

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

January 20, 2021

INDEX TO THE PROCEEDINGS

Page No.

1. INTRODUCTIONS	2
A. New Members 2021	2
B. Recognitions for Service	2
2. ANNOUNCEMENTS	3
A. Craig Simon Appointed Assistant Aviation Director	3
B. Acceptance of 3rd Quarter 2020 Noise Abatement Report	3
3. APPROVAL OF MINUTES	3
A. October 21, 2020	3
4. ELECTION TO FILL UNEXPIRED CO-CHAIR TERM (ELECTED OFFICIAL)	4
5. NEXTGEN RELATED NOISE CONCERNS	4
A. Subcommittee Report	4
1. Letter Request for Update on WNDSR TWO Approach	4
2. Letter Request for Status on HUUSH TWO Departure	4
3. Proposed Cal State/SLZ1 Visual Approach	4
B. FAA Noise Complaint Initiative	5
6. PUBLIC COMMENT	6
7. FAA REPORT—“EVALUATION OF AIRCRAFT SPEED ON COMMUNITY NOISE”	10
8. FORUM 2021 WORK PLAN	12
9. NOISE OFFICE REPORT	13
A. Update on Action Items from October 21, 2020 Meeting	13
B. Viewpoint Update	14
10. NOISE NEWS AND UPDATE	14
11. CONFIRM NEXT SCHEDULED MEETING DATE (April 21, 2021)	16
12. NEW BUSINESS/ADJOURNMENT	16

1. INTRODUCTIONS

The January 21, 2021 meeting of the Oakland Airport-Community Noise Management Forum was called to order at 6:35 p.m. by the Forum's facilitator, Mike McClintock. McClintock noted that this meeting was the Forum's third virtual meeting and welcomed all who were attending online or by smartphone.

A. New Members 2021

The facilitator noted that there are several new and returning Forum members present tonight. Among them are Alameda City Councilmember Trish Herrera Spencer and former San Leandro Councilmember Benny Lee who are returning to the Forum. Ms. Herrera Spencer is Alameda's Elected Representative and Benny Lee has rejoined us as San Leandro's new Citizen Representative. Berkeley City Councilmember Rigel Robinson has joined us as Berkeley's Elected Representative and Councilmember Fed Simon is San Leandro's new Elected Representative. Laura Ho is Richmond's new Citizen Representative and Ruben Hernandez has been appointed as an alternate to represent Richmond Mayor Tom Butt. In addition, Sarah Yenson from HMMH has joined us as HMMH's new airspace advisor to the Forum; replacing Adam Scholten, who has moved on to other endeavors.

B. Recognitions for Service

Facilitator McClintock said that with the new appointees to the Forum, the previous appointees are no longer serving; it is therefore appropriate to recognize their service to the Forum. Alameda City Councilmember Tony Daysog has served his community on the Forum on two previous occasions. Former Berkeley City Councilmember Cheryl Davila ably represented her community and the North Bay area during her term on the Forum. Tom Wagner, San Leandro's Citizen representative, also served his community and the Forum over the past several years. So, the facilitator said, in recognition of their service to the Forum, and to the communities they represented, the Forum wishes to award them Certificates of Appreciation. The Facilitator read the individual certificates and thanked the former members.

The facilitator proceeded to call the Roll:

Forum Members/Alternates Present

Co-Chair Trish Herrera Spencer, Councilmember, City of Alameda
Co-Chair Walt Jacobs, Citizen Representative, Alameda
Cindy Horvath, Representing Alameda County Supervisor Wilma Chan (District 3)
Ernest DelliGatti, Citizen Representative, Alameda County
Councilmember Rigel Robinson, Berkeley
James Nelson, Citizen Representative, Berkeley
Edward Bogue, Citizen Representative, Hayward
Peter Marcuzzo, Citizen Representative, Oakland/Chair, NextGen Subcommittee
Ruben Hernandez, Alternate for Mayor Butt, City of Richmond
Laura Ho, Citizen Representative, Richmond
Fred Simon, Councilmember, City of San Leandro
Benny Lee, Citizen Representative, San Leandro

Staff Members/Advisors Present

Craig Simon, Acting Assistant Director of Aviation
Matt Davis, Airport Operations Manager
Matthew Davis, Director, Port Governmental Affairs
Diego Gonzalez, Port Governmental Affairs Representative

Alex Katz, representing Congresswoman Barbara Lee (CA-13)
Jesse Richardson, Airport Noise and Environmental Affairs Supervisor
Susan Fizzell, Sr. Aviation Project Manager
Joan Zatopek, Manager of Aviation, Planning and Development
Colleen Liang, Port Environmental Supervisor
Rolanda Rogers, Port of Oakland
Chris Whitmore, Chief of Staff, Office of Mayor Butt, Richmond
Kathy Ornelas, City of San Leandro/NextGen Subcommittee
Mary Ellen Egan, HMMH, President and CEO
Rhea H. Gundry, HMMH, Principal Consultant
Sarah Yenson, HMMH, Airspace Consultant
Tim Middleton, HMMH, Consultant
Christian Valdes, Technical Consultant, Landrum & Brown
Valerie E. Jensen Harris, Court Reporter
Michael McClintock, Forum Facilitator

FAA Representatives Present

Raquel Girvin, Regional Administrator, FAA Western-Pacific Region
Sky Laron, FAA, Community Engagement Officer
Bonnie Malgarini, FAA Western Service Area Operations Support Group
Joseph Bert, FAA Western Service Area Operations Support Group
Durre Cowan, FAA, Air Traffic Procedures Specialist

2. ANNOUNCEMENTS

A. Craig Simon Appointed Assistant Aviation Director

The facilitator congratulated Mr. Simon on his promotion from Acting Assistant Aviation Director to permanent Assistant Aviation Director. Craig replied that he is looking forward to working with the Forum and helping to improve things in the communities around the airport.

