MEETING MINUTES OAKLAND AIRPORT-COMMUNITY NOISE MANAGEMENT FORUM

July 15, 2015

INDEX TO THE PROCEEDINGS

[note that some agenda items were taken out of sequence]

	PAG	ŀΕ
1.	INTRODUCTIONS	. 2
2.	ANNOUNCEMENTS	. 2
_,	A. Port Aviation Director—LAWA.	
	B. Acting Aviation Director—Kristi McKenney	
	C. Quarterly Noise Report 1Q 2015 (Receive and File)	
3.	CORRESPONDENCE	. 3
	A. Alameda Letter—Mayor Trish Spencer	
	B. Port Response—Executive Director	
4.	APPROVAL OF MINUTES (April 15, 2015)	. 3
5.	PUBLIC COMMENT	. 4
6.	ELECTION OF OFFICERS—CO-CHAIRS	. 5
7.	NOISE OFFICE REPORT	12
	A. June 18 Helicopter Operators Meeting	12
	B. North Field Tour & Corporate Jet Operators Noise Meeting	
8.	NF/SF GROUPS STATUS REPORTS	
	A. Runway Safety Area Project Update	13
	B. Technical Working Groups – NFG/SFG	13
9.	NOISE NEWS UPDATE	4
10.	CITY OF ALAMEDA	. 5
	A. Permanent Noise Monitor Request	. 5
	B. Upcoming Events—Fleet Week/Superbowl	
	C. East End Alameda Noise Concerns	
11.	OPTIMIZATION OF AIRSPACE & PROCEDURES METROPLEX	10
12.	CONFIRM NEXT SCHEDULED MEETING DATE (OCTOBER 21, 2015)	16
13	NEW RUSINESS/ADJOURNMENT	16

1. INTRODUCTIONS

The July 15, 2015 meeting of the Oakland Airport-Community Noise Management Forum was called to order at 6:31 p.m. by the Forum's Facilitator, Michael McClintock. Mr. McClintock welcomed the Forum members and guests. He asked the Forum members and advisors to introduce themselves for the benefit of the audience:

Forum Members/Alternates Present:

Benny Lee, Co-Chair, Elected Representative, City of San Leandro

Walt Jacobs, Co-Chair, Citizen Representative, Alameda

Tony Daysog, Councilmember, City of Alameda

James Nelson, Citizen Representative, Berkeley

Greg Jones, Elected Representative, City of Hayward

Edward Bogue, Citizen Representative, Hayward

Tom Wagner, Citizen Representative, San Leandro

Cindy Horvath, Alternate, County of Alameda

Ernest DelliGatti, Citizen Representative, County of Alameda

Kristi McKenney, Acting Director of Aviation

Staff Members/Advisors/Guests:

Matt Davis, Airside Operations Manager, Port of Oakland

Larry Galindo, Noise Abatement/Environmental Affairs Supervisor

Jesse Richardson, Jr., Noise and Environmental Affairs

Darron Evans, Airport Operations Manager

Vince Mestre, Acoustical Consultant, Landrum & Brown

Gene Reindel, Harris Miller Miller and Hansen, Inc.

Rhea Gundry, Harris Miller Miller and Hansen, Inc.

Ford Frazier, Southwest Airlines

Harvey Hartmann, Consultant to the Port

Don Kirby, FAA Air Traffic Manager, Northern California TRACON

Kathy Ornelas, City of San Leandro

David Decoteau, Operations Manager, Hayward Executive Airport

Sean Moran, Noise Analyst, Hayward Executive Airport

Bert Ganoung, Aircraft Noise Abatement Manager, San Francisco International Airport

Valerie E. Jensen Harris, CSR, Stenographer

Mike McClintock, Forum Facilitator

2. ANNOUNCEMENTS

A. Port Aviation Director--LAWA

Facilitator McClintock announced that Deborah Ale-Flint has left the Port of Oakland and is now serving as the executive director of the Los Angeles World Airports -- LAWA -- which

includes Los Angeles International Airport (LAX), Van Nuys Airport (VNY), Ontario International Airport (ONT) and Palmdale Airport (PMD). He said that he had discussed an award for her with the Co-Chairs in recognition for what she has done for the Forum over the years. Co-Chair Lee moved approval for an appropriate award to be commissioned by the facilitator. The motion was seconded and approved.

B. Acting Aviation Director—Kristi McKenney

The facilitator asked Kristi McKenney if she wished to say a few words, as the acting aviation director. Ms. McKenney said she was a familiar face to most of the Forum members since she has worked in a variety of capacities while with the Port, including a lot of community and environmental work related to aircraft noise as well as initiating and chairing the stakeholders' group. Kristi said she was pleased to be asked to step into this new role and that she was very confident her team at the Port will continue to work together with the Forum to be there to listen and to address the issues that are of most concern to the Forum communities. She said this was an important and critical relationship and she is looking forward to continuing to work with the Forum.

C. Acceptance of 1st Qtr 2015 Noise Report (Receive and File)

The facilitator said that the last item under announcements was the first quarter 2015 noise report. Typically, this is received and filed unless there are questions or discussion. Motion to receive and file made by Co-Chair Jacobs. Seconded by Co-Chair Lee. Motion approved.

3. CORRESPONDENCE

The facilitator announced that two letters had been received through the Port. The first letter was from Alameda Mayor Trish Spencer and the second letter was in response to Mayor Spencer's letter from the Port's Executive Director, Chris Lytle. Forum members received copies of the two letters in their agenda packets.

