DRAFT MEETING MINUTES OAKLAND AIRPORT-COMMUNITY NOISE MANAGEMENT FORUM

April 19, 2017

INDEX TO THE PROCEEDINGS

Page No.

1.	INTRODUCTIONS	1
2.	ANNOUNCEMENTS	2
3.	APPROVAL OF MINUTES (January 18, 2017)	2
4.	PUBLIC COMMENT	2
5.	NEXTGEN RELATED NOISE CONCERNS	
6.	NOISE OFFICE REPORT	6
7.	TECHNICAL WORKING GROUPS REPORT	
8.	NOISE NEWS AND UPDATES	9
9.	CONFIRM NEXT SCHEDULED MEETING DATE (JULY 19, 2017)	12
10	. NEW BUSINESS/ADJOURNMENT	. 12

1. INTRODUCTIONS

The April 19, 2017 meeting of the Oakland Airport-Community Noise Management Forum was called to order at 6:40 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, Councilmember, City of San Leandro Walt Jacobs, Co-Chair and Citizen representative, Alameda Trish Herrera Spencer, Mayor, City of Alameda Cindy Horvath, Alternate for Wilma Chan, Alameda County Supervisor

Ernest DelliGatti, Citizen Representative, Alameda County

Susan Wengraf, Councilmember, City of Berkeley

James Nelson, Citizen Representative, Berkeley

Edward Bogue, Citizen Representative, Hayward

Pat Mossburg, Alternate for Larry Reid, Councilmember, City of Oakland

Peter Marcuzzo, Alternate for Laurel Strand, Citizen Representative, Oakland

Tom Wagner, Citizen Representative, San Leandro

Kristi McKenny, Assistant Director of Aviation, Port of Oakland

Staff Members/Advisors/Guests:

Iowayna Peña, Policy Analyst & Community Liaison for Vice-Mayor Annie Campbell Washington, Councilmember, City of Oakland

Doreen Stockdale, Airport Noise Abatement and Environmental Affairs Supervisor

Jesse Richardson, Jr., Noise and Environmental Affairs

Darron Evans, Airport Operations Superintendent

Hugh Johnson, Aviation Planning and Development

Gene Reindel, Harris Miller and Hansen, Inc.

Rhea Gundry, Harris Miller and Hansen, Inc.

Harvey Hartmann, Hartmann & Associates

Vince Mestre, Landrum & Brown

Thann McLeod, Manager, Airspace & Procedures, Northern California TRACON

Abegael Jakey, FedEx Corporation

Kathy Ornelas, City of San Leandro

Kathy Livermore, City of Alameda

Nastasja von Conta, Aircraft Noise Abatement Office, San Francisco International Airport

Valerie E. Jensen Harris, CSR, Court Reporter

Michael McClintock, Forum Facilitator

2. ANNOUNCEMENTS

A. ACCEPTANCE OF 4TH QUARTER 2016 NOISE REPORT

The facilitator asked for a motion to receive and file the 4th Quarter 2016 Noise Report. Motion made by Co-Chair Lee. Seconded by Ms. Mossburg. Motion to receive and file carried.

3. APPROVAL OF MINUTES (JANUARY 18, 2017)

The facilitator noted that members of the Forum had received a copy of the draft minutes for the January 19, 2017 Forum meeting with their agenda materials. Having received and read copies of the draft meeting minutes, the facilitator asked the Forum for a motion to approve the draft minutes unless there were any corrections or additions. Co-Chair Jacobs moved approval of the draft minutes. Co-Chair Lee seconded the motion. Abstentions by Mmes. Wengraf and Mossburg. There being no further discussion the facilitator called the question. Motion carried.

4. PUBLIC COMMENT

Kurt Peterson, a resident of the west end of Alameda, said that he and his wife had been attending Forum meetings for over three years. He complained that the 220 signatures they

had gathered and presented to the Forum concerning increased noise in their neighborhood had fallen on deaf ears, and that there wasn't anyone present from the FAA who could to respond to their issues. He expressed his disappointment that a representative from Southwest Airlines was not present, because on April 13 Southwest Flight 4863 left OAK at 9:45 p.m. and flew directly over his house...considerably short of where it should have turned. He accused the pilot and controller of laxity in executing this early turn. He said he would like to have someone from the FAA at the next meeting to explain how this happened "because there wasn't another flight in the whole entire area on web track at that time."

