

AGENDA

LEGISLATIVE COMMITTEE OF THE

SANTA CLARA/SANTA CRUZ COUNTIES AIRPORT/COMMUNITY ROUNDTABLE

December 16, 2020 1:30 PM – 3:30 PM PST

This meeting will be conducted in accordance with State of California Executive Order N-29-20, dated March 17, 2020. All members of the Committee will participate by video conference, with no physical meeting location.

Members of the public wishing to observe the meeting live may do so at: <u>https://www.youtube.com/channel/UCtPEqHsvTSnRcJUCQxX2Ofw</u>

Youtube.com → SCSC Roundtable Channel

Members of the public wishing to comment on an item on the agenda may do so in the following ways:

- Email comments to <u>scscroundtable@gmail.com</u> by 10:00 a.m. PST on December 16. Emails will be forwarded to the Committee. Emails received after 10:00 a.m. PST and prior to the Chair announcing that public comment is closed for each item will be read into the record by the Chair at the meeting (up to 3 minutes, at the discretion of the Chair). IMPORTANT: <u>Identify the Agenda Item number in the subject line of your email. All</u> <u>emails received will be entered into the record for the meeting</u>.
- 2. Provide oral public comments during the meeting: click the following link to register in advance to access the meeting via Zoom Webinar: https://mountainview.zoom.us/webinar/register/WN_pHWaicELTza4RIM35C8bHQ
 - a. You will be asked to enter an email address and a name. Your email address will not be disclosed to the public. After registering, you will receive an email with instructions on how to connect to the meeting.
 - b. When the Chair announces the item on which you wish to speak, click the "raise hand" feature in Zoom. Speakers will be notified shortly before they are called to speak.
 - c. When called to speak, please limit your comments to the time allotted (up to 3 minutes, at the discretion of the Chair).

Or join by Telephone:

US: +1 669 900 9128 or +1 253 215 8782 or +1 346 248 7799 or +1 646 558 8656 or +1 301 715 8592 or +1 312 626 6799 or 833 548 0276 (Toll Free) or 833 548 0282 (Toll Free) or 877 853 5257 (Toll Free) or 888 475 4499 (Toll Free)

Webinar ID: 948 3325 6492

*6 toggles mute and unmute*9 raises your hand.

Legislative Committee of the Santa Clara/Santa Cruz Counties Airport/Community Roundtable December 16, 2020 1:30 pm – 3:30 pm PST

1.	Call to Order – Legislative Committee Chair, Lisa Matichak	
2.	Identification of Members Present – Legislative Committee Members	Information
3.	Oral Communications from the Public on Non-Agenda Items	Information
	This portion of the meeting is reserved for persons wishing to address the Committee on any matter not on the agenda. Speakers are allowed to speak on any topic for up to three minutes during this section. If there appears to be a large number of speakers, speaking time may be reduced. State law prohibits the Committee from acting on non-agenda items.	
4.	Noise Metrics – Steve Alverson, Roundtable Facilitator	Discussion/
	Review and discuss the draft policies for a new approach to noise metrics, and the proposed use of the new approach to noise metrics. Define proposed actions to be taken for full Roundtable consideration.	Action
	Public Comment	
5.	Public Health & Environmental Impact of Noise and Emissions – Committee Member Watanabe	Discussion/ Action
	Review and discuss the second draft plan to address public health and the environmental impact of airplane noise and emissions, and the proposed use of the plan. Define proposed actions to be taken for full Roundtable consideration.	

Public Comment

6. Adjournment – Legislative Committee Chair Matichak

Agenda Item 4. Noise Metrics White Paper – Steve Alverson, Roundtable Facilitator

SCSC Roundtable's Position on the Federal Aviation Administration's (FAA) Use of Aircraft Noise Metrics to Accurately Identify Noise Impacts from Proposed Flight Procedure Changes

Problem Statement:

The millions of aircraft noise complaints and public discord that has resulted from the FAA's implementation of the NorCal Metroplex and other Metroplex projects throughout the country has demonstrated that the FAA's existing tools, noise metrics, and thresholds of significance have not effectively or accurately assessed the actual impact of aircraft noise on residents and noise sensitive resources. As a result, the FAA, elected officials, airport/community roundtables, and affected members of the public spend countless hours addressing aircraft noise issues that could have been resolved in the procedure design and/or environmental analysis process.

Failure of the FAA's Existing Aircraft Noise Analysis Process:

The current FAA Orders that govern the FAA's environmental reviews under the National Environmental Policy Act (NEPA), do not include sufficiently specific language to direct the FAA to fully consider and disclose the impact of aircraft noise and overflights on residents and noise sensitive resources when it is making determinations about the appropriateness of flight procedure changes. In fact, the FAA has relied on NEPA's Categorical Exclusion (CatEx) process to approve flight procedure changes that have shifted and concentrated aircraft flight tracks over noise sensitive areas without disclosing the nature of the change in noise exposure and overflights or holding public meetings to solicit input on the proposed changes. As a result, the thousands of residents who are impacted by the change express their concerns to their local, state, and federal elected representatives, local roundtables, and the FAA only to learn that the FAA's environmental process has been completed and there is no recourse for minimizing the new aircraft noise and overflight impacts.

When the FAA has utilized the Environmental Assessment (EA) process under NEPA to disclose potential noise impacts due to changes in flight procedures over populated areas, there are no impacts to disclose because the FAA relies exclusively on the 65 dBA Day/Night Average Sound Level (DNL) as the impact threshold. Levels of 65-dBA DNL typically occur within a few miles of an airport's runways. As a result, flight procedure changes that occur miles from an airport will never trigger an exceedance of the 65-dBA DNL threshold. The SCSC Roundtable believes that there is a national urgency to correct this systemic flaw in the FAA's environmental process, which if corrected will benefit communities, the national air transportation system, aircraft operators, and the FAA.