A. Alameda Letter—Mayor Trish Spencer

Mayor Spencer had three requests for items to be placed on the Forum's agenda for tonight's meeting. The facilitator noted that they were included on the agenda under item number 10 and that they would each be discussed individually. The Mayor requested the Forum provide information on (1) providing another permanent noise monitor in Alameda, (2) two upcoming events-- Fleet Week and the Super Bowl, and (3) the concerns of citizens on the east end of Alameda. The facilitator said these items would be responded to later in the agenda.

B. Port Response—Executive Director

Executive Director Lytle's response to Mayor Spencer addressed her three issues. These response will be discussed under agenda item 10.

4. APPROVAL OF MINUTES (APRIL 15, 2015)

Facilitator McClintock noted that this item was for the approval of the draft minutes of the April 2015 meeting. The facilitator noted that Forum members had received a copy of the draft minutes of the April meeting with their agenda packages. He asked if there were any comments, questions, or corrections. Co-Chair Jacobs said he did not see a reference to the discussion concerning Southwest Airlines using North Field for an early morning takeoff. He said it should have been noted in the minutes. Mr. Jacobs said that this was probably a result of maintenance not being completed on time on the main runway, and that this could establish a precedent for such use in the future, which was not acceptable. It was also noted that James Nelson's last name was not capitalized in the draft minutes, and a question was raised with respect to the spelling of the Linden intersection. McClintock said he would review the transcript and make the necessary changes. He asked for a motion for approval of the draft minutes with the above noted corrections. Motion for approval moved and seconded. Motion carried.

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 and air quality at Oakland International Airport. Mr. Grant Weseman from Santa Cruz said he was a member of Save Our Skies Santa Cruz, which is an organization that was formed to "combat the actions of the FAA in establishing new aircraft arrival routes over Santa Cruz County, which has caused innumerable problems and irritation, and the people are, basically, going mad, especially in the summit area where the noise is created." He said his organization has "become aware that planes from Oakland (which is) 70 miles from Santa Cruz...are still trying to get up to cruising altitude, and as they do this (at 20,000 feet) (he) can hear them at (his) house five miles north of Santa Cruz City." He said these flights are "creating an additional layer of irritation because of the fact that they're underpowered going up to cruising altitude...and this is a significant noise effect in an area that has very low ambient noise levels."

He said the noise was very prolonged and incessant—one flight after another from Oakland and San Francisco. Because of this, he said, the Oakland Airport would start receiving noise complaints just as SFO is currently receiving in "great volume." He said the situation had become intolerable, and because of this his group was able to get a letter from the SFO Roundtable and the airport director to the FAA "expressing their sympathy for our pain we're suffering and their suggestions that the flight path needs to be reworked." Mr. Weseman offered that the Forum might "consider suggesting to the FAA that all of (the flight tracks) go out to sea, as that would take care of the problem and they wouldn't be doing this noise-producing maneuver at such a great distance from the origination point and disturbing a very peaceful and serene community otherwise." Facilitator McClintock inquired as to what Mr. Weseman was asking by way of action by the Forum. Weseman said he wanted to acquaint the Forum with "the fact that activities coming from the Oakland Airport are creating a noise problem in another area," which is two hours driving time from his community. He said he hoped that the Forum would consider this along with its other noise abatement activities.

Kurt Peterson, asked that Item 10 on the agenda be moved up as there were several Alameda residents who wished to speak to this matter and Councilmember Daysog had indicated a need to excuse himself early due to another commitment. He noted also that recently there has been a number of extremely low-flying flights over his neighborhood during the day, and that this was not acceptable. He said there were other low overflights, including one that was "right off"

Encinal High school, thus another reason why they would like to see a noise monitor at this site. The facilitator agreed to Mr. Peterson's request. Mr. Anthony Garza of Alameda said he and others were interested in the issue of noise over Alameda's east end. He and others in east end neighborhood became aware of the increase in low-flying craft over their neighborhoods about 3 months ago. They began asking themselves "Why is this plane here?" There are "Cessna, turbo props, helicopters, even large jets, over (our neighborhoods) all day, every day, in both directions." He said he has been working with Larry Galindo and Jesse Richardson in response to their complaints. He and his neighbors want to know "why is this happening, and when is it going back to normal?" Garza said "if we're in a new flight pattern, then we've got a very serious issue on our hands for the east end."

Red Wetherill, president of CLASS, restated several ongoing concerns of his group and reaffirmed the issue of low overflight over the east end neighborhoods. He noted that four members of the CLASS board of directors are present, plus one emeritus member, Len Peters. Dan Morris, representing Alameda, said, like some of the others, that he has very serious concerns about increased noise and air traffic over Alameda for the past few months, and, like the others, he has been working with Larry and Jesse to determine why the community has noticed a change in flight patterns and noise over the past few months. He said the Forum would be seeing data presented by the airport that will suggest these patterns have always been there, but he wanted to offer one piece of polling information to the Forum, which indicates that 70 percent of people have noticed an increase in traffic over Alameda over the past several months and 55 percent are seriously bothered by this. He said, "That's qualitative data we would like to bring forth because we cannot access what the airport does." He said he has had to become an expert on Airport noise abatement procedures because this has become such an issue in Alameda. His conclusion is that "these procedures are not being followed." He said he wanted to know why, what can be done and "how we can get things back to the level of sanity we once had in Alameda."