Bart Lansbury [sp?], a resident of North Oakland, expressed concern over ILS approaches to Runways 19L and 19R at SFO during inclement weather (Southeast Plan operations). He said these arrivals from the east come over the Berkeley and Oakland hills, and also over Oakland and Alameda. He said this approach to SFO has been used excessively because of all of the recent storms, and has created severe noise impacts over the underlying communities. Some of these flights have come over his house as late as 2:30 a.m. and then again, as early as 5:30 a.m.—giving him only two and a half hours of relief. He felt that they should make their approach over the Bay before turning for final approach. He asked that this matter be considered to see whether there's a way to redesign this approach so it's less impactful to his neighborhood. McClintock asked Mr. Lansbury to provide his contact information to Doreen Stockdale for follow-up. James Nelson asked Mr. Lansbury where he lived. Lansbury replied "North of Montclair, the top of the hills near the regional park, Broadway Terrace and Skyline where they meet in Oakland."

Bill Harrison, a resident of Hayward said that he and his wife had been coming to Forum meetings for over 10 years. He expressed their concern with the upcoming runway overlay project, noting that "the last time this was done in 2001 there was traffic overhead 24/7." He stated there was a noise monitor in their yard and over a 30-day period there were over 5,000 flights. You can imagine what the impact will be for the period of this overlay project. He said he had a very simple question, "Can the Forum arrange for the Port to pay for us to live in a hotel while this project is going on?" McClintock responded that a presentation on this subject would be coming up.

Michael Bostick, from Montclair expressed his concern that "It's been since October [that] we last heard from somebody from the FAA, and we now have a new [regional] administrator... so, we've all been waiting [since] the proposal has been submitted and hoping for a positive outcome and not having any sign." He said he was concerned that there may not be a positive response, and asked how we should keep ourselves at bay while awaiting the FAA response. The facilitator said that this issue was coming up in the next agenda item. Aaron Robinson said he and his partner live on a sailboat at the Ballena Isle Marina on the bay side of Alameda. He said besides noise pollution, their sailboat has been receiving "more debris, environmental fallout, from the jet fuel," and, as a consequence, it costs a lot more money to maintain their boat now. Veronica Peterson said they were promised a noise monitor at Ballena Bay. She wanted to know the timeline was for getting the monitor. Doreen Stockdale replied that she was not aware of any promises of noise monitors, and that there is a long list of residents requesting noise monitors ahead of the Petersons. Mrs. Peterson asked for a copy of the list. Ms. Stockdale agreed to provide a copy.

Naomi Pierce, from North Berkeley, said "Since the traffic has been streamlined up by Tilden,

it interrupts her work and her sleep." She said it is an undue burden that has been placed on a smaller subset of people, like asking only certain people to pay all of the taxes. It's very disruptive and quite unacceptable. She said she did not understand why this was happening and why she has to accept it, especially since noise mitigation measures are available. She read a statement from her neighbor:

"Dear Mr. Richardson [and] FAA board members:

I was only just notified of this evening's hearing, and I'm, unfortunately, unable to attend on such short notice. I own two homes on acreage fronting on both Wildcat Canyon Road and Vistamont. I purchased my home for its serene and quiet location...Since flight patterns have been changed, it is nothing [unintelligible] but with flights constantly overhead 24/7. I was never informed this was going to occur, and I believe that it has impacted my quality of life as well as that of my neighbors and tenants. I'm experiencing sleeping problems as a result. I am and have been a prominent realtor in the Bay Area for 30 years, and I know that increased aviation noise levels are having a negative impact on property values. I urge you to change or at least vary flight patterns. I believe those of us in the two-mile radius should not have to bear the burden of a lesser quality of life and financial harm as it relates to our home and income properties, not to mention diminished quality of life.

Sincerely,

Lucius J. Silcox, Jr."

