

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

**October 19, 2016**

**INDEX TO THE PROCEEDINGS**

**Page No.**

<b>1. INTRODUCTIONS .....</b>	<b>1</b>
<b>2. APPROVAL OF MINUTES (July 20, 2016) .....</b>	<b>2</b>
<b>3. NEXTGEN RELATED NOISE CONCERNS.....</b>	<b>4</b>
<b>A. Glen A. Martin, FAA Regional Administrator .....</b>	<b>4</b>
<b>B. SOSEB Informational Update .....</b>	<b>11</b>
<b>C. CLASS Informational Update .....</b>	<b>14</b>
<b>4. NOISE OFFICE REPORT .....</b>	<b>16</b>
<b>A. Noise 101 Recap .....</b>	<b>16</b>
<b>B. Fleet Week .....</b>	<b>16</b>
<b>5. TECHNICAL WORKING GROUPS REPORT .....</b>	<b>17</b>
<b>A. North Field/South Field Group .....</b>	<b>17</b>
<b>B. Main Runway Overlay Project .....</b>	<b>17</b>
<b>6. NOISE NEWS AND UPDATES .....</b>	<b>17</b>
<b>7. ANNOUNCEMENTS .....</b>	<b>19</b>
<b>A. Acceptance of 2<sup>nd</sup> Qtr. 2016 Noise Report (receive and file) .....</b>	<b>19</b>
<b>8. CORRESPONDENCE.....</b>	<b>19</b>
<b>A. Berkeley City Council Resolution No. 67,692-N.S. ....</b>	<b>19</b>
<b>9. PUBLIC COMMENT.....</b>	<b>19</b>
<b>10. CONFIRM NEXT SCHEDULED MEETING DATE (JANUARY 18, 2017).....</b>	<b>20</b>
<b>11. NEW BUSINESS/ADJOURNMENT.....</b>	<b>20</b>

**1. INTRODUCTIONS**

The October 19, 2016 meeting of the Oakland Airport-Community Noise Management Forum was called to order at 6:43 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 and Citizen representative, Alameda  
Tony Daysog, Councilmember, City of Alameda  
Cindy Horvath, Alternate for Wilma Chan, Alameda County Supervisor  
Ernest DelliGatti, Citizen Representative, Alameda County  
James Nelson, Citizen Representative, Berkeley  
Elisa Marquez, Councilmember, City of Hayward  
Edward Bogue, Citizen Representative, Hayward  
Pat Mossburg, Alternate for Larry Reid, Council President pro tem, City of Oakland  
Laurel Strand, Citizen Representative, Oakland  
Tom Wagner, Citizen Representative, San Leandro  
Bryant L. Francis, Director of Aviation

**Staff Members/Advisors/Guests:**

Joshua Quigley, District Director for Representative Barbara Lee  
Glen A. Martin, FAA Regional Administrator  
Kristi McKenney, Assistant Director of Aviation  
Matt P. Davis, Airport Operations Manager  
Diego Gonzalez, Governmental Affairs, Port of Oakland  
Doreen Stockdale, Airport Noise Abatement and Environmental Affairs Supervisor  
Jesse Richardson, Jr., Noise and Environmental Affairs  
Gene Reindel, Harris Miller Miller and Hansen, Inc.  
Rhea Gundry, Harris Miller Miller and Hansen, Inc.  
Harvey Hartmann, Hartmann Associates  
Christian Valdes, Landrum & Brown  
Don Kirby, FAA Air Traffic Manager, Northern California TRACON  
Tony DiBernardo, FAA District Manager  
Taonya Patterson, FAA Deputy District Manager  
Trish Spencer, Mayor, City of Alameda  
Jill Keimach, City Manager, City of Alameda  
Bob Haun, Public Works Director, City of Alameda  
Allen Tai, Planning Services Manager, City of Alameda  
Kathleen Livermore, Planner, City of Alameda  
Kathy Ornelas, City of San Leandro  
Valerie E. Jensen Harris, CSR, Court Reporter  
Mike McClintock, Forum Facilitator

**2. APPROVAL OF MINUTES (JULY 20, 2016)**

The facilitator noted that members of the Forum had received a copy of the draft minutes for the July 20, 2016 Forum meeting with their agenda materials. Ernest DelliGatti asked about the appointment of a San Lorenzo/Castro Valley member to the NextGen subcommittee as was discussed

at the July meeting. McClintock replied that he recalled Councilmember Daysog saying he would like to see the members of the committee decide among themselves about the addition of any new members, and that the committee had not met after the July Forum meeting. There being no other questions or comments on the draft minutes the facilitator requested a motion for approval. Co-Chair Lee moved approval. Seconded by James Nelson. Motion to approve the draft minutes was approved.

### **3. NEXTGEN RELATED NOISE CONCERNS**

#### **A. GLEN A. MARTIN, FAA REGIONAL ADMINISTRATOR**

The facilitator introduced Mr. Martin. Mr. Martin thanked the audience for attending and said that he appreciated the fact that they were there. He said that he was here to hear from the community and that he wanted to reassure all present that the airport has been in communication with his office and that they are aware of the issues and are working toward finding some solutions. He said he would go through a presentation and then answer questions. Given the “overwhelming” number of cards that were submitted, Martin said that he would try to get through as many as he could within the time allotted [Editor’s Note: The question cards were collected from the audience and consolidated into subject areas for Mr. Martin’s response]. He said he was committed to coming back if need be to finish the discussion. He said he had provided a copy of his PowerPoint presentation to staff, and that it would be available for anyone interested in reviewing it on their own. Mr. Martin said it was his intent to focus on several things: (1) where the FAA was in the initiative process; (2) what has yet to be done to make any changes; (3) where the FAA’s priorities lie; and (4) to make sure the Forum and the communities understand what they need to do to see things changed in the manner they would like.

Mr. Martin began his presentation by saying that as a federal agency, the FAA has been directed to advance the NextGen air traffic control system and that there are “solid” plans in place to see that it gets done. He noted also that he believed all could work together to address the issues that had brought everyone to tonight’s meeting. These are the implementation of the HUSSH, WNDSR, and TRUKN procedures. Martin explained the difference between Standard Instrument Departure procedures (SIDs) and Standard Terminal Arrival procedures (STARs), and any reference he might use with respect to these two terms means they are actual charted procedures published by the FAA and used by the airlines and air traffic control in running the nation’s airspace system. He described the various components and improvements associated with the NextGen air traffic control system, which is a satellite-based system, as compared to the older land-based air navigation system. He explained that the NextGen satellite based system was superior to ground-based navigation because the newer system, and its associated on-board flight management systems, is three dimensional, whereas the latter is only two dimensional. Because of this, the FAA is now building air routes three dimensionally, which allows them to have greater control over where aircraft fly. Pilots have more information available to them, so they have more understanding of where they’re going and how they’ll get there based on information in the flight management system (FMS) computer. Advanced navigation is giving us an opportunity program very-complex procedures into the FAA computers, thereby enhancing system efficiency and reducing pilot and controller workloads. Martin said the FAA takes safety very seriously, which means that it’s their responsibility to make sure the air traffic control system is available to fulfill its function.