6. ELECTION OF OFFICERS

The facilitator announced that the floor was open for nominations for both the Forum elected Co-Chair and Citizen Co-Chair. He said that he had been requested to place the names of Benny Lee and Walt Jacobs in nomination for re-election to their respective Co-Chair offices. He asked for seconds to the nominations. Councilmember Daysog seconded the motion. The facilitator said that the process requires that we also ask for any additional nominations. McClintock asked if there were any additional nominations for either of these positions? There being no additional nominations, Benny Lee and Walt Jacobs were reelected by acclamation.

10. CITY OF ALAMEDA (this item taken out of order by request)

The facilitator noted that this agenda item deals with the three issues raised by the Mayor of the City of Alameda: the permanent noise monitoring request; the upcoming events of Fleet Week and Super Bowl; and the east Alameda noise concerns. McClintock asked Larry Galindo if he could take the east end Alameda noise concerns first.

A. East End Alameda Noise Concerns

Mr. Galindo thanked the representatives from east Alameda. He said that he had met with two of the individuals who had originally complained to his office on April 29. Their complaint had to do with questions about changes to airport flight patterns, massive increases in flights, and new flights never seen before. He said these concerns really caught his attention, but went on to say that the airport has been undertaking an enormous effort to rebuild and improve its runway safety areas (RSA) as mandated by the U.S. Congress and FAA. He said these complaints were in direct relationship to the RSA construction activities, and that the runway safety area project had caused some changes to traffic patterns. For example, airline departures have been diverted to the North Field at times. Taxiway closures have also forced corporate jets to depart from the North Field. He said the North Field traffic patterns were changed due to the closure of runways during RSA construction. The closure of Runway 28L necessitated the use of Runway 28R, which caused some change to the departure flights, particularly over east Alameda. However, Runway 28L left was re-opened on June 10th, just a few days ago, and 28R is now closed for the construction of its safety areas. So all of these changes to the airfield operating configuration were definitely causing a change in the pattern of flights leaving North Field.

Mr. Galindo said he and his staff also looked at the question of increased air traffic over Alameda's east end. He said they looked at three years' worth of data for airline departures during April from 2013-2015. Overall the numbers were fairly consistent, but were up by 4% in April 2015. More relevant to the issue were the Runways 28L/R departures. Galindo said there was a 23% increase in April 2015 departures over April 2013 and 2014. The reasons for this increase had to do with the closure of Taxiway B, which resulted in both air carrier and corporate jet departures to have to use North Field. There was an increase of 9 percent in general aviation activity overall. This is not indicative of a significant issue with increases. He said he went out to the area of Washington and High Streets, which is near the epicenter of the original complaint, to observe the early morning aircraft activity. What he observed were a number of small cargo flights that leave North Field at 6:00 a.m. on instrument flight departure from the airport. In April 2015 there were 240 such departures compared to 221 in 2013 and 222 in 2014, so there was not a big "bump" in those numbers (about 1 flight/day).

Galindo said his office reviewed a week's worth of flight track data so they could see the pattern of the tracks better. He showed graphical depictions of the flight tracks with respect to the runways and showed that, due to the RSA construction, these tracks did shift depending on what runway was closed for construction. He described the methodology used to analyze the effects on operations and overflights when one or the other of the two runways were closed. The data he collected showed definite shifts in the departure tracks during specific runway closures. He concluded that this was a short term issue related to the RSA project and that things should return to normal once the RSA project was completed in December. He cautioned that in the future, when both runways return to full operational capacity, there will not still be a significant amount of traffic over the east Alameda area. Mr. Galindo continued on with more graphical depictions of flight tracks for March of 2013 before the RSA project began. He compared this with flight tracks for March 2015 with the RSA project in full swing. He said there was some increase in traffic for March 2015, but not significantly so. However, when he looked at the traffic on the 315 IFR departure heading it showed increased activity, predominantly from jet aircraft diverted to North Field for departure because Runway 30 was closed for maintenance or construction. He said this would represent a significant increase in traffic over east Alameda. He cautioned that RSA construction is not yet complete and that there is still more work to be

done in an effort to resolve this issue. He said his office will continue to work with the community.

Co-Chair Jacobs ask if the IFR takeoffs on the North Field all continue straight out. Galindo replied that they actually come off of the runway and make a right turn to 315 degrees. From that point, it's straight out, but not initially. Jacobs asked if the turns were visual? Galindo replied they turn when they intersect the 315 degree radial off the OAK VOR, i.e., they start the turn before the golf course – while still over airport property. Co-Chair Lee noted that what was missing from the discussion of flight activity was the temporal component. He said it would be helpful to know whether the activity was before dawn, dawn, early morning, etc. He requested that future data be broken down into maybe 8 different periods. Larry replied that the daytime vs. nighttime factors are very important for analyzing the noise impact. However, he said, the purpose of this analysis was only to determine what the traffic levels were, but the greatest impact from these flights is in the morning from 6 a.m. to 11 a.m. That's when most of the traffic occurs. Then they start back up at around 10:00 to 11:00 p.m.

Councilmember Daysog asked with respect to quantifying an increase in the number of flights, if there was a definition by which you could determine what would be considered a significant increase. Larry Galindo replied that it would be a combination of the total number of aircraft that have been added to the data set. The other part would be the time of the operations. Daysog said what he was striving for was a "benchmark" by significant could be defined quantitatively, recognizing that each situation might be different from another. But for record keeping there should be a threshold by significant can be clearly understood. With this, he noted, it would be possible for an individual to visit a website and determine whether an increase was significant or not. Galindo answered that in his experience in working in noise programs at Santa Barbara, San Jose and here at Oakland, you have to make that call on what you feel is a change numerically or in noise impact that we feel is beyond just a concern that we investigate, report out and explain. So those numbers have to mean something that is in the level of annoyance, in the level of the time of occurrence and in the number that are happening where you have a significant problem or issue. He said in this particular case, he found that just from the air traffic perspective he didn't see that was an issue, but he said he is concerned now that the alteration of the departure tracks has added more departures directly over this neighborhood. To him, this rises to a level that it may qualify for the significant level because it's very annoying. Hence, he said, more work is needed to address this and to see if there is anything that can be done.