Facilitator McClintock thanked Ms. Pierce for her commentary and the letter from Mr. Silcox. He noted, however, that this was not a public hearing and that she was not directly addressing the FAA. He added that the Forum has been addressing the issues raised by her and Mr. Silcox for over a year and that the next agenda item is an update on the report that was prepared by a subcommittee of the Forum in response to the concerns raised by her neighbors both along the shoreline as well as in the Oakland and Berkeley hills. He said she should know that the Port's Board Room has been packed for the last three, perhaps even four, Forum meetings with people from her area who have expressed the same issues and concerns. The Forum is very much aware of the concerns of the people living in the Berkeley and Oakland hills. This information was taken into consideration by the Forum subcommittee that prepared the report to the FAA seeking remedies from the conditions she described.

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

5. NEXTGEN RELATED NOISE CONCERNS

A. NextGen Subcommittee Update

The facilitator called on Leslie Ransbottom to provide an update on the status of the Forum subcommittee report and recommendations to the FAA, and noted that afterwards, he would ask Assistant Director of Aviation Kristi McKenny if there was anything new from the FAA. Ms. Ransbottom introduced herself as the Chairperson for the Forum's NextGen subcommittee. She

began by noting that the Forum's NextGen noise mitigation proposals have been sent to the FAA for consideration. At its January 18, 2017 meeting, the Forum voted unanimously to approve the report prepared by the NextGen subcommittee. The report recommended adjustments to certain NextGen procedures and routes at both the Oakland and San Francisco airports. The motivation for these recommended revisions was that NextGen implementation in the East Bay resulted in significant noise impacts and an increase in community noise complaints. However, because of concerns about how one of the recommended noise mitigation measures could affect the Hayward area, the report was sent to Vince Mestre of Landrum & Brown, the Forum's acoustical consultant for peer review. Mestre reviewed the report and came back to the subcommittee with his comments on the pros and cons of the report from a noise perspective. The subcommittee reviewed Vince's comments and met with him in February to discuss his findings and recommendations.

The additional time spent in reviewing the report was well worth the time and effort, and resulted in a stronger document. Vince's recommendations included adding and modifying some graphical exhibits to clarify the proposals, incorporating additional text to refine the proposals and, importantly, he had some great suggestions on how to modify the text to ease the FAA's reviewing of this and bring the report in line with FAA terminology. For example, the term "significant impact" to the subcommittee meant a dramatic, big noise impact. "Significant impact" has a very different meaning to the FAA, and it based on decibel levels. It was things like this that we could change that made the report easier to read and decrease any chances of miscommunications. The proposals themselves weren't altered, and for that reason, it was decided the document did not have to go back to the Forum for another vote. This temporary delay had another benefit. The cities of Alameda and San Leandro passed resolutions urging the FAA to mitigate NextGen noise, and we were able to add these to the packets along with the resolutions from Oakland and Berkeley.

The Forum's action received letters of support from the Mayor Libby Schaaf of Oakland, Oakland Vice-Mayor Annie Campbell Washington, Oakland City Council President Larry Reid and a letter of support from Alameda County Supervisor Nate Miley. Forum facilitator, Mike McClintock, prepared the transmittal letter, which was supplemented by an introductory cover letter from the Port's Director of Aviation, Bryant L. Francis to the new FAA Regional Administrator Dennis Roberts. Director Francis' letter also provided some context for the proposals. On March 27, 2017, copies of the report and all supporting documentation (a total of 70 pages) were sent to Administrator Roberts and to former FAA Regional Administrator Glen Martin; U.S. Senators Feinstein and Harris; Alameda and Contra Costa County Congressional Representatives Barbara Lee, Eric Swalwell, Mark DeSaulnier, and Mike Thompson; the SFO Community Roundtable; and to members and advisors of the Forum. Ms. Ransbottom thanked the Forum on behalf of the subcommittee for its support, and Port of Oakland staff for their hard work in helping to get the report out the door. She acknowledged the much-appreciated assistance from Representative Barbara Lee, who was able to bring the FAA to the table, as well as Mayor Schaaf, Vice-Mayor Campbell, Council President Larry Reid, Supervisor Nate Miley, and the City Councils of Alameda, Berkeley, Oakland, and San Leandro for their support. Thanks also went to the local noise advocacy groups -- CLASS in Alameda, Keep Jets Over the Bay in Berkeley, and Save Our Skies East Bay. She added that the final document is available for public review, and can be accessed on the Port's website under Noise Forum and NextGen.