B. Acceptance of 3rd Quarter 2020 Noise Abatement Report

The facilitator announced agenda item 2B as acceptance of the third quarter 2020 noise abatement report, adding that Forum members should have received copies of the report with their agenda materials. He asked if there were any questions or comments before he entertained a motion to receive and file? Benny Lee said that, looking at page 2 of the report and the nighttime Runway 28R turbojet departures, he noticed a large drop in terms of volume, but what struck him was the fact that compliance had improved significantly, from 93 percent compliance 99 percent compliance. He asked, “what did we do differently, outside of the drop in the flights, that really helped to increase...the nighttime departure compliance?” Jesse Richardson gave credit to the Air Traffic Control Tower personnel for their great work. Lee added that “eventually, when this COVID pandemic is resolved, we'll get more flights.” He thought it important that the Forum maintain awareness of what is being done to keep the compliance numbers at the high levels they are. Benny moved that the quarterly noise abatement report be received and filed. Seconded by Councilmember Herrera Spencer. There being no further discussion, the facilitator called the question. Motion carried unanimously.

3. APPROVAL OF MINUTES

A. October 21, 2020

The facilitator noted that Forum members should have received a copy of the draft Minutes for the October 21, 2020 meeting. He asked if there were any questions or comments prior to him asking for a motion to approve. There were none. He thanked Valerie Jensen Harris for her work in preparing the transcript of the meeting, which, under Covid-19 restrictions, is not easy. Co-Chair Walt Jacobs moved to accept the draft minutes. Seconded by Councilmember Benny Lee. Councilmember Herrera Spencer abstained. The question was called and the motion passed.

4. ELECTION TO FILL UNEXPIRED CO-CHAIR TERM (ELECTED OFFICIAL)

The facilitator announced that agenda item 4 is an election to fill the unexpired co-chair term for an elected official. Given that Councilmember Benny Lee has stepped over to be the citizen representative from San Leandro, the Forum needs to elect a co-chair from among the other elected officials on the Forum. Co-Chair Walt Jacobs said that Benny Lee had done a fantastic job and been a great guy to work with, and a real asset to the Noise Forum. He thanked Benny for serving as a co-chair and for doing a great job in that position. Jacobs also thanked Alameda Councilmember Tony Daysog, who also has done an outstanding job. He said he has appreciated all their help.

Jacobs said he wished to place the name of Alameda Councilmember Trish Herrera Spencer in nomination to be the Forum's next Elected Co-Chair. Jacob's said that he wanted to nominate Ms. Herrera Spencer because she has served on the Forum before, and she brings continuity to the Forum; which he thought was very important. He said he has worked with Ms. Herrera Spencer before, and that she is a take-charge person. Benny Lee seconded the nomination, saying that he too had worked with Councilmember Herrera Spencer a couple years ago when she was on the Forum, and, definitely, he said, she has a passion for this. She listens, and she actually participates heavily on the issues. So, to fulfill the remainder of the two quarter terms, he asked that the Forum support Trish's nomination to be the elected co-chair. The facilitator thanked Mr. Jacobs and Mr. Lee, and asked if there were any additional nominations. There being no other nominations, Ms. Herrera Spencer was elected by acclamation to the position of Forum Elected Co-Chair for the term ending on July 21, 2021. Co-Chair Herrera Spencer thanked the Forum and said that she will do her utmost to serve all locally and in our community at large.

5. NEXTGEN RELATED NOISE CONCERNS

A. Subcommittee Report

Peter Marcuzzo said that members of the subcommittee had met virtually with the FAA last Wednesday. It was, he said, a worthwhile meeting with good information. He said he had sent three letters to the FAA from the Noise Forum; the members of which should have received copies. These letters addressed the following issues:

- The WNDSR approach;
- The status of the HUSSH departure procedure; and
- The San Lorenzo (SLZ1)/ Cal State Visual Approach.

Marcuzzo also noted that the FAA had given the subcommittee a preview of its new noise complaint initiative; which they will present tonight at the subcommittee's request.

The status of the HUSSH departure procedure was discussed. The FAA is having some issues with the HUSSH departure. The subcommittee asked questions of the FAA, and we are trying to get it changed, he said. However, he noted, as technology changes, and more procedures are implemented, it takes away some pilot options on departures; and, for that matter, in all aspects of the flight process. Peter said that he anticipates that the FAA will make a presentation on the HUSSH departure and its progress and status at the Forum's April meeting. It was a good discussion, he said, and the subcommittee offered some new ideas and asked a number of questions. The FAA is still taking a look at the departures, and it is not a closed issue.

As for the WNDSR approach, Marcuzzo had asked the FAA for a short presentation concerning the problems between the WNDSR arrival procedure and the Hayward Airport departures. The FAA reviewed this with the Forum. It was a good presentation, he said, but, basically, he surmised that there were no real changes that WNDSR brought to the Hayward arrivals and departures. There aren't any real differences between the pre-NextGen WNDSR approach and the current WNDSR procedure. Any potential conflicts are of the type that have always occurred. There will be more discussions on this he said, and he will update the Forum at the April meeting.

There was no discussion of the San Lorenzo One or Cal State visual approaches, due to time constraints, moreover, he said, he did not believe that the FAA had been able to focus on this issue with everything that's been going on with COVID and everything else right now. He said, the subcommittee is hoping for more updates of that in April. Peter asked if there were any questions. There were none.

B. FAA Noise Complaint Initiative

FAA Western-Pacific Regional Administrator Raquel Girvin introduced Ms. Durre Cowan from the FAA's Office of Environment and Energy, who spoke on the agency's noise complaint initiative. Cowan said that she did not want anyone to leave tonight without having had any of their questions about the FAA Noise Portal answered. She said that if she was unable to answer any questions about the noise portal, she would get back with answers through Sky Laron, the FAA Community Engagement Officer (CEO) for N. California, and noted that the noise portal is not meant to be a stand-alone project. It is part of a larger enhanced communication effort the FAA continues to develop. The portal is not trying to compete or replace any systems the Oakland Airport has currently in place. It's the FAA's mechanism to respond to inquiries and assist airport noise complaints to answers questions.

Ms. Cowan began her presentation, saying that the goal of the noise portal and the overall concept of it is to open lines of communication among the FAA, airport and the public. How we do that is key, she said. The FAA wants to respond in a manner that is both effective and clear to residents, but also efficient and sustainable for the FAA. The noise portal was created, in part, by pulling together resources from the FAA's Air Traffic Organization, its environmental and airport divisions, and Ms. Girvin's office. This allows the agency to efficiently draw from its internal expertise to provide a holistic response to inquiries. The initiative has two parts, she said. Part one is where the agency currently is; they have implemented and improved their response system, the portal, and now they're identifying airports they hope to partner with, like Oakland. The second part of the initiative is to identify the possible actions that the FAA could undertake to address the underlying issues raised in many of the noise complaints that they see, particularly those regarding performance-based navigation [PBN] procedures.