Tony Daysog added that he raised the question of "significance" because he works for a consulting company that has the regional air quality board as a client. This agency has certain rules having cost impacts and routinely measures these cost impacts against other factors, e.g. profits. So when a proposed rule is being contemplated its potential consequences have to be measured against these factors. He said he thinks that by being able to define whether an activity may exceed a certain level of significance the Port and the public would be better served. Larry said he would try to find an answer to Tony's questions. Ernie DelliGatti asked if Galindo's analyses were exclusive to Oakland, or if they included SFO or San Jose. He said he was asking because he concurred with other people's assessment that something has happened to flight tracks. San Lorenzo, he said, has become the crossroads for aircraft overflight including some from San Jose Airport and he wanted to make sure any analyses were specific to Oakland departures. Benny Lee said that significance would be very difficult to determine when you are looking at things from a daily or weekly perspective. You need to drill down to a specific time period

where you can really determine significance, because if the activity level has increased by a "huge factor" it would definitely be noted. Similarly, he said, it would be good to see some analysis based on a range of altitudes. Increased activity at lower altitudes would be more significant than increased activity at higher altitudes. Galindo said he would look into the question. Tony Daysog asked if the Forum meetings were videotaped. McClintock said no, but a transcript is prepared. Tony asked for a copy of the transcript for this meeting. McClintock said he would get one to him. Walt Jacobs expressed his concern that the modified takeoff patterns and flight tracks created due to the runway safety area construction would not revert to their previous (pre-RSA construction) configurations after the RSA project was completed. He said he has a problem with shifting runways and taxiways, and is concerned that a whole new set of problems is being created. He asked Larry Galindo who controls the altitude of the aircraft after they have taken off. Matt Davis replied it was typically the FAA, but there are airspace and aircraft performance factors that influence this as well.

Dan Morris thanked Larry and his staff for their research and analysis. He said that he did not see any discussion of VFR departures that "can be swinging around when you take a right turn and hitting the east end..." He commented on increased activity on Runway 33 that was not discussed. His next comment was that he was holding "Oakland Metropolitan (sic) International Airport Noise Abatement Procedures." He made reference to "something that says, for Runways 20L (sic) and 20R (sic) aircraft category A, B and C departure only. Instructions are: Make right crosswind turn over San Leandro bay until reaching I-880, continue per ATC instructions." He said he did not know what those were, but what he did know was that he's "had to do research on the various airlines that are flying over Alameda with regularity recently... [and that he was calling] out Surf Air that [for] flying so damn low and is so easy to recognize." He said he found that Surf Air flies "Class A" aircraft and that they fly eight times a day over the east end of Alameda at an altitude of at least (sic) 1,500 feet. He said he discovered that they will be doubling their number of departures out of North Field -- and they're flying straight over the east end of Alameda. He suggested that Larry Galindo determine if this was a "violation of the rule or not." He commented that construction would continue through December and that operational normalcy should return in January. However, this was not a solution because Alameda's east end will still be overflown on a regular basis. He said we need to forget about the statistical data and ask ourselves if we believe that "30-plus planes flying directly over the east end of Alameda at altitudes 1500 feet or less is the precedent we want to establish from this point forward?"

The facilitator asked Mr. Galindo if he had anything more to add on this subject. Galindo replied that he said he hoped he addressed the concerns that came from the complaint and he was taking under advisement the comments of the Forum members and residents. He said he thought it would be most productive if we would return to the subject at the next meeting and bring forth some different types of data as have been suggested. Lastly, he added, in 2010, when I was still new as the noise supervisor for the airport, I was concerned about the 315 departures because, until 5:59 in the morning, they make a right turn and fly the Salad IFR departure. In other words, you take them out to I-880 and do as Mr. Morris said. At 6:00 a.m., because of procedural changes with air traffic control, they're given the IFR route going right up Alameda. He said he was puzzled and would wonder, why does that make a difference? Because one aircraft goes to Burbank and the next up goes out four miles and makes a right turn and follows the previous aircraft. Procedurally, there is a logical reason, but he has asked Don Kirby to review this procedure to see if any changes may be in order.

The facilitator commented that this was a complex subject and that additional research would be required. He asked the Acting Aviation Director if Mr. Galindo could continue to work with Mr. Morris and others on this issue and bring it back for the next Forum meeting in October. Ms. McKenney replied that the Port is committed to continuing to work with the community, especially as they do see these changes, and it's very important for them to be able to work with the community to assess what they're perceiving in relationship to these specific changes, but, also, to hear back from the community whether the situation has improved or otherwise.

B. Permanent Noise Monitoring Request

Larry Galindo noted that at the last two Forum meetings some central Alameda residents have requested that a new permanent noise monitoring station be installed in their area. He said the Airport had responded to this request by doing noise monitoring in central Alameda on two different occasions. One was in December of 2014, where a portable noise monitor was located in the Ballena Bay neighborhood to measure overflights of the right turns from Runway 30 departures. This was to make sure that the noise abatement procedure was properly reflecting the performance of the aircraft and the guidance by the NCT controllers in the TRACON, and was working properly for the community. By placing the noise monitor in that area, noise data was collected which produced L-max, which is the maximum level, single-event level, which spreads out noise energy and gives you a different metric. CNEL data were also collected. CNEL 65 dB is the state standard metric for measuring people's reaction to noise. The measurements resulted in a CNEL level of 56 dB, some 9 dB below the state standard.