The Solution:

FAA should use other noise metrics besides DNL to identify and mitigate potential aircraft noise exposure and overflight hotspots before flight procedure implementation. For example, through the Aviation Environmental Design Tool (AEDT), the FAA has a suite of supplemental metrics to help identify where problems may occur. Once the problem areas are identified, FAA can work with Air Traffic Organization (ATO) staff, industry partners, the local roundtable, and the public to explore methods of ameliorating those problems. In addition, to the benefit of possibly developing an approach that minimizes increases in aircraft noise exposure, this approach provides the FAA an opportunity to share its work with the public before procedure implementation.

In addition to supplemental noise metrics, the FAA should use tools such as its Terminal Area Route Generation Evaluation & Traffic Simulation (TARGETS) tool to analyze flight track density, changes in the number of overflights on a per person basis, changes in operations based on the availability of the flight procedure, identify noise sensitive areas that will be newly overflown, and use similar nonnoise metrics to assess the full breadth of the potential change in aircraft noise and overflights that people will experience on the ground.

Finally, after implementation of a procedure, the FAA should gather actual data to evaluate if the noise exposure from the procedure is at the predicted levels, determine if the aircraft operations levels are as predicted, calculate the actual overflights on a per-person basis, and make the necessary adjustments to ensure the aircraft noise exposure, operations levels, and flight track concentrations are within the predicted ranges.

Appropriate Balance:

The SCSC Roundtable agrees that safety of air travel is paramount. However, the SCSC Roundtable believes that the rules governing the FAA's environmental processes should be amended to ensure that "the impact of aircraft noise on

people and noise sensitive resources" is given the same decision making weight as "the efficient use of the airspace for aircraft operators".

Recommendations:

The following conceptual language changes must be included in the appropriate FAA Reauthorization bill or similar FAA-related bills – until this language or similar language has been adopted for use by the FAA in fulfilling its obligations under NEPA.

- Utilizing existing supplemental noise metrics, the FAA must establish new analysis methods and noise/overflight standards to accurately assess the actual noise and overflight impacts of flight procedure changes. This includes the application of cumulative and single-event noise metrics to assess impacts on human annoyance, sleep, health, learning, public spaces, and natural quiet.
- The FAA must modify its existing flight procedure approval processes to include and utilize the existing supplemental noise metrics and overflight density and intensity when approving any flight procedure modification.
- When the FAA is reviewing/approving any flight procedure, it must collect noise measurements at homes and noise sensitive uses (using existing supplemental noise metrics). These noise measurements will include actual pre-change conditions, actual post-change conditions, and a postimplementation review process to ensure the "after" condition is the same or an improvement in aircraft noise exposure as measured at homes and noise sensitive uses than was defined in the approved flight procedure.
- If the post-implementation noise measurements are higher than those defined in the approved flight procedure's environmental documentation, the FAA would be required to modify the flight procedures until the measured noise levels are at or lower than the approved levels.
- FAA's Orders and Desk Reference governing the FAA's environmental processes must be amended to ensure that "the impact of aircraft noise on people and noise sensitive resources" is given the same decision making weight as "the efficient use of the airspace for aircraft operators".

The intent of the proposed language changes above is to protect residents and noise sensitive resources as the FAA considers changing the flight procedures/path/frequency over them.

Agenda Item 5. Public Health & Environmental Impact of Noise and Emissions – Committee Member Watanabe

PUBLIC HEALTH & ENVIRONMENTAL IMPACT OF NOISE AND EMISSIONS

Review and address public health and the environmental impact of airplane noise and emissions, and the proposed use of the work plan. Define proposed actions to be taken for full Roundtable consideration.

Issues:

- Current regulations and guidance that govern the FAA's environmental reviews do not include sufficiently specific language to direct the FAA to adequately consider the impact of aircraft noise on residents and noise sensitive resources when it is making determinations about the appropriateness of flight procedure changes.
- Relatively high concentrations of ultrafine particles (UFPs) have been observed around airports, in which aviation and road traffic emissions are the major sources. This raises concerns about the potential health impacts of airport UFPs, particularly in comparison to those emitted by road traffic.
- Aircraft turbine engine particle emissions have, in the wake of increasing air traffic, also become more important. As a result, scientific research of the particulate matter from air traffic is important for the development of environmental standards in the aviation sector.
- Although there is not a complete picture of U.S. health impact assessments, there are indications that decision makers lack the information they need to protect communities from noise-related health effects. Environmental impact statements that calculate changes in noise levels also do not necessarily provide information about adverse health impacts resulting from these changes.
- The SCSC Roundtable agrees that safety of air travel is paramount. However, the SCSC Roundtable believes that the rules governing the FAA's environmental processes should be amended to ensure that "the impact of aircraft noise on people and noise sensitive resources" is given the same decision making weight as "the efficient use of the airspace for aircraft operators".

Recommendations:

- The Roundtable will continue to monitor and advocate for proposed legislation at the local, state, and federal level that addresses, or has the potential to reduce, aircraft noise exposure and environmental effects on its member communities.
- THERE APPEARS TO BE A NEW PROCESS TO GET AIRPORT MONITORS outside the 65 DNL (using federal funds). THE SCSC could be instrumental in securing permanent monitors for our communities.

- When the FAA is reviewing/approving any flight procedure, they must collect noise measurements at homes and noise sensitive uses (using the new metrics defined above). These noise measurements will include actual pre-change conditions, actual post-change conditions, and a post- implementation review process to ensure the "after" condition is the same or an improvement in aircraft noise exposure as measured at homes and noise sensitive uses than was defined in the approved flight procedure.
- Work with Congressional representatives in establishing a Center for Excellence for Public Health and Welfare which would enact effective community engagement in the evolution of the nation's airspace and a better definition of the process to involve communities impacted by aircraft noise and emissions in the rollout - before the fact, while change is still possible - of FAA procedures and standards; and
- The CoE would collaborate on an annual report on the progress of the FAA toward relieving and protecting public health and welfare from aircraft noise and sonic boom would help ensure that the FAA understands the continuing interest of Congress in the FAA's execution of this duty.
- This interest would be further driven home should a subcommittee or the Quiet Skies Caucus choose to follow up with the Administrator to discuss the report.

