

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

October 21, 2020

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1. INTRODUCTIONS

The October 21, 2020 meeting of the Oakland Airport-Community Noise Management Forum was called to order at 6:38 p.m. by the Forum’s facilitator, Mike McClintock. McClintock noted that this meeting was the Forum’s second virtual meeting and welcomed all who were attending online or by smartphone. He said he would start out by going through the Forum roster to take roll:

Forum Members/Alternatives Present

Co-Chair Benny Lee, Councilmember, San Leandro
Co-Chair Walt Jacobs, Citizen Representative, Alameda
Councilmember Cheryl Davila, Berkeley
James Nelson, Citizen Representative, Berkeley
Edward Bogue, Citizen Representative, Hayward
Peter Marcuzzo, Citizen Representative, Oakland/Chair, NextGen Subcommittee
Tom Wagner, Citizen Representative, San Leandro
Kathy Ornelas, City of San Leandro/NextGen Subcommittee
Cindy Horvath, Representing Alameda County Supervisor Wilma Chan (District 3)
Ernest DelliGatti, Citizen Representative, Alameda County

Staff Members/Advisors Present

Bryant Francis, Director of Aviation
Craig Simon, Acting Assistant Director of Aviation
Matt Davis, Airport Operations Manager
Jesse Richardson, Airport Noise and Environmental Affairs Supervisor
Matthew Davis, Director, Port Governmental Affairs
Diego Gonzalez, Port Governmental Affairs Representative
Susan Fizzell, Sr. Aviation Project Manager
Joan Zatopek, Manager of Aviation, Planning and Development
Colleen Liang, Port Environmental Supervisor
Rhea H. Gundry, HMMH, Principal Consultant
Adam Scholten, HMMH, Airspace Consultant
Tim Middleton, HMMH, Consultant
Christian Valdes, Technical Consultant, Landrum & Brown
Tatiana Kalinga, Representing Congresswoman Barbara Lee
Valerie E. Jensen Harris, Court Reporter

FAA Representatives Present

Raquel Girvin, Regional Administrator, FAA Western-Pacific Region
Sky Laron, FAA, Community Engagement Office
Bonnie Malgarini, FAA Western Service Area Operations Support Group
Joseph Bert, FAA Western Service Area Operations Support Group

CONTRA COSTA COUNTY/CITY OF RICHMOND REPRESENTATIVES

Christopher Whitmore, Chief of Staff for Mayor Butt of Richmond

2. ANNOUNCEMENTS**A. Acceptance of 2nd Quarter 2020 Noise Abatement Report**

The facilitator announced that item 2A is acceptance of the second quarter 2020 noise abatement report. Typically, he said, the Forum receives and files these documents. He asked if there were any questions or comments on the noise report. If there are none, he said, he would entertain a motion to receive and file.

Co-Chair Jacobs moved to receive and file. Seconded by Co-Chair Benny Lee. Mr. Lee said he wondered that with the impact from COVID-19 and the reduction in flight activities, was there a corresponding decrease in the number of noise issues or complaints. He said that he had noted for some procedures that

there had been no reduction in the number of complaints. Jesse Richardson replied that the procedure cited by Mr. Lee is at the edge of central Alameda and the Noise Office tries to educate pilots to make a right turn to avoid Alameda. Unfortunately, he said, the numbers were pretty much like last year, despite having only half the numbers of flights. Richardson said that more pilot education is needed and that the Noise Office needs to work more with the North Field pilots a little more. Mr. Lee thanked Jesse, and offered that we want to do the best job we can to try to reduce these kinds of issues. There being no more questions or comments, the facilitator called for the question to receive and file second quarter 2020 noise abatement report. Motion was approved without objection.

B. Proposed San Lorenzo 1 (SLZ1) Visual Approach

With regard to agenda item 2B, the proposed San Lorenzo One visual approach, the facilitator asked if staff and Alameda County's Forum citizen representative Ernie DelliGatti had a chance to get together to discuss the status of this item. Peter Marcuzzo replied that they had, and that he had a graphical comparison of Mr. DelliGatti's proposed SLZ1 visual approach with the FAA's proposed CAL STATE visual approach. Marcuzzo said Mr. DelliGatti had presented a very-well-thought-out presentation on his proposed San Lorenzo visual approach as an alternative to the CAL STATE approach proposal by the FAA; which could have noise or overflight issues for the San Leandro/San Lorenzo area. Mr. Marcuzzo showed a slide that compared the two separate proposals. Two years ago, he said, the Forum tabled this for further discussion while awaiting results from the FAA and its review of the WNSDR approach alternatives offered by the Forum.

The issue has come back up as a way to keep aircraft away from the residential neighborhoods in the Hayward, San Leandro and San Lorenzo area. Mr. DelliGatti's alternative proposal, the SLZ1 approach, would keep aircraft away from a few more neighborhoods by directing arriving traffic over the industrial areas of Hayward, San Leandro, and San Lorenzo. So, he said, at the meeting last week they discussed the two approach proposals. Marcuzzo said they would like to recommend that the Forum ask the FAA to look at the San Lorenzo One visual approach as a doable approach; i.e., is the declining radius turn acceptable to the FAA? In addition, he said, the Forum should request the FAA to conduct a 60-90-day test of the two proposed approaches to assess their viability and to judge community reactions. Ernie DelliGatti added that the only thing we need to do before putting this into play for the test period is to make sure that noise monitors are set up in those areas, and to make sure the Hayward Airport is onboard; so, this way, he said, we can capture all of the noise data and then compare it with the Noise Office's historical data. He added that he would coordinate with the Hayward Airport to ensure their noise monitors would also capture any relevant data.

The facilitator asked FAA Regional Administrator, Raquel Girvin, if a letter from the Forum requesting the validation of the SLZ1 procedure and the flight testing of the two procedures would be the best way to get things going. Ms. Girvin replied that this would be the shortest way to do it; and that we would both have a record of the request and that they would respond back in writing. Facilitator McClintock asked the Forum members if they concurred with the recommendation to send a letter request to the FAA to (1) validate the San Lorenzo One proposal and (2) compare the San Lorenzo One proposed approach with the proposed Cal State visual approach by means of flight testing. The Forum members concurred and the facilitator said the he would work with Peter and staff to get the letter out. Ernie DelliGatti said he would continue to work with the Hayward Airport on this, as well. Forum members thanked Peter and Ernie for their work on the subject.