The second noise monitoring effort was to measure the new HUSSH departure procedure at Washington Park in central Alameda. This is primarily a nighttime procedure. Data collection started in November 2015 and finished in January 2015. The monitoring was to help determine what the change in noise level would be from the left turns at the SILENT noise abatement procedure, which is a left turn to 70 degrees out to the west end of the bay and up toward Treasure Island. The average amount of change was less than 2 dB above the ambient noise level of 52-53 dB from one procedure to the other. In addition, there was no complaint history or complaint record for that time period, which indicated that there wouldn't be any further concerns of the change in flight paths. Galindo said that unless he hears from the community that things have changed, he'll assume that it's been a good procedural change for both the residents of the West Bay and the East Bay.

With respect to the question of deploying a permanent noise monitor in central Alameda, there is already one in the Fernside area of east Alameda, which is one of the least noisy places in the city. Because of its proximity to air carrier departures off Runway 30, Bay Farm Island is subject to the greatest noise impacts. However, it is some 4.2 miles from the CNEL 65 dB noise contour to where the right turns normally occur. With a cumulative noise level of about 56 dB there is no apparent justification or need for a permanent noise monitor in this location. However, Larry said, the Port believes that a better alternative would be to continue to use the portable noise monitoring system when community issues surface. Co-Chair Lee asked where the 14 permanent noise monitors were located and how were those sites determined. Mr. Galindo said that the two noise monitoring sites on the airport were designed to measure nighttime noise, which, before construction of the ground run up enclosure, generated a lot of noise and complaints. With construction of the GRE and a corresponding noise level reduction of 17 dB,

noise complaints about this area have been eradicated. In 1992, the Port built its first noise monitoring system which was, and is, designed to measure and validate the state-mandated CNEL 65 dB noise impact boundary, including the 70 and 75 dB contours which are entirely on the airport. Under the State Noise Regulations residential land uses within the CNEL 65 dB and above noise contour are eligible for sound insulation program funding. To date, Alameda has received \$34 million worth of sound insulation. And San Leandro has had 146 homes insulated in recent years. So that's the primary purpose of the monitoring system. The Port also has a couple of remote monitors that are employed where needed on a temporary basis. One of them is in Davis West, outside of the 65 CNEL contour.

Tony Daysog said he thought there was something to be said for a permanent noise monitor in the east end and the west ends of town, whether it's at Encinal High School or elsewhere he was not sure. He said he grew up in Alameda and has lived here since 1974, but it's only been in the last 18 months or two years where he's began to notice a lot of low-flying planes that he's never seen before. He said having a permanent noise monitor would provide a meaningful way to determine whether or not these planes are really cutting closer and whether what he's seeing is more than just a hunch. He suggested a permanent noise monitor site be established in Mr. Peterson's neighborhood because it appears that would be the only way to validate the Peterson's concerns. The only other recourse is to have the Petersons keep coming back with the same unanswered concerns. From his perspective, we could cut to the chase and put a permanent facility there, although he was not sure about the potential costs. He asked if the city could install its own monitor. Walt Jacobs asked to hear from Dave Needle on the matter because he has studied this subject extensively. Mr. Needle said he was ambivalent about this particular issue. He concurred that noise and low overflight events do occur because these events have been documented, but having a permanent noise monitor has some logistical issues and some issues with the Port but, in his opinion, doesn't solve anything. A portable, temporary noise monitor will help us to understand the situation correctly, but until we see that this is truly necessary he would not be in favor of a permanent monitor but, rather, a long-term placement of one of the temporary monitors until we understand exactly what it is that's going wrong and how we're going to solve it. As for the concept of significance, if you haven't been woken up ever in the morning and now you get woken up every single day because one airplane makes noise -- that is more than significant. We don't need 10 percent over that, he said. We don't need some number of flights or average sound levels. Long ago we won the concept of single event noise. A single event once a night is more than significant and needs to be addressed.

Councilmember Daysog said he did not disagree with Mr. Needle, and did not want to preclude any further discussion, but added that in all the issues surrounding this matter there has to be some way by which "significance" can be defined. The Settlement Agreement with the Port recognizes single-event noise levels, so this could be the definition of level of significance. Benny Lee offered that he has used the XML files in the WebTrak flight activity tracking software used by the airport to identify individual flights by the altitude at which they are flying. He suggested that classifying flights by their respective altitudes might be a better way of determining significance. WebTrak also has the advantage of capturing actual flight data without picking up any ambient or background noise. Lee felt it was important to use this information because it empirically describes the nature of the flight activity. Ernie DelliGatti offered that WebTrak does not capture all of the air traffic activity, since many aircraft in the Bay Area "go black," or opt out of the aircraft identification mode. He asked how often the noise monitors were "calibrated." Larry Galindo answered that the State Noise Regulations require an airport

to calibrate its noise monitoring system once a year, which the Port does. Galindo also offered that Jesse Richardson, the Port's Senior Noise Specialist, monitors their functions on a daily basis. He looks at the real-time data of the noise monitors and can tell if anyone is not functioning properly. If this happens, it is reported to the vendor who makes the necessary repairs to get it back into operation.