Ms. Ransbottom reported that the Forum is currently awaiting a reply from the FAA with regard to the report and the FAA's anticipated timeline for completing its review of the report and recommendations. There are no plans for the NextGen subcommittee to meet until after the FAA replies. If no reply is received within 60 days of mailing, we will follow to find out where they

are in the process. Facilitator McClintock thanked Ms. Ransbottom for her comprehensive report and also thanked the subcommittee and Port staff for their hard work. McClintock called upon Kristi McKenny for her remarks.

Ms. McKenny thanked Leslie for her leadership on the subcommittee, as well as Councilmember Benny Lee and Walt Jacobs, who, as the co-chairs of the Forum, were very actively involved and engaged in helping guide the process and the completion of the package. She also thanked Matt P. Davis and Doreen Stockdale for working with the team along the way. She felt that the timing of the transition from one FAA regional administrator to another was a good thing, and spoke highly of the new regional administrator. She said Mr. Roberts has had a long career in various aspects of the FAA, including airports and the environment, so he understands the environmental aspects of FAA actions. She said she had let him know to expect the report, and that he has a lot of things going on right now with the NextGen process being implemented in Southern California, and the Bay Area Metroplex with the select committee on the peninsula and SFO Roundtable reports. She reached out to Roberts and they had a very positive conversation. Roberts indicated that he was setting up briefings with the appropriate staff in his organization so he could get fully up to speed.

She said the most important thing Roberts could do at this time would be to provide the Forum with a timeline of what the next steps will be. Moreover, she said, she stressed the need for the FAA to work with the Port and the Forum through an interactive process of working directly with their key people and ours. The last thing we need if we are to accomplish anything will be further time-consuming formal back-and-forth. We need to roll up our sleeves and get down to business so that we can see what may or may not be possible. She said, the report was well received, and Roberts indicated he would proceed posthaste with reviewing the materials and getting back to us with an outline of a timeline and next steps, but he did stress the amount of work they have going on in this area repeatedly as well as the reality of new processes and how long things take in general in the federal government. So, there are a number of challenges they're working through concurrently and we will need to manage our expectations accordingly. McClintock added that he had reviewed the minutes and agendas of the SFO Roundtable and, so far, there was no indication that the FAA had responded back to them with regard to the report they had submitted. Ms. McKenny said the select committee has not heard back from the FAA. McClintock noted that this was true, but there is some question over whether the select committee or the Roundtable has priority over Peninsula issues. This is complicated by the fact that many of the Peninsula's elected officials are members of both the Roundtable and the select committee.

The facilitator noted that there was no correspondence on this agenda item.

6. NOISE OFFICE REPORT

The facilitator called upon Doreen Stockdale to give the Noise Office report. Ms. Stockdale said she would start with Co-Chair Jacobs request for a recap of the March 7, 2017 tour of the Northern California TRACON facility. She said this was a joint visit with the SFO Roundtable. There were 21 attendees, with 13 from the Forum. The tour began with a presentation from the NCT staff, and then a visit to the radar room. The group enjoyed a nice lunch, where both groups were able to intermingle. She said it was a good tour and that they would anticipate it as an annual event. On April 2, the Alameda Naval Air Museum held a 75th anniversary remembrance of the Doolittle Raid over Tokyo. A B-25 bomber from the Commemorative Air Force from Camarillo did three

flybys over the museum in recognition of the anniversary. Of the eighty crewmen who participated in the raid, only 102-year old Richard Cole is still alive.

Ms. Stockdale recapped the noise complaints for 2016 and compared them with the 2015 complaints. The number of callers increased by 97%, from 364 in 2015 to 716 in 2016. Noise complaints increased 843% from 5,252 in 2015 to 49,544 in 2016.

