

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

October 16, 2013

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1. INTRODUCTIONS

The October 16, 2013 Oakland Airport-Community Noise Management Forum meeting was called to order at 6:38 p.m. by the Forum’s Facilitator, Michael McClintock. Mr. McClintock

welcomed the Forum members and guests. He noted that there were not enough Forum members present to constitute a quorum, so he advised that the meeting would continue without any formal actions to be taken unless more members arrived to constitute the quorum. 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
Barbara Tuleja, Alternate for Walt Jacobs, Alameda
James Nelson, Citizen Representative, Berkeley
Edward Bogue, Citizen Representative, Hayward
Michael McEneaney, Elected Representative, Marin County
Jim Prola, Vice-Mayor, San Leandro (Alt. for Benny Lee)
Deborah Ale-Flint, Director of Aviation

Staff Members/Advisors:

Matthew Davis, Airside Operations Manager
Larry Galindo, Noise Office, Port of Oakland
Wayne Bryant, 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
Rhea Gundry, Harris, Harris, Miller & Hanson
Harvey Hartmann, Airspace Consultant
Jeff Dickinson, Assistant Chief Pilot, Southwest Airlines
Don Kirby, FAA NorCal TRACON (NCT)
Allen Tai, Supervising Planner for Alameda
Sean Moran, Noise Analyst, Hayward Executive Airport
Valerie E. Jensen, CSR, Stenographer
Mike McClintock, Forum Facilitator

2. ANNOUNCEMENTS

A. Acceptance of 1st and 2nd Quarter 2013 Noise Reports

The facilitator said the first and second quarter 2013 noise reports were distributed with the agenda packages and were ready to be received and filed unless there were any questions. Jim Prola asked why there was a range in compliance rates for the runway 11 night departures, both for the first and second quarters. He said he noticed that the 2012 1st quarter compliance rate was 97 percent, while the 2013 rate was only 78%, and for the second quarter, it was 96 percent for 2012, but only 51 percent for 2013. Larry Galindo commented that the changes in percentage from 2012 to 2013 were because of an event in June of 2013, where there was an incident at night on Runway 11 where the instrument landing system (ILS) was inoperative

and operations that night were conducted in non-standard configuration for landings to the North Field and departures from Runway 11. The air carrier departure went straight out that night because of what was going on. Mr. Prola asked about complaints. Galindo responded that the arrivals over Alameda generated over 200 complaints for that night because of the unusual operational activity. He said he didn't think there were very many complaints for San Leandro because the departures were largely normal; the right turns were not made. McClintock thanked Mr. Prola and Mr. Galindo and noted that, because of the current lack of a quorum, he would have to defer action on the two reports until the next meeting.

B. Acting FAA OAK Tower Chief—Deborah Price

The facilitator said that Deborah Price is the new acting FAA Oakland Tower chief. She and other FAA staffers were not present tonight because of the government shutdown. Larry Galindo said that there would likely be a new permanent tower chief appointed in mid-December, so, one way or another, we will be announcing a new tower chief at our January meeting.

C. Noise Forum Annual Dues for 2013/2014

Item C under announcements is the Noise Forum annual dues. Jesse Richardson usually handles this, but he is unavailable tonight. McClintock asked Larry Galindo for an update on the status of the membership dues. Mr. Galindo replied that so far only two payments had been received; from Marin County and Union City. Staff provided copies of the original letters requesting payment of dues to the other representative Forum members.

3. CORRESPONDENCE

The facilitator noted that there was no direct correspondence, but that there is one item that will be covered under public comment tonight.

4. APPROVAL OF MINUTES (APRIL 17, 2013) (JULY 17, 2013)

Facilitator McClintock noted that this item was for the approval of the Minutes of the April 17, 2013 and July 17, 2013 meetings. He said he would entertain any changes or corrections to the draft minutes. Jim Prola commented that he believed that FedEx has been doing a pretty good job, especially since they have done a very good job in replacing their B-727s with B-757s. As a result, he said, "I just don't hear as much noise at night anymore." The conversion of their fleet from the B-727s to the B-757s takes a lot of pressure from elected officials. He said he was still hearing a lot of complaints about Allegiant Air and it seems that they do not want to cooperate or attend any meetings. Larry Galindo responded that he could not speak for Allegiant, but that they are currently complying with the Port noise abatement program and procedures. Prola said that they were still very noisy. Galindo replied that it is because they are using aircraft with older engine technology, i.e. MD-80 series jets. Their long-standing business plan is to acquire used jets that still have flight hours left in them. Beyond that they are reluctant to discuss anything about their future fleet mix plans other than that they plan to acquire additional Airbus A319/320 aircraft in the future. Mr. Prola asked if they could be requested to attend a North Field/South Field Group meeting. Galindo replied that staff has requested such, but they have always declined.