However, she noted, we're not there yet. The second phase is still in development. Please note, once we get some better ideas as to what it'll look like, she'd be happy to come back or have her office to come back and brief the Forum on that portion of the initiative. Right now, they're still in phase one, though. The presentation continued with a slide showing how the process works. We often compare the noise portal process to building a house; all structures begin with the foundation. In this instance, the foundation is the office she represents, the Office of Environment and Energy. The office is responsible for establishing the noise portal policy, admitting process and the database. Unlike my position, which is focused on data, she noted, CEO Sky Laron deals with community issues and the needs of the local areas in N. California. The Community Engagement Officers play a vital role in collecting information, coordinating resources and combining all of that together to provide a response. This truly reflects the mission of the noise portal, finding and efficiently managing internal resources. Then trying to provide residents, who sent in the comment or complaint, an effective answer to their question or complaint that they don't have to wait a decade for. There is still a time frame, she said, but we are seeing some improvement on how long it's taking to get the responses out. In 2019, which is the early days of the portal, almost 60 percent

of the responses took more than 30 days. In the last few months, they've seen the number drop to nine percent. So, they are seeing improvements with the portal's response times, she said.

Ms. Cowan next discussed the external workings of the portal, saying, for example, if after going to the FAA website and still having not gotten an answer, they can submit their question or complaint through the portal; where it's routed through the administrator's office to a subject matter expert. Responses are collected from an office or multiple offices and the timing of the response depends on the complexity of the question or the complaint. Cowan said their goal is to have a thorough response back to an individual in two weeks or less. As she said earlier, they are seeing improvement in the timeliness of their responses. As to the volume of noise complaints they received in 2020, even with the Covid-19 pandemic, there was only about a two percent reduction in noise complaints overall. Noteworthy among these complaints is that the "complexity trend" has increased; meaning that the issues became more complex and the inquiries didn't get easier. If anything, they had more subject matter experts engaged in 2020, particularly on flight school, helicopters and drone issues. It seems that a lot of people bought drones during the quarantine.

Cowan said that they are currently in the process of developing "partnering relationships" with airports, but, actually, "coordinating" may describe it better. She said they have reached out to Oakland and other airports to share their data with them; and that this is important as they look to the future of the second phase of the noise portal as well. She discussed the FAA's privacy policy, which states that they can't legally share any personally-identifying information [PII] with any airports that haven't agreed to be a partner with the FAA. So, if they were to receive a complaint from Oakland, they could only share with the airport the fact that they had received the complaint. They couldn't say who it was, where they live, or what it was about; which doesn't help the airport or the residents of Oakland or any other city. This the reason that they are asking airports to partner with them, so they can share general PII information like name, address and the nature of the complaint.

Ms. Cowan's said that the FAA wants to bring some positives to the table, too. She showed a slide highlighting some of the benefits of working together and mutually coordinating efforts. She said a key point for clarifying some of the issues for the residents is that some inquiries come in that say the airport didn't give them all the information; but many times the complainant has inadvertently left out some contact or other information that caused the airport to respond in the way they did. When they respond with the information they've been given, it looks like the FAA and the airport are pointing fingers at each other. When in fact, we both provide a response that is technically correct on the basis of the information we have been given, but if it lacks a specific detail, nuance, concept or context (say omitting a.m. or p.m.) – or it could even be a typo – it would change the response. She said they want to minimize, if not stop this altogether. They want to support the relationships airports have in the community and strengthen relationships that people have with aviation and the FAA. The best way is to work together and share information and communicate as much as possible.

She cited an excerpt from the FAA's noise complaint policy, noting that the FAA agrees that they have to share responsibility among airports, airlines, state and local governments and the communities regarding aircraft noise. But that said, she particularly wanted to draw attention to one complaint policy right now; that is that the FAA will not respond to the same complaint over and over. She said this is not meant to discourage citizens from complaining or sending inquiries to the FAA; it's the opposite. People have a fundamental right to contact the government with their concerns, and the FAA doesn't want to the infringe on that or try to impede that. They will still "traffic" the complaint; meaning that if the inquiry is similar in nature to previous complaints and will elicit the same response as already sent, they reference this in their response back. If it's a completely different or new concern, they will research and investigate the issue and provide a new response. It's not the uniqueness of the sender but, she said, but rather, the issue. Frankly, if there is no other answer, it becomes condescending and frustrating to receive the same answer over and over, and it's a waste of taxpayer money to spend hours coming up with a new way to say the

same old thing. All the same, it doesn't fall on deaf ears either. They track every response. That is useful data as they continue to set noise policies and develop mitigation policies.

Cowan said that she wanted to talk about this specifically because she's had so many conversations where this policy has been misconstrued. We are generally trying to be a good neighbor with this initiative, but the FAA is always, and always will be a regulatory agency with safety at the forefront. It could be that noise impacts may align with the mission more directly, but they have to see where the research and science takes them. She said she wanted to clarify this up front because that's one thing people hone in on, and it's not explained very clearly all the time. She just wanted people to know why the FAA does that.

Councilmember Lee thanked Ms. Cowan for her presentation and noted that the noise portal sounds promising. He said he was really interested in seeing the statistics and transparency of the statistics, and asked if this was available on the portal or does one have to make a FOIA request. Cowan replied that it will be made available on the FAA's website for community engagement and at faa.gov/noise. However, she noted, they are still compiling data and are not quite there yet. The portal has only been up nationally since September. Lee asked if there will be open data that is PII compliant. Cowan replied that she has to give an I.O.U. on that, because they are still trying to figure out what that will look like; and that, they have to make sure that what they're sharing couldn't be used to piece things together. They do want to be as transparent as possible, but, again, as far as open data and how we present that, that's under development. Lee asked if PII would be shared with the airport. Cowan replied yes, they need to have the name and address. Lee concurred, saying, yes, that helps to mitigate duplication in identification of the unique concerns.