3. APPROVAL OF MINUTES

A. July 15, 2020

The facilitator said that Forum members had received copies of the draft meeting minutes for the July 15, 2020 Forum meeting. He asked if anyone had any questions, comments, or suggestions? There being no questions or comments, the facilitator asked for a motion to approve. Co-Chair Lee moved approval. The motion was seconded. James Nelson commented that on page 4 under subcommittee report, the first paragraph, the last sentence reads "which primarily affects Windsor and the East Bay hills." He said that it should say "Berkeley," not "Windsor." Peter Marcuzzo said he meant to say "the entire East Bay all the way from Richmond, El Cerrito, Berkeley, and all the way down." Peter added "just leave it as the East Bay hills." Benny Lee amended his motion to delete "Windsor." Tom Wagner seconded. The motion carried as amended.

4. NEXTGEN RELATED NOISE CONCERNS

A. Subcommittee Report

The facilitator asked Mr. Marcuzzo to bring the Forum up to date on what transpired at the last subcommittee meeting with the FAA. Peter responded that it was another good meeting with the FAA. He thanked them for their presence and for their help and engagement with the Forum's NextGen issues. Again, he said, the HUSSH heading change is a work in progress within the FAA's system. He said he expects that the FAA will provide updates on both HUSSH and WNSDR TWO tonight. The FAA also provided the subcommittee with the status of the FAA's new noise complaint website; which is in a different place than where people have gone to in the past to submit noise complaints. Matt Davis said he would talk about the new web page later in the program. As was discussed earlier, Marcuzzo said, we also talked about San Lorenzo One.

B. FAA Noise Forum Updates

Matt Davis said that he did not have a lot to report, but wanted to focus on the FAA website. He shared his screen showing the site. He noted that it appears that the FAA has made a lot of effort to improve and streamline the noise complaint process over the past several months, including the addition of community involvement information. It's a great web page, he said, and offered to send a link to the site to anyone who does not already have it. The webpage offers an educational opportunity to understand what the FAA's mission is and how the agency processes noise complaints and policy questions. It also allows individuals the opportunity to file noise complaints. He said he believes that the FAA put this together to continue to improve its efforts at community outreach and understanding. He said he would encourage people to go to this web site if they have questions or concerns for the FAA. He noted that complaints are captured, and that everything submitted is read. Lastly, he noted that there haven't been any actual FAA regional Noise Forum meetings for a while. The facilitator added that he had sent out the link to the FAA webpage a few weeks ago to Forum members along with some additional information about to where to file noise complaints.

C. FAA Regional Administrator's Update

FAA Regional Administrator Raquel Girvin said she wanted to make sure that everyone was clear on its proposed change to the WNSDR procedure, and why the change was needed. To this end, she said her technical team was present to explain things. She introduced Bonnie Malgarini, who would present the material, and added that she hoped that the community and Forum members will benefit from hearing more specifically about the issues associated with the proposed change.

1. WNSDR TWO Approach

Ms. Malgarini began with a recap of the presentation provided to the Forum subcommittee in May. This was part of a briefing to explain the need to modify the WNSDR STAR [Standard Terminal Arrival Route] and the constraints affecting the location of the STAR. She began the graphical presentation with an

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overview to explain the differences between the current WNDSR procedure and both of the proposals and, also, what the next steps would be. Shortly after the WNDSR STAR was published, the air traffic control organization realized that it didn't provide the same separation in departures that the RAIDER STAR did. This wasn't just Oakland departures, she said, but also from Napa, San Francisco, Hayward and San Jose departures.

The WNDSR STAR, in conjunction with other procedures, reduced air traffic control's option for establishing the Oakland arrivals on the downwind for Runway 30. She explained that the downwind approach runs parallel to the runway from northwest to southeast. She showed additional graphics that explained this and listed the constraints that affect the WNDSR arrivals. The first slide was for the Napa County Airport; which showed the conflicts between the WEBER and BOYSS waypoints. Napa County Airport departures, climbing to the west reach the WNDSR path quickly, she said, and explained the various flight tracks and how they interacted over a one-week period last August. She explained that the distance from the Napa County Airport to the WNDSR route is about five and a half miles; and that air traffic control usually requires either a one-thousand-foot vertical separation or a distance separation of three miles between aircraft. So, she said, with a distance of only five and a half miles, by the time an aircraft takes off from Napa Airport and starts to climb, they're very quickly within the three miles separation needed from the WNDSR arrivals. Malgarini gave further details of the airspace interactions between Napa Airport operations and the WNDSR STAR and showed graphical illustrations of both Napa arrivals and departures over the last week in August 2019.

Ms. Malgarini next discussed airspace constraints associated Travis Air Force Base airspace. She noted that there is an agreement between the FAA and Travis Air Force Base that requires both Oakland and San Francisco departures to be at or above 11,000 feet prior to entering Travis' airspace. If this doesn't happen, she said, the controller has to contact Travis on a special line, which adds complexity. She showed another graphical depiction of one week's worth of Oakland and San Francisco departure traffic to the North and northeast, which are affected by the Travis Air Force Base airspace.

As the WNDSR STAR continues to the south, she said, additional constraints involve Oakland, San Francisco and South Bay departures. She reviewed a graphic depicting an overview of the northeast to east Oakland and San Francisco departures showing where they cross the arrivals of WNDSR. The next three slides showed an overview of Oakland and San Francisco and closer views of the crossing points of departures and the WNDSR arrivals. By moving the WNDSR to the west, she said, the area where the departures interact with the WNDSR is reduced, and any aircraft crossing below the WNDSR route is able to resume climbing earlier. She showed a graphic of the eastbound departures, which also interact with the WNDSR approach.

Higher terrain to the east increases the altitude required, which increases the length of the downwind as aircraft must descend to get to the airport. So, she said, the longer downwind translates into a longer final approach. Terrain also impacts Hayward departures, she noted, which keeps them lower longer until they're clear of overhead traffic and allowed to climb because there's not as much room between the terrain and the aircraft. Moving WNDSR to the west allows extra room to avoid the South Bay departures from being trapped due to rising terrain and overhead arrivals. If the WNDSR arrival aircraft held higher for Napa departures, for example, then the downwind would have to be extended, which is over rising terrain. As she mentioned before, this keeps aircraft from being able to descend. The last constraint is other arrivals, she noted. Arrivals are generally sequenced by combining a downwind screen, which is the WNDSR arrival screen, with a straight-in screen. The downwind leg parallels the final leg. Malgarini showed an example of final and the parallel downwind legs. This ensures separation, she said, but by angling arrivals toward the aircraft inbound from the south, you can see how would angle in towards the arrivals, constraining them.