The more efficient the system is, the safer it is for all air passengers while in flight. He noted that the FAA does not schedule airline flight times; this is the sole responsibility of the individual airlines. Efficiency for the FAA is different than efficiency for the airlines, but since the FAA is

aligned with the airline industry there are common interests in this regard. Hence, to ask the FAA to be less efficient goes against both the FAA and the airlines. However, the FAA recognizes the need to find a way to be operationally efficient but to also make sure that they can balance this with the impact on the communities. Martin reiterated that from a safety standpoint it was important for the FAA to be efficient, given the problems and situations they deal with on a day-to-day basis, especially when airplanes all start to come in at the same time. With respect to performance-based navigation (PBN), Martin said there are many benefits to it, but the key thing is that the FAA is starting to lay the groundwork for advanced aerial navigation. He noted that there can be much more by way of enhancements to the system as the capabilities of flight management systems continue to grow. If we were to start today, he said, we would be able to do things with these routes that we were not able to do when they were initially implemented. As a result, the FAA is just setting the groundwork for these routing procedures and this represents an opportunity to find better ways to work with affected communities. He said the FAA is working hard to resolve the issues that have come about as a result of initial PBN implementation, and, if they had it to do over again, they would have done it differently.

The FAA was trying to find ways to better engage the community, Martin said, and they are holding community meetings around the country, but it is hard to get people involved before things actually happen. He said it was dreadful to have to have everyone come out tonight to deal with things that have already occurred. Martin made the point that he was sharing these things with the Forum because he wanted us to understand how the FAA looks at NextGen. This is a big project involving a lot of money, and when you work for the federal government you are expected to be in support of it, especially when it can save a billion dollars in costs to the FAA and to the air transportation system. However, he said he wanted to make sure that the FAA worked with the communities to achieve a balance between their needs and the needs of the air transportation system.

Getting back to performance-based navigation, Martin said there were two definitions the group should also know. Area navigation (RNAV) is basically GPS, a satellite based global positioning system. This allows airplanes to go point to point to point without having to fly over land-based navigation facilities. The other thing to understand required navigation performance (RNP). This is particularly important because it has to do with the approaches to an airport. Martin described the various turning movements required to intersect the approach path to an airport under the older land-based navigation system. Under the old system air traffic controllers had to issue turning instructions, air speed information, and altitudes to get aircraft onto the runway. With RNP the approach can be along a curve, and aircraft can fly a repeatable path on that curve all the time. With required navigation performance, this is all in the computerized flight management system aboard the aircraft, when aircraft start that turn, it will guide them in all three of those ways all the way to the runway and allow them to land. It's much safer. One of the chief concerns in the country is around maintaining a stabilized approach, and this type of procedure with the built-in capabilities of the onboard flight management equipment makes it a much safer way to land the airplane.

In his slide presentation, Martin noted that there's probably been around eight thousand different procedural changes and implementations with NextGen around the country, and it has been happening for a while. He said, the FAA is somewhat down the path on this and that he is not here to try and debate the issue of whether or not to stop it. He is, however, suggesting that, as a problem

solver, he thinks we can work out any problems without trying to shut down the federal government. Just something for the Forum to think about. There are benefits from NextGen and it was his hope that we can solve the issues of concern to the communities among us much quicker than we can change the federal government.

Mr. Martin next turned to the reasons for the night's meeting—the HUSSH, WNDSR and TRUKN procedures. He explained the operational characteristics of each of the three procedures by use of the slides in his presentation. He compared the HUSSH procedure with the old SILENT procedure, noting that SILENT departed Runway 30 on a heading of 270 degrees after reaching 400 feet altitude, while the HUSSH procedure departs on a 296-degree heading until 520 feet. The question has become "is it possible to return to the 270-degree heading?" To fix this would require a change to the HUSSH procedure. He said that the FAA is looking at doing this and that they should have a decision in six to eight months.

As to the WNDSR STAR, he showed slides of the approach paths for the RAIDR arrivals in 2015 and for WNDSR in 2016. He noted the differences between the two procedures and questioned whether or not the WNDSR arrival could have been shifted farther to the east. He said he has heard that the communities say that there's a better place for this track a little farther east, either over the top of the mountain ridge or elsewhere. There is certainly an opportunity to affect fewer people. Martin said he wanted the Forum subcommittee to work with him, and help the FAA to better understand where the line should be drawn. Both the Northern California TRACON and the Oakland Center feel that the line can be moved to the east. Martin concluded, he did not see anything of an operational nature that would stop the FAA. However, shifting the line to the east would take the flights out of one Congressional district and place them into three others. This could have political implications for the FAA. He said he was mentioning this because it could become a political issue for the FAA, but this is not to suggest that it would be insurmountable. It just means that more coordination would be involved, and that at this time he did not know if any of the three new Congressional districts were aware of the situation. As to the timeline, Martin said that he could see it taking six months just trying to get all the coordination done, the communities engaged and finding the solution. This could be optimistic or it could be too long; it just depends how well everyone can agree on the greater good here, and see if we can't find the line that addresses the problems of the folks in the room tonight.

In addition, he noted, every time you ask the air traffic organization to change a procedure, they tell you it will take 18 to 24 months to make the change. He said every time he has to provide an answer on a slide, he says 12 to 18 months. This makes air traffic very uncomfortable, but that's his take away from them. He said they can do it faster; it just depends on how difficult the issue is. With respect to WNDSR, we are talking about a single arrival procedure. This is an important issue, so we will bring it about. However, because the air traffic system is updated every 56 days as part of a charting cycle, and because the chart changes from today through 2019 are all full, there will have to be some adjustments. The important thing, he noted, is for us to get together and find the alignment, and find the communities that we need to get onboard. And this is what he has asked the subcommittee to help him with.

As for TRUKN, he showed a comparison of flight tracks from August 2014 and August 2016. The complicating factor in resolving this issue is that this procedure deals with eastbound air traffic out of SFO. The issue is that some on the Peninsula want to have more jets depart over the Bay and, consequently over Alameda and Oakland in particular. Martin voiced a need to get the SFO

Roundtable and Forum together to lay out all the changes that SFO has for the bay, as well as what the Forum communities want to have done so that the FAA can figure out what they can change. He said he would like to work with the subcommittee on this issue. He explained that the essence of advanced navigation will not allow for going backwards—the technology is just too precise. He spoke to the issue of dispersed flight tracks and the need to work with the affected parties to determine if more tracks are needed or if better tracks in better locations are the answer. He concluded his presentation by saying that the Forum should continue to maintain contact with the representatives of the Northern California TRACON and Oakland Center.