SCSC Roundtable - Legislative Committee (Leg Comm) All Correspondence Received for the Leg Comm from the last meeting and prior to 12/11/2020

August 23, 2020

From

Jennifer Landesmann

То

SCSC Roundtable

Message

FAA Report to Congress on 176b - Community Involvement

Dear Legislative Committee,

Thank you for your work and discussions on the topics of metrics and health.

FAA's Report to Congress on Community Involvement pursuant to provision 176 of the 2018 Reauthorization is posted here,

https://www.faa.gov/about/plans_reports/congress/media/Community_Involvement_in_NextGen_Projects_PL_11 5-254_Sec176.pdf

Please note the following on page 5 of the report,

...." Elected and/or Appointed Officials

Elected and/or appointed officials should advise in determining the type of outreach to

the public and the number and location of public workshops, if needed."

This confirms what FAA stated in SCSC meetings - that they look to you to advise on "type of outreach" from FAA on airspace changes.

There's much to address in the FAA's report but I suggest there are a few items that are problematic and need attention.

1) CATEX - how can you know what "type of outreach" is appropriate if you (or the public) have no knowledge of what change is happening and what the potential impacts are?

2) Public outcry has been about both - being left out and uninformed with Catex and with the IFP gateway lacking environmental information. And also about *quality* of outreach in that to date there are no noise maps or baseline analysis using AEDT and more metrics.

These are urgent issues that do not need legislation but action and suggest that they please be taken up by the full roundtable.

Thank you,

Jennifer

September 11, 2020

From

Darlene Yaplee

То

Legislative Committee - SCSC Roundtable

Message

Response to 9/11/20 deadline - Legislative Committee, Input on Hendricks Document

Legislative Committee,

As a follow up to the August 17, 2020 Legislative Committee meeting, we are submitting the attached input to the document drafted by committee member Hendricks "Language/Concepts the SCSC Roundtable Requests be Added to Appropriate Federal Aviation Administration (FAA) Legislation".

Regards,

Darlene Yaplee and Marie-Jo Fremont

Attachment Name

20200911_D_Yaplee_Legislative Input re Hendricks Document

Input to Legislative Committee 9/11/20

Pertaining to the document by Glenn Hendricks: Language/Concepts the SCSC Roundtable Requests be Added to Appropriate Federal Aviation Administration (FAA) Legislation

Introduction:

We have identified several major problems that require legislative attention as described in the "Executive summary". In the "Background and Recommendations" section, we outlined the problems and offered legislative recommendations to address them.

Executive Summary:

As evidenced by the millions of complaints received since NextGen started, a sizable disconnect exists between the FAA's predicted impacts (e.g., "no significant impact") of NextGen implementations and the actual impacts on communities. Existing legislation must be changed or new legislation must be drafted to address the FAA failures in determining the profound and negative impacts that NextGen changes have had and continue to have on communities across the country.

In implementing NextGen, the FAA pursued safety, which is of course paramount, and efficiency. On the other hand, human impacts seem to have been disregarded or severely underestimated when designing and implementing NextGen changes because of **serious shortcomings with the current rules and environmental review process** used by the FAA. Although not an exhaustive list, we have identified the following problems:

- **Community impacts are not a priority for the FAA:** Safety is the FAA' s top priority. Efficiency is the second priority. Community impacts (noise, health, and other environmental concerns) are not a priority.
- Flawed assessments under represent the true impacts of NextGen: As currently performed, the estimation of potential impacts is flawed for multiple reasons (including not evaluating impact all the way to the airport, inaccurate noise models, and inadequate metrics to name a few). The current assessments do not capture the full community impacts.
- Outdated definition of "Significant Impact" allows the FAA to claim that there is no major noise problem caused by NextGen: Since NextGen started to be implemented, millions of complaints from across the country have been submitted. NextGen has had a profound impact on many communities; therefore, it warrants an evaluation of the current definition of significant impact, which was established decades ago for a pre-NextGen environment and is based on a single metric (DNL) and 65 dBA threshold. The definition of significant impact must capture the full impacts of NextGen changes on communities, including the ones located far from an airport.
- The analyses on the impacts of MAJOR changes are deficient: Today, the FAA can "categorically exclude" major changes (such as implementing a new procedure) from a detailed environmental analysis if the FAA initial environmental review concludes that there will be no significant impact.

- No review of actual impacts against predicted impacts of changes is performed: Today the FAA can approve environmental reviews without having to address any future discrepancies between actual impacts and predicted impacts after implementation. There is no validation required to check that actual impacts are equal to or lower than predicted impacts.
- **Community consultation and communication occurs too late and lacks transparency**: The FAA does not consult with the community with the intent of acting on the input when considering a change. The FAA is not transparent in its communication: insufficient information, often incomprehensible to a lay person, is provided too late for communities to influence or understand a proposed change and the potential impacts. There is no robust process for the community to review and comment on assumptions, answers, tools, and metrics used in the environmental review.

Background and Recommendations:

1. Community impacts are not a priority for the FAA.

Background: The FAA has two priorities: safety and efficiency. However, Congress should require the FAA and industry partners to implement procedures that **take into account safety, efficiency, and community impacts.**

- An overly broad provision in Section 329 of the FAA Reauthorization Act of 2018 requires the same or better safety for all new procedures without any mention of impacts on communities.
 - The provision states "The Administrator shall, to the maximum extent possible and consistent with Federal law, and based on input by the public, ensure that regulations, guidance, and policies issued by the FAA on and after the date of enactment of this Act are issued in the form of performance-based standards, providing an equal or higher level of safety."
 - This overly broad provision does not mention community impacts. Residents should not be expected to bear the costs of the most marginal improvements to safety. This provision needs to be revisited and changed.
- In November 2019, Jackie Speier (D-CA-14) sponsored a bill to put noise and health impacts on an equal basis with efficiency. The bill was co-sponsored by 15 other members, including Anna Eshoo D-CA-18, Ro Khanna (D-CA-17), and Jimmy Panetta (D-CA-20).
 - HR 5109 F-AIR Act¹: "This bill revises the priorities of the Federal Aviation Administration (FAA) in developing plans and policy for the use of navigable airspace. Specifically, the FAA must ensure (1) the safety of aircraft as a primary priority in developing such plans and policy; and (2) the minimization of the impact of aviation noise, and other health impacts, on residents and communities, and other impacts of the use of airspace on the environment as a secondary priority on an equal basis with the efficient use of airspace."