Mr. Lee noted that the airport currently has a portal that takes in these inputs; and there are outside parties with their own open applications that takes its own input information, which becomes an aggregation nightmare for the Port staff. He asked if the FAA was looking to integrate the FAA portal information and data with the Port, or are we looking at a separate tool? You have to have some data integration; otherwise, it would be just two sets of data that would have to be reconciled by staff. Cowan replied that they don't want this to be onerous for airport staff, and that they want to make this seamless and as easy as possible to provide data. She said they are trying to get airport input to help them to figure out what this will look like; adding that no one has the funds to add another system to integrate this. That's a non-starter. We want to make it easy, she said. We won't be integrating data, which is likely off the table, due to the resources involved in that. Lee said for this to work, the data needs to be received in a timely manner by the Oakland Airport staff, and they have to provide feedback to the public as well. He noted that Forum meetings have become data driven over the last few years. This is a very important thing -- to bring in something that helps to address issues raised by the public, but we want to make sure whatever we bring in doesn't add to that consternation.

Ms. Cowan said she wanted to assure the Forum that they try to tailor the noise portal to the uniqueness of the airport. However, she noted, what might work in Oakland may not work in Dallas or Denver or Chicago. They really try to make it tailored to each individual airport. This is one of the reasons that they depend so much on the regional administrator's office to help guide them when we work together to find really unique solutions for an airport. We talk about timely exchanges of information that look different based on the complaint volume and on the type of airport, and where it is located. Councilmember Lee again thanked Ms. Cowan for her presentation and said he was looking forward to seeing that spirit of partnership, which would make things better for the public. Ernest Delli Gatti asked questions about Personally Identifiable Information (PII) and the FAA's disclaimer advising people who go ahead and file a noise complaint that they need not worry about personal identification information being disclosed because it's protected under PII. Cowan replied that without noting the complainant's address, it's difficult to determine what procedures might be affecting them. We would need to know their name and address

to be able to put together an effective response. Mr. Lee, Mr. Delli Gatti, and Ms. Cowan continued with a focused discussion on PII, including its origins, implementation, and penalties for violations.

Delli Gatti asked Jesse Richardson if the noise complaints his office received were classified as PII. Richardson said they were not so classified, but that they were not shared outside the Port's noise monitoring system. Delli Gatti replied that this was the point he wanted to make, i.e., that there could be a conflict between the FAA with PII and the Port with respect to its data not being considered PII. He asked Ms. Cowan take his comments back to her legal department for clarification; noting that he has worked quite a while in both the government and U.S. Air Force, and is well aware of the PII label. We're just trying to do good here, he said. Ms. Cowan thanked Ernie for his feedback, and said that she would take it back to her legal counsel. Matt Pourfarzaneh made the observation that shouldn't this information go from the airport to the FAA, and not the other way around. Then the FAA has to provide the airport with an answer or mitigation strategy. Matt said, what he sees happening is that once the community is informed of the existence of the FAA noise portal, they will have to make the same complaint to both the FAA and the airport. This would appear to be rather cumbersome. Ms. Cowan concurred, saying that part of the way the portal is set up is that one thing we do ask is "Have you contacted the airport first?" She said the FAA does not want to be the first point of contact. If we get more involved in a partnership with the airport, we would ask them to choose a radius around the airport where incoming complaints are routed directly to the airport. The FAA would answer the ones that are outside of the radius. That's not to say if something comes to the airport first, that the FAA won't respond. It's an efficiency issue, trying to make sure that -- on a day-to-day basis -- the majority of complaints that might come in from a few miles out would be for Oakland, and things 15 or 20 miles away would be for the FAA to handle. Again, she said, it's just efficiency issue. Oakland is free to come back and say, "Listen, we feel you should answer this. It's five miles out, but we feel it's an FAA issue." She said, the FAA's goal is not to get in between Oakland and the public; it's as an assistant to the airport. If the public chooses to come to the FAA, they can.

Reva Fabrikant said that, as a member of the public, she was confused about whom to complain to. She said she lived under the WNDSR approach, an FAA flight procedure, so she should complain to the FAA through the noise portal? What about individual flights? Is the airport the appropriate entity to complain to? She said "we really need a lot more clarification on what complaints go where." Cowan replied that "the first point of contact should always be the airport." She again cited the idea of a radius around the airport to define the areas where either the Port or the FAA would have immediate sway. Having said this, she added that the FAA is not trying to impede anyone from their right to contact the government. So, if you still would like to contact the FAA for a federal response, you can do that and use the noise portal to send them any concerns. Cowan said she could go to www.faa.gov/noise. This will take you to the noise pages, then you can direct your complaint from there.

Edward Bogue said he believed we really need to have more information on how partnering with the FAA would change and affect what we now do. We hear a lot of information about what complaints are going on with what situations, he said. It comes down to what neighborhood. Sometimes it comes down to streets, and sometimes even certain houses; sometimes the people who made the complaints are in the chamber with us, so we know exactly what the basis for their concerns are. How would partnering affect our responsibilities to provide information if the FAA provided the information first; and how would we keep track of where each piece of information came from, so we could review it and offer comments. Cowan replied that nothing they would share would be to hide per se. It's the opposite. We want to be as transparent as possible. The airport would give us data -- we're in phase one right now, which is supporting airports in their noise responses and trying to be responsive to the public. The second phase is when the data sharing will come into play more. We hope to use some of the data to study national trends and to help support our enhanced communication efforts to develop templates for mitigation plans, but they are not fully there yet, so it's hard to explain what phase two looks like because she really doesn't know herself yet. Mr. Bogue replied that his concern was that he did not want to see the airport or Forum get caught

up in something where we're not allowed to discuss it because the information came through the FAA. Cowan replied that "This isn't meant to be that way at all. This is actually meant to be the opposite. We want to be as transparent and public with this process as we possibly can.

Co-Chair Herrera Spencer thanked Ms. Cowan for coming to tonight's meeting. She noted that as an Alameda councilmember and former Mayor, she actually had the opportunity meet with the FAA in Washington, D.C. She noted that we have community members that come to this Forum regularly, every quarter, and share their noise issues. So, she said, she was hopeful that, by Ms. Cowan's presence here, and coming up with this system that there will be some progress in partnering together. She again thanked Ms. Cowan, saying that it really appears that you are taking it seriously and trying to help us out. Ms. Cowan thanked the Co-Chairs and Forum members for the opportunity to be here tonight, and that she sincerely hoped that the noise complaint initiative will see some benefit across the country.

6. 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.