Kurt Peterson pointed out that the earlier temporary monitor placed at Encinal High School was installed prior to the HUSSH procedure was implemented, so it was monitoring a different condition than what is currently happening. He said what should be looked at what's taking place now as far as departure procedures go, not what was taking place in 2013. He expressed concern that a temporary noise monitor would not be able to provide the real-time information necessary for WebTrak to do any comparisons. He said all he was asking for was a fair representation to be able to understand what is actually taking place. He said he felt that the High School site was still the best option because the students were subjected to the noise every day. Peterson criticized the location of the Washington Park site as being "on a building that had numerous trees – large pine trees -- between it, the monitor and the flights, which definitely deadens the sound." He said it also only represented HUSSH—no daytime data. Okay? He said the primary concern from the people on the west end "isn't a complaint as far as about the procedures after 10:00 p.m. and before 7:00 a.m.," but during the day by large aircraft flying at low altitudes. He reiterated his request for a permanent noise monitor on the west end. Dan Morris commented on qualitative versus quantitative data, and the importance of significance and benchmarking. He asked just what exactly are the benchmarks and standards. How loud is too loud? How low is too low? His understanding of too low is when he looks up at a plane that is flying so low that he can see the underbelly of the plane and can read "Surf Air." His interpretation of too loud is when he has to wear ear plugs every single day when he sleeps. Even then he is woken up at 6:00 a.m. He asked "what does the FAA deem as the standard?"

Larry Galindo commented on several of the issues, saying that the expression "right altitude" is more appropriate when you're in level flight, and flying a route that is published and has specified fixes and altitudes. When you are landing, if you're a mile from the runway -- almost 100 percent of the jets landing on Runway 30 will be at 300 feet because that's where the glide slope places them. If you're two miles out, the glide slope will have you at 600 feet, which is the standard altitude for arrivals at that point. There is no "right" altitude when you're taking off because aircraft have different rates of performance, e.g., speed and climb rate, not to mention aircraft weight, and wind and weather conditions. Larry asked Capt. Ford Frazier of Southwest Airlines for his comments on this issue. Capt. Frazier said what Larry referred to as aircraft performance is going to vary by the size of the aircraft and the amount of weight it's carrying and the atmospheric conditions of the day. Southwest tries to climb as fast as they can, as a safety issue, and to get as much altitude as quickly as they can. Nobody is trying to stay low. If you depart off Runway 30, there are air traffic considerations that sometimes require the departing aircraft to level off at 2,000 feet until they pass beneath the SFO departures, otherwise they would continue to climb straight out to 10,000 feet uninterrupted. Sometimes ATC requires aircraft to level off at 2,000 feet immediately after departing Runway 30, having them along the shoreline at 2,000 as a traffic separation requirement for San Francisco departures. Frazier said any jet departing off the South Field wants to climb as quickly as and will unless directed otherwise. It's an economic incentive. The faster they can get up, the less gas they will have to use. Additionally, they are trying to be good neighbors and have no interest in being lower than we need to be at any point on the departure. Larry Galindo asked "what

is too low?" Frazier replied that "too low depends who you are." There are minimum safe altitudes for both airplanes and helicopters, but these standards do not apply to takeoffs and landings. Harvey Hartmann added that the Title 14, Code of Federal Regulations, Part 77 sets forth the minimum safe altitudes over both populated and unpopulated areas, with one disclaimer that says "Except for landing and departing." So the key factor is, if you're taking off or landing, none of those apply. Hartmann added that this and other information is readily available on the internet.

The facilitator cut off the discussion on this subject at this point because Mr. Galindo and staff would be getting together with the Alameda residents to get the answers to the questions they have raised. McClintock thanked Councilmember Daysog for taking the extra time to hear from the Alameda citizens. Mr. Daysog said he appreciated the discussion and the residents for coming to air their concerns, and asked the facilitator for a copy of the meeting transcript. McClintock said he would provide same.

C. Upcoming Events—Fleet Week/Superbowl

Mr. Darron Evans, Airport Operations Manager, provided the Forum with an update on the status of Fleet Week. He said Fleet Week is synonymous with the annual visit to the airport by the Blue Angels, and airport staff are working with the FAA and others to ensure that their visit will be well received. He said their focus will be on controlling the impact to the environment from the Blue Angels' activities. The scheduled events will take place from October 6 through 12. The aircraft will be staged at Landmark Aviation at North Field, and most of the operations will be on Runway 28L. This will create some noise impacts, but the event itself will be relatively short.

Larry Galindo briefed the Forum on the status of preparations for Superbowl, which will take place on February 2, 2016. Galindo said Port staff were working with the FAA and FBOs to make sure that things go smoothly and to minimize any noise impacts to the local communities. He said the Port is developing a community outreach plan to maintain coordination and provide information to the adjacent communities. There will be more detailed information available at the October and January Forum meetings. In the meantime staff will continue to work with the local jurisdictions to keep them apprised of the state of affairs.

7. NOISE OFFICE REPORT

The facilitator announced that we were now back on the agenda in its regular order with item number seven, the noise office report, which includes the June 18th helicopters operations meeting, as well as the North Field tour and corporate jet operators meeting. Kurt Peterson interjected with the statement that he wanted to go on record to say that he represents "the people, as far as additional citizens from the west end of Alameda...that are supportive...of the permanent noise monitor."