Furthermore, the FAA routinely claims that changes must be made for safety or efficiency reasons. However, when proposing a change, the FAA does not specify the specific safety or efficiency issues that must be addressed and does not quantify the expected improvements in safety or efficiency that may be

¹ <u>https://www.congress.gov/bill/116th-congress/house-bill/5109?s=1&r=5</u>

achieved by implementing the change. The objectives behind proposing a change are not fully articulated.

Recommendations:

- Change the overly broad provision in Section 329 of the 2018 FAA Reauthorization Act of 2018 that currently requires the same or better safety for all new procedures to ensure that residents do not bear the costs of the most marginal improvements to safety.
- Support proposed bill HR 5109.
- Require the FAA to systematically document, with supporting data and as part of the full disclosure document described in item 6 recommendations, the specific safety or efficiency issues that a proposed change will address and the expected improvements in safety or efficiency that may be achieved if the change is implemented.

2. Flawed assessments of changes under represent the true impacts of NextGen.

Background: Assessments of potential impacts are flawed and do not capture the real impacts. The FAA:

- **Does not assess the impact of aircraft all the way to the airport.** Impact assessment is limited to the "end" of the procedure as defined by the FAA whereby a procedure may end many miles away from final approach. This means the FAA does not evaluate the impact of vectored aircraft all the way to final approach even when vectored aircraft fly in a narrow, concentrated path as if the procedure continued.
- Uses invalid assumptions, methods, tools, and metrics that are unsuitable for NextGen environments:
 - **The Initial Environmental Review (IER) is based on problematic** noise screening tools and faulty questionnaires.
 - Subjective claims and interpretations are not supported by evidence. "No traffic increase" is a common FAA assumption that pretty much guarantees a conclusion of no significant impact.
 - Statements are at times **misleading or inconsistent**.
 - The FAA can mark answers as "UNKNOWN" in initial environmental reviews and is not required to get answers even when they could get them through existing communication channels. A good example is the PIRAT RNAV procedure.
 - **Community recommendations are misused**. When the community asks for a change, the FAA at times implements something quite different and then claims it was a "Community Request."
 - Estimated impacts through Aviation Environmental Design Tool (AEDT) (or the Integrated Noise Model (INM), which preceded AEDT) are not accurate representations of NextGen impacts:
 - **The noise model is inaccurate** for communities far from an airport but now heavily impacted by NextGen.
 - Important factors that affect noise levels are not fully considered or considered at all: aircraft configuration, level of thrust/engine power, varying weather conditions, and man-made structures.
 - Margin of errors or confidence intervals on estimated DNL levels are not provided.
 - **DNL is inadequate** to represent the impact of NextGen changes because DNL:
 - Averages noise data over a 24-hour period using annual operations. In other words, DNL is calculated as the noise level for an average day based on an

annual number of operations. This average calculation assumes that traffic occurs in a constant manner across a 24-hour period, and does not reflect the bursts of high-frequency flight activity that occur multiple times a day and are very disturbing to residents. As a result, the calculated DNL level is always much lower than the DNL of peak periods (if a DNL-peak were calculated) and the total noise of each aircraft.

- Sums up noise events as if each event was one-second long. Aircraft noise events last many seconds, not one second. This one-second simplification does not reflect the human experience: people hear noise for 30 seconds or more per aircraft.
- The current definition of **cumulative impact is misleading** because impact estimates are:
 - Limited to the aircraft from and to the airport associated with the change. The FAA does not consider the cumulative impact of all planes from multiple airports even if they overfly the same community.
 - Done on an individual change basis. The FAA does not evaluate the total impact caused by all the NextGen changes made over the years over a community. Unfortunately, this incremental approach allows the FAA to reset the "baseline noise level" to the last time a change was made.

Recommendations:

- Require the FAA to fix the current methods used in predicting the community impacts of NextGen changes:
 - Estimate impacts all the way to final approach.
 - **Obtain answers to questions** when there are reasonable means for the FAA to obtain the answers (for instance, contact existing Roundtables or elected officials who made recommendations that are relevant to the change).
 - Provide **supporting evidence** on assumptions and answers.
 - **Improve the AEDT noise model** to estimate impacts on communities living outside the 65 dB noise contour and up to 50 miles away from a commercial airport. **Model must:**
 - Consider aircraft configuration, level of thrust/engine power, varying weather conditions, and man-made structures.
 - Be validated against some actual measurements that are representative of the affected communities.
 - Metrics
 - Provide margins of error or confidence intervals on estimated DNL values.
 - Calculate DNL levels for peak periods (e.g., high level of flight activity over a limited time) or for 4-hour periods in addition to current DNL levels for 24 hours. Using histograms, show the DNL data distribution of DNL peaks or DNL-4 hours, in 2 dB increments over the course of a year.
 - Use alternative metrics (such as N-Above) and report data in ranges (such as "N-Above ambient noise level," "N-Above ambient noise level +5 dBA," etc.)
- Change the definition of cumulative impact to include all aircraft traffic from multiple airports and consider the aggregate impact of all changes made since the first NextGen change was implemented in the area (i.e., compare the aggregate impact of all changes to the pre-NextGen environment before any NextGen implementation occurred).