7. TECHNICAL WORKING GROUPS REPORT

Doreen noted that Thann McLeod, Manager, Airspace & Procedures at NorCal TRACON, reported to the NFG/SFG that the nighttime procedures from both SFO and Oakland are now going all the way to the REBUS waypoint before they are turned, which is something that is actually in the proposal we sent to the FAA, and it's already happening. Kathleen Livermore reported to the working group that Alameda Mayor Spencer had sent out another round of letters requesting those pilots refusing to comply with published noise abatement procedures, especially no jet departures from north field, to please comply. Ms. Stockdale thanked the Mayor for her ongoing support.

A. Main Runway Overlay Project

Ms. Stockdale introduced Hugh Johnson from aviation planning and development, who discussed the main runway overlay project. Mr. Johnson is the project manager for the runway overlay project. He presented a slide show of the information shown at a community outreach meeting in February. He showed slides of potholes and cracks in the runway surface and explained that the last overlay was completed in 2001. Normally, pavement overlays are done every 15 years, so we're beyond the normal life expectancy. Since 2001, minor repairs have been conducted within six-hour closure windows once a week. This is not enough time to perform a full overlay. When the runway was overlaid in 2001 it was closed for one week. However, he noted, this time they will be repairing the lights too, and the runway will have to be shut down for two full weeks.

Johnson showed slides of the proposed project, including the use of parallel Taxiway Whiskey as a temporary runway (to be called Runway 11-29) during construction. The temporary runway will be just over 7,600 feet long, compared to the main runway at 10,520 feet. The 7,600-foot temporary runway is adequate for the aircraft that currently use the main runway. However, some air carriers will use North Field for arrivals, although not any of the heavier jets. Parts of the main runway were overlaid two years ago in conjunction with the Runway Safety Area project, so the entire 10,520 feet will not have to be repaved, only about 7,000 feet. The planning and design elements of the project were started in late 2015. Six stakeholder outreach meetings were conducted with the air carriers, cargo operators, FAA staff, and business interests. Community outreach included meetings in San Leandro and Alameda. A follow-up meeting will be held in San Leandro in June, and in Alameda in July. He said they were prepared to meet with other interested organizations on request.

Initial work on converting the taxiway to the temporary runway will begin at the end of June and continue into August. The actual overlay work will be carried out in September. The decision to close the main runway was arrived at after considering several other alternatives, but these would have essentially diverted all flights to North Field. The approach of using the temporary runway allows the Port to minimize the use of North Field during this project. Weather and flow control are factors in the desire to have the work done before the end of September. Johnson showed

April 19, 2017 Page 7

additional slides of the airport's runway configurations, and noted that as in 2001, all aircraft that operate out of the South Field for departures will continue to do so. There will be increased arrivals into North Field, but an increase in departures by air carriers out of the North Field is not anticipated. The shift in activity will result in about a 50/50 split in operations between the North Field and South Field. Currently, this split is about 75% South Field and 25% North Field. Johnson added that they were expecting up to 108 commercial jet arrivals at North Field, and 104 at South Field. Heavy jets will continue to use South Field. This estimate is based off of information received from the FAA tower operations and is conservative. It assumes that the most restrictive conditions will apply for the operation.

Johnson showed slides of potential noise impacts during the project. No significant additional impacts are anticipated. Lastly, he showed slides of the proposed haul routes. The contractor that has been awarded the work already does much of the paving work at the airport and has batch plants in the area and is very familiar with working at the airport. 98th Avenue was identified as the preferred route to the airport for any hauling from the freeway. He noted that by recycling runway pavement material through grinding, it would lessen the total amount of truck traffic. The facilitator thanked Mr. Johnson for his presentation and asked for any questions.

Co-Chair Lee asked if Mr. Johnson had notified the Wilson and Muir schools in San Leandro of any potential impacts. Johnson said he would contact the airport noise office about this issue. Co-Chair Lee said any disruptions could interfere with the learning process, so outreach to the two schools is very important. Darron Evans said they would continue the outreach they began with San Leandro to include the two schools. Kathy Ornelas asked that this additional outreach be started sooner than later because many of the offices will be closed in June and July, and there is only a few weeks in which to reach them before the school year starts. Ernest DelliGatti asked if the "NOTAM" concerning the project could be posted to the airport website so that people wondering what exactly is going on would have that information readily available. In addition, he wanted to make sure that the San Lorenzo residents, who will also be impacted by the project, receive adequate notification so that they will be aware of exactly what's going on.