Lastly, she offered that the next thing is that the FAA will move forward with the full working group proposal, and we will continue to collaborate with the Forum and the subcommittee. We also remain committed to working with the subcommittee and the Forum on other aircraft-noise-based issues in the area. James Nelson noted that in one of the slides, it was indicated that one of the factors affecting the ability to shift WNDSR to the east is rising terrain. The current WNDSR arrivals follow the spine of the East Bay hills-- the highest terrain for several miles either side. So, Nelson said, he doesn't understand the terrain issue. He said if you move the WNDSR arrival either east or west, you'll be over lower terrain. Another thing, he said, it was his understanding that the proposed WNDSR arrival will not involve any change in altitude for the approach path, so the issue of terrain becomes unimportant in that case, unless you're planning on lowering the altitude of the WNDSR arrival over Berkeley after shifting the WNDSR arrival. Malgarini responded that, no, they are not planning to lower the arrival altitudes. The altitudes will remain the same.

Ms. Malgarini continued, saying that by moving the flight path off of the ridge to better manage the departures allows for more vertical space between the ground and arriving aircraft; which allows the aircraft departing Hayward to climb out sooner, instead of staying pinned under inbound aircraft where they can't climb. James Nelson asked if Malgarini was saying that the terrain issue has to do with Hayward departures. She replied, yes, that was one of the reasons; and when the downwind leg has to be extended it reaches into higher terrain to the south, which means that you have to keep aircraft higher when they go over the higher terrain, which extends the downwind, resulting in a longer final approach. Nelson conjectured that the WNDSR arrival would still be going to the HOPTA intersection, and that HOPTA was not being moved. Joe Bert responded that he did not believe that HOPTA would be moving, but would look into it and get back to the Forum. Ms. Malgarini noted also that aircraft don't have to fly the full procedure; they can be cleared for the approach prior to an intersection. Nelson replied that, in general, aircraft go from HOPTA to the waypoint, so that the aircraft would be veering to the east after passing HOPTA, for the most part, and then doing the regular path. Malgarini said she was not sure what he meant by "veering to the east." Nelson said, currently, after a WNDSR arrival hits HOPTA, then the flight path shifts and heads a little more to the east before to go the 100-degree or 90-degree radial. Malgarini said that this portion of the route would remain the same, as it is more of a feeder.

Ernie DelliGatti asked about Hayward departures and conflicts with WNDSR, saying that jet aircraft departing Hayward Airport typically use Runway 28L and make a 180-degree turn before entering Oakland airspace, and then, once cleared to do so, they head to the south and then climb out. He wondered what the conflict was, because there's not that many departures on a daily basis that leave the Hayward Airport that could present possible interference. He asked what data were the FAA using because he was trying to understand why, all of a sudden, Hayward is kind of a show stopper with respect to WNDSR. Ms. Malgarini replied it's not just Hayward; it's also San Jose. It's just mixing in. It doesn't have to be every day. It's one of the constraints that factors in. She noted that they did have some interactive tracks that showed the Hayward departures at the end of May; and as Ernie said, they takeoff and go back to the northeast and circle around in their climb. She said she did not know if she could get the graphics for this, but, if so, she would make them available. DelliGatti said he'd like to review that data, because something doesn't seem right with respect to departures, because most departures out of Hayward are below one thousand feet. Clearly, they're crossing under Oakland airspace. Then, when they're granted clearance, they go on up to two thousand feet in the vicinity of the San Mateo Bridge. From there they head to points either south or west or east. Ms. Malgarini replied that she believed there were some Hayward departures that actually went out to the northeast. She said she would give him an "IOU" on that. Ernie added that the only reason he was asking the question was because he'd like to see the data because the number of departures -- especially jet aircraft departing on 28L -- aren't that significant on a daily basis. Joe Bert said that they'll get that information back to the Forum.

James Nelson asked a question concerning interaction between the Napa County Airport and Travis AFB. He said he had noticed that the Napa departures and arrivals appeared to pass directly through Travis' airspace. Does that mean, he asked, that the Travis airspace is limited in altitude to some amount, so that the Napa departures can pass over that space, or is it the other way around? Ms. Malgarini said that she was not familiar with the agreement that Napa might have with the base. The Travis airspace extends over and around the base; its upper limit is at 10,000 feet. So, she said, aircraft climbing out of Oakland and San Francisco heading to the northeast could just clip Travis' airspace or may be a bit under it for a short time. Their agreement with FAA regional air traffic control requires civil aircraft to cross its airspace at or above 11,000 feet. Under the terms of this agreement, they aren't required to talk to Travis' air traffic control; i.e., they wouldn't have to change frequencies to Travis and then to Oakland Center. Just having the aircraft above Travis' airspace reduces the overall airspace complexity. Nelson said that it would be useful to know what the Travis airspace looks like in relationship to the flight tracks of commercial aircraft transiting the base. Ernie DelliGatti said he was looking at a sectional chart showing the outline of Travis AFB airspace; which is restricted. The reason why it's restricted, he noted, is because it's a training base for C-5As and C-17s. He asked Peter Marcuzzo if he could elaborate on this because Peter had flown C-5s out of Travis. Peter said that if he tried to explain this airspace to everyone, he'd put us all to sleep. However, he said, he didn't understand why Travis couldn't take a handoff for the OAK and SFO departures. Malgarini explained that when the SFO and OAK departures get trapped underneath the current WNDSR arrival route, they don't have enough time to climb to clear the Travis airspace.