The facilitator thanked Mr. Martin for his presentation and advised him that around 30 question cards had been turned in, but have been consolidated into about ten questions for him. McClintock said he would start out the question and answer segment with these ten questions, then go to the Forum members for any follow-up questions they might have:

**Question 1--What is the timeline for any changes?**

Mr. Martin responded that for HUSSH he believed that the matter could be resolved within six months. For WNSDR Martin replied that he believed the Forum subcommittee can come to a determination where it would like the line to be as soon as it wishes to. Depending on where the line is proposed to be will determine how difficult it is going to be to make that happen. Martin said fixing the problem for the Oakland hills may open up other political and environmental issues. If these issues can be surmounted and the route published, he said, it could then take an additional 12 to 18 months to complete. The big problem will be the politics, he noted. Also, he said, he doesn't need the Forum to tell him where to draw the line, but to tell him where the line solves the problem for the Oakland hills. With this information, he will be able to provide this to his team to evaluate from a technical standpoint. Co-Chair Jacobs asked how does the subcommittee make that determination? Martin replied that operationally the FAA would like to move the path back to the west, but will consider the Forum's recommendation and determine if it needs to be moved farther to the east.

**Question 2--What does the FAA intend to do to mitigate the noise problems NextGen has created?**

Martin responded by saying that “if you're asking me how to solve this, it's let's get the problem defined, get a solution and get it moving in the FAA.” The FAA is a federal agency. Whether anyone wants to hear this or not, we are very busy. These three procedures are not the only changes they are engaged with. They are installing new equipment, and changing other procedures. Elsewhere it's the same people who have to make these changes. He said, the sooner we can define the Forum's solution and put it in and get it scheduled, the sooner these changes can happen. The longer we talk about it, the longer that we grow the scope, the longer we try and add three or four other things, the longer it will take to resolve. The FAA needs to make sure that it can do this, and this is a change that has to be put in line with all the other changes. Let's keep it a priority, but let's also keep the focus.

**Questions 3 and 4—Will people and populations under the flight patterns be considered when looking at changes? And how will any future changes be communicated with the community?**

Mr. Martin replied that the FAA is working through the Noise Forum to try and determine a solution we can move forward with. Partially, that is some community engagement on their part. However, once they determine that they are ready to make a change, that becomes a federal action. Once that federal action is determined, and a purpose and need for the action is set, then all the federal rules, laws and requirements kick in. Among these steps is an environmental review which could determine that you cannot proceed without preparing an environmental impact statement (EIS)—and if you're not aware, that is years and millions of dollars. An environmental assessment, he said, might take typically two years, but he has no idea to what level of review these changes might rise to. At this time the only thing he can say is that for every federal action, you begin with an environmental review. You have to base your decisions on what comes out of that review, and all of those things will kick in, including public meetings. He said, they will communicate any changes to the interested public as appropriate. One last thing, he asked, was for the public to make sure to get involved early.

**Question 5--Why can't the noise be spread out like it used to be?**

This is a common question, stated Mr. Martin, and the most general comment that he hears is that “it wasn't here before and now it is.” Where the flight tracks had been dispersed in the past, as with TRUKN, and now they are concentrated, everyone wants to dial it back. In places where they have spread them out, people would like them to define that fine line and go around certain things. So, they really get this both ways. It depends on what dispersion means to someone. With advanced navigation, the system is too precise. He did not think that the FAA could “starburst” hundreds of radials. The compromise is to work toward finding what disperses it enough. This is something they can work toward. The community is going to be as involved as they can get them to be. It is not easy to get people involved ahead of time, and they are trying any way possible to get them on board from the beginning. Again, that's what the FAA is trying to do—is to get the word out before, and making sure people have a chance to comment. As an aside, he said one of the primary ways that the FAA is working toward this is through working with the Forum. The Forum is able to bring communities together in a regional approach to issues, and the FAA is relying heavily on the Forum and supports its work. As far as he is concerned, Martin said, the members of the Forum are the right people to have at the table, and they are the right people to help us bring the communities together.

**Question 6—Why can't all the flights go over the bay?**

Martin answered that the three major Bay Area airports—Oakland, San Francisco, and San Jose International—all want to use the bay, but there is only so much room. Air traffic control needs to keep everyone separated by three miles and one thousand feet when everyone is either ascending or descending. Lateral separation is, typically, the number one thing air traffic controllers are concerned with because they're all changing altitude. Each one of the three airports want to make more use of the bay. San Francisco would like to align their arrivals more out over the bay, which only pushes things more toward Oakland. This is why, he said, he wants to work with both the SFO Roundtable and OAK Forum to ensure that everyone is being transparent in their requests and that no one's solution is another one's problem.

**Question 7—How is NextGen safer as claimed?**

Martin replied that NextGen allows for the utilization of equipment and technology that is installed on the aircraft. From an air traffic standpoint, it has allowed the FAA to build much more complex procedures, and to do things that were not possible with ground-based systems. This is making a big difference at congested airports like SFO and LAX. He explained the technical basis for his rationale and concluded by noting that advanced navigation allows for more precise approaches, i.e. safer approaches and more precise lateral separations between aircraft.

**Question 8—Why can't the FAA make the aircraft fly the assigned routes without vectoring them off earlier, or turning them early?**

The reason we vector in this particular case, especially in congested airspace like the Bay Area, is because of weather and safety, said Martin. Sometimes it is necessary to turn one departing aircraft at OAK early to get it out ahead of another one departing SFO. So, it's a timing thing. However, without access to the specific data to determine why the aircraft may have turned when it did, it is hard to tell why the turn was made at a particular point. It is something that the FAA can address.

**Question 9—If the reasons for NextGen aren't being realized -- that is, fuel savings, among others, will the FAA re-visit the need for it?**

Mr. Martin said the FAA is looking at NextGen as a total package under a federal initiative. He did not believe that the evidence supports the conclusion that NextGen is not beneficial, but there are a number of goals that must ultimately be met to support this conclusion.

**Question 10—Is there any research being done on the effects on the environment and health of people under the concentrated flight tracks?**

Martin replied that there certainly is such research. There are three questions that have been posed concerning the effects of noise on people, including is the Day-Night Noise Level (DNL) the appropriate metric to measure aircraft noise; are there supplemental metrics that should also be used; and, if you can arrive at a metric, what are the thresholds of significance? Martin explained the rationale behind the DNL metric and how the significance of any impacts is determined. He said if the Forum felt this was important to the members, he could direct us to some informational web sites where we can find out what is going on and what the results have been.

The facilitator thanked Mr. Martin for his perseverance, and reiterated that he could not read everyone's questions verbatim, but by consolidating the types of questions it made the process much more efficient and less lengthy. Of the 30 cards received, all will be provided to Mr. Martin by the Airport Noise Office. McClintock opened the discussion to members of the Forum for questions.

Edward Bogue noted that his biggest concern was the concentration of flight tracks and the problem that this could create. Now we are being asked to choose a new location for the WND SR procedure. Will the FAA conduct computer noise modeling that will tell us what the noise impact will be, particularly since by moving the track to the east there will be a relocated base leg? And when you put a concentrated path in a different place, people will notice, even if aircraft have been flying there before, but not in increased concentrations. Mr. Martin replied that the system is not sophisticated enough today to have a hundred different paths. He said he did not ask the Forum to pick a path, but to help him to understand where it would resolve the issues that the communities



want taken care of. Martin agreed that someone else was going to be affected, but that is why he is trying to get the communities together to look at this to try to find a solution. Edward asked what kind of modeling was done for the WNDSR procedure? Martin said this was explained in the environmental assessment. Bogue said the EA didn't recognize the major change and problems we'd have with this because of the aircraft altitudes and the high ground elevations. He asked why the environmental study did not recognize that the concentration of the flight path over the Oakland hills would cause a major problem. Mr. Martin said that this was exactly why the FAA was not going out and drawing a line, and doing their same analyses and coming back to say "we solved the problem." We're trying to work with the communities to make sure we're actually resolving their issues. Edward thanked Mr. Martin.