Michael McEneaney asked about Allegiant's operation at OAK. Larry Galindo replied that Allegiant is a profitable carrier. They moved to Oakland from San Francisco in 2009-2010. Last year they went through a fairly-rapid growth period that contributed significantly to the Airport's total passenger activity. Since then, the airline has dropped some markets and the number of their operations has decreased. Aviation Director Ale Flint said with Allegiant coming to the San Francisco Bay Area they bring not only tourists, but jobs as well, and this is good for the region's economy. Michael asked if Allegiant was a subsidiary of a major airline. Director Ale Flint replied that Allegiant is not part of an airline alliance, but that they do have deep ties with hoteliers and do tourism packages with them—they sell full vacation packages.

The facilitator asked if anyone else had any comments on the Minutes. There were none, but McClintock noted that because of the lack of quorum he would have to carry their approval to the January meeting.

5. 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. He said he had been presented with a petition signed by maybe several hundred members of the Alameda community prepared by Mr. Curt Peterson. Mr. Peterson said he collected the signatures because the aircraft traffic over his neighborhood has become unbelievably bad. He said that he had circulated his petition to over two hundred residence4s in his area. Mr. Peterson read from the letter:

“This letter is written to express our deep concerns with the increase in air traffic from the Oakland International Airport over the western area in the City of Alameda. This traffic makes it extremely difficult for us to enjoy our personal lives in the manner we have had in the past. We, as residents, understand the occasional need during weather and congestion for the air traffic patterns from Oakland International Airport to flow over the western portion of Alameda. These actions, however, have become the norm rather than the unusual. It is hard to see why the flights from Oakland International Airport don't follow a route as they once did.

We, as tax-paying citizens, deserve a quality of life where we are not exposed to loud noise and added air pollution. To that end, we strongly urge the Forum members to take whatever steps necessary to curb the amount of air flow in the future over our community.”

Mr. Peterson said that everyone he had spoken to had noticed an increase. The flow over his community has gotten worse, and he has talked with Larry Galindo about his concerns. He noted that he has watched aircraft turn over his community while flying low for no apparent reason when the corridor up the center of the Bay is free and clear. He said they also commonly go over the Encinal High School all during the day, which is incredibly disruptive. He said he spoke with several teachers, who said when the windows are open it is unbearable. He said he did not know what steps he should take, but could go to the FAA and say “Hey, direct flights up the bay like you once did. I'll take that step and talk to Barbara Lee if that is what it takes.” He said he and other people were “fed up dealing with it.”

He said he has worked with Larry Galindo since August, but still does not know why this is happening or what the change has been from 2012 to 2013. What is the situation? Is it as a result of different runway use or the total number of flights. He said his observations differ from the information provided by the Port. He said he knows the direction of the runway and cannot understand why they can't always depart straight up the Bay and not turn over or close to Ballena Bay. He said Southwest was notorious for this and he did not understand why they can't take a "direct path up the center of the bay, basically pass as far as Alameda Point and make your break at that time." He said there were a large number of people with similar concerns to his and they all want answers.

McClintock thanked Mr. Peterson for his presentation and said that he could not get an explanation for him at this meeting as the FAA representatives were not present. He said these concerns would be passed on to the Port for its review. Red Wetherhill asked that the record show that the CLASS executive board has four representatives here tonight (Barbara Tuleja, Brian Schumacher, Barb Mina and himself) and that they are very supportive of Mr. Peterson's concerns.

Ms. C.R. Hershfield introduced herself and said she was a resident of Adam's Point, "which is the most dense neighborhood in Alameda County." She said her concern was helicopters "living" over downtown Oakland non-stop -- six to nine of them at one point -- and "we were trying to figure out exactly who they were." She said she understood the need for police helicopters, but what she couldn't understand were the large numbers of helicopters representing news organizations. When she tried to find out what their standards or rules for coverage were she was rebuffed by the news organizations. She said also that small planes over her neighborhood were also a problem. Most recently it was a plane towing a GEICO banner which was incredibly loud. She said she was sorry that the FAA could not attend the meeting because she wanted to know "who it is that says it's okay to have six helicopters up at once from whenever in the daytime until 1:00 in the morning? Who decides if it's okay for GEICO to fly over her neighborhood advertising?" She asked if it was possible to have a noise monitor set up in Adams Point.

The facilitator noted that the Forum had been dealing with helicopter issues for some time and that he wished she could have attended the Forum's April meeting where there was a presentation on the issues she raised concerning helicopters. He added that there is an item on the agenda tonight, the noise office report, where Larry Galindo will present an update on the meeting with the helicopter in Hayward. Gene Reindel will also make a presentation tonight with some additional information on helicopters. He noted also that the Port's airspace consultant, Harvey Hartmann is a retired FAA air traffic controller and is extremely knowledgeable on what helicopters can and can't do. Harold Perez said he was glad to see that there were others complaining about helicopters. He said he calls every week to complain about helicopters—and once even had a V-22 Osprey fly over his home. He said if you think helicopters are loud wait until the Ospreys start coming in. In response to additional questions it was confirmed that the V-22 Osprey operation was an unusual and unique event, and not part of any regular activity.