3. Outdated definition of "Significant Impact" allows the FAA to claim that there is no noise problem caused by NextGen.

Background: The **current definition of significant impact**, established decades ago for a pre-NextGen environment, is **not appropriate for a NextGen environment** because:

- The definition relies on a single metric (DNL averaged over a 24-hour period). As described in the background section of item 2 above, DNL is not a true representation of the noise impact on communities.
- The DNL thresholds that are used to consider whether a change has a significant impact virtually guarantee that all changes will not have any significant impact.
 - DNL threshold values (+1.5 dB at 65 dBA or greater, +3 dB between 60 and 65 dBA, +5 dB between 45 dB and 60 dB) are set absurdly high: flying an additional several hundred noisy planes per day over some communities will still be considered as having no significant impact on these communities.
 - A 3 dB DNL increase represents a doubling of the noise level. A 6 dB DNL increase represents a quadrupling of the noise level. Today the FAA can claim that doubling or quadrupling the noise levels of some communities does not represent a significant impact.
 - Per current rules, communities with ambient noise levels below 45 dB would never experience any significant impact with thousands of noisy planes flying every day over these populations.

Recommendations:

- Create a task force of experts (including academic experts) to evaluate the current definition of significant impact in the context of NextGen and make recommendations for a new definition to better capture the impacts of NextGen implementations on communities, including the ones located far from an airport. Items to be considered include:
 - Metrics: Multiple metrics should be considered (at least 3 and not all DNL-related).
 Examples: DNL-24 hour (used today), DNL peak period, DNL-4-hour, N-Above, T-Above, Number of operations by altitude bands, and complaints. Furthermore, C-weighting (dBC) should be used in addition to A-weighting (dBA) to capture low-frequencies and tones.
 - Metric thresholds: each threshold for each metric must be representative of the NextGen impact experienced by communities and should be tied to pre-NextGen conditions whenever possible (e.g., Number of operations by altitude bands before any NextGen implementation; DNL increase between DNL level before any NextGen implementation and DNL level after the change) and/or current conditions (e.g., DNL increase relative to actual ambient noise levels).
 - **Definition of significant impact:** two aspects should be considered:
 - Different degrees of impact instead of just one: today, the impact is significant or it is not. Instead of a binary choice, one could consider a gradation of impacts (such as minor, moderate, major), which would require different corrective strategies and actions.
 - Criteria to determine the degree of impact based on multiple metrics: having at least one metric exceed a threshold level could be sufficient or isoquants (e.g., contour lines) of several metrics could be used to rate the degree of impact.
 - **Definition of cumulative impact:** as described in the last recommendation in item 2, cumulative impact should include all aircraft traffic from **multiple airports** that overfly

an area <u>and</u> consider the **aggregate impact** of all changes made since NextGen started to be implemented in the area.

- Establish corrective requirements for different degrees of impact. For instance, a minor impact could be considered acceptable and would not require the FAA to correct the impact; a minor impact would require the FAA to design alternatives even if such alternatives could reduce efficiency up to 20%; and a major impact would mandate the FAA to design alternatives even if such alternatives could reduce efficiency up to 20%; and a major impact would mandate the FAA to design alternatives even if such alternatives could reduce efficiency up to 50%.
- Establish a maximum impact limit beyond which no incremental noise would be permitted. There is currently no upper bound to the amount of aircraft noise over residential populations. The maximum impact limit could be determined using one or more of the metrics listed earlier.
- Decouple existing and future insulation programs from the current definition of "significant impact".

As indicated in our comments on the Public Health & Environmental Impact of Noise and Emissions prepared by Kathy Watanabe, we recommend **requesting an amendment of proposed bill** <u>HR 5107 - Serious Noise Reduction Efforts (SNORE) Act</u>² (sponsored by Jackie Speier D-CA-14, and co-sponsored by 3 other members, including Anna Eshoo D-CA-18 and Jimmy Panetta D-CA-20):

- Amend proposed bill HR5107 to change the eligibility requirements for noise mitigation and other sound proofing strategies for communities surrounding airports to have a national scope beyond the San Francisco International airport.
- Under the current Program Requirements, residents would qualify if "in any 2 consecutive or nonconsecutive months in a fiscal year, a total of 10 or more measurements of 75 dBA or greater (on a noise monitor operated or approved by San Francisco International Airport) are taken within a single city or county between the hours of 10 p.m. and 7 a.m. due to San Francisco International Airport operations, including aircraft arriving or departing the airport." (See Page 3, Program Requirements.)
- o Notes:
 - Residents living near an airport but outside the 65 dB DNL contour would likely qualify based on the program requirements of the bill.
 - Residents living further away from airports may or may not benefit. However, these residents are not asking for noise insulation mitigation programs. These residents want the FAA to use technology to design procedures and flight paths that reduce noise over their homes to a level similar to what existed pre-NextGen.

4. The analyses on the impacts of MAJOR changes are deficient.

Background: The FAA does not have to conduct detailed environmental review analyses to determine the impact of major changes, which include but are not limited to creating new procedures -- conventional or RNAV, modifying existing procedures, doing "overlays", or changing vectoring paths, headings, and altitudes. As described in the <u>April 26, 2018 FAA presentation to Ad Hoc Advisory</u> <u>Committee on South Bay Arrivals</u>,³

² https://www.congress.gov/bill/116th-congress/house-bill/5107/text

³ https://www.flysanjose.com/sites/default/files/commission/FAA%20NEPA%20Presentation%20V2.pdf

- The National Environmental Policy Act (NEPA) defines three different levels of environmental analyses: CATEX (Categorical Exclusion), EA (Environmental Assessment), and EIS (Environmental Impact Assessment).
- Today, the FAA can use the CATEX level, which is the lowest, to "categorically exclude" a
 proposed project (e.g., a change) from a detailed environmental analysis by doing only a
 lightweight analysis that incorrectly determines that the project does not have a significant
 impact. Current rules allow the FAA to "categorically exclude" many changes, including major
 ones such as implementing new RNAV/RNP procedures, which are very different than
 conventional procedures, or creating overlays of existing flight tracks, which are problematic
 when moving from a radar-based system with widely separated planes to a GPS-based system
 with narrowly concentrated planes.
- The Quiet Skies Caucus July 2015 letter to Chairman Bill Shuster (PA-R), House Transportation and Infrastructure Committee, asked to "Reform Section 213(c)(2) of the FAA Modernization and Reform Act of 2012 This provision provides a categorical exclusion from adequate environmental reviews for flight path changes implemented through the NextGen process. It was written in an overly broad way"

The impact of MAJOR changes should be evaluated through an EA or EIS level of environmental analysis given that major changes have extensive negative impacts on communities as evidenced by the millions of complaints that have been submitted since NextGen implementations started.