Ernest DelliGatti said he concurred with Mr. Bogue's assessment, and offered that if the FAA is going to be bringing aircraft in more precisely, you need to take a look at the settings of the aircraft flaps, altitude, and all of that because you're slowing down the aircraft, and that's contributing to the noise. This element has been missing from all of the noise analyses performed for the implementation of NextGen in the Bay Area. So, what needs to be looked at as well, which is contributing to the noise, are the flight parameters of all of the aircraft where you're setting them up to come in at a lower altitude a lot slower, because when they go ahead and take additional shortcuts, based on whatever air traffic control is telling them, they're out of the normal position, which means they have to apply more flaps, more power, and that all contributes to the jet noise. If you could look at the flight parameters of all of the aircraft, Ernie said that's the key in resolving this issue within the Bay Area.

Forum Co-Chair Benny Lee thanked Mr. Martin for his presentation. He said that when we look at the flight track maps, they basically show a heat pattern that depicts a concentration of flight activity over a given area. This was very helpful to him, but he felt that what was missing was a heat map showing households and population. This would be good because it tells us the number of individuals impacted. He asked if the FAA has the technology for "GIS" maps that includes heat maps, households, household concentrations or population concentrations? Mr. Martin said that this is not the kind of information the FAA keeps, but that it could find it. He said that he thought one of his WNDSR slides showed population data and that these data showed declining population to the east. He added that there was no reason the FAA could not use such data to help determine a solution. He cautioned the Forum to realize that just because an area appears to be less populated, it does not mean that it is necessarily the best solution because these areas are also typically very quiet. Benny thanked Mr. Martin for his comments and added that we consider this and other factors when we work together with the SFO Roundtable.

Councilmember Daysog also thanked Mr. Martin for taking the time to come here. He said he wanted to make two quick points. His first point was the attendance of local leaders, including Alameda city manager, Jill Keimach, her key staff, as well as Mayor Trish Spencer, which is meant to underscore the importance with which all residents of Alameda hold this matter. It also underscores the degree of professionalism with which we are ready to work, through our technical subcommittee, in working with the FAA and trying to obtain satisfactory results. His second point was, through the next six to eight months, as we work through the subcommittee with the FAA, we have people like Alameda citizen representative and Forum Co-Chair, Walt Jacobs, who has been involved in these matters for almost 30 years. Walt and other community members are people who have incredible, intense knowledge about this issue as well as incredible professional and

diplomatic ways of communicating our issues and concerns. So, we look forward to this next six to eight months. Mr. Daysog thanked Mr. Martin, and the Port for hosting the meeting tonight.

Laurel Strand thanked Mr. Martin for his presentation. She explained that, although she was new to the Forum, she was a part of the group of citizens in the audience who reside in the 94611 zip code area of Claremont, Montclair, and Piedmont, where the elevation is from 500 feet up to 1,500 feet. The area is only two miles wide on a map and the population is about 20,000. It is a very concentrated area population-wise, and is very quiet. They can no longer hear the sound of the crickets at night for the sound of the jet engines. She said she was concerned about the process for bringing relief to her area being drawn out because of the potential of having to deal with the additional Congressional districts. She and her neighbors wanted to know what the next steps are in terms of executing the moving of the WNDSR path. Martin replied that he could not say with certainty about what the next steps might be. He said there are potentially new populations and communities to be considered when evaluating where the line will be drawn, so, they need to determine who will be impacted because they do not want to start down that path with a line and don't include people, that's what's going to end up getting us back into this similar situation, and that's what the FAA wants to avoid. It is the new Congressional districts that are his first concern. We need to set down with them, he said, and show them what we've got and make sure that we're not getting stopped at that point. Ms. Strand thanked Mr. Martin.

Facilitator McClintock asked a follow-up question concerning who would be responsible for coordinating with the other Congressional districts? The Forum? The airport? The FAA? Martin replied that "Everybody is going to be involved." Walt Jacobs offered that this is where we might need to have the support of Rep. Barbara Lee, who might have some influence over the other Congressional representatives. McClintock concurred and offered that Port Governmental Affairs people should also be involved. He noted also that he had been on the phone earlier with SFO Roundtable Chair Cliff Lentz about getting the Forum and Roundtable together for a meeting. McClintock thanked Mr. Martin for his patience and answers, and for coming to tonight's meeting. He said the Forum was looking forward to working with him and bringing these issues to resolution.

McClintock recommended to the Forum that the NextGen subcommittee be continued and directed to move ahead and define the possible solutions that we need to get to the FAA before they can begin their analyses. This would include outreach to the other potentially-affected communities through their Congressional representatives. Also, as Ernie Delli-Gatti pointed out, in the minutes of the last meeting, at the next subcommittee meeting they need to consider adding any new members from Alameda County or San Lorenzo. He said the subcommittee should make this decision in and of itself. He asked for a consensus from the Forum to proceed in these areas. James Nelson asked if there were representatives from Orinda or Lafayette? These areas are in a different Congressional District than Barbara Lee's. We have some homework to do to see who is potentially impacted as we move ahead, McClintock said, and he thought we should be careful with the timing of reaching out to our neighbors. There's nothing there yet. He was not sure how we decide when the timing is right, but he could see a situation where we would try to bring groups in, or other Congressional representatives too soon, before we have something concrete to actually talk about. He repeated his call for consensus to reach out to meet with Cliff Lentz concerning the issues concerning both the SFO Roundtable and the Oakland Forum, continue the NextGen subcommittee, and define the solutions and get them to the FAA as soon as possible so they can begin to do their analyses. A consensus was agreed upon. The facilitator thanked Mr. Martin again for him

and his staff coming in to meet with the Forum and the Forum communities. Mr. Martin thanked the Forum for inviting him to the meeting, and said that he knew the Forum would take the pulse in the community, and that he would work with us. Walt Jacobs said that was appreciated.

## **B. SOSEB Informational Update**

Leslie Ransbottom introduced herself as the representative for Save Our Skies East Bay. She thanked the Oakland Airport and the Forum for their continuing efforts to address NextGen issues and for giving SOSEB an opportunity to update the Forum on their work. She said that her organization is encouraged by the progress in implementing real and lasting solutions towards resolving the significant NextGen noise affecting their communities, and that SOSEB is determined to make the collaborative efforts between the Oakland Airport, affected communities and the FAA to achieve effective noise mitigation. She thanked Rep. Lee for helping to bring this all about, and expressed appreciation to Administrator Martin and his staff for attending the Noise Forum's NextGen subcommittee meeting October 5, and for being here tonight. Moreover, she said, SOSEB appreciates the FAA's acknowledgement that the impact of NextGen aircraft noise on East Bay communities is real, significant and must be equitably resolved. She said she was hopeful that the FAA will commit to engage in a continuing dialogue and informational meetings with the Noise Forum and community groups regarding the identified impacts and mitigations. She requested that such meetings be scheduled together with quarterly Noise Forum meetings.