Wafaa Aborashed addressed the Forum on the issue of how the use of aviation fuel is impacting the quality of life for people living under the Airport's flight paths. She said she was concerned because the only such study in the Bay Area was being done at the San Carlos Air-

port, a general aviation facility that does not have scheduled commercial air carrier service. She said there were five schools in San Leandro under the flight paths and what the lead from aviation fuel does to these schools is outrageous. She asked "Why aren't they studying the places that have schools on the flight path?" She said her concern was with the lead in aviation fuel and what it was doing to our communities. Facilitator McClintock asked Vince Mestre if he was going to talk about the status of the lawsuits over leaded AvGas and the research on lead fuels, as well as replacement fuel such as biofuel. Mestre said he would be. There being no one else who wished to address the Forum, the facilitator closed the public comment period.

6. FAA PRESENTATION – OPTIMIZATION OF AIRSPACE & PROCEDURES IN THE METROPLEX (OAPM)

The facilitator said that because of the federal government shutdown and the resultant lack of attendance by the FAA officials, this item would have to be rescheduled for the Forum's January meeting. Larry Galindo said that he had spoken with Patty Daniel of the FAA, who expressed her regret at being unable to attend tonight's meeting. She said she was looking forward to being here with her team for the January meeting.

7. NOISE OFFICE REPORT

The facilitator noted that Larry Galindo had two presentations: the first would be a recap of the joint tour of the FAA's Northern California TRACON (NCT) facility with the San Francisco Roundtable; and his second presentation would be a review of the meeting with helicopter operators in Hayward.

A. Forum/Roundtable Joint Tour

Mr. Galindo reported that on September 19, Forum members joined with San Francisco Community Roundtable members for a joint tour of the FAA's terminal radar control facility (TRACON) at Sacramento's Mather Airport. One of the important items requested by CLASS prior to the field trip was to endeavor to persuade, encourage and interact with the FAA to get them to support our noise program. Larry noted that these tours also provide an excellent opportunity for new members to understand the FAA operations and how important the role of the NCT is to our noise abatement program. The trip was made on a chartered bus that had a DVD media system for passengers, an onboard restroom and an excellent PA system, which was put to use. On the way to the TRACON, the passengers were able to view a 20-minute San Francisco Airport noise program video that presented their noise program goals, procedures and methods. Also shown was a history of the Oakland Airport which depicted the early days of aviation development at OAK. Harvey Hartmann gave an authoritative explanation of why the TRACON was moved from Oakland to Mather Airport and the important changes to air traffic control that have occurred since.

Galindo said the group arrived at NCT around 10:45 a.m. and was escorted to the main conference room after passing through security. Members of the NCT staff, including the current noise specialist, Thann McLeod, airspace procedures specialist Rick Cote and Patty Daniels, who is in charge of the Metroplex project for the FAA. Rick Cote gave an excellent presentation on the TRACON organization and operational areas of responsibility. At the group's request, live radar feeds were linked-in and staff explained what was happening in the control

room. One of the areas covered was Mr. Peterson's issue; that is, aircraft departing Runway 29 and making a right turn over Central Alameda. The issue is complicated with traffic from San Francisco having to be taken into consideration, as well as the destinations of the aircraft, the aircraft weight and the air speed. The group was shown several situations where it was necessary to turn departing aircraft to the right over central Alameda. Larry restated that The Port's noise abatement procedure asks that aircraft not be turned over central Alameda any lower than three thousand feet. He added that this procedure is included in a letter of agreement and is followed to a high degree by controllers, but there are exceptions. Galindo said that he would be in contact with Mr. Peterson and others to determine how to deal further with this issue.

Patty Daniel gave an impromptu presentation on the FAA Metroplex project and explained the important thing is that the environmental review document will be available for public comment around February or March of 2014, after which there will be workshops and public input before it is finalized. The group was allowed to tour the control facility, where the air traffic controllers actually handle San Jose, Oakland and San Francisco air traffic. The facility is partitioned into specially-designed rooms for, for example, OAK departures and arrivals separately, and the same thing for San Francisco and San Jose. Members of the group were allowed to put on headphones and sit next to the controllers and listen to live instructions to aircraft coming in and out of the Bay Area. The group debriefed in small groups over lunch and arrived back in Oakland just after 3:30 p.m. Larry felt that it was a very successful tour and thanked those who took the time to participate.

B. OAK/Hayward Meeting with Helicopter Operators

Mr. Galindo said the second part of his report has to do with helicopter noise abatement issues. He said this is a growing problem, a national problem; it's not just here at Oakland. The Bay Area has its own concerns that we've been hearing about from Berkeley and Oakland. Those issues, at our last meeting, had to do with major national news stories drawing an intense amount of noise to the area from extended coverage of these stories, such as the aftermath of the George Zimmerman verdict, Occupy Oakland, and the strikes that hit the Port. All of these things have generated helicopter activities that have generated a high degree of concern. He said the question is what can we do about it? The airport does not fly airplanes, nor does it control aircraft in flight. We report what is going on, and we specifically look for compliance with our noise abatement procedures, which are enumerated in the Quarterly Noise Reports. A similar situation currently exists in Southern California where there is an initiative to ask for FAA assistance to promulgate some type of controls for altitude and routes to alleviate helicopter noise. Gene Reindel will provide more details on this coming up.