It's more of a complexity than anything, Ms. Malgarini said. It becomes an issue when the Northern California TRACON (NCT) controller has to watch the departing traffic to see if they're going to enter Travis airspace or not. If not, there's the point-out call. She said she had discussed this with NCT, and that this was an issue, and that the aircraft needed to be above 11,000 feet altitude. Peter said that he understood this, but aircraft performance has improved since his time in a tower. Malgarini said it is only an issue when the departing aircraft get stuck under WNDSR. If they depart, and they are able to get above WNDSR, it's not an issue. Peter responded that he has a hard time understanding aircraft from Oakland and San Francisco getting trapped under the WNDSR arrivals. Malgarini replied that she was not saying that this was the case for all, or even many of the departures, but it does happen. She said she did not know if it was because they were heavy, but by moving the route it could be alleviated. So, Peter said, you propose moving the WNDSR path to the west to get the crossover done faster. Joe Bert said that would be the case. James Nelson said that would imply that to be trapped under the WNDSR arrival the departures would be under 5,000 feet altitude at that point. Mr. Bert replied that he did not have the specific altitude they're at when they cross. He didn't think that they had that information right now; they just know they're stuck underneath the WNDSR. James Nelson said that this would appear to be only a small number of aircraft. Mr. Bert concurred.

Peter Marcuzzo said that it was his contention that if you move the whole WNDSR arrival to the east 7-10 miles, let Travis work the airplanes instead of just pointing out incursions, that takes care of all the departure problems you have right there. Joe Bert replied that it doesn't always work that way. One of the issues you might run into is what if Travis can't take the aircraft--where Travis could say, "We've got stuff going on, and we can't have you in our airspace?" Bert said the he was not saying that this actually happens, but there are potential conflicts that could happen when you're operating that way. Peter said he would put his questions in writing and send them to Joe. Mr. Bert replied that this would be good, that way they can give Peter specific answers to his questions. Ernie DelliGatti asked if there were specific times or periods when commercial aircraft intruded into Travis' airspace. Joe Bert replied that they do not have this information right now, but can get it to the Forum later. Ernie added that the only reason he asked was that in his experience as a rescue controller dealing with Travis to try and clear airspace, especially the tower, they've been extremely helpful and open with respect to accommodating such requests. He was sure that discussion with Travis could be worthwhile. Sky Laron asked Ernie to send his thoughts

on this to Peter to be included in a written communication to the Regional Administrator as the best means to ensure that they get to the FAA's different lines of business and analytics folks. So, he said, it becomes much more than one or two people taking a look at this.

Matt Pourfarzaneh, president of CLASS, asked how much of a concern has the WNDSR arrival been. Ms. Malgarini replied that it has been a concern since the beginning. However, she added, air traffic has implemented procedures that make it safer, but increased the complexity of the controllers workload. She noted that it could be even safer and less complex if it were to be moved. Ms. Susan Stevenson thanked the panelists for holding this forum. She said she lived in Montclair in the Oakland hills, and that she was new to all of this. She asked if anyone could explain to her in lay terms which of the WNDSR alternatives might alleviate the noise in the Oakland hills. Joe Bert replied that he didn't think there was an answer to that. Sky Laron noted that it was the FAA's intent to specifically address WNDSR tonight and show the constraints involved. He asked the Forum and members of the community to collect any comments and send them to him in writing so that they might be able to respond. Facilitator McClintock offered to forward any such questions or comments to the Regional Administrator. He said his email address is on the agenda/meeting notice. Facilitator McClintock asked that a copy of the FAA presentation be sent to Jesse Richardson. Joe Bert said they will make sure that Jesse gets a copy to post.

Ian Crew asked what the overall timeline would be for making a decision about which route will be chosen; and when will that be. The facilitator said that he thought the question might have two parts: one is when is the FAA going to identify the project [the federal action] for public review and comment; and second what are the next steps after that. Ms. Girvin responded, saying that as Ms. Malgarini presented earlier, there are a lot of considerations and conflicts, which is why the FAA has come up with the procedure that they've identified as the full FAA working group procedure. That procedure is what we need to move forward by in order to address the safety issues. She said at this time, they do not have a timeline; but they need to continue with an environmental review of the procedure that they have proposed. This is the procedure that addresses the safety issues and concerns they have identified. The facilitator commented that at one point in this process the FAA advised that this could take anywhere from 18-24 months. Ms. Girvin said that it is true that, in the past, they generally talked about an 18-24-month process. Unfortunately, she said, COVID has introduced another layer of uncertainty into their timelines, so it is a little harder to communicate what that might be. We are in the process of moving towards environmental review right now, she said.

Lori Ert, from the Montclair District, offered that Ms. Malgarini spoke about planes flying at 11,000 feet, but, she said, they're flying between 4,000 to 6,000 feet over our heads. So, she asked, what is the amount of pollution, both the noise as well as physical pollution, and what is really being done to take away the flight concentration over this area. She also noted that she appreciates the FAA website, but stop-jetnoise.net is really great because it shows you what the flights are, how high they are and everything like that. She said she heard what Sky Laron had to say, and appreciates the fact that they weren't prepared to respond to many of the questions this evening; but, she noted, there have been presentations and requests to get this changed. So, she asked, what are the FAA's plans to adjust this in any way to accommodate the people that are suffering. The facilitator offered that the Forum has heard Administrator Girvin say that they are in the process of preparing for the initiation of the environmental review process; which will probably consider at least two alternatives. In addition to the question of noise, there are also questions of air quality and other impacts that need to be looked at. Ms. Ert said that since this meeting began, she had video recordings of all the planes that have been flying over her house every one to three minutes; and they are not by any means at 11,000 feet. The facilitator noted that when the FAA mentioned aircraft at 11,000 feet altitude, they were probably not referring to aircraft on the WNDSR approach over Montclair. Joe Bert responded that the altitude figure of 11,000 feet was for Oakland and San Francisco departures heading to the north or northeast. Ms. Ert replied that she and her neighbors have "San Francisco departures and arrivals all coming right over our heads." She invited panelists to come to her home

any evening or any morning, starting at 6:00 a.m. and going until 1:00 a.m., to come and observe it for themselves. It is untenable, and it is irresponsible at best, she concluded.

Matthew Davis, Director of Government Affairs for the Port, said that the Regional Administrator mentioned that there would an environment review conducted. He asked Ms. Girvin to clarify, for the benefit of the Forum and the subcommittee working group, what type of environmental review they were contemplating. He said he thought that this would help to clear up some of the public engagements questions that have arisen. Administrator Girvin responded that when she says “environmental review,” this is the process they undertake in order to figure out what kind of environmental analysis or category it fits within under the NEPA guidelines; i.e., whether it's a categorical exclusion, an environmental assessment [EA], or an environmental impact statement [EIS]. That's the part that they have not yet resolved. She said the point she wanted to make was that, regardless of which of the three categories, of NEPA environmental analyses she talked about, they plan to engage with the communities; and they are looking forward to working with the Noise Forum leadership, as well as the airport and Congressional offices, and engaging with the communities to talk everyone through the proposed procedure.