On a disappointing note, she observed that the letter submitted by the Noise Forum to the FAA regarding NextGen noise issues in the East Bay included a request for a process to provide community-driven noise mitigation proposals, and that a list of such proposals was provided to Mr. Martin at the October 5 subcommittee meeting. Unfortunately, there was no mention of those proposals tonight. These proposals were devised using the principles of safety, efficiency, minimizing impact, fairness and, above all, collaboration, she said. SOSEB recognizes that airports located in urban areas are convenient, yet noisy. Everyone shares the convenience, and they should better share the noise, as was the case prior to NextGen. The last point is really vital to understand, as the unprecedented jump in noise complaints easily demonstrates noise was not a widespread issue outside areas near arrival and departures until NextGen. SOSEB is not against NextGen, but problems were created with the concentrated and charted RNAV "rails" over densely-populated residential areas. Comparing pre- and post-NextGen air traffic for the first week of June from 2013 to 2016 shows just how much NextGen has impacted the East Bay hills that both San Francisco and Oakland aircraft traverse. Ms. Ransbottom provided statistical information to support the case that direct overflights of her area had increased significantly after NextGen implementation. The simple solution to this problem would be to return to the pre-NextGen operational procedures. In the absence of this, the noise has to be better shared.

Ms. Ransbottom acknowledged that RNAV is here to stay and that all have to come to grips with the fact that we have to share airspace and noise, but some of these procedures need to be fixed. Fixing the burdensome RNAVs in the East Bay should help fuel efficiency and reduce environmental impacts. It's a no brainer and a win-win solution to provide equitable sharing of noise. At the October 5 NextGen subcommittee meeting, SOSEB provided proposals addressing the three recognized NextGen noise issues with multiple mitigation proposals. With regard to the WNDSR STAR, it has inescapable problems in its current location and doesn't conform at all with NextGen goals of fuel efficiency and quieter descents. It's a 24-hour arrival route into a major commercial airport and FedEx/UPS hub that forces planes to fly for many miles under power at about 3,500

feet above homes. This is noisy, polluting and fuel inefficient. She said SOSEB proposes using San Francisco Bay or three alternative arrival routes to the east, and bringing planes in at high altitudes using fuel efficient, quiet, gliding optimized descents. SOSEB also proposed using a lot of alternative arrival paths that are already published and available; hence, it doesn't necessarily have to go to a complete re-draw. Secondly, the San Francisco departures on TRUKN are distributed along four RNAV routes from North Oakland to San Leandro. There's no reason to concentrate departing planes into "conga lines" over the Oakland hills. SOSEB proposes using San Francisco Bay for turning flights to their destination as soon as possible once they reach Oakland Airport to echo the dispersion over the East Bay hills, as was the case prior to NextGen. Air traffic control has to "touch" each one of those planes, anyway, so SOSEB figures that is a viable route. The third one is the nighttime Oakland departure HUSSH route. SOSEB has suggested requiring planes to fly midway up the bay to the eastward configurations north of Point Richmond. Unless safety dictates otherwise, planes should not be routinely turning eastward over Berkeley and North Oakland, as the majority do now.

Leslie reported that a spot check on WebTrak for August 10 from 11:00 to midnight showed 78 percent of departing flights did not fly the noise abatement transition. One after another turned over sleeping North Oakland and Berkeley. The noise abatement graphic that shows a 98 percent compliance with nighttime departures only addresses compliance in the immediate Alameda area. Once aircraft get north of there, they are not being tracked, it doesn't seem. She said SOSEB wishes to assert in the strongest possible terms that the current noise levels and distribution are unacceptable. SOSEB looks forward to hearing and discussing specific feedback regarding the proposals we provided Mr. Martin at the NextGen subcommittee meeting. SOSEB trusts that the FAA is going to work with us and our communities in good faith to develop and implement fair noise mitigation. SOSEB also appreciates Regional Administrator Martin's stated concern that equitably sharing noise must involve communication with any community that may be affected. SOSEB has met with and will continue to meet with representatives from CLASS and Keep Jets Over the Bay to create a collaborative and transparent approach to East Bay noise mitigation. Even though our communities were not originally afforded effective communication considerations, it's very important to adopt this going forward. We would hope other groups would join us in this collaborative effort and get the communication all aboveboard.

Leslie reported on the status of the portable noise monitors placed at two homes in the Montclair area. She thanked the noise office for extending the monitoring period to make up for some lost time due to technical issues. She also thanked Jesse Richardson for providing the processed data. However, she said they were challenged in understanding the data, which is at odds, in enough instances, to warrant research and clarification. She said they are in communication with the noise office on this issue and are looking toward getting it resolved. She also reported on SOSEB's attendance at the August Kaiser Air project meeting for North Field and were encouraged and appreciative, after briefly speaking with both Kaiser Air and Signature regarding their noise mitigation efforts. She asked that the Forum take additional steps to identify the ways fixed-base operators can help decrease noise impacts, such as pilot education and quiet flying. Both of them noted they used to have heat maps in their offices showing the quiet ways to fly, but they disappeared in some remodel, and they've never put them back. SOSEB remains confident with the collaborative approach here, that it's practical and will, hopefully, be effective. She asked for any questions.

The facilitator thanked Leslie for her presentation and suggested that the information she presented be discussed at a subcommittee meeting. Benny Lee commented that since the portable noise monitors have been in Montclair for some time, he felt that it would be good if the airport could produce some noise reports. This would help give us a better understanding of all of the different impacts and stresses occurring in Montclair. He thought it was great to have the monitors up there, and that it was also important that the Forum receives a report to understand those issues. Walt Jacobs concurred, and commented that he thought that Administrator Martin wanted the subcommittee to identify where they thought the line should be to best resolve the WNDSR issue. He said this was a key question that needed to be answered because it was the trigger point for the FAA's analyses. He added that all of the suggestions have been developed by the citizens most impacted by the NextGen procedures, and that he lives in Harbor Bay and knows all about airport noise. But, if we throw too many ideas at the FAA they will get lost. He said the subcommittee really needs to focus on providing exactly what Mr. Martin has asked for. Leslie replied, that this is exactly what SOSEB has tried to do. She said the list of proposals they gave to the FAA were very specific, and had been looked at by air traffic control, pilots, and others. She said they were very specific, using maps, waypoints, and other. Co-Chair Jacobs said if we've got that much technical information already, then we're one step ahead of the game in the subcommittee. Maybe what needs to be done is to analyze things some more to be able to recommend where we think the line should be that will serve the community best. Walt said the political aspect is a whole different thing, but he thought that Barbara Lee has shown sufficient interest in this project not to allow it to get swept under the rug, and she certainly has contact with the Congress. Leslie replied that one of the things they tried to do in the proposals was to use a lot of existing routes. A lot of the technical thinking has already been put into place by putting these routes here. Why can't we utilize them? Walt answered that we can, but the Forum subcommittee also has access to the Port's professional staff and consultants. They can review SOSEB's proposals from a technical perspective. Leslie said that the subcommittee has already received considerable support from Kristi McKenney, Matt Davis, and Doreen Stockdale.