Galindo said his instructions from the April meeting were to do an outreach meeting with the helicopter operators. This took place on September 12, with the assistance of the Hayward Executive Airport director and his staff. The meeting was held the Hayward Airport. The purpose of the meeting was to follow up on the community concerns that were heard at Forum meetings. Galindo said he presented a letter prepared by the City of Berkeley to the chief pilot for the helicopter operator based at Hayward that provides the majority of air operations for the news networks. There were two other helicopter operators, and a pilot from the East Bay Regional Parks District. The discussions went over the separate noise abatement procedures and hot spots for the Oakland area, including Hayward. The noise mitigation measures

that the Helicopter International Association publishes for helicopter pilots were also discussed. These procedures include maintaining proper altitudes, alternating hover points and using power and pitch controls to alleviate noise and, also, to fly with awareness for noise abatement. He said they reviewed the fact that OAK had received 641 helicopter noise complaints in 2012. The discussion with the representative of the News Helicopter Association served to amplify the voice of Berkeley and Oakland and other areas, about how intense and how annoying that noise is. The reply was that “they're in a competitive business, and a good shot for their network means money,” and the lack of good or effective coverage from the helicopters means they lose out. It is a cutthroat and competitive business, with operators jockeying for the right shot at the right time. It is even worse in S. California where there's virtually no control in the air from the FAA over helicopters. It has gotten to the point that communities have started to take action. Galindo asked Gene Reindel of HMMH to make his report.

Reindel introduced himself as employed by Harris, Harris, Miller & Hanson, noise consultant to the Port. He said he was going to brief the Forum on the Los Angeles Residential Helicopter Noise Relief Act of 2013. Rhea Gundry also introduced herself as being from HMMH. Ms. Gundry assisted in the research on the topic at hand. Reindel said that as a result of activism in Los Angeles there have been two bills introduced to rein in helicopter operations in L.A. H.R.456 - Los Angeles Residential Helicopter Noise Relief Act of 2013 was introduced in the U.S. House of Representatives by Rep. Adam Schiff. The Senate version of this bill is S. 208, which is sponsored by Diane Feinstein. There is also a joint resolution in the California State Legislature—SJR 7-- which urges Congress to enact and the president to sign the Los Angeles Residential Helicopter Noise Relief Act of 2013.

The coalition behind the legislative efforts is called the Los Angeles Area Helicopter Noise Coalition. The acronym they use is LAAHNC. Their mission statement says that they are an ad hoc group comprised of representatives from areas across Los Angeles County to recover and improve the quality of life throughout the county by reducing helicopter noise in their communities without compromising safety. They are also committed to partnering with local neighborhoods and working with appropriate government agencies, helicopter pilots and operators and other entities to enhance the environmental quality of the neighborhoods today and for future generations. On May 31, 2013 the FAA released a report on the Los Angeles Helicopter Noise Initiative. Basically, what the FAA report says is that the helicopters must be separated in altitude from other aircraft for safety reasons. The FAA plans to implement a stage 3 helicopter noise standard in the U.S., not just LA County. So it would benefit people in the Bay Area as well. The FAA also recommended a robust local process and is prepared to be engaged in such a process to pursue remedies that reduce helicopter noise, that are responsive to community quality of life and economics and consistent with the national airspace system safety and efficiency.

The interesting thing is that the Forum is already doing many of the things the FAA recommended that communities do. This is what Larry talked about earlier with the meeting with the helicopter operators in Hayward. Reindel said the Forum would see these similarities as he proceeded. The FAA report also showed -- for events that are anticipated to attract a significant number of news-gathering helicopters, the FAA recommends the media to pool information about freeway congestion, avoid flying during early morning or late evening hours, and remain as high as possible and limit hover times. The FAA also noted that Los Angeles is

the only one of nine major metropolitan areas with published visual flight rules for helicopter route charts. It was suggested that helicopter operations be restricted to operating mostly off-shore, but the FAA noted that keeping helicopters offshore is not a feasible option because they're unequipped for over-water operations. Also, voluntary noise abatement procedures have a high degree of compliance when operators can use them safely and efficiently. For example, designated helicopter routes are designed to be flown at altitudes below the arrival and departure routes for fixed-wing aircraft.

In L.A. the FAA can analyze altitudes on existing helicopter routes to determine whether they can be raised safely. This could be a bigger problem in the Bay Area with the numbers of GA and air carrier airports and no currently defined helicopter routes. Also, limiting hover times would be problematic because hover times appear to be site and event specific. Lastly, working with helicopter operators to improve awareness of best practices is effective. The FAA has seen that over and over again throughout different regions of the country, recommending that working with the helicopter operators, as Larry just did, to go over issues and concerns and develop solutions. The FAA is also promoting research. They have sponsored the Volpe Transportation Center, which is located in Cambridge, Massachusetts, to actually measure and model helicopter noise, to try to improve helicopter noise modeling techniques. They are also sponsoring the Airport Cooperative Research Program (ACRP), which is a research program headed up by the Transportation Research Board (TRB) to review, evaluate and document current helicopter noise models and to identify potential improvements to better capture the unique complexity of helicopter operations.