He added that anyone having any questions about the FAA's neighborhood environmental survey may want to wait until Christian Valdes talks about it under agenda item 10, but any other questions on items not on the agenda are certainly welcome at this time. Matt Pourfarzaneh spoke in regard to the FAA seeking input on its aviation noise policy and future research. He said that CLASS supports the addition of a single-event noise metric to supplement the California Community Noise Equivalent Level (CNEL) metric. The average noise over a 24-hour period does not represent how humans react to noise; whereas, they do react strongly to single-event noise intrusions. The use of the Day-Night Average Sound Level (DNL) by the FAA is not a true measure of what people actually hear. Matt said that the Forum needs to respond to the FAA input request. In forming this response, CLASS requests the Forum to direct HMMH, Inc. to use their state-of-the-art methodologies to evaluate noise in the community. For example, he said, HMMH could survey the latest base approaches in the industry to evaluate noise impacts, i.e., what noise impacts people are experiencing and summarize those methods to be included in the Forum response to the FAA. Given that the Noise Forum represents the participation of communities, CLASS thinks this information would be invaluable to educate the Forum members and to present to the FAA to advance and have more solid values for aircraft noise that impacts the communities.

The facilitator said that he had sent out a memo basically restating what was in the notice in the Federal Register. He said that if anyone wants to comment directly to the FAA, the contact information is in the memo. Individuals, cities, or any organized groups are free to comment directly to the FAA on this issue. He said, as for the Forum, he'd like to get together with the co-chairs, staff, and consultants to come up with a response to the FAA to be shared by Forum members and staff prior to the time that it goes out. Anyone wishing to comment to me through the Forum to get to the FAA eventually, needs to send me their comments or questions. He asked that commenters try to keep them in the format that was set forth in the Federal Register notice or in the format set forth in the memo, which are identical. This would be a formal response from the Forum, the FAA's submission deadline is March 15, 2021—this deadline precedes our April 21, 2021 Forum meeting. McClintock asked Dr. Pourfarzaneh to send him an email with CLASS' input.

There being no other speakers, the facilitator closed the public comment period.

7. FAA REPORT: “EVALUATION OF AIRCRAFT SPEED ON COMMUNITY NOISE”

Agenda item 7, noted the facilitator, is a presentation on the evaluation of aircraft speed on community noise by HMMH. Rhea Gundry introduced Sarah Yenson who will make the presentation. Ms. Yenson works closely with HMMH’s federal programs division and the FAA. Sarah is here in place of Adam Scholten as the new airspace specialist on HMMH’s team. Ms. Yenson began by saying that her presentation would be about a report recently submitted to Congress by the FAA evaluating the effects of speed on aircraft noise as one of the deliverables required of the FAA by Congress as part of the 2018 FAA reauthorization bill. The report, she noted, was prepared by MIT for the FAA. She added that this report is publicly available, and would be pleased to provide a link for anyone wishing to delve into the technical details of the report. To begin with, she said, she would quickly go over the requirements that were set out in the reauthorization act; then she’ll talk about the major sources of aircraft noise discussed in the report.

The MIT report looked at two conditions: takeoff noise reduction and approach noise reduction, so, she said, we’ll talk about those too. Finally, she said she would summarize the conclusions of the report. She reviewed the requirements in the reauthorization bill for the FAA to prepare the study; essentially, the reauthorization act requires that the FAA provide a critique of existing work relating to the reduction of noise due to changes in aircraft speed. The FAA was then requested to determine the significance of speed reductions on noise; specifically, how reductions in noise would occur as a result. The FAA was also asked to determine whether the speed reductions would impact safety and/or efficiency in the national airspace system, and what some of these impacts might be. Finally, Yenson said, the report looks at whether the speed reductions are reasonable mitigations for aircraft noise, if they would provide any impact affecting any specific metropolitan areas, and if these areas would be specifically benefitted from any of these noise reductions. She did note, however, that the report did not specifically touch on each of these requirements, but it did address the overall intent of the requirement that the FAA was directed to consider.

Ms. Yenson described the primary sources for aircraft noise as coming from the engines; including the intake of air, the core where air and fuel are mixed and combusted, and the exhaust. Other areas creating noise are the airframe itself and its components, which extend from the sleek body, such as slots, flaps or landing gear. These components cause drag and thereby generate noise. These are the main sources of noise that were discussed in the report. So, she continued, MIT looked at the effects of speed on takeoff noise and landing noise. During takeoff, an aircraft goes essentially from a very low speed to a higher speed to gain lift. This is why engine noise is basically a dominating noise source during takeoff. Engine noise tends to be louder with the increased power setting which one necessarily has during takeoff. Also, she noted, there’s increased noise when there is a high difference between the speed of the air flow through the jet compared to the speed of the aircraft, which, in this case, was also a pretty significant difference. MIT looked at two situations for the takeoff noise, one of which was the change in where the flaps are retracted after takeoff and also where the thrust is changed once takeoff power is no longer needed and the aircraft switches to cruise climb. The second situation MIT looked at was using a reduced climb speed to potentially reduce noise. This reduced speed would be maintained up until 10 thousand feet altitude.

So, two noise abatement departure profile (NADP) scenarios were looked at (flaps retracted and thrust cutback). Shockingly, she said amusingly, MIT named them NADP 1 and NADP 2. NADP 1 benefits close-in communities, and NADP 2 benefits distant communities. The primary difference between the two is the point at which the flaps are retracted and the cruise climb power setting is shifted. She showed graphical exhibits to illustrate these points for each procedure.

The results of this evaluation were fairly minimal for both of these scenarios. The MIT study showed there is a fairly minimal change in noise when one procedure is enacted over the other. The close-in procedure (NADP 1) provides a slight reduction on the order of, at most, one decibel, and this reduction only occurs within a very small area that is between three and six nautical miles from the runway's departure end. Because the reduction is pretty small, and the area that is applicable is also fairly small, there is not much in the way of mitigation effect due to changing the location of where the flaps are retracted and the power setting is changed. In the second or farther out procedure (NADP 2) reduced climb speed also doesn't have much of an effect since the aircraft is ascending in a cruise climb configuration, which means the flaps have been retracted and the aircraft is in a more aerodynamic configuration. So, she said, at this point the engine is the primary noise source, and even with the slight difference with reducing the speed of the aircraft, the engine still is producing a relatively high-power output in order to maintain the safety and effectiveness of the climb.