A. June 18 Helicopter Operators Meeting

Mr. Galindo reported that, at the direction of the Noise Forum, a meeting with regional helicopter operators was held at Hayward Executive Airport on June 18th. San Leandro Councilmem-

ber and Forum Co-Chair Benny Lee and Hayward Councilmember Greg Jones were participants. Galindo said that there were three helicopter companies in attendance, including News, Inc., which flies for TV channels 2, 5 and 7. The East Bay Parks District and Stanford Medevac Service. The helicopter providers shared their mission statements with the group and the Forum representatives presented their community noise issues. Larry, Sean Moran, and Councilmembers Jones and Lee stated their concerns very clearly. Galindo thought it was a very productive meeting, and thanked the City of Hayward and the Hayward Executive Airport for hosting it. Sean Moran said the Hayward Airport was very happy to have hosted the meeting and it was a very positive takeaway both for our representatives and for the helicopter and service operators. Benny Lee and Greg Jones were very good at helping the operators in understanding the needs and the concerns of the affected communities, and it was a positive experience for the elected officials hear about the missions and how the operators continue to comply with noise abatement procedures with respect to the mission they're flying, the characteristics and dynamics of the aircraft, the type of fixed wing or helicopter they're operating, as well as the complexity of Bay Area airspace. All of the Hayward-based helicopters operations aren't limited immediately to Hayward or Oakland; they operate throughout the Bay Area.

B. North Field Tour & Corporate Jet Operators Meeting

Larry Galindo said that at the last meeting of the North Field/South Field Working Groups had expressed interest in organizing a tour of North Field to visit the flight line and view some of the RSA work and look at some of the aircraft that regularly fly in and out of the airport. He said the tour was scheduled for July 29. On a separate issue, he talked about the annual noise abatement meetings held for the aircraft operators that deal with our noise abatement procedures. As the residents of Alameda and Bay Farm Island know, the previous preferential runway jet policy is one of the most important for them. The compliance rate of 95% was below the norm for that procedure. Larry said a meeting with the corporate jet operators has been scheduled for August 19th to review the program and encourage their compliance.

8. STATUS REPORTS

A. Runway Safety Area Project Update

Darron Evans gave the report on the status of the RSA project. He announced that the project was going according to plan and they are scheduled to meet the deadline of being complete by December 31st. A big part of the current phase was completed on June 10th, where they were able to complete the Runway 28L move over to Runway 28R. He announced that Taxiway Bravo would be closed for 3 nights due to construction. This is the main taxiway between the North and South Fields. This closure will effectively cut the airport in half, and as a result, there will be jet departures on Runway 28L. Red Wetherill asked why the RSA project is affected by Taxiway B when that taxiway is functional. Mr. Evans replied that Red was correct, but that Taxiway B connects to Runway 28L and that some electrical work needs to be done to tie the two together. Ernie DelliGatti asked if appropriate notices would be issued concerning the taxiway closure. Darron replied that a notice will be prepared, as always, but that as is required by the FAA, no notices can go out until 72 hours before. He said a community advisory has already been prepared and will go out to the community in advance of this work.

B. Technical Working Groups—NFG/SFG

Matt Davis said that there were three topics discussed at the last working groups meeting. Of the three items discussed, two were covered again in detail tonight—the east end of Alameda and Fleet Week and Superbowl. The third item was the Monday morning departures that was discussed at the April Forum meeting. Maintenance is routinely performed on Runway 30 from 2:00 a.m. to 6:00 a.m. on Monday mornings. This is because there is a lull in air traffic at this time. Normally Runway 30 is reopened by 6:00 a.m. to accommodate first a.m. departures. The working group was tasked with tracking these departures. Although there has been an increase in these operations, there was no significant increase in noise levels. The increased operations were attributable, in part, to the RSA project, and included flights by UPS. Matt reiterated that the airport works very hard to ensure that the runway reopens as scheduled, and if the work is completed before 6:00 a.m. the runway will reopen before 6:00.

11. OPTIMIZATION OF AIRSPACE & PROCEDURES METROPLEX (taken out of sequence)

Gene Reindel of HMMH said his presentation is to try to see if there are flight track changes associated with the recent introduction of the Metroplex. He said his firm had analyzed the data from May and June 2015 because this covers the time span for implementation of the Metroplex. These data were compared with May and June 2014, the corresponding period before the Metroplex. Their task was to try to determine whether there were any discernable differences between the flight tracks between the two periods in terms of where aircraft are flying over the ground and, also, the altitude of where they're flying as a result of the Metroplex changes. Mr. Reindel described his research methodology, which included flight track density analyses. The benefit of this methodology over traditional flight track maps is that the concentration of tracks is easier to discern. He showed the Forum graphical exhibits of this. His research included both arrivals and departures from both North and South Fields. He went on to show specific examples of flight track concentrations throughout the area. His conclusions were that some of the flight tracks had shifted, but in order to be able to get a more accurate assessment of any potentially significant changes it might wise to wait a little longer to allow more time for the full implementation, because things may still change as they continue to fully implement the NorCal Metroplex.

James Nelson asked if there had been a correlation of noise complaints before and after the Metroplex. Larry Galindo said he had received some calls attributable to the Metroplex, and that some of these were attributable to the new procedures, but there has been no significant uptick in noise complaints. Mr. Weseman asked Gene if he knew why the Port departures were being noticed so much now in Santa Cruz. Gene replied that it was outside the scope of his investigation. Harvey Hartmann noted that, at this time, the FAA is unable to comment on the Metroplex because of pending litigation. He suggested that what might be done would be to try to line up the density charts with the published FAA procedures. However, until the FAA is able to assist with this it will have to wait for the lawsuit to be settled. Kurt Peterson said that he was disappointed because the graphical illustrations did not effectively portray the interface between land and water. Without this as a reference, he said, it was almost impossible to determine where any shifts in the flight tracks may or may not have occurred.