Reindel next recapped the results of a meeting in L.A. between the LAAHNC and the FAA to discuss (1) evaluating existing helicopter routes to identify feasible modifications to lessen impacts, (2) analyze whether helicopters could safely fly at higher altitudes, (3) develop and promote best practices for hovering, (4) conduct outreach to helicopter pilots, (5) explore a more comprehensive noise complaint system, and (6) continue collaboration with community representatives, helicopter operators and the FAA. Again, Gene pointed out these are many of the things that the Port of Oakland has been doing in working with Hayward as well and the helicopter pilots based there to reach out to them, educate them, and work for collaboration as well. He said that he obtained copies of the lengthy meeting notes, which covered 22 pages. Rhea Gundry reviewed the notes and prepared a synopsis for the Forum. First and foremost was a statement that the coalition would not work to eliminate helicopter operations. This was a principal concern of the helicopter operators who were initially reluctant to participate if they thought their business would be shut down. The operators were assured that the process was to be a collaborative one. Similar to the Forum, one of their key points was that operations would not be shifted from over one community to another. This was key to getting community support for the legislative initiatives, as was the need to establish timelines and milestones. However, when the coalition's community members realized how long the process could take they were not very happy. One of the initiatives the coalition wanted to pursue was an "integrated noise complaint management system" that would allow them to access noise complaint data from all Los Angeles County Airports including flight tracks and other information that could be correlated and analyzed independently. Lastly, they wanted to encourage law enforcement to fly neighborly, because they knew that whatever policies and procedures they came up with law enforcement would be exempted.

Michael McEneaney said he presumed that Los Angeles International Airport (LAX) had an advisory body similar to the Forum. Reindel replied that there is a LAX Community Noise

Roundtable and a similar organization for the Van Nuys Airport, but neither organization is directly involved in the Los Angeles Area Helicopter Noise Coalition (*Editor's Note: The Coalition's Board consists primarily of representatives of homeowners associations including two who also serve on the Van Nuys Airport Citizens Advisory Council and one from the LAX Community Noise Roundtable. There is only one city council representative on the Board*). McEneaney asked Reindel what he thought the best outcome of this would be since there would likely be pushback from the helicopter operators. Gene replied that he thought the best outcome would be that the coalition and the communities could find a way to work things out with the operators and that there would be no need for the proposed legislation. Harvey Hartmann offered that if the FAA came up with rules in L.A. they would soon become applicable nationwide. Harvey said that since L.A. already has published VFR helicopter routes the FAA may recommend specific operating altitudes to go along with them. Keep in mind that these operations take place beneath the controlled air space and FAA controllers do not get involved. The helicopters maintain communication between each other. An example of this in our area was the Berkeley tree sitters, where the news helicopters were flying below controlled air space and maintained their own separation from each other.

Hartmann added that he had served as a controller in L.A. and that it was "horrible" because of the number of helicopters that operate down there. There were corporate helicopter fleets, police, fire, and Highway Patrol helicopters, but the biggest helicopter problem was the *paparazzi* shadowing celebrities and other aircraft shooting "stock footage" for the TV and movie industries. He said what he thought was going to happen was that the FAA would come up with some recommendations, but not codify them in the Federal Aviation Regulations. Ms. Gundry added that any restrictions on news operations of paparazzi could be construed as a violation of their First Amendment rights. Larry Galindo thanked Gene and Rhea their presentation. He said that the Port staff would continue to monitor this very closely because their job is to make sure no one out there is doing anything more effective in any area than they are. If something is coming that's going to be effective, they want to be at the forefront of any initiative or any legislation that's going to change the landscape of noise control. James Nelson asked if it was possible to get a copy of the proposed legislation. McClintock replied that he would send links out to the members. Michael McEneaney said that the Forum needs to continue to reach out to San Jose and Sacramento, especially in light of the Metroplex project. McEneaney also suggested that Forum representatives attend Roundtable meetings and vice versa. He said this was particularly important because SFO has already said they want 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 excessive concentrations. Larry Galindo replied that at the Forum's direction he had visited San Jose and met with its noise program and environmental office manager and asked San Jose to join with the OAK and SFO noise offices to review the FAA's Metroplex report for potential conflicts and issues. Harvey Hartmann noted that he regularly attended SFO Roundtable meetings, and that Galindo and McClintock were often in attendance as well.

Michael McEneaney moved "to continue outreach to our brother and sister airports in the Northern California Metroplex and to establish formal communication links with them and to possibly have a formalized procedure for alternating representatives. (*Editor's Note: At the moment of the motion a quorum was present with the previous arrival of two more members*).