MIT also looked at approach noise, primarily, the noise coming from the aircraft airframe and engine during the arrival procedure; which ranged from 30 NM out to touchdown on the runway. During this flight segment, airframe noise is more dominant. This is because the aircraft is decelerating from a high air speed down to a slower air speed, allowing it to touch down and provide a stabilized approach on its way in. It should be noted, she said, these airframe noise sources are tightly coupled -- the noise resulting from the flaps and such is very sensitive to air speed because they serve the air flow over the wing and airframe, cause noise as a result of that. Additionally, the deployment of the flaps and other projections (e.g., landing gear) is highly dependent on what speed you're flying at, so the two essentially play into each other. To evaluate this, MIT looked at delaying deceleration on approach. This basically means that the pilot will delay decelerating the aircraft until later in the approach, and essentially flying the descent profile as with a conventional approach, but maintaining higher air speed until the aircraft is further along in its descent and closer to the airport. Because they decelerate later in the approach, that means they will be able to deploy the flaps and slats, all those noise creating sources later closer to the airport. Areas farther out on the approach will benefit because they will not be exposed to the flap deployment at that point in time. That's pretty much the main benefit of the delayed deceleration approach.

Ms. Yenson next summarized some of the pros and cons of NADP 2 approach. There is reduced noise from the flaps and airframes about 10 to 25 miles out from touchdown onto the runway. According to the MIT report, this is on the order of four to eight decibels. There is also less fuel burn because by maintaining a higher air speed for longer, it reduces the flying time. She said one thing she didn't mention was that, by using this delayed deceleration concept, the pilot can also use lower engine settings, which would also result in reduced fuel burn. Yenson added that there are some cautions to this because these deceleration profiles will vary according to aircraft type, as well as what they're carrying and the weather. That means that there may be some impact to pilots. They either need to manage different deceleration profiles in the flight management system, which has training implications for airplane manufacturers and pilots. Additionally, there are issues for air traffic controllers because there are variations in the performance characteristics of all the different types of aircraft under their control. The spacing and sequencing for arrivals will be less consistent than what you would see with a more conventional approach, which, in turn, leads to some impact on controllers' workload and possibly for operational efficiency. However, these are, she thought, somewhat conjectural assumptions that MIT has stated are likely to exist, but more research is necessary in order to figure out exactly what these effects might be on air traffic controllers, pilots, and airlines.

So, in summary, Yenson said, takeoff speed reductions really don't produce too much reduction in aircraft noise. This is because engine noise dominates over pretty much anything else; and you can't gain altitude quickly with reduced thrust during takeoff or climb out. However, she noted, by employing delayed deceleration on approach, you can reduce noise for slightly-farther-out communities between 10 and 25 nautical miles from touchdown by about four to eight decibels; which would provide some noticeable

noise reduction. Again, caveating all of this, is the fact that additional work is going to be necessary to determine whether this is reasonably feasible and to figure out what challenges are actually going to arise and how they could be potentially mitigated. This concluded Ms. Yenson's presentation. She said she would answer any questions, but, again, suggested that if anyone would like to have a really in-depth look, they should seek out this report and read it for themselves.

James Nelson asked if the report discussed engine settings on arrivals, say maintaining level flight and the effect of doing that to maintain a certain cruise speed before deceleration? Ms. Yenson replied that the report provided a discussion of the thrust used in MIT model, but she didn't know if it necessarily talked about the specifics of what settings were used. Nelson offered that he believed that this could be relevant to the WNDSR arrival path. Ernie Delli Gatti asked whether or not MIT used a baseline profile of the aircraft, because, he said, don't forget that aircraft come in narrow body, wide body, and jumbos, and jet engines have different manufacturers, different fan cowl sizes and everything else. Also, he continued, did they use a standard setting and then extrapolate the data, so that they would go ahead and come up with the latest line or did they break it out according to aircraft type and engine type, e.g., Pratt-Whitney, Rolls Royce, and others? Sarah replied that she believed that MIT used representative wide body and narrow body aircraft, and provided a basic breakdown, but didn't go into the specifics of actual engine type. There being no more questions from the Forum and no questions on the part of the viewing/listening public, the facilitator moved on to the next agenda item after thanking Ms. Yenson for her presentation and asking her to please provide Jesse with a copy of her presentation for posting.

8. FORUM 2021 WORK PLAN

The facilitator announced the next agenda item is the Forum 2021 work plan. He said that, every year, in January, the Forum updates its work plan. For the last couple of years, he said, it's only been necessary to do some housekeeping changes. McClintock said that everyone on the distribution list, which goes well beyond Forum members, received a copy of the draft 2021 Plan. Under work plan Initiatives, on the first page, he suggested that item 1 should be rewritten to say "Review and establish Forum positions on proposed aviation noise legislation, airplane noise research, air traffic noise pollution, and airplane noise and pollution impacts." Item 3 under "Support and Maintain Forum Subcommittee to Address NextGen Implementation Issues Affecting Bay Area Communities," he recommended adding an additional bullet to read "The FAA should also be entreated to provide the Forum with definitive information on the timelines or schedules and next steps in its review process for the HUSSH and WNDSR 2 procedures." He said these were the main changes and asked for a motion to approve the draft 2021 Forum work plan after any discussion.

Ernest Delli Gatti spoke to items 5 and 6 on Pages 3 and 4 on the draft work plan, offering that the draft work plan be amended to include the recent findings of the FAA's Neighborhood Environmental Survey (NES). McClintock said he had looked at the two items, and that they were broad enough to cover the issues raised by the NES. Ernie added that Sky Posse Palo Alto had reviewed the NES data and they had some serious heartburn with regard to what the FAA do. He suggested using some of Sky Posse's information in the Forum's response to the FAA request for input. McClintock said he would review the Sky Posse information. Laura Ho asked if the WNDSR TWO approach is mentioned on page 3, and is this the one that would be over Richmond? The reference to WNDSR TWO would be added to the work plan, if it were to be approved, McClintock said; but without any current information from the FAA on its current thoughts for rerouting WNDSR TWO he could not say, but added that the original July 2019 proposal was in fact depicted as being over Richmond. As far as anyone outside the FAA knows, a final determination has not yet been made. The FAA is still reviewing its options, or so we have been told, McClintock said.