Walt Jacobs asked why any operational activity needed to be transferred to North Field if Taxiway Whiskey was available as a runway. What kind of jets will be using North Field. Johnson replied that even with the parallel taxiway being used for a runway, it only has limited capacity compared to the main runway, mainly because of the back taxiing that needs to occur on the main runway. Currently, on the runway, aircraft can pull off the runway and use the taxiway and essentially leave the runway for use by other aircraft. With the taxiway as a temporary runway landing aircraft will taxi to the end of the taxiway/runway, then have to back taxi to clear the runway. This limits the capacity of the runway. The temporary runway is able to accommodate all of the departures, but, unfortunately, not all of the arrivals. Mrs. Bill Harrison asked what kind of heavy jets would be coming in over Hayward during the project. Mr. Johnson replied that the heavy jets will use the temporary runway parallel to 12-30. They would not be not coming in over Hayward. Some of the smaller commercial passenger jets, e.g. Southwest's B-733s, will be landing on the North Field, but the heavier aircraft, the long-haul aircraft, international carriers, and the heaviest cargo carriers will come in to the South Field, which is essentially the same approach as is currently used by them.

Mayor Spencer commented that she appreciated the outreach, but wanted to make sure Mr. Johnson was aware that the Alameda School Board does not meet in July, and the City Council is dark

in August. She asked that the Port keep this in mind when making their schedule. Kurt Peterson asked if the air carriers had been approached about modifying their schedules. Johnson replied that the air carriers had been involved in an earlier outreach meeting, and the Port only has a limited ability to affect their schedules, but they are aware of this project and are taking that into account as they schedule their operations. Ed Downing asked if the standard instrument departure for Oakland Airport will be modified during the project, and will there be any turns made that are different than what they're flying now to adjust to the fact that there will be a lot more airplanes taking off from North Field, and will they have to adjust for the fact that the temporary runway will be closer to Harbor Bay and Bay Farm Island. Johnson said that the majority of aircraft would come in on the approach to 12-30, but some would have to make a side-step to line up with temporary Runway 11-29. For departures, he said, there's special RNAVS developed for direct in and out of 11-29. Thann McLeod added that there will be the Oakland 9 and Oakland 1 departure, the Skyline departure; and the ILS sidestep. There will be an RNAV procedure straight-in to the temporary runway. Kristi McKenny thanked Mr. Johnson, noting that the stakeholder and outreach meetings were very important to the Port. Ernie DelliGatti said at the January Forum meeting he asked for a plot of the locations of noise complaints. Ms. Stockdale responded that she did not recollect the request. DelliGatti said this was always included in the noise report, and that he would like to see it reinstated so that the Forum could see the number of noise complaints. Doreen said she would gather the information and send it out to the Forum.

8. NOISE NEWS AND UPDATE

Vince Mestre began his presentation with a thank you to Leslie Ransbottom. Vince said it was a pleasure to work with her and the subcommittee. He announced that an agreement had been made between the FAA and the City of Santa Monica to allow the Santa Monica Airport to close in 2028. He said this was an unbelievably significant agreement. He said he did not know why the FAA settled at this point, but the battle has been ongoing for almost 50 years. He next discussed the hearing that Phoenix had before the U.S. Court of Appeals for the District of Columbia on their lawsuit on the FAA's new RNAV procedure out of Phoenix Sky Harbor that was not subject to environmental review, but simply categorically excluded by the FAA. Vince noted that the judge asked some extremely-pointed questions of the FAA. She said a black hole exists in the FAA processes and procedures, making it unclear what an affected party has to do to get the FAA to reconsider final decisions. He said he was concerned about a federal agency making decisions that affect peoples' lives without having a process for agency review. The judge was concerned how parties affected by FAA flight path changes get the agency to reconsider them. The tenor of her questions led one to believe that she was favoring the City of Phoenix's position.