Motion seconded by Jim Prola. Mr. Bogue expressed reticence at the Forum imposing itself on the Roundtable. The question was called and the motion passed.

Harold Perez asked if the airport was still shooting birds as he had seen on TV. Matt Davis replied that the Port maintains an active wildlife management program, and that includes multiple measures to manage wildlife at the airport as necessary to maintain a safe operation. Birds on and in the vicinity of the airport are hazards to aircraft and the Port has a contract with the U.S. Department of Agriculture that allows for the harassment of wildlife and removal of habitat. They have the authority to take birds within strict limits.

8. NOISE NEWS UPDATE

Vince Mestre said that the Forum had not seen noise news since April, so there's actually been quite a bit that has happened over the last six months. First of all, the noise restrictions for business jets under 75 thousand pounds has finally been implemented and will be effective December 31, 2015. There's a lot of pressure from industry groups to extend or provide an exemption for certain aircraft. The FAA rejected this. There are 413 corporate jets that will have to be grounded or hush kitted, because these aircraft are generally 25 to 50 years old. It is not likely that they will be hush kitted, as that probably won't be economical. The background on this is that in 1990 Congress passed the Airport Noise and Capacity Act that set a retirement date for the year 2000 for all aircraft that didn't meet FAR Part 36 stage 3 noise limits, except for those under 75 thousand pounds. It's taken a long time for those aircraft to be regulated out, but that will now occur.

A very strange court ruling has occurred as a result of litigation regarding helicopter routes on the East Coast, primarily Long Island. In the appellate court's ruling, they shot down the FAA's single criteria of defining the significance of the impact of noise, which is about 65 DNL (CNEL 65). The court said that noise complaint can be used as a measure of the significance of the impact of noise. Right now no one really knows what this means or how the FAA will implement this in their environmental guidelines or if they even will include it in the environmental guidelines, but he referenced an article in which one attorney familiar with aviation noise law, said you can pretty much count on this appellate court ruling appearing in pretty much any litigation on airport noise now and in the future. How many noise complaints does it take to be a significant impact? None of that was addressed in this, but it could represent a very significant change in how noise impact is treated. Red Wetherill said that the FAA's 65 DNL noise standard is based on the Schultz Curve, which is based on complaints. Mestre concurred and added that he would provide Red with some articles that he co-authored on the subject.

Mestre discussed two recently released independent medical studies linking aircraft noise with heart disease and stroke. We have discussed this subject before and these two studies appear to be a bit more definitive but still leave a number of outstanding questions. Both address primarily the elderly. The US study used only Medicare records to study the occurrence of heart disease and stroke near airports. Both identified odds ratio increases of stroke and heart disease at higher noise levels. Both studies are quite interesting. For Mestre, there were a lot of questions he felt needed to be answered. First and foremost is how they separated the effects of air pollution from the effects of noise, because we know that heart disease and stroke

are certainly correlated with certain particulate matters, and how they isolated these two variables. He said this was an ongoing study and he would keep the Forum updated.

The Airport Cooperative Research Program has funded six large noise studies. Last year there were only two topics on noise and annoyance associated with helicopters. Work on noise level reduction test efforts for residential insulation programs and electrified aircraft taxi operations was also funded. FedEx recently retired its last Boeing 727 freighter, which have been gone from Oakland for a while. Now they're gone, gone, gone. UPS is adding winglets to its B-767 aircraft to save fuel and cut noise. The subject article doesn't describe how much noise reduction they get, but they are expecting to get a four percent fuel savings on any flight as a result of the increased aircraft performance as a result of the winglet. They talk about lowering noise emissions, but they don't say how much.

He next showed a series of slides on categorical exemptions from the National Environmental Policy Act for the NextGen studies. These slides would have made a lot more sense had we had the FAA presentation earlier tonight, because that presentation was going to address the airspace modernization program and his discussion was going to be about exemptions from doing environmental review for these modernization plans, provided that any noise change would be below a certain threshold. He concluded that because of the way the NextGen advisory committee interpreted a section of the guidance document for FAA implementation was legally indefensible. More on this later. In response to the helicopter legislation work Gene talked about earlier, the coalition in L.A. has said "Sorry, but the voluntary program is not going to work. We don't like the idea of a voluntary program. We want legislation to regulate [helicopter operations]." The FAA has come back and said "No, we think voluntary will work better." Then locals said, "We will establish tracks they will have to follow." The FAA then said, "Wait a minute. Only we have the authority to regulate helicopter flight paths." So, on the one hand, the FAA has said, "You don't need to do it, but if anybody does it, it's us." As a result, things are in a state of flux. Helicopter operations in L.A. are a big problem. As an example, the closure of I-405 for the removal of a large bridge resulted in four days of no traffic noise from the 405, but they nonetheless had four days of noise from continuous helicopter operations.