2. HUSSH TWO DEPARTURE

The facilitator said that the last the Forum had heard was that this procedure was still undergoing internal review by the FAA. He asked Administrator Girvin if this was still the case. Ms. Girvin replied that it was still being processed. Matt Pourfarzaneh said that in last week's subcommittee meeting he asked for clarification of what that means; has a priority been given to it, he asked. He also requested that Ms. Girvin provide the Forum with an update at tonight's meeting. Sky Laron asked Joe Bert if there had been any updates on the project's status. Bert replied that, as of right now, there is update on the priority. They're still looking at the different things. Nothing has been prioritized at this point. Pourfarzaneh queried Bert, asking if he had looked into it, but found nothing. Bert said that they had looked into it and there were no updates on its status, and that they're still working on the issues that we're dealing with here. Matt asked what it means when Bert says, “They are still looking at the HUSSH stuff.” Mr. Bert replied that it means that the flight procedures group that looks at developing procedures are still doing their analytical work. They have different steps and protocols they have to go through, he said, and that's what they're going through right now. Dr. Pourfarzaneh said he understood that, but he's asking because a couple of subcommittee meetings ago, someone mentioned that, in order for something to happen, the FAA has to assign a priority number. Bert replied that they can't prioritize it until they know it is something that can be accomplished by our criteria, industry, all those things they have to do before the procedure can even be prioritized. They have to make sure the procedure is actually doable or flyable before they can get to any type of priority. Matt asked how long would it take for us to be able to know. Mr. Bert replied that he cannot give a timeline on that; but, hopefully, it will be soon. He said he can't make any guarantees because that is outside his area.

Co-Chair Benny Lee said there were a couple of points he wanted to get clarified with respect to WNDSR and Richmond. He said the reason he is bringing this up is because the proposed change to the WNDSR route would take it over more neighborhoods and schools than the current track. The concern is that, by shifting the WNDSR track to the west, the new flight track would go directly over neighborhoods which are currently underserved. Ms. Malgarini replied that this would be something that would be looked at in the review process, depending on what level of review is decided on. Lee asked if this would be a part of the NEPA outreach process. Joe Bert offered that the nature and extent of community outreach would depend on what type of NEPA environmental review they'd decide to go with. Lee said that, in the previous Forum meeting, representatives from Richmond discussed some of these concerns. He said he was not sure if they brought up concerns specifically for underserved communities, but anytime we have any kind of transference of flight paths and possible noise impacts, putting them into communities that are

considered historically underserved, doesn't reflect well on us. He said he just wanted to make sure that's recognized and understood. Joe Bert said they understand.

Lee continued, saying that often, when we hear about safety issues, we're looking at colorful visuals that show, basically, what the flight path looks like. Here's a takeaway, he said; in the next meeting, we should see some kind of demonstration of why this is a safer path and what makes this path safer than the other path. If that can be done in a visual way, even in an animation, it would help all to better understand why and how something that is safe can be made safer. Also, he said, he would argue more fervently in favor of what Peter Marcuzzo talked about with regard to passing through the Travis AFB airspace. Why is this such a difficult process. He said he was not looking for answers in this meeting, but wanted to see some explanations of why things are as they are, and what it would entail to make meaningful changes. James Nelson followed-up, saying we want a little more clarity in terms of flying over Travis and why that is such a difficult process. He understands that abruptly changing something almost requires an act of Congress to do, but it's important for us to have more clarity on that. Joe Bert acknowledged Benny and James' concerns.

James Nelson followed up on Benny's comments by saying that the SFO and Oakland departures do pass over Richmond, San Pablo, El Sobrante, Pinole, Hercules, et cetera; and we've been made aware of the safety issue. He said, it appears to him that having these departures head up the bay and hit the proposed BOYSS waypoint and then begin their various departure routes to the north and east would alleviate that noise impacts from departing aircraft and also alleviate the problem in terms of getting above the Travis airspace, et cetera. He said he would like to see the FAA consider this as part of its studies. Peter Marcuzzo asked Bonnie Malgarini about the graphical exhibit showing northbound departures—he asked if the “dark green line” was HUSSH and NITE departures. Ms. Malgarini said she didn't believe so. It represented one week's worth of departures, including daytime departures. James Nelson added that departures from SFO and Oakland pass over Berkeley, so these can't be nighttime departures. Marcuzzo asked to have a copy of the graphical exhibit. Bonnie said, he could.

5. PUBLIC COMMENT

The facilitator opened the public comment period; noting that this is an opportunity for the public to speak on issues not on the agenda, but relevant to airport noise and air quality at Oakland International Airport. He said speakers are limited to two-minutes. However, he said, everyone has the option of e-mailing him with any additional questions or comments, which he will get to Forum members and other parties of interest. There were no speakers, so, in the interests of time and expediency, he closed the public comment period, noting that if anyone has any comments or questions they should email them to him. He said his email address is on the meeting notice/agenda.

6. CITY OF RICHMOND FORUM MEMBERSHIP

Christopher Whitmore, Chief of Staff for Richmond Mayor Tom Butt, said that after the July Forum meeting the City Council directed staff (him) to seek and advocate for Richmond's reinstatement to the Forum. Mr. Whitmore said he had maintained contact with Port staff and the facilitator to move things forward on the City's membership request. He thanked Forum members in advance for considering Richmond's request to rejoin the Forum, so that they can advocate for their community and its residents. The facilitator thanked Mr. Whitmore and restated the City's request to rejoin the Forum as a regular member, which gives them two seats on the Forum: one of which is an elected official, and the second seat is a citizen representative from the community. He noted that all Forum member communities pay a \$1,000 annual membership fee and agree to participate in Forum meetings and other activities. So, facilitator McClintock said, we are looking forward to having Richmond's participation, but he first needs to put this to a vote of the Forum. He asked for a motion to approve Forum membership for the City of Richmond.