Recommendation:

• Change legislation to require Level 2 (Environmental Assessment) or Level 3 (Environmental Impact Assessment) environmental reviews for <u>all major</u> changes, including but not limited to new procedures (RNAV, RNP, or conventional), changes in existing procedures (including but not limited to changing or relocating waypoints as well as procedure endpoints, decreasing altitudes, adding or changing speed requirements), and vectoring modifications (including but not limited to new headings, new vectoring ceiling or floor altitudes). A CATEX would no longer be allowed for major changes.

5. No review of actual impacts against predicted impacts of changes is performed.

Background: Through its environmental review process, the FAA determines the predicted impacts of changes on communities. However, **the FAA does not have to address any discrepancies between actual impacts and predicted impacts** that may be discovered post implementation: there is no validation step to check that actual impacts are equal to or lower than predicted impacts. Environmental reviews are approved based on analyses and conclusions that are not verified after changes have been implemented.

Recommendations: For environmental reviews beyond the CATEX level:

- Modify the approval of environmental reviews to initially receive a conditional approval that is later reviewed after the actual impacts of a major change have been compared to the predicted impacts of the environmental review. A conditional approval would require the FAA to do an impact validation after implementing a major change.
- Require the FAA to include the **impact validation plan details in the environmental review**. Details should specify the locations of the noise monitors, the timing and duration of the noise measurements, the grid cell format, and the multiple metrics that will be used to report and evaluate actual impacts against predicted impacts.
- The impact validation plan would include the following steps:

- Measure noise **before** <u>and</u> <u>after</u> the implementation of a change, in multiple locations that represent affected communities.
 - Before: 6 to 12 months before the change is published (i.e., goes live), collect noise data for at least 3 months to create a baseline noise level (during the collection period, no aircraft should test the proposed change to avoid data contamination).
 - After: after the change has been published, collect noise data in the same locations for 12 months.
- Within 3 months following the "After" post-implementation noise data collection (i.e., no later than 15 months after a change has been implemented), compare actual impacts against predicted impacts, publish the comparison results, and change the status of the environmental review to either fully approved or rejected.
 - The comparison should be done using multiple metrics that represent community impacts (acoustic metrics like DNL and Lmax; alternative metrics like N-Above, T-Above, and Number of Operations; emission metrics; complaints) and use a grid cell format to display metric changes all the way to final approach and for several locations that are representative of the affected communities. The size of the cells must be commensurate with the degree of flight concentration and number of operations.
 - If the impact evaluation results show that actual noise levels are equal to or lower than the predicted noise levels in the environmental review and if other metrics do not show substantial increases ("substantial" would need to be defined to be consistent with the new definition of significant impact recommended earlier), then the environmental review would be fully approved, and no longer be conditionally approved. Otherwise, the change would be stopped: the FAA would need to restore the previous conditions that existed before the change was implemented and do so within 6 months of the environmental review being rejected.

6. Community consultation and communication occurs too late and lacks transparency.

Background: The FAA engages with communities too late in the process and with insufficient information. The FAA is not required to be transparent or timely, and does not have to seek community input in a <u>systematic</u> manner BEFORE an environmental review is completed or AFTER a change is posted on the IFP Gateway. Furthermore, the FAA is not obligated to consider and address community concerns when developing changes that affect communities.

- The FAA is **not required to share with the community information**, preliminary or final, on changes that are being considered. They post however future changes and published changes on the IFP gateway to allow airlines to comment on the safety of proposed changes. Given the target audience of the IFP gateway, the IFP postings are not comprehensible for non-industry audiences.
- The FAA **does not share sufficient information** on the full impacts of a proposed change and the details of the change. Communities need a full and comprehensible disclosure on predicted, cumulative community impacts (such as noise, increase in operations, increase in aircraft concentration or frequency) all the way to the airport, and the details of the change (such as changes in altitude, speed, headings, ground track, endpoints, waypoints, and vectoring instructions), including the implications for aircraft configuration (e.g., locations on flight path of expected deployment of flaps, slats, and landing gear; expected level of thrust).

- Once completed, documents are **not immediately made available or even made available**. FOIA requests are often necessary to obtain basic information. Communities should not be required to make FOIA requests to get information on FAA changes, especially after making the same requests to the FAA in person or in writing.
- The FAA does not offer any mechanisms for communities to comment on changes BEFORE an environmental review is approved or AFTER a change is posted on the IFP Gateway. Note: the IFP Gateway is only for industry input, not public input.
- The **Airport proprietor is not a mandatory participant** in Full Working Group meetings even though the FAA considers the Airport Proprietor as the Community Representative.
- There is **no robust process for the community review and comment** on the assumptions, answers, tools, and metrics used in the environmental review.
- A robust community engagement process was one of the recommendations of the Quiet Skies Caucus July 2015 letter to Chairman Bill Shuster (PA-R), House Transportation and Infrastructure Committee. Their recommendation was "Mandate a robust community engagement process, including pre-decisional public hearings, for any new flight paths or procedures or changes to existing flight paths and procedures."
- In November 2019, Jackie Speier (D-CA-14) sponsored <u>three bills related to community</u> <u>participation and communication</u>⁴ (all bills were co-sponsored by many members, including Anna Eshoo (D-CA-18), Ro Khanna (D-CA-17), and Jimmy Panetta (D-CA-20)):
 - HR 5105 RESPECT Act⁵: "This bill requires the Federal Aviation Administration (FAA) to respond in writing within 90 days to requests for data and information from Congress. Specifically, the FAA must respond if
 - the data is within the control of the FAA; and
 - the data would be otherwise appropriate to provide if requested (1) by an airline, an airport, a flight procedure proponent, an Aviation Roundtable, or anyone not employed by the FAA; or (2) via a Freedom of Information request from any individual or any entity.