He said he had some good news on the helicopter front. Eurocopter, a helicopter manufacturer, has looked at what's being done with fixed-wing aircraft using GPS-based approaches and said, "We can do that with helicopters and reduce helicopter approach noise." Helicopters are different than fixed-wing aircraft, in that they make more noise on approach than on arrival, because it turns out it is rather difficult to land gently with the helicopter. They use a lot of energy to keep from landing not gently. So, there is going to be some technical research done on how better to do helicopter approaches that are less impactful on the community. This would certainly be great at hospitals near residential areas that have a lot of helicopter operations. Airbus has flown its new A350. This is the European competitor to the Boeing 787. Both are very new technology aircraft with quieter engines and higher performance wings and climb rates, which are generally quieter and more fuel efficient. At the Paris Air Show an airplane with an electrified front wheel was demonstrated taxiing around the airport. This would be a great advance in both fuel savings and taxi noise. They're also dynamic because, during landing, they recover energy, much as a Prius or hybrid car recovers energy in the braking system to store up electricity.

Mestre said he could have brought a hundred articles on drones because we've gone kind of off the cliff on this. Florida now has a law that prevents a police department from purchasing drones to replace its helicopter. This was done primarily for privacy reasons, as are most drone restrictions. The town of Deer Trail, Colorado issued drone hunting licenses for \$25.00 and a bounty of \$100 for every drone brought down. The FAA, however, didn't think it was a joke because the legislation actually was passed by the town. The FAA sent a letter to the town that said shooting an unmanned aircraft could result in criminal or civil liability, just as would firing at a manned airplane. Drones are not getting more popular, even though they have been promoted for pizza and small package delivery purposes.

On air quality and greenhouse gas emissions, the International Civil Aviation Organization has finally put together the framework for control of greenhouse gases by implementing a market-based system. The final version of the rule will be voted on at their 2016 assembly meeting to be implemented in the year 2020. This particular ICAO rule was supported by the airlines because they did not want to have a different set of rules for every different country across the world. Mestre said that LAX has been recently the locale for a number of air pollution studies. They looked at a number of air pollutants -- carbon monoxide, nitrogen oxide and sulfur dioxide and fine particulate matter. They did not exceed any federal standards close to the airport, but California has stricter standards. Particulate matter is a current issue. Regulations currently address particulate matter in a number of ways. The fine particulate matter, ppm 2.5, are particles less than 2.5 micrometers as a standard. They didn't find anything that was particularly troubling. However, ultrafine particles are now under the microscope. These particles are less than point 0.1 micrometers. They did find elevated levels of ultrafine particulates east of the airport. We should follow the EPA's policy on this as to whether or not they will now start regulating ultrafines in addition to 2.5. Ultrafines are more of an issue for older diesel trucks, especially areas close to freeways.

With respect to the leaded aviation gas that piston-engine aircraft use, the EPA has been doing a lot of studies on that. One of the more significant studies involved 17 GA airports where lead levels near the airport were examined. Of the 17 airports only two exceeded the EPA lead standard. The two that exceeded the standard were the San Carlos and Palomar Airports. Neither of these two airports are associated with large amounts of business aviation activity, so there is some question as to whether weather (i.e. still air band stable atmosphere) may have been a factor. He said he could not get more information at this time because of the government shutdown. With respect to leaded fuel, Mestre said that the FAA has heavily funded their PARTNER program, through the University Center of Excellence program, to study alternative fuels that can replace leaded aviation gas. The FAA has also gone to the refineries and said, "We want to have a lead-free gas to replace aviation fuel by the year 2018." He said he wanted to mention this because that appears to be the magic number that the FAA and the EPA are looking at for getting leaded fuel out of general aviation aircraft. As for the ongoing California litigation, he said that as he reported earlier, environmental groups want to prohibit the sale of leaded av-gas in the State of California. Apparently that litigation has been settled, but Vince had no details on the settlement as it was so recent. Alaska Airlines ranked the most fuel efficient U.S. airline. In this ranking, Alaska is the highest. At the bottom is Allegiant, American, Air Tran and Delta. This is primarily because they still have some old dogs in their fleets. As for bio-fuel, there are numerous articles on the subject. The Department of Energy is funding four refineries for military jet and ship biofuel. Currently biofuel for commercial purposes is not economical, but the difference is getting

smaller. The military, in particular, is interested in biofuels from a strategic point of view. They're willing to pay a premium for fuel in order to have fuel available. So they're at the forefront of biofuel development.

The FAA has awarded 17 million dollars in grants to improve air quality. This is primarily for airports to reduce their energy and emissions. Oakland is part of a program to provide pre-conditioned air along the jetway and electricity to the aircraft parked at the gates so they don't have to operate their auxiliary power units but can get cool air and electricity from the ground. The FAA, through the AIP grant program, authorized \$6.4 million in sustainability projects. These are primarily projects that reduce energy consumption and recycling. Susan Fizzell said once the FAA grant improvements have been completed, 100 percent of the gates at OAK will have pre-cooled air. All of the OAK gates currently have 400 hertz power that replaces the auxiliary power units in the aircraft that they usually run to power air conditioning and lights and other aircraft systems.