Co-Chair Benny Lee made the motion to approve. The facilitator asked that Co-Chair Lee amend his motion to also allow the Forum Structure document to be revised to show that the City of Richmond is now a Forum member; representing Richmond and West Contra Costa County. Co-Chair Lee agreed to the amendment. Mr. Whitmore said he was OK with the change. The motion was seconded by James Nelson. Co-Chair Lee said he wanted to welcome Mr. Whitmore and the City of Richmond. He added that he had lived in Richmond more than 30 years ago, and understands the challenges that the community has. The facilitator called for the question. Motion carried. McClintock asked Mr. Whitmore to relay the Forum's congratulations to Mayor Butt, and said that he would send out an informational packet about the Forum. He added that he would let the Port deal with the paperwork for the agreement that's required for Forum member membership, as well as collecting the annual dues.

7. UPDATE ON ENVIRONMENTAL STUDIES FOR FUTURE DEVELOPMENT

The facilitator introduced the next item on the agenda as an update on the environmental studies for future airport development. Port Aviation Director Bryant Francis began by saying that he appreciated all those who were able to join in tonight. He said he wanted to provide some background on a soon-to-begin undertaking and give it some context. The Oakland Airport is a major contributor to the local economy, he said. There are thousands of jobs that provide for the movement of goods and people domestically and internationally. Consequently, airports are always doing long range planning to ensure an ability to accommodate anticipated demand. As one of three commercial service airports in the Bay Area, OAK is in a highly-competitive air travel market. The Oakland Airport served a record 14.6 million passengers in 2007, which created a tremendous amount of strain on terminal infrastructure, both landside and airside. During this time, he said, some long-time residents may recall the ongoing stakeholders' engagement undertaken while the Port actively studied potential options to accommodate the increasing demand. However, due to the great recession in the late two-thousands and its deep impact on activity levels, that planning effort was suspended before any significant decisions were made. Passenger traffic began to rebound in 2013 and consistently grew over a more than five-year period. The year 2020 began with the potential to be a new record year; that, of course, will not occur, primarily due to the downturn in travel caused by the COVID-19 pandemic. Current estimates are that air travel will not fully recover for another three to four years nationally. Nevertheless, with a strong geographic location, easy accessibility, and ongoing population and job increases in the East Bay, it is expected to grow in the future, especially as surrounding airports experience capacity constraints.

Oakland's first terminal opened in 1962, Director Francis said, and it's still in active use today. It is inefficient in its ability to meet the needs of today's air travelers and airline operators. Terminal 1 ticketing and baggage claim components do not meet modern building codes and must eventually be replaced. Further, long-term anticipated Bay Area travel demand will require additional boarding gates at OAK, which will create an opportunity to enhance customer experience and allow the Port to meet industry service level standards. So, he said, in order to prepare for the future, we are currently evaluating options for new development to replace aging facilities and accommodate forecasted growth. Under the California Environmental Quality Act (CEQA), and the federal National Environmental Policy Act (NEPA), the Port must conduct an environmental review to address any potential impacts from a proposed project -- that includes air quality, noise and traffic -- in order to obtain approval at both the state and federal level. The firm of RS&H California was selected as part of a prescribed process, which began with the Port's issuance of a Request for Qualifications (RFQ) in which two firms expressed interest. The FAA and other staff agreed that RS&H California, Inc. was the most qualified firm. They will provide environmental planning services related to potential development projects. The Director said, it's important to note that environmental entitlement does not commit the Port to build anything. Those decisions will occur following completion of the two-three-year environmental review process. Any related terminal expansion will be located adjacent to Terminal 1 in an area identified 15 years ago in the airport's master plan. The

project description analyzed in the environmental document will set the maximum development parameters. A variety of other steps in the process would be conducted prior to a decision on an actual project. Among those steps are community and stakeholders coordination and engagement, which would be key components, additional work on the business plan, airline agreements, plans of finance and continued monitoring of forecasted activity levels. These steps will feed into future decisions regarding final size, scope, timing and possible phasing.

The director said that expects to have the first community meeting prior to the new year, and it will be widely advertised. That meeting, he said, will allow us to introduce a tentative schedule for the environmental process, and more deeply explain its components. "Why now?" some might ask. The answer is rather simple, he said; This is a long process, and no physical development will take place for a while after it is completed. By conducting an environmental review now, we are able to take advantage of the current lull in activity, and we will be in a position of strength as traffic begins to return to historic levels. He noted that completion of the environmental process will provide a valuable tool for the Airport Board to use in making critical decisions for the future of the airport; and how it will serve what undoubtedly will become a strong and growing market once again. This process will not contemplate additional runways. Previously-conducted studies revealed sufficient available capacity on the South Field runway to accommodate the flight activity levels anticipated in the future. As a major economic engine that will contribute to the growth of the East Bay, planning for our future is the responsible thing to do; and we look forward to beginning the process along with ongoing interaction with representatives of Port aviation planning and development. The director introduced aviation planning and development manager Joan Zatopek and Colleen Liang of Port Environmental. He said, they're both present this evening and will happily take any questions that anyone might have.

Facilitator McClintock thanked Director Francis and asked if there were any questions from Forum members. The facilitator asked about the anticipated schedule. Joan Zatopek replied that as Director Francis said, they were planning to hold a pre-environmental informational meeting before the end of the year, possibly on November 18, where they can answer questions and bring folks up to speed on their planning efforts to date. Ms. Zatopek said that Ms. Liang's environmental team and their consultant will be preparing the project description, Notice of Preparation, and begin holding public meetings sometime after the first of the year. James Nelson asked about the format for the November 18 meeting. Director Francis said that it would be a virtual meeting on Zoom. He said they would have more detailed information in the official notice when they confirm the date and time. Nelson offered that they may have to accommodate quite a few observers. The director answered that Zoom can accommodate quite a few participants.