There's a bill authorizing \$640 million for the NASA aeronautics program, which usually includes some noise work either for helicopters or fixed wing aircraft or both. This bill doesn't have much in it except for the preliminary design of a low-boom supersonic demonstrator aircraft, which Lockheed Martin would build, and then there's a series of proposed surveys of people who will be asked their response to the sonic boom after overflights of the demonstrator aircraft. As for the status of noise legislation, one of the bills we talked about was signed into law in December before the change of administrations. The remainder are still in committees of the House or Senate. The current FAA administrator, Michael Huerta, has not been replaced. His five-year appointment ends January 1, 2018. He's one of thousands of political hold-overs. It's very unclear when we might see a new agency administrator. The National Quiet Skies Caucus, NQSC, has 36 members of Congress. They have a web site. It's both House and Senate members who have taken up the

April 19, 2017 Page 9

banner of aviation noise control and, hopefully, will generate effective legislation. As for the bill signed into law by President Obama on December 23rd, it's basically to restrict how the FAA can do these categorical exclusions for flight path changes. It has a mandatory notification and consultation provision of at least 90 days before implementation, and it requires consultation with the airport operator. Vince said he did not like the provision that stated that the FAA will consider consultations or other engagement with the community. He would be happier if it required consultation with the community. The law requires the identification of measures to mitigate and consider alternative flight paths that do not substantially degrade the efficiencies. Mestre felt the legislation was a good starting point, but probably not very helpful to us. It talks about the effect on the human environment. It defines the human environment according to a separate Code of Federal Regulations.

He provided an update on the Quiet Communities Act. Its main component will be to re-establish the EPA Office of Noise Abatement and Control (ONAC), which was shut down in the mid-1980s. Additional funding would be required for the EPA to re-establish ONAC. He said he did not think this was going to happen. The Airport Mitigation Act requires the FAA to fund eligible users to study health impacts of aviation on residents, both noise and air. He was not optimistic as to its passage either. The FAA Community Accountability Act establishes an FAA ombudsman for each FAA region. Under this legislation, the ombudsman could prevent a CATEX flight path change and force an environmental analysis if he felt that communities would be impacted. Also, it would allow an airport operator who would be affected to force an environmental analysis and not a CATEX if the airport operator submits a written request. He said all of these can be tracked on an aviation web site called noiselaw.org\bills. There is no clear direction as to which way the FAA will go on noise and environmental issues. However, Michael Huerta, the FAA administrator, says he's willing to give up some efficiency to reduce noise and he embraces the 80 percent solution, i.e. if he can get an 80 percent improvement, he'll take it instead of pushing for a higher percentage. If that had been the policy before Phoenix, Phoenix would have never happened. So, this is a clue that there may be some lightening up at FAA headquarters about how these RNAV procedures are dealt with.

Vince said the Trump 2018 budget includes air traffic control privatization. Its intent is to implement an independent non-governmental organization. This was part of the FAA re-authorization bill two years ago. It did not make it into the final bill. The same issues we talked about before are there; and that is, would such an organization be subject to the National Environmental Policy Act. If not, and it operates in the State of California, would it be subject to the California Environmental Quality Act, which is significantly stricter than the national one. At this time, and until "privatization" is defined, we have no idea what this will really mean. The Bureau of Transportation Statistics has launched a website that includes all sorts of demographic maps. It includes these national aviation and road noise maps. Mestre demonstrated with a map of his own construct showing various noise impact areas around the Bay. Boeing and Jet Blue invested in a company called Zunum, which is a hybrid electric aircraft that looks pretty cool. It is designed to have from 10 to 50 seats with a range up to a thousand miles and will include battery power with either an aviation diesel or turbine engine to extend its range. The idea is that the aircraft would operate in an electric mode on departure and arrival and then use the engine, if necessary, for longer flights in transit. So, the noise reduction is spectacular because an electric motor is a lot quieter than a jet engine.