9. NOISE NEWS UPDATE

The facilitator asked Vince Mestre to give a quick overview of noise news and update. Mestre's initial item was the Southern California Metroplex study. The SoCal Metroplex environmental assessment has been released. It, too, had a 30-day comment period. It was Mestre's opinion that it was substantially more complex than the NorCal study because it involves 21 airports and 140 changes in flight procedures. There was a huge outcry about the 30-day comment period, and, ultimately, the day before the comment period closed, the FAA did expand it to a 90-day comment period. The overall comment right now is more like "What?" because it's so difficult to figure out what changes are being proposed. Vince next discussed an FAA study on aircraft noise effects in a 20-airport social survey which is intended to study the dose-response relationship between noise and human response. The question was what is the noise standard permitted under FAA guidelines? That policy was set 40 years ago and the FAA has announced a roadmapping process to reevaluate that policy. The survey is scheduled to take 2 years, which sort of fits into the FAA's schedule to have a policy reevaluation by the year 2020.

The chairman of the House Transportation Committee has introduced a bill to privatize the air traffic control system. This corresponds to the FAA reauthorization bill. For those of you who are not familiar with it, the FAA operates on a five-year authorization. At the end of five years, they have no more money. In some years past, Congress appropriated money for them with short-term authorizations. He said we would be hearing more about this in the future. He noted that the City of Phoenix is suing the FAA over their new RNAV procedures that put departures right over neighborhoods that had not experienced such overflight in the past. It is very difficult to get any information about this because everybody is operating under the "can't talk because there is a lawsuit" rule. In East Hampton, NY they have stopped taking federal grant money because they wanted to implement curfews and flight restrictions. The community filed a lawsuit, and the courts upheld the city's right to have curfews. They were not subject to the Airport Noise and Capacity Act requirements because they stopped taking FAA money and any previous grant agreements had expired, so they could base their restrictions on noise, but not restrict the numbers of flights. In the appropriation bills, there was quite an interesting discussion about the FAA and their implementation of the Metroplex studies, and, in particular, the problems at East Hampton and Phoenix. They granted some nice words to Phoenix and East Hampton, but did not include the amendments that would have given Washington National Airport and Bob Hope Burbank airport the right to have a curfew. He expected the Southern California communities to seek legislative remedies.

On the research side, NASA is experimenting "soft" sonic booms. NASA has eight research projects going that range from the design of the aircraft, to a study on human response to these softer booms. An interesting story from the UK where the government announced they will proceed with putting a third runway at Heathrow. One of the alternatives has been an airport in the Thames River. Now we have a university group that said maybe we can fly into the Thames, without the airport part, by going back to commercial-sized seaplanes. So they are actually doing a detailed design of what would amount to something similar to Howard Hughes' plane—the Spruce Goose. With respect to air quality and greenhouse gases, the big issue is that the EPA has taken the step for controlling aircraft emissions. As we discussed before, the EPA cannot unilaterally set emission noise standards for aircraft because, under treaty with other nations, there must be a harmonization of all nations' requirements for emissions. The EPA is moving forward with new emission standards for aircraft that will ultimately go to ICAO for approval. Once they approve it, it will go to the U.S. to approve it as part of the ICAO treaty.

Mestre said that Alaska Airlines had recently said that "Over the past decade, we've cut emissions by 30 percent." They expect another huge reduction by 2020, all the time having increased their number of operations. He said, we'll hear more about this because the EPA regulates emissions and President Obama has identified a 40 percent goal for the federal government to reduce greenhouse gas emissions, and the airlines are getting spooked. They have already achieved huge emission reductions. The problem is when any law is passed as to what kind of reduction they need to comply with, the selection of the base year is critical. So we'll start to see discussions about this because the issue is not will we cut emissions; it's how much we have to cut relative to what, because there is probably no industry in the U.S. that has cut emissions more than the airlines have. Vince said he believed that leaded fuel will be gone in the next few years. He mentioned a commercial-scale refinery using forest waste products and a number of other waste products to produce jet fuel, diesel fuel and naphtha. Biofuel development does well when gas prices are high, not so good when prices are low.

NASA has a program to test a coating to reduce bugs sticking to the wings because there is a huge drag coefficient associated with dead bugs getting a free ride. These bugs cost the industry many millions of gallons of fuel because the wing is not smooth. Conversely, the winglets you see at the end of the wing have saved five billion gallons of fuel as a result of the winglet technology and they expect to double that by 2020. For each flight it is a small number, but when all the flights are totaled it becomes a big number. This summer United will fly between Los Angeles and San Francisco in a plane fueled entirely by farm waste and animal fat.

Vince limited his drone report to an FAA press release prohibiting any drone flight in the vicinity of the White House. The FAA is also providing an app for android and iPhone devices which identifies areas where you can and cannot operate UAVs. This would be something in conjunction with a national registration site where you can put your address in to have your home declared a no-fly zone. They are trying to get drone manufacturers to build into their software the ability to recognize these no fly zones—good luck with this. When the industry is selling an average of 200,000 per month it ain't gonna happen. Last of all, Harvey Hartmann said the FAA was changing all of the navigational fixes around West Palm Beach to eliminate any references to Donald Trump. No more DONLD, TRMMP, or UFIRD.

12. NEXT MEETING – October 21, 2015

13. NEW BUSINESS/ADJOURNMENT

Facilitator McClintock thank all those who came to tonight's meeting, particularly Mr. Weseman, who came all the way here from Santa Cruz. He wished him luck with his problem, and hoped it would be resolved in the near future. There being no additional new business the meeting was adjourned at 8:48 p.m.