republic. Solar-powered aircraft are also being built and tested in Germany. Lastly, he said he had a humorous anecdote to relate. Most municipalities have a noise ordinance that says if you play your drums at night or – this poor fellow in New York has been arrested because he was cited so many times because his neighbor complained that he was laughing too loudly.

The noise measure showed him to be in violation of the local ordinance. Just to show you how bad things can turn if neighbors don't get along. Kristi McKenney commented on the CAEP process.

12. STATUS REPORTS—NORTH AND SOUTH FIELD WORKING GROUPS

A. Federal Express B-777 Impact on OAK Fleet Mix

Captain Jim Baas of Federal Express provided an update on FedEx activities and initiatives. He said that FedEx's fleet operations at Oakland would be subject to an upcoming review, but FedEx's mission is to connect the world in responsible and resourceful ways. We don't just get out there and blow smoke and make noise; we try to make our business and the world sustainable and efficient and try to improve global access. One of these programs is the fuel sense program, which he manages for flight operations. In 2011, this program saved FedEx 40.5 million gallons of fuel. He said projections for 2012 would involve even greater fuel savings. Other initiatives involve working with the FAA to reduce wake turbulence separation standards. This would enhance airport capacity by reducing delays. As for the FedEx fleet, Jim said that the B-727s would be out of service by July 1, and that they were being replaced by B-757 aircraft. Their MD-10 aircraft were being replaced by B-757s and MD-11s with B-777s. He said that their goal was to reduce CO₂ emissions by 30% by 2020. In 2011, the reduction in emissions was 13.8%. He described the fuel efficiencies of the new additions to the FedEx fleet, as well as their cargo capacities and flight routes.

A question was asked about noise level reductions. Wayne Bryant replied that Noise Office had studied this, and that the B-777 would be from two to eight dB quieter than the MD-11, depending on the location of the noise monitor. Baas reviewed other green initiatives being promoted by FedEx, and concluded by saying that FedEx is committed to fuel efficiencies and sustainability, including reductions in noise. He reminded the Forum of the upcoming tour of the FedEx facility.

Facilitator McClintock asked Susan Fizzell to say a little bit about Earth Day and some of the awards the Port is giving out. Susan said Monday is Earth Day, April 22nd, and the Port of Oakland will be hosting an Earth Day Fair for its employees and tenants of the airport. As part of the day's activities, they'll be presenting some environmental awards. FedEx will receive an award for leadership in renewable energy at Oakland. FedEx has a very strong commitment to solar and fuel cell technologies. The Federal Aviation Administration will receive an award for designing a LEED Gold airport traffic control tower. It's not certified yet, but we're congratulating their effort in all the innovative environmental designs they incorporated into that project. In addition, Southwest Airlines will receive an award for their commitment to the electrification of their ground service equipment, or GSE. Our GSE at Oakland is about 70 percent electric, thanks to Southwest. So we appreciate that effort and want to encourage that amongst other tenants as well. The Oakland Airport Rental Car Consortium will receive an award for replacing their old shuttle buses with new shuttle buses a little bit ahead of schedule. Port Aviation Construction and Turner Construction are being awarded for the use of bicycles in lieu of vehicle trips. They've been employing bicycles to commute from their offices to Terminal 1 and the central utility plant construction site. That has eased the parking congestion, and it's been an air quality gain. She asked that the Forum

join her in congratulating Jim Baas, Sean Cullinane and Jeff Dickinson. She encouraged them to keep up their good efforts.

B. ANOMS Radar Flight Tracks Analysis

Larry Galindo said that he had some very important information for the Forum with regard to some tests that Vince Mestre and Landrum & Brown had done concerning the ANOMS flight tracks. Vince Mestre made the presentation which dealt the analysis that was done to evaluate how accurate the flight tracks are that the ANOMS system uses for noise reports. Vince described his testing methodology and explained the nature of radar signals and imagery. He also spoke to the issue of the next generation of air traffic control (NextGen), and how this system will be even more accurate in tracking aircraft flight paths. Vince illustrated his presentation with overlays of ADS-B flight data and flight tracks from the ANOMS system. The results were a very close coordination between the two different sources of information. The largest difference they found between the ADS-B track and the average radar track was 397 feet. Other results were on the order of 260 and in other cases less than 100 feet. Hence, it was concluded that the degree of accuracy for the flight tracks ranged from 100 feet to about 400 feet, which is actually very good because at other airports the variance could be as much as 1,100 feet. This testifies to the sophistication and resultant accuracy of the Port's flight tracking systems.

13. NEXT MEETING – July 17, 2013 (Fly Quiet Awards Program)

14. NEW BUSINESS/ADJOURNMENT

There being no new business the meeting was adjourned at 9:07 p.m.

End