Laurel Strand offered that several potential new alignments for the WNDSR STAR have been generated by the various parties, and that what is needed is a closer, more specific delineation of this new path and the areas that it would cover, particularly if it is going to impact two other Congressional districts. She said, if we're going to be approaching them with respect to allowing this path to go through their areas, she would like to be able to see beforehand a larger and more detailed map as to exactly where it would be located. She wondered about how that would be developed. Walt Jacobs answered that he thought the subcommittee could make this determination, but it could only be one path. The FAA does not want to see more than one proposed solution. Ms. Strand said she was not suggesting there be two choices. What she was asking for and questioning was, how do we go about taking the two existing versions of that new path and create a path that is more specific and shows exactly which communities are going to be impacted, their altitudes, their populations, et cetera? Jacobs said, that was not what Martin asked for. He asked, "Where would the line be located that would serve the interests of your area the most?" That's the question that needs to be answered. Ms. Strand suggested that this could be placed on the agenda for the next subcommittee meeting.

Ernie DelliGatti said the sectional navigation charts for Oakland have detailed information that pilots use, including waypoints, obstructions, and terrain. Based on the information on the sectional, you will be able to draw whatever lines you want and immediately see what impact there's

going to be in real time. DelliGatti suggested that the subcommittee request the appropriate sectional from the airport. James Nelson offered that there is a letter proposal to move WNDSR one nautical mile east and stretching it out. Evidently, this would cause it to cross into two other Congressional districts, which could raise a problem. He was not sure exactly why, but it raises the question of perhaps moving the line farther to the east. Walt Jacobs said the subcommittee should discuss this. Facilitator McClintock concurred, and said that all of these matters were things that should be left to the subcommittee to sort out.

### **C. CLASS Informational Update**

Matt Pourfarzaneh, an Alameda Bay Farm Island resident and president of CLASS, thanked the people from Alameda, city officials and members of CLASS, for their participation and support in tonight's meeting. Matt introduced Ed Downing who would be giving CLASS' presentation. He said that Ed was an aviation professional with many years of experience. Besides being a Bay Farm Island resident and an executive member of CLASS, Mr. Downing is a veteran pilot with vast experience flying both military and civilian aircraft. After retiring from the Navy, he joined Southwest Airlines, became chief pilot and was domiciled in Oakland for 25 years. Mr. Downing thanked Matt for the introduction, and also thanked Rep. Barbara Lee's office for being here and helping to facilitate what's happening tonight. He explained that CLASS stands for "Citizens' League for Airport Safety and Serenity," and serenity and safety were two key topics in his presentation. He said CLASS was formed in 1989 by Bay Farm Island residents concerned about noise and potential airport expansion. Today, CLASS represents 20 homeowner's associations, and 2800 households on Harbor Bay and Bay Farm Island. He explained that Alameda is made up of two islands: the main island and Bay Farm Island. Bay Farm Island is the one closest to the airport and the one that is most impacted by noise from the Oakland airport. As a matter of fact, he said, the majority of the homes in Bay Farm Island are directly off the end of the two North Field runways, Runways 28 Left and Right. A lawsuit was filed by CLASS over the proposed airport expansion and a settlement agreement was reached in 2001 or 2002. There were two main results of the settlement agreement. The first was a whole a bunch of do's and don'ts that the airport can do and pilots should be doing as they operate out of the Oakland Airport. The second result was a huge increase in the communication that existed between the Port of Oakland and Alameda and communities surrounding the airport. This increased communication has served us all very well, and it goes on today, and they are very grateful for that outcome.

Mr. Downing said there were three things he planned to talk about this evening, and that the presentation was designed to be presented to Mr. Martin. He said CLASS's concerns were increased noise associated with the HUSSH departure, increased noise from daytime straight-out Departures--the Oakland 9 departure -- that's not part of the NextGen program, and increased non-compliance with noise abatement procedures by pilots departing the North Field. The HUSSH departure, as has been mentioned, is an RNAV procedure. It was preceded by the SILENT departure, which was in existence for decades before HUSSH and was not an RNAV departure. CLASS's concern about the HUSSH departure is the ground track brings aircraft closer to Bay Farm Island and the shoreline. The initial turn occurs later and also brings the noise tracks closer to Harbor Bay and Alameda. It's much less effective at reducing noise, and, as was mentioned earlier, the FAA agreed they are willing to take another look at the HUSSH departure. CLASS is very grateful for that willingness, and is looking forward to an expeditious change in the departure which would restore the SILENT ground tracks out of the Oakland Airport. CLASS's second

concern is increased noise from daytime straight-out departures--the Oakland 9 departure. Alameda residents are experiencing more noise recently as a result of the Oakland 9 departure. The noise contours have moved closer to Bay Farm Island and the City of Alameda. As a matter of information, Downing said, the noise levels they deal with in Bay Farm Island are at the 65dB level. The departing aircraft are very, very loud, and a small adjustment in the noise or small shift in the noise contour makes a huge difference to the people that live on Bay Farm Island. CLASS believes that the increase in noise coincides with the implementation of the Metroplex plan and the Oakland 9 departure. Downing showed slides of two different aircraft departing the airport on Runway 30. The second aircraft is actually a thousand feet closer to Bay Farm Island and the Alameda shoreline than the previous departure. He asked the Port to look into this and to provide an explanation of the differences in the two flight tracks.

For 86 years, the main runway for the Oakland Airport was Runway 29. In late 2013, as a result of a shift in the location of the magnetic north pole, the runway designation was changed to Runway 30. Downing said that CLASS believes that the redesignation of the runway could result in a shift to the east for the Runway 30 departure noise contours. For decades, Downing said, airplanes flying the runway heading off of South Field were flying 290 degrees. Today, CLASS believes that some pilots might be flying the 300-degree heading and causing the noise contour to shift 10 degrees to the right (east). CLASS believes that a number of pilots, when they get on the runway and have a runway heading instruction, don't necessarily fly the specified 296-degree heading. He asked that the Port prepare data from before the Oakland 9 departure, so we can take a look at that. CLASS's third concern is increased non-compliance with noise abatement procedures for pilots off of North Field. For the Forum's information, he said, even before CLASS, and even before the settlement agreement, there was an agreement that no jet aircraft would depart the North Field. In recent years, CLASS has seen an increase in the number of aircraft that are departing the North Field. He showed a chart for the first quarter 2016. There were 3,189 departures off of the North Field runways, and of these 129 were identified as non-compliant departures, which comes out to a 96 percent compliance rate. However, the Port's quarterly noise report also notes that there were 485 jet departures off the North Field, which represents a compliance rate of only 85 percent. He said CLASS believes that this number needs to be looked at, and a determination made as to whether or not the compliance rate is actually 95 or 96 percent. He noted a similar discrepancy for the second quarter 2016.