Mestre next discussed the development of electric-powered aircraft including conceptualizations for future passenger aircraft. He concluded his presentation with pictures of the solar-powered aircraft that took off from Moffett Field and flew cross country. Red Wetherhill asked Vince about any statutory requirements to maintain maintenance and other records for aircraft older than 7 years, especially for even older aircraft. Mestre replied that he was surprised by the question because Boeing, for example, maintains a complete history on all of its airplanes ever built. Walt Jacobs asked why airlines are cramming seats together in economy and making things even more uncomfortable for passengers. Mestre replied that it was bad and would get worse with at least one airline considering "stand-up" seats. Wafaa Aborashed asked Vince for a copy of his PowerPoint presentation. Director Ale Flint suggested that Vince e-mail it to Wafaa. Wafaa asked about lead around the L.A airports. Vince said there were peaks in lead in the environment around GA airports, but not in any concentrations that exceeded EPA standards. Ms. Aborashed said she did not understand why commercial airports would have lower lead emissions than general aviation airports. Mestre replied that commercial aircraft don't use lead in their fuel. Only piston-driven propeller general aviation aircraft have lead in their fuel. Wafaa asked if OAK's North Field had been tested for lead emissions. Director Ale Flint said that staff would have to research the question and get back to her.

9. STATUS REPORTS—NORTH AND SOUTH FIELD WORKING GROUPS

Matt Davis said he had two presentations, as follow:

A. Runway Safety Area Project Update

He said that Runway Safety Areas (RSAs) are areas around a runway designed to protect aircraft that overshoot, land short, or run off the edge of the runway. An RSA is generally an unpaved area specially prepared to support the weight of an aircraft that might stray from the runway. Over the last year, and continuing through next year, the Port will have done about \$100 million in airport infrastructure improvements, especially around the runways to meet new federal safety standards. The work has to be completed by the end of 2014 to meet FAA deadlines. Davis said the biggest impact of the RSA project from a community noise perspective has been the need for extended runway closures. For example, the main South Field run-

way is usually closed once a week from 1:30 a.m. to 6:00 a.m. for maintenance. This is the only time that operations do not normally occur. However, under the RSA project, it has been necessary to close the runway earlier and more often because of the amount of work that needed to be done. When this happens the Port issues community advisories and is appreciative of the community's understanding. The runway will be closing this weekend at 11:00 p.m. on Sunday until 6:00 a.m. Monday. This should be the last early closure for a while. The Port will send out another community advisory about this.

Davis said that as a result in the marginal shifting of the earth's magnetic pole, the runway end numbers will need to be changed. The runway numbers are based upon their magnetic alignment according to a compass heading. For example, Runway 29 was generally aligned on a 290 degree magnetic heading. Over time the runway's magnetic heading changes to the point that it becomes more closely aligned to a 300 degree heading. The current runway heading is 297 degrees magnetic, and since this is closer to a 300 degree heading the runway designation needs to be changed from 29 to 30. Here on out Runway 29 will become Runway 30. The opposite end of the runway will also change, going from Runway 11 to Runway 12. These same changes will also be applied to the North Field runway ends as appropriate. These changes will involve a lot of work to repaint the runway numbers and change the airfield signage. After this work is done there should not be that much to be done that would require closure of the main runway until February 2014. Starting in the spring of 2014 there will be additional work to be done on the runways in order to complete the job by the end of 2014.

Curt Peterson asked about the number of flights that would be affected by the runway closures and what effect would this have on flight paths. Davis replied that during a typical closure there would be one departure for Guadalajara at 2:00 a.m. and a UPS departure around 4:00 a.m. Both flights depart on Runway 27L. Walt Jacobs asked about their takeoff tracks. Davis replied that the 27L departures typically go straight out. Jacobs asked if they made a hard left over the community. Matt said that it was really not possible for large jets to snap a quick left turn. Peterson asked if consideration was given to the fact that in good weather people like to sleep with their windows open any consideration was given to this in scheduling the closures. Davis said that considerable thought had gone into the scheduling of the closures, but that the magnitude of the work and for safety considerations a certain degree of flexibility had to be built in. Mr. Peterson added that with the amount of runway and other airfield work taking place, and the fact that this often required closure of the main runway and the diversion of large aircraft to the North Field, it seems that the South Field runway may be approaching capacity. In which case, he said, has anyone considered the fact that SFO has multiple air carrier runways. Red Wetherhill said "don't go there!" Mr. Davis answered that the South Field runway has sufficient capacity to handle existing and projected flight activity.

Jim Prola gave McClintock an article on an open forum on clean air and aircraft carbon pollution by Linda Adams. Ms. Adams was Gov. Schwarzenegger's lead negotiator for the passage of Proposition 32, the climate change and clean energy law. McClintock said he would distribute it to the Forum.

B. Technical Working Groups—NFG/SFG

This item was tabled due to time constraints.

10. NEXT MEETING – January 15, 2014

11. NEW BUSINESS/ADJOURNMENT

There being no new business the meeting was adjourned at 8.55 p.m.

End