8. NOISE OFFICE REPORT

Moving on to agenda item 8, the facilitator announced that Matt Davis and Jesse Richardson would begin by recapping the action items from the July 15, 2020 Forum meeting:

A. Update on Action Items from July 15, 2020 Meeting

Matt Davis greeted the Forum members and participants, saying that there are only three action items from the July meeting. The first one is in regard to the FAA regional administrator's update. He said he thought tonight's update was great, and so there are no remaining outstanding items on that from July. Secondly, he said, there was the Alameda community's concern over the dates and times of the runway closures to support maintenance activities. Davis said, they close the runways at night—typically early Monday morning-- because that's the slowest operational activity period at the airport. Maintenance activities are restricted to 12:30 a.m. until 6:30 a.m. The Forum requested additional information on the reason for extended closures. Davis replied that the extended closures occurred when Covid-19 caused a reduction in overall flight operations. There will be times when the airport has to close a runway during the day for unscheduled maintenance or some work that has to be done and cannot be accommodated at night, Davis

said, but for the most part the Forum and members of the community should see a return to where we were previously, which is almost always doing nighttime closures during the 12:30 a.m. to 6:30 a.m. time period. He said he was happy to report that they completed the maintenance activity that was the source of so much concern, and that they went back to the normal nighttime maintenance routine about a month ago. Another issue that came up was in regard to the questions submitted through the Zoom chat feature. Facilitator McClintock has been working to get responses to those questions from the responsible parties. The last action item was from Co-Chair Lee, who asked us to advise everyone to make sure that they have updated their computer with the most recent version of Zoom in order to be able to login to the meetings. Matt Pourfarzaneh said that he wanted to thank Matt and compliment the Noise Office staff and the Oakland Airport for working with CLASS and Alameda regarding the Monday morning maintenance issue and also compliment them on implementing all the requests and discussions that we had regarding the noise app. Wonderful job. Thank you, he said.

B. Viewpoint Update

Jesse Richardson said that he was happy to announce that the Viewpoint app now has the ability to recall the complaint that was last submitted. It means, if you go to the web site and log into the Viewpoint app, your previous complaint will be stored there. So, he said, this should save the customer time, because they don't have to go down and check everything all over again.

9. FAA ENVIRONMENTAL DESIGN TOOL

Christian Valdes from Landrum & Brown is the Forum's noise and environmental consultant. He was asked by Co-Chair Lee to give a presentation on the computer tools used to model noise or predict noise impacts. Christian began by saying that he was going to give the Forum a very quick presentation on the primary tool currently used to predict aircraft noise--the FAA's Aviation Environmental Design Tool (AEDT). He shared a little of the background on the model and showed a bit of the graphical user interface used to run the model, including a recent addition called the Environmental Justice Analysis feature. The AEDT tool is the required tool to be used by the FAA to predict aircraft noise, fuel burn and emissions under provisions of the National Environmental Policy Act. It was developed under the oversight of the FAA Office of Environment and Energy, with a supporting task force from the U.S. Department of Transportation Office of Research, Development & Technology Programs and Activities and Georgia Tech, along with others. In 2014, AEDT replaced the FAA's Integrated Noise Model (INM), as well as the air quality Emissions and Dispersion Modeling System (EDMS). The computerized tool combines the functionality of INM and EDMS in the form of noise contours and emissions inventory and dispersion. The calculations and output for fuel burn and emissions, including NO_x, CO (carbon monoxide), and particulate matter are based on three different air quality models. The noise calculations are based on the Society of Automotive Engineers Aerospace Information Report Number 1845, which describes the procedures for calculating noise exposure levels at ground locations resulting from operations of jet and propeller-driven airplanes in the vicinity of airports.

Noise calculations were also based on the European Civil Aviation Conference (ECAC) Doc 29, "Report on Standard Method of Computing Noise Contours around Civil Airports" that provides comprehensive data on the calculation of aircraft noise exposure levels and the production of aircraft noise contours. Mr. Valdes next went into the modeling process used by the AEDT. He explained how the model works, its input requirements, and the resultant output. Because AEDT can provide noise and air quality output, the end user can evaluate the interdependencies and tradeoffs of proposed operational procedures. The recently added environmental justice analysis feature allows you to determine whether minorities and those with lower incomes are disproportionately impacted using different operational scenarios or alternatives. Summarizing his presentation, Christian said that the AEDT is the current required tool for FAA noise and emissions analyses. It provides outputs and tradeoffs to compare for decision making. It's constantly

evolving and improving, and HMMH and other consultants and users of the tool are part of the user review group, providing constant feedback on bugs and fixes, as well as possible new features to the FAA's AEDT group. The facilitator thanked Mr. Valdes for his presentation and asked if there were any questions.

James Nelson asked if the AEDT uses the same noise algorithm as the INM. Valdes replied, yes, but improved. How about the weather data, queried Nelson. Christian replied that the AEDT has greatly improved the weather program, the weather data and associated aircraft performance data. Nelson asked if there was a provision for calculating the potential for sleep disturbance, population wakening at night, and speech interference. Valdes replied in the affirmative. Co-Chair Lee thanked Mr. Valdes for his presentation. He asked Christian to go back to the slide that showed disadvantaged communities. Lee said that this is a very important tool, particularly from an environmental justice perspective. In looking at one of the OAK noise contours prepared with the AEDT, Co-Chair Lee noted that it impacted a very-highly-underserved area of San Leandro, and that city leaders need to see this so they can gain an understanding of where the impacts will be. Lee asked what socio-economic data is used as input to the AEDT. Christian replied that it uses census data—blocks and tracts. Lee asked about the emissions inventory component of the AEDT. He said that he thought that this could be useful to cities preparing climate action plans to mitigate the effects of climate change. He made the observation that one thing not discussed that could be important to Forum member communities was gaining an understanding of all the different emissions' impacts from aircraft, because this should be factored into our action plans as well. He said he brings this up because in his day job they do innovation for the County of San Mateo. His employer partners with Google Environmental Insights Explorer, which is a good view of how much emissions are actually happening. He felt that this was an issue for future discussion with the Forum. We, as cities, he said, can work together to try to adjust our climate action plans; that way, we can mitigate more greenhouse gases. This is something that he thinks is important for us to have some numbers on, and we need determine how we figure that out in the proceeding meetings. Lee said that San Leandro has purchased a number of air quality monitors and will be placing them throughout the city.