Another of CLASS's concerns is the number of "ATC instruction" departures that are part of the non-compliant departures off the North Field. In the first quarter, there were 200. In the second quarter, there were 138. This is a significant number of jet aircraft that are being directed to take off from the North Field and, basically, disregards the fact that the previous preferential runway for jet aircraft is the South Field runway, Runway 30. This is a concern for CLASS because the North Field runway is 6,200 feet long with hundreds of houses off the end of the runway. The South Field runway is 10,400 feet long. There is open water off the end of that runway. He said CLASS was concerned about the safety in asking a jet pilot to use a shorter North Field runway, when there was a 4,000 foot longer runway available. CLASS is asking that the FAA also consider operational safety when they issue departure clearances to large jet aircraft from the North Field. He said the explanation CLASS has been given for some of this non-compliance is limited staffing. We don't quite understand that. We think the tower should be staffed to maximum effectiveness at all times. He asked that the Port clarify the meaning of the term "Pilot good effort," because they are not sure what it means. Lastly, he said, CLASS is asking for the best efforts of Oakland air traffic controllers to oversee compliance with the airport noise abatement procedures. There

are no options and no potential for success in implementing the voluntary preferential runway use system and procedures without the help of the air traffic controllers. CLASS appreciates their efforts and knows that they have a difficult job with considerable stress, but would like to submit that the protecting the quality of life for folks in the surrounding communities should be included in their job descriptions.

These issues have been discussed with the Port, and CLASS remains concerned about some of the data reporting and how some of its complaints are getting recorded. We can talk to the Port about these later. As for the HUSSH procedure, CLASS's proposed solution is to move the HUSSH waypoint site slightly south, and it appears that the FAA may be considering doing that. The benefits of this would be the departure ground tracks would move farther away from Bay Farm Island, the Alameda shoreline, and aircraft would be at a higher altitude prior to turning east over the East Bay communities. Mr. Downing summarized by saying that CLASS was suggesting: (1) adjusting HUSSH to reduce the noise for nighttime departures; (2) improve data from the Oakland Airport to accurately reflect the non-compliance CLASS believes exists; (3) motivate air traffic controllers to be aware that how they do their job greatly impacts the people in the surrounding communities; and (4) arrange for an FAA representative to attend North Field/South Field Group meetings. Harvey Hartmann attends every meeting and he's a great source of information, Downing said, but CLASS would like to see the air traffic controllers who are controlling those aircraft represented at the meeting. Lastly, CLASS would like the FAA to consider implementing the HUSSH departure 24 hours a day seven days a week. CLASS believes that if the HUSSH waypoint were to be moved slightly south – about a mile or less-- that it would move the noise tracks far enough away from the Alameda shoreline and far enough away from the City of Alameda that we could have quieter communities around the Oakland Airport. He thanked the Forum members for their attention and time.

Ernie DelliGatti asked if there was any indication that adverse weather conditions contributed to the noncompliant jet takeoffs. Ed replied, not to his knowledge. Matt Pourfarzaneh confirmed this. McClintock thanked Matt and Ed for their presentation.

#### **4. NOISE OFFICE REPORT**

##### **A. Noise 101 Recap**

Doreen Stockdale reported on the September 28 Noise 101 education program. She said there were 14 attendees from both the Forum, as well as the North Field/South Field Research Group. There were five separate presentations that ranged from the structure of the Forum to how and where aircraft fly, and how their noise is measured. It was well received by all involved.

##### **B. Fleet Week**

Ms. Stockdale recapped the aftermath of Fleet Week activities. She noted that in 2015 there were ten complaints from eight callers. This year there were eight callers again -- two of them were the same as last year, the other six were new -- but these eight callers filed 23 complaints. The majority of the complaints were Alameda over Sunday's arriving aircraft. The second most complaints were on Thursday and were about the air show's training activities.

Co-Chair Lee said the Noise 101 program was excellent, and asked if there were plans to repeat it. Doreen replied, Yes, definitely.” Benny said next time we should video tape it and place it on the



Port's website. With respect to Fleet Week, Benny said he was asked by his constituents why the Blue Angels base at Oakland, when it is San Francisco that derives the majority of the economic benefits. He also asked what can be done in the future to ensure that the East Bay derives some of the economic benefit. Kristi McKenney replied that she was not sure exactly what economic benefits are derived from Fleet Week; as it's, typically, more of an expense for communities to host these functions. I know it is a cost to the Oakland Airport and, even our engagement with the community costs us. Mr. Lee said. He thought the perception was that everybody goes to San Francisco and spends money there rather than spending it in the East Bay.

## **5. TECHNICAL WORKING GROUPS REPORT**

### **A. North Field/South Field Group**

Matt P. Davis provided the Forum with an update on the activities of the North Field/South Field Technical Working Group. Davis said that most of the items discussed at the last meeting were related to NextGen, which has been covered adequately in this meeting. They also talked about Fleet Week and Glen Martin's engagement with the Noise Forum, which we saw the results of this evening. They went through the noise report in detail, including the compliance and non-compliance rates, and looked at the discrepancies identified by CLASS. It turned out that there was some underreporting in Alameda. Everybody's noise concerns were being catalogued, but they were put in the wrong bucket; it was another category. Based on the way the system is processing the situation, the noise complaint wasn't going to the right location. It wasn't lost; it was just going to the wrong place. We resolved that issue and have republished the reports. He said they also talked about the Runway 30 easterly turn over Alameda, ATC instructions in general, the 100-degree radial into Oakland and the need to continue to comply with that. Doreen met with NorCal TRACON recently to continue to engage with them to make sure they're aware of the noise abatement procedures, that they train on the procedures, and that the controllers on the front line are following those procedures. During that meeting, Doreen made sure they know not to turn departing aircraft below 3,000 feet, and unless there's a safety concern, they want them to comply with a 100-degree radial arrival into Oakland. They also worked on the SALAD departure—the nighttime departure off of North Field—to tighten the turn. Basically, as you depart off the North Field, you make a turn heading in the opposite direction from which you took off. The problem is that we are seeing a lot of pilots making a wider turn than we would otherwise like. He said they were working on this issue to see if we can tighten up that turn.

### **B. Main Runway Overlay Project**

Mr. Davis said the project is scheduled to begin in September 2017. The overlay is done approximately every 15 years. It will entail a two-week period where some traffic will have to be shifted from the South Field to the North Field. More information will follow in subsequent meetings.

## **6. NOISE NEWS AND UPDATE**

Christian Valdes of Landrum & Brown made the presentation in the absence of Vince Mestre. Mr. Valdes began his presentation by noting that Southern California will get its own Metroplex starting in three weeks. The study will include about 99 procedures over the whole Southern California area. In Massachusetts, the Port Authority and MIT are participating in a study for ways to reduce the noise impacts due to the implementation of "PBN" and NextGen procedures introduced in 2012 and 2013. Aircraft are flying now where they did not fly in the past. Last year Massport received

over 17 thousand complaints, compared to 2300 in 2012. FAA Administrator Huerta was quoted as saying, "If these ideas are successful, we may be able to use lessons learned to address the challenges in neighborhoods around other large metropolitan areas." The study will cost approximately half a million dollars. Congress, as a result of community response, mandated the FAA to modify its community involvement manual. The FAA has published it on its web site. Boeing is doing noise testing on its B-737 MAX. To put it into context, the Airbus A320 NEO that is being delivered to the U.S. is about three to five decibels quieter than the previous A320 family.