The FAA must also provide staff at a private or public meeting with a Member of Congress if certain conditions are met."

- HR 5110 APPRISE Act⁶: "This bill requires the Federal Aviation Administration to ensure that an aviation roundtable technical representative or consultant is allowed to participate in the Next Generation Air Transportation System (NextGen) performancebased navigation implementation process for new or modified flight procedures affecting their communities. (NextGen performance-based navigation is an advanced, satellite-enabled form of air navigation that creates 3-D flight paths.)"
- HR 5111 NOTIFIED Act⁷: "This bill requires the Federal Aviation Administration to notify the public of any proposed new Performance Based Navigation flight procedure or flight procedure change affecting airspace at altitudes below 18,000 feet."

Recommendations: Require the FAA to:

- Publish on the FAA website and within 5 business days after completion the following information:
 - The minutes of any Full Working Group meeting that was held.

⁴ https://sforoundtable.org/wp-content/uploads/2019/12/20191204 2019-Legislation.pdf

⁵ https://www.congress.gov/bill/116th-congress/house-bill/5105

⁶ <u>https://www.congress.gov/bill/116th-congress/house-bill/5110?s=1&r=8</u>

⁷ https://www.congress.gov/bill/116th-congress/house-bill/5111?s=1&r=5

- A full and comprehensible disclosure document of the proposed change. Such full disclosure, which does not exist today, would require more than a navigational chart. The disclosure should:
 - Explain the changes proposed and describe the differences between the current environment and the future environment in a manner that is comprehensible to the public.
 - Articulate in specific terms the objectives and reasons behind the proposed change (including safety or efficiency objectives and reasons).
 - Describe, in qualitative <u>and</u> quantitative terms, the expected benefits (including safety or efficiency improvements) that may be realized once the change is implemented.
- The **environmental review document and its associated documentation** (including the description of all assumptions made and the methods and tools used in the analysis with their rationale) to describe the full, predicted community impacts on a cumulative basis.
- The actual impact validation results (as described in item 5 above) and final status of the conditionally-approved environmental review.
- Implement a 90-day community comment period after each document publication.
- Provide a **web or other mechanism for communities to submit comments** (similar to what industry can do on the IFP gateway).
- **Support proposed bills**: HR 5105 RESPECT Act, HR 5110 APPRISE Act, and HR 5111 NOTIFIED Act.

September 11, 2020

From

Darlene Yaplee

То

Legislative Committee - SCSC Roundtable

Message

Response to 9/11/20 deadline - Legislative Committee, Input on Watanabe Document

Legislative Committee,

As a follow up to the August 17, 2020 Legislative Committee meeting, we are submitting the attached input to the document drafted by committee member Kathy Watanabe "Public Health & Environmental Impact of Noise and Emissions".

Regards,

Darlene Yaplee and Marie-Jo Fremont

Attachment Name

20200911_D_Yaplee_Legislative Input re Watanabe Document

Input to Legislative Committee 9/11/20

Pertaining to the document by Kathy Watanabe: Public Health & Environmental Impact of Noise and Emissions

Introduction:

We have identified several areas for legislative attention as described in the "Executive Summary". In the "Recommendations" section, we offer legislative recommendations to support a proposed bill, request amendment to a proposed bill, or request a new bill.

Executive Summary:

The FAA modernized the airspace with NextGen by fundamentally altering how and where aircraft are flown. NextGen drastically increased aircraft concentration, changed flight paths, lowered altitudes, decreased separation between planes, and increased noise and pollution over communities not previously impacted. The public health and environmental impacts of having 200-400 aircraft overhead per day compared to 20-40 are notably different. Yet, **the FAA did not update how it measures and enforces limits on the impacts of noise and emissions caused by NextGen environments.**

For noise impacts, a sizable disconnect exists between the FAA's predicted impacts (e.g., "no significant impact") of NextGen implementations and the actual impacts on communities. For emissions impacts, it's unclear what FAA analyses have been performed even though aircraft produce multiple air pollutants, including sulfur dioxides and nitrogen oxides, and that the limited and emerging academic research on submicron particles indicate adverse health impacts on people.

Existing legislation must be changed or new legislation must be enacted to address the FAA failures in determining the profound and negative health and environmental impacts that NextGen changes have had and continue to have on communities across the country.

The law (US Code 49, Section 44715) requires the FAA "to relieve and protect the public health and welfare from aircraft noise and sonic boom..."¹ However, the FAA consistently communicates and emphasizes aviation safety, efficiency, and predictability, while rarely recognizing its important responsibility to safeguard the public health and welfare of communities. Examples:

- Administrator Stephen Dickson told a Senate committee on June 6th, 2020: "Our space is aviation safety, and their space is public health"² ("their" refers to the Centers for Disease Control and Prevention as the agency responsible for safety precautions for the transmission of COVID-19).
- The FAA's mission statement on their website says (only): "Our continuing mission is to provide the safest, most efficient aerospace system in the world."³

¹<u>https://www.govinfo.gov/content/pkg/USCODE-2011-title49/pdf/USCODE-20</u> ²<u>https://www.usatoday.com/story/travel/airline-news/2020/06/17/coronavirus-faa-refuses-make-masks-mandatory-airlines/3209903001/</u>

³FAA website, <u>https://www.faa.gov/about/mission/</u>

• The FAA's website says: "The Next Generation Air Transportation System (NextGen) is the FAAled modernization of America's air transportation system to make flying even safer, more efficient, and more predictable."⁴

Recommendations:

1. Support proposed bill <u>HR 976 - Aircraft Noise and Pollution Expert Consensus Act 2019</u>,⁵ sponsored by Stephen Lynch (D-MA-8) and co-sponsored by 30 members, including Anna Eshoo (D-CA-18) and Jackie Speier (D-CA-14).