Vince talked about meeting with Julie Marks, FAA Community Involvement Manager for Airspace Projects in the Air Traffic Organization. He said the FAA has begun to realize that their community outreach has been less than stellar because of mounting community outrage and litigation over the implementation of RNAV. Julie talked about changes they have made to RNAV procedures as a result of input from the communities in Charlotte, Cleveland, Denver, Regan National, Florida and Southern California. There was no discussion of the Bay Area and no discussion of Phoenix, however, they have facilitated changes at Long Beach and John Glenn Columbus International Airport. Perhaps this new outreach endeavor will help to improve communications. Vince noted that President Trump has sued the FAA on several occasions.

Safran S.A. is a French multinational aircraft engine, rocket engine, aerospace-component, defense, and security company engaged in the development of open rotor jet engines. This is a jet engine without a cowling containing the propellers. There were a number of companies developing these, but Safran is the only one still active. This technology is supposed to be quieter, but that may not be so. With respect to Branson's Virgin Galactic Supersonic passenger plane, Mestre said, they begin test flights next year, and Lockheed's NASA demonstrator is still two or three years away. This is a small business aircraft with a reduced sonic boom signature. With respect to air quality, Vince said that ICAO reached their agreement on international aviation emissions. We know this administration intends to eliminate all the rules on greenhouse gas emissions. But for aircraft, we are part of the ICAO organization by treaty. We do not have the option of ignoring ICAO regulations and our airlines could be prevented from flying into other countries. For airports, it's a different story. Outside of the State of California, airports may be able to ignore the greenhouse gas emission requirements that are coming out, but in the State of California, that won't happen because we have our own greenhouse gas emissions standards that are more limiting.

As for biofuels, the cost of oil is still around \$50 a barrel, and biofuels do not become competitive until oil prices rise to over \$100/barrel. In the meantime, biofuel production will come on more slowly, but Vince didn't think anybody believes we will have long-term fuel prices as low as they are now. The good news is, with these biofuels, they are much cleaner burning fuel, and engine particulates are reduced by 50 to 70 percent, which is huge. With respect to drones, Mestre noted that they are more appropriately called "Unmanned Aerial Vehicles." However, now there is considerable impetus to put men inside these unmanned vehicles. He showed pictures of several concept vehicles. Someone asked "How could they be unmanned then?" Vince's nightmare is that the commercial drone market is expected to expand tenfold by 2021, just two and a half years away. The smaller drones will triple from 1.1 million to more than 3.5 million vehicles in two and a half years. Commercial drones will grow from 42 thousand at the end of 2016 to about 442 thousand by 2021. The FAA is having a difficult time gaining control on how to regulate these both in terms of safety and noise. The emphasis has been primarily on personal space invasion and intrusion, but there hasn't been much discussion on noise, although NASA does have an extensive research program on the noise-generated characterization of the small hobbyist drones. Right now, most of the hobbyist drones have a very limited range. If you are being bothered by a drone, you can go outside and look around and probably spot the guy who's flying it. The goal of the manufacturers is to have a drone that has a range of a mile to a mile and a half. He said that would be a game changer in terms of "Do you know who's flying that drone? He said he hated to have to end on a note like this, but the drone issue will continue to be an outstanding problem.

James Nelson asked if there were any figures on the relative noise reduction achieved by electric aircraft. Vince said he has not seen any such data, as this is a relatively new development. Nelson

asked about the possibility of using fuel cell technology. Vince replied that it is not clear whether these aircraft will use fuel cells or batteries. James asked about the size of the sonic boom associated with the supersonic jets. Vince replied that with the aircraft cruising faster than the speed of sound at 60,000 feet altitude, the sonic boom would be hard to notice, but nonetheless discernable.

The facilitator thanked Vince for his presentation.

9. CONFIRM NEXT MEETING – July 19, 2017

The next Forum meeting is scheduled for July 19, 2017. The facilitator reminded Forum members that the July meeting was when the Forum elected its officers.

10. NEW BUSINESS/ADJOURNMENT

Benny Lee offered that the City of San Leandro is currently working with the master developer on the Marina Shoreline Project, which also includes decommissioning the boat harbor. Co-Chair Lee said he believed that one of the airport noise monitors is located in the Marina. He asked that the monitor be preserved and available for re-use in San Leandro.

There being no further business, the meeting was adjourned at 8:14 p.m.

END