10. NOISE NEWS AND UPDATES

Christian Valdes began his presentation with the FAA's report on replacing the DNL [Day Night Level] noise metric pursuant to FAA Reauthorization Act Section 173 that required the agency to evaluate alternative metrics to the current DNL 65 dB standard. Twenty-seven members of Congress released a letter stating that the report failed to evaluate well-respected and widely-used alternatives like CNEL, which adds a penalty to evening hour operations. They said the report also failed to analyze complaint data, despite the fact that the FAA utilized complaint data in the airport metric case back in 2013 against Helicopter Association International and failed to mention the importance of noise complaint data would appear in contrast to the FAA's efforts with the noise complaint initiative, the portal where the public can submit complaints. As a result, the letter continued, the FAA is effectively treating supplemental noise metrics as minor ancillary elements with which to address noise impacts. The FAA does say that supplemental metrics can be used to support further disclosure for preventing noise effects. It didn't provide guidance on how or when that could be used in flight procedure design or just to lessen existing aircraft noise. The letter also states that the U.S. standards to protect peoples' health from airplane noise are not only ineffective but also hinder our counterparts in Western Europe. Lastly, Christian said, there is consensus that the DNL metric remains an inadequate way to measure noise because it averages noise over a 24-hour period; not to mention the 65 DNL threshold doesn't address the impacts of concentrated flight paths miles away from an airport. The letter concludes that Congressional intent was badly missed.

The next part of the FAA Reauthorization Act of 2018 was Section 186, which instructed the Government Accountability Office to initiate a review of the potential benefits, costs, and other impacts that would result from a phaseout of stage 3 aircraft. The GAO report found that phasing out Stage 3 aircraft would only provide limited noise reduction and would be a costly effort. The GAO said that 96 percent of current

large commercial aircraft and 86 percent of smaller regional aircraft and 73 percent of general aviation Stage 3 aircraft already meet the more stringent stage 4 and 5 noise standards. This is because engine technology has developed relatively fast over the years and outpaced the need for enforcement of quieter noise standards. If implemented, such a phase-out would require the vast majority of Stage 3 aircraft to comply with Stage 4 and 5 standards. Additionally, jet aircraft unable to meet standard would require massive modifications or face retirement.

At the Forum's July meeting, the FAA's Notice of Proposed Rulemaking (NPRM) relative to supersonic aircraft noise standards was discussed. Christian noted that there has been a lot of coverage over this issue. The FAA describes the aircraft they're referring to in the proposed rule as being quieter than the Stage 4 standard, but louder than the current Stage 5 certification standard. On one side of the issue, you have supporting industry members, like Lockheed and Boeing, saying that the NPRM provides a welcome step towards environmental standards for modern supersonic aircraft, and that the proposed rule provides an excellent foundation for recognizing that the unique characteristics and technologies of supersonic aircraft require changes to the certification system. Additionally, the industry offered, these aircraft would be "no louder than" aircraft that are currently operating in the civil aviation fleet and would not lead to more significant increases in noise for communities around airports. On the other side of the issue, the Airports Council International (ACI) disagrees, stating that these aircraft will be as loud as MD 80s and older 737s. This proposed rule would effectively go backward in terms of noise certification standards. Valdes said that one interesting point that ACI brought up was that the FAA did not consider all costs associated with this proposed rule -- the costs to airports, that is. A larger area of CNEL 65 dB would increase the area of homes eligible for sound insulation, the cost of litigation for noise-related damages, the cost of challenging the FAA's environmental review process, the cost of dealing with more noise complaints, et cetera. The environmental group, Earth Justice, commented that the FAA has the obligation to protect the public health and welfare and should withdraw the proposed rule.

On to the MAX...the FAA posted a draft report on newly recommended 737 MAX pilot training. FAA Administrator Dixon and Deputy Administrator Elwell experienced the training firsthand and went through a number of scenarios to demonstrate the efficacy of software and design changes to the flight propulsion systems. Administrator Dixon said it was important for him to experience the training and the aircraft so he can have the most complete understanding possible of the issues at hand.

On the research side. Two studies were published about the health effects on babies. A UCLA study found pregnant women within nine miles around LAX were exposed to high levels of ultrafine particulate matter from jet exhaust and were more likely to have more preterm births before 37 weeks of pregnancy. One study examined the record of over 174 thousand total births between the years 2008 and 2016. After adjusting for all things that may cause preterm births, researchers found expectant mothers living in areas close to the airport are 14 percent more likely to have preterm births than mothers living in areas with no exposure to jet exhaust. The UCLA study comes on the heels of a Lehigh University study which revealed an increase of 22 percent with the risk of lower birth weight babies. Sanford Fidell and Vince Mestre published a book titled "A Guide to U.S. Aircraft Noise Regulatory Policy," which is a timely publication considering the consternation over the 65 DNL threshold. The book explains how both the DNL metric and especially the 65 DNL threshold came about almost serendipitously, but both have become so important to federal policy that their meaning and significance have gone far beyond what was originally intended. While Congress did direct the FAA to develop a single aircraft noise metric back in the 1970s, Valdes offered, the FAA has skillfully taken that directive beyond the original intent. The current noise regulatory policy, which has evolved over 50 years, was never technically or legally sound, and there is no doubt that it is certainly inappropriate in the 2020s.

Lastly, Christian said, one size fits all doesn't work when it comes to airport noise. The 65 DNL standard is a static policy. Studies have shown there is great variability in community reactions to noise and a

stable threshold does not take into account this variability. Valdes concluded his presentation with his favorite slide of the night—one having to do with the quality of life. Now, he read, we've heard the term "quality of life" many times during public comment and about noise. Quality of life is subjective. By creating jobs, attracting and supporting businesses and serving as transportation hubs, airports can positively influence quality of life. In contrast, by generating noise and affecting the air quality, airports can also negatively influence the quality of life. To date, there is no guidance how to comprehensively measure the impact until now. Research has now shined light on this issue. The research included a literature review of existing quality-of-life frameworks with a focus on the transportation-related factor. Then they contacted industry stakeholders, including airports. Based on the information gathered, the team developed a quality-of-life assessment method that is flexible, adaptable, and scalable to various size airports and communities. The quality-of-life assessment method considers nearly 100 indicators in six categories, including economic, environmental, health, local government, community services, social relationships, and transportation. So now, when we hear people talk about their quality of life, we have a tool to quantitatively and qualitatively measure it.

11. CONFIRM NEXT MEETING DATE

The next meeting is scheduled for January 20, 2021.

12. NEW BUSINESS/ADJOURNMENT

Facilitator McClintock thanked the FAA, elected officials, and all who participated in tonight's meeting.

The meeting was adjourned at 8:35 p.m.

END