Benny Lee said he was looking at Initiative 17, and believed it would make sense to incorporate holding an annual forum or joint session among the three Bay Area noise Roundtables/Forum. This could be an opportunity to share information and gain new perspectives, he said, adding that the N.O.I.S.E. organization is affiliated with the National League of Cities and attends their conferences. N.O.I.S.E. is a lobbying group for cities that have serious airport noise problems, and would represent a means for Bay Area communities to start working together and can also focus on national advocacy. Lee said that there is a Congressional Quiet Skies caucus, but when we looked at some of the Fly Quiet initiatives in the 216th Congress, we saw that they were only able to obtain 38 signatures at most as co-sponsors of aviation noise abatement proposals. The fact is, that for a Bill to get out of committee, at least 220 signatures are needed. The only way we can enough momentum to gain that kind of support is to have our local Roundtables inform other Roundtables to get their Congressional reps to get involved and to sign-on as co-sponsors. The facilitator said he understood Mr. Lee to be saying that he would make a motion to include in the work plan consideration of an annual joint collaboration session or meeting with other Bay Area Roundtables or Forums? Lee replied, yes and made such motion. Co-Chair Herrera Spencer seconded the motion, saying she believed this to be a good, solid idea. There being no further discussion, the facilitator called for the question. Motion carried unanimously.

9. NOISE OFFICE REPORT

Moving on to agenda item 9, the facilitator announced that Matt Davis and Jesse Richardson would begin by recapping the action items from the October 21, 2020 Forum meeting:

A. Update on Action Items from October 21, 2020 Meeting

Jesse Richardson recapped the action items from the October 21, 2020 Forum meeting. The first item was by the facilitator to have clarification on the job titles between Jesse Richardson and Colleen Liang. The titles were clarified for the administrative record, so this action item has been completed. The next action item was from Councilmember Lee concerning why the VFR compliance rate was lower in 2020 Q2 compared to 2020 Q1. It was explained that more pilot education was needed; so, after the meeting additional noise abatement brochures were distributed to the North Field tenants. If you look at the 2020 Q3 VFR noise abatement procedure, you'll see that the compliance rate had improved; going from 87 percent to 93 percent. So, Jesse said, we're happy that the brochures and that bit of education helped those owners and pilots become more compliant in that particular procedure.

The Forum facilitator asked Forum members if they concurred with the subcommittee recommendation to send a letter of request to the FAA to validate the San Lorenzo 1 proposal and to compare the San Lorenzo 1 proposal and Cal State approaches by means of flight testing. The recommendation was approved and the letter has been sent to the FAA. Forum member James Nelson said he noted that the draft minutes alluded to Windsor being affected. He said, he thought it should say Berkeley is affected. Subcommittee Chairperson Peter Marcuzzo suggested that a name change referring to the "East Bay Hills" would be more appropriate. The reference was changed to the East Bay Hills in the final minutes. The next action item was re City of Richmond Forum membership. Facilitator McClintock said he would send informational materials about the Forum to the City of Richmond, adding that the Port can deal with the membership agreement and the collection of dues at a later time. The materials were sent to the City. Lastly, Mr. Richardson said, Benny Lee felt that the use of the AEDT would serve a worthwhile purpose in developing community climate action plans. However, it would be worthwhile to generate some numbers on this, especially with regard to the mitigation of greenhouse gases. The consensus was that this could be worked out over the course of future meetings, and additional clarification from Mr. Lee would be helpful. Benny said that because there are a number of councilmembers on the Forum, it's very important they also provide feedback to their local climate action plans. He said that's where he saw the AEDT tool being able to provide information that can be fed into the model used to develop their climate

action plans. He said, he wanted to make sure the airport works together with the various jurisdictions to provide this information, and the elected reps need to discuss this with their jurisdictions. Lee commended the Port staff for the work they did on raising the compliance rate for VFR operations.

B. Viewpoint Update

Jesse Richardson reported that he and Matt Davis met with Envirosuite regarding two projects they're working on. The first project to be discussed was their new Oakland Airport insightful project. Basically, this tool will have a number of features that will help the community understand the airport's noise abatement program. It will also include things like a videographic enhancement of west flow and southeast flow operations, so the community can get familiar with the different air traffic patterns at the Oakland Airport. It's also going to have a dashboard to access reports. The other project that was discussed was complaint brokering. Basically, that's the regional complaint database with the other two major airports in the Bay Area. So, the details are still being worked out by the research and development team, but one of Jesse's hopes is that it'll have a feature or dashboard located on the website for the community. It would be a tool to help them determine which airport operation might be causing noise concerns in their area. He concluded that the Port is looking forward to these new developments by Envirosuite. Stay tuned, he said, we'll keep you posted. Rolanda Rogers said we have two hands raised. First is Christopher Whitmore from the City of Richmond. Mr. Whitmore said the City had not received the Port's invoice for Forum dues. Jesse Richardson said they will make sure that he gets one. Benny Lee said he recommended that a tutorial for the Viewpoint app be made part of any upcoming Noise 101 curriculum, and that the Port convene a Noise 101 session once the Covid-19 situation settles down.

10. NOISE NEWS AND UPDATES

Christian Valdes began his presentation with a win-win effort. He said the House Quiet Skies Caucus has been working with the FAA for quite some time about the increasing noise impacts on Long Island residents from aircraft flying into the airport. A new procedure keeps landing aircraft at or above 3,000 feet 15 miles from the airport. The FAA Administrator stated the actions mark a huge relief for the Long Island residents impacted by these arrivals. The FAA Administrator also signed an order removing the B-737 Maxx's grounding. That gets the Maxx a little closer to being back in service, but three major milestones still need to occur, including design changes to the manual that provide the flight crew with runway horizontal stabilizing procedure changes to the flight control computer software and completing an "angle of attack" sensor situation test. Additionally, each airline must submit pilot training revisions to the FAA for approval, and airlines must perform pre-flight maintenance on the Maxxs that have been parked for quite some time. The Kansas Department of Transportation and the FAA agreed on the creation of airspace to test non-military aircraft that fly faster than the speed of sound. The governor is enthusiastic about the supersonic corridor as a business opportunity with the creation of 40 billion dollars in revenue and numerous jobs. The supersonic airspace will consist of a 770-mile racetrack shaped corridor at 39 thousand feet in altitude. NASA also welcomes the supersonic corridor as a test for its "quiet" boom technology.