As was seen from Glen Martin's presentation, prior to NextGen, many departures had defined dispersion corridors that were quite wide and the flight tracks were dispersed. NextGen condensed these flight tracks into what Martin described as "rails in the sky." Charlotte, NC asked the FAA to study this, and the FAA has completed a plan to disperse departure noise at Charlotte International Airport. Christian noted that Vince Mestre had spoken to the Forum previously about reducing taxes due to noise. This is actually happening in Cook County, IL, around Chicago's O'Hare International Airport. After considerable research, the Cook County Assessor found a correlation between property value and aircraft noise and will give a four to five percent reduction in property taxes to over eight thousand homeowners as compensation for noise impacts. The City of Santa Monica has been trying to close its airport for many years. The City Council recently voted close it by July 2018. If the airport closes, the city plans to build parks and other recreational areas. Christian said he is betting that the airport will remain open past July 2018.

Valdes presented information on new aircraft technology that will appear around 2030. It will be quieter, use less fuel and produce less NOX than the best-in-class B-737-800. NASA was awarded 2.9 million dollars to continue its development of the "double bubble" aircraft. In three more years we might be able to see and hardly hear a "quiet boom" supersonic jet. NASA and Lockheed Martin are testing designs on this aircraft. This design hopes to break the sound barrier with a little rumble instead of the dramatic clap or boom we currently hear from breaking the sound barrier. NASA is also testing a new engine nozzle that reduces exhaust noise level to below industry limits. A model of the aircraft with these engines will go through wind tunnel testing later this year. A new general-aviation trainer powered by a solar electric engine is being flight tested. The company that makes this aircraft calls it a "nearly silent aircraft." The National Park Service is quite interested in this "development" because of the thousands of small-propeller aircraft that fly over national parks and disrupt visitors and wildlife on the ground. The entire American Airlines fleet became much quieter because they retired 20 MD-80s in one day. American Airlines will retire an additional 45 MD-80s by the end of this year and retire their remaining 52 MD-80s by 2018. Two other airlines that operate the MD-80, Delta and Allegiant Airlines, will retire aircraft by 2019. Valdes said the upcoming UC Davis noise symposium looks to be quite exciting. The title is "Seeking Solutions for NextGen Impacts." It will focus on efforts by elected officials, airport, communities and the FAA to resolve NextGen implementation issues.

The Paris Climate Change Accord on greenhouse gases did not include aviation until now. ICAO has agreed to greenhouse gas limits. Although China, India and Russia quaked and screamed, there was an agreement. Any increases in aircraft emissions above 2020 levels would be offset by the purchasing of carbon credits from designated environmental companies. NASA will study five green tech concepts that reduce fuel use, emissions and noise. Some of these concepts are alternative fuel cells that are lighter and not as complex as the existing cells that mix hydrogen and oxygen to produce electricity. The aviation industry promised to cut out CO<sub>2</sub> emissions by half by 2050 by using bio jet fuels, which are a lot cleaner, with less methane. This also helps aviation

become less dependent on fossil fuels. A study by UC Irvine found charging an emissions fee of 39 cents per gallon on jet fuel would generate an environmental benefit of 117 million dollars a year. The author of the study claims its emissions fee would have a quicker effect on emissions than the recently-proposed ICAO aircraft fuel efficiency standards. Kudos to Jet Blue. They continue to invest in renewable jet fuel (bio-fuel). They agreed on a 10-year renewable jet fuel purchase. They plan to purchase 33 million gallons of jet fuel with 30 percent renewable jet fuel content. It's targeted to achieve a 50 percent or higher reduction on greenhouse gas emissions per gallon on a life cycle basis.

Christian concluded his presentation with an anecdote about the use of drones to deliver medical supplies and blood to remote hospitals in Rwanda. Each aircraft can carry about three pounds of cargo and deliver it over about 90 miles. The facilitator thanked Mr. Valdes for his presentation.

## **7. ANNOUNCEMENTS**

### **A. Acceptance of 2<sup>nd</sup> Qtr. 2016 Noise Report**

Facilitator McClintock said that Forum members had received copies of the quarterly noise report. He said if there were no questions or comments he would entertain a motion to receive and file. Co-Chair Lee noted that for North Field quiet hours compliance it was 65 percent for the second quarter of 2015, but 79 percent compliance for the current year with more operations. He said this was very good. He asked about the 100-degree radial turbojet landing compliance, noting that it was at 96 percent compliance in Q2 2015, but only at 92 percent this year. Matt Davis replied that Doreen Stockdale had discussed this issue with the FAA, and that it is a matter of educating the frontline controllers to keep those planes out longer. There's a lot of pressure to get the planes in quickly, but continuous engagement with the FAA to make sure they understand the importance of that turn and not to turn those airplanes too early. He agreed that the compliance rate should be looked at. Councilmember Daysog moved to receive and file. Seconded by Ernie DelliGatti. The motion carried.

## **8. CORRESPONDENCE**

### **A. Berkeley City Council Resolution No. 67,692-N.S.**

The facilitator noted that Forum members had received a copy of Berkeley City Council Resolution 67,692-N.S. He applauded the City for weighing in on the NextGen issue. James Nelson said the resolution was prepared by Berkeley Councilmembers Jesse Arreguin and Susan Wengraf. McClintock said that this was an informational item only and that no action was required.

## **9. PUBLIC COMMENT**

The facilitator announced that this was the opportunity 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. Facilitator McClintock said that it had been a long evening, and if anyone wished to have anything entered into the record it would be better to submit any comments to him directly, as the minutes would not be available until just before the next Forum meeting. Carmen Borg, representing CLASS, commented that by the time the public comment period opened this evening, most of the audience had already left. She said it was very disappointing for CLASS that they had such a large turnout, but lost everyone before the end of the meeting. The facilitator thanked Ms. Borg for her comments, but noted that he had made it very clear that anybody who wanted to comment

on NextGen was certainly welcome to do that through the comment cards, all of which would be forwarded to the noise office and the FAA. And, again, he said, the public comment period is principally for items not on the agenda. He reiterated that anyone wishing to make comments or ask questions may do so by submitting them to him via e-mail. They will be distributed to the Forum, the airport noise office, and the FAA. There being no further individuals who wished to address the Forum, the facilitator closed the public comment period.

#### **10. NEXT MEETING – January 18, 2017**

The next Forum meeting is scheduled for January 18, 2017.

#### **11. NEW BUSINESS/ADJOURNMENT**

Ernie DelliGatti requested that Glen Martin be provided with a copy of CLASS's presentation. Laurel Strand asked that a discussion of low-flying helicopters and fixed-wing aircraft be placed on the January agenda. The facilitator asked Ms. Strand to provide him with a description of the specific issues of concern, and noted that this had been an issue of interest to the Forum in the past. Pat Mossburg requested that copies of Mr. Martin's presentation be made available to Forum members. Matt Davis said he would make copies available. Walt Jacobs said the Alameda presentation should also be made available.

The meeting was adjourned at 9:22 p.m.

END