Kudos to the Embry Riddle aeronautical university team for helping to develop technology to reduce electric aircraft propeller noise, he said*. It shows great promise, as these propellers can be quite noisy. This technology attempts to maintain propellers rotating at efficient and quieter speeds. This was inspired by the 1980s show "Blue Thunder," which was about a police helicopter used in silent mode so the bad guys couldn't hear it [although Blue Thunder seems oxymoronic]. The EPA finalized the first proposed standards regulating greenhouse gas emissions in the U.S. for new aircraft designs as of January 2020 and for aircraft introduced in 2028. Normally, land use decisions don't make news, but Christian thought this would, because they likely create more aircraft noise impacts on residents underneath the flight path. In

the 1990s, an airport district overlay at Raleigh-Durham Airport was adopted by Morrisville, North Carolina after numerous homeowners sued about noise issues. The airport overlay district was designed to protect the airport from residential encroachment. The town of Morrisville wants to change its 2009 land use plan to allow residential development inside the airport overlay district. The airport urges Morrisville not to allow residential development which would impact residents with higher noise levels and frequent overflights, which would increase the risk of future lawsuits. The airport is no stranger to lawsuits; having spent over 1.8 million dollars to settle lawsuits in the late 1980s. In another land use decision, the Board of Supervisors in Fairfax County, Virginia have rezoned a 12 aircraft plat for 134 townhomes subject to overflight by 200 daily flights from aircraft flying at 950 feet altitude. There is strong opposition. It centers around the use of a map updated in 2019 versus an older map. One of the three supervisors that voted against the new development said not using the updated 2019 map would be intellectually dishonest. Why did the older map get used, you might ask, said Christian? The board did not employ its usual process for considering noise maps, which passed through a citizen advisory committee. The land use committee (chaired by the supervisor who supported the project and whose district it sits on) was the sole entity given the authority to consider the 2019 map for its use or nonuse.

On drones, NASA and the FAA started the Advanced Air Mobility Campaign. Its purpose is to eventually test vehicles and UAM air taxi providers from various companies. It also looks at how cities, airports, and overall infrastructure can support this. Flight testing will use helicopters as surrogates for the drones and involve current standards to mimic future flight standards with the goal of creating a viable market. In related news, the FAA launched a new drone integration commitment, the Beyond Program. This program is to address the safety of visual line-of-sight operations, societal and economic benefit to drone operations, and community engagement efforts to collect, analyze and address community concerns about drones. Internationally, Christian said, he found this item to be very interesting. A new law passed in South Korea provides monetary compensation for folks living near military airports and shooting ranges. They receive about 52 U.S. dollars on a monthly basis. The list of recipients will be updated frequently and the law reviewed every five years. There are two U.S. military bases in South Korea subject to this. It appears they will have to cover the costs of the noise compensation.

Hot off the press is the FAA's release of the findings on the Neighborhood Environmental Survey. It's a 450-page document; the intent of which is to determine whether the FAA needs to update its 40-year-old aircraft noise policy, based on the "Schultz Curve," last updated in 1992. Christian reviewed the synopsis of the FAA's webpage and the announcement in the Federal Register concerning the FAA's request for input to its noise policy and to inform future research initiatives. Forum members received copies of these documents with their agenda materials. The Schultz curve was developed in 1979 and re-validated in 1992. Recent international research findings resulted in higher levels of noise annoyance at lower DNL levels. The FAA wanted to dig deeper and started the survey which was led by HMMH. The findings were used to create a new national curve. Valdes explained the selection process for the airports included in the study [Oakland was not one, but San Jose International was]. He said thousands of mailings or surveys were mailed to residents around the study airports. Less than 50% of the recipients responded, even after receiving follow-up mailings. Valdes discussed the nature of the questions in the survey, which was structured in a way that wouldn't alert the recipient that this was an aircraft noise survey. They wanted to keep it subtle and discreet. So, the main question a resident was asked was "Thinking about the last 12 months or so when you were here at home, how much does each of the following bother, disturb or affect you?" Aircraft noise was below "smells from the road, smoke, litter, etc." However, the response rate was such that a much greater percentage of people were highly annoyed by lower levels of aircraft noise than were predicted by the Schultz Curve. For example, at the DNL 65 dB level the Schultz Curve showed 12.3 percent of people being highly annoyed. By contrast, the new National Curve showed a dramatic increase in aircraft noise annoyance by residents. The extreme differences between the new National Curve and the Schultz Curve could be due to changes in peoples' attitude toward noise, changes

in the nature of the noise exposure, or whether it's a new procedure or more frequent flights, and even cultural differences among those being surveyed. The FAA is now requesting public comment on other factors that contribute to changes in people's response to aircraft noise.

Christian recapped another request by the FAA for comments on three research activities or subject areas: the effect of aircraft noise on people; predicting noise, noise modeling, noise metrics or how to explain results; and the reduction, abatement and mitigation of aviation noise. What's next for the FAA, he asked? The agency will review, comment and identify general themes. He said he would take questions from Forum members. James Nelson said he had given some thought to this, and the terms "highly annoyed or percent highly annoyed," seem to be a poorly-defined parameter, even though the surveys have well-defined questions. He said he thought that the definition of highly annoyed may be different today to some extent than it was when the Kryter or Schultz curves were developed. One definition is those who are complaining to their Congressional representatives or the airport regarding noise. So, he said, when a survey is conducted and just asks the question "Are you highly annoyed?" that may not be the same thing as actually willing to sue or engage the airport operators. Another thing, is that he thought that the original Schultz Curve had a spread between 2 and 49 percent or something like that at 65 DNL. That 49 percent is now at the bottom end of the spread in the new National Curve. So, in his professional opinion, the new National Curve is subject to quite a bit of uncertainty. In any event, he said, there needs to be recognition of other factors, including sleep disturbance or time above a certain noise level, which may be better descriptors of highly annoyed. Matt Pourfarzaneh asked if it would be possible to have a copy of Christian's presentation. Christian replied that Jesse already has a copy that he can make available. Reva Fabrikant asked for more information on what inspired the FAA to implement the changes in the arrival procedures at JFK. McClintock thanked Christian and everyone else who made presentations, and the community members for joining us tonight.

11. CONFIRM NEXT MEETING DATE

The next meeting is scheduled for April 21, 2021.

12. NEW BUSINESS/ADJOURNMENT

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

The meeting was adjourned at 9:14 p.m.

END