- Directs the FAA to sponsor a study by the National Academies of Sciences, Engineering, and Medicine, an **independent** organization who will convene world experts from across the country to serve on the committee, **to examine the health impacts of air traffic noise and pollution**.
 - It is critical that this consensus report take place in the **Division of Medicine**, not the Division of Engineering, to maintain the focus on public health.
 - During the committee's work, strict requirements are put on committee members, e.g., no sharing of any committee material or information outside of the process.
- The study will be a **synthesis of evidence from experts in multiple fields of study** on the issue (examples of previous studies are secondhand smoke and indoor mold).
 - On average, National Academies consensus reports can be completed in 18 months.
 - The study will benefit all communities, including the ones outside the 65 dBA DNL contour.
- Their findings will be viewed by policy-makers as a **definitive "scientific" ruling** and will shape debate on the noise and pollution topics.
 - National Academies studies can accelerate policy changes Congress defers to their findings over single or multiple-academic site studies.
- Senator Elizabeth Warren has a companion bill in the <u>Senate S2506</u>⁶.

2. Support proposed bill HR 2351 - Protecting Airport Communities From Particles Emissions Act,⁷

sponsored by Adam Smith (D-WA-9) and co-sponsored by 12 members, including Anna Eshoo (D-CA-18).

- Directs the FAA to contract the National Academies of Sciences to conduct an **independent**, national study on the natural characteristics, distributions, sources, and potential health effects of airborne ultrafine particles.
 - Aircraft engines produce ultrafine particles that are defined as particulate matter with a diameter \leq 0.1 μ m.
 - Ultrafine particles pose a serious health risk because they can penetrate the human body through the lungs.
 - The FAA has funded research on the topic in the past: see <u>"An Integrated Measurement</u> and Modeling Study of UFP due to Aircraft Operations at Boston Logan"⁸ (presented at the UC Davis Aviation Noise and Emissions Symposium in March 2019). The research

⁵https://www.congress.gov/bill/116th-congress/house-

⁴FAA website, <u>https://www.faa.gov/nextgen/what_is_nextgen/</u>

bill/976?q=%7B%22search%22%3A%5B%22hr976%22%5D%7D&s=1&r=1

⁶https://www.congress.gov/bill/116th-congress/senate-bill/2506

⁷https://www.congress.gov/bill/116th-congress/house-

bill/2351?q=%7B%22search%22%3A%5B%22hr2351%22%5D%7D&s=2&r=1

⁸https://anes2019.aqrc.ucdavis.edu/sites/g/files/dgvnsk3916/files/inline-

files/Emissions_S%20Arunachalam_An%20Integrated%20Measurement%20and%20Modeling%20Study%20of%20UFP%20due% 20to%20Aircraft%C2%A0%20Operations%20at%20Boston%20Logan_0.pdf

analyzed ultrafine particles for some BOS arrivals in 2017 (phase 2, which extends the study to include both takeoffs and landings, had not been completed at the time of presentation).

- It is critical that the National Academies of Sciences, Engineering, and Medicine include medical experts in the study and in the creation of the consensus report.
- The study will benefit communities located in areas where planes fly at 3,000 feet or less above ground level. Note that the community locations may not always be right under the flight path because ultrafine particles may be distributed due to wind conditions.
 - The current rule-of-thumb is that particles emitted at 3,000 feet or less above ground level go downward. Above 3,000 feet above ground level, the particles get caught in the atmospheric mixing layer and get dispersed, thus not directly affecting communities underneath but potentially affecting other communities.
 - Typically, aircraft approaches at 10 miles out tend to be 3,000 feet or less above ground level. Departure altitudes vary based on climbing profiles but tend to be 3,000 feet or less a few miles out (less than 5 miles).
- Once the study results have been published, new bills or amendments to existing or proposed bills should be considered to define mitigation requirements, which could range from designing new flight paths to requiring HEPA air filters in schools and homes.
- Additional studies on the levels of aircraft emissions and health consequences may be needed in the future, including a validation of the current rule of thumb for the mixing layer.

3. Support proposed bill <u>HR 3001 - Quiet Communities Act</u>,⁹ sponsored by (Grace Meng (D-NY-6) and co-sponsored by 40 members, including Anna Eshoo (D-CA-18) and Jackie Speier (D-CA-14).

- Re-establish the Office of Noise Abatement and Control in the Environmental Protection Agency.
- The FAA seems to be unable (or unwilling) to objectively evaluate and use noise metrics and standards that have "a highly reliable relationship between projected noise exposure and the surveyed reactions of people to noise..." as required by law.¹⁰
- Congress should task the Environmental Protection Agency to do such evaluations, objectively and independently of the FAA.

4. Request amendment of proposed bill <u>HR 5106 - Restore Everyone's Sleep Tonight (REST) Act</u>,¹¹ sponsored by Jackie Speier (D-CA-14) and co-sponsored by 15 members including Anna Eshoo (D-CA-18), Ro Khanna (D-CA-17), and Jimmy Panetta (D-CA-20).

- Amend proposed bill HR 5106, which would "allow airports to impose an access restriction for certain hours, to assess certain penalties against air carriers or aircraft operators, and for other purposes." The amended proposed bill would **replace "airports" with "local governments"** thus giving local governments the authority to impose access restrictions and penalties.
- Under current rules (<u>PART 161—NOTICE AND APPROVAL OF AIRPORT NOISE AND ACCESS</u> <u>RESTRICTIONS</u>, section 161.103),¹² the FAA does not permit restrictions unless several conditions are met such as "The restriction does not create an undue burden on interstate or foreign commerce." Virtually any restriction put on flights that travel interstate or

bill/3001/text?q=%7B%22search%22%3A%5B%22keeping+all+students%22%5D%7D&r=46&s=1

⁹https://www.congress.gov/bill/116th-congress/house-

¹⁰Aviation Safety and Noise Abatement Act, 1979, <u>https://uscode.house.gov/statutes/pl/96/193.pdf</u>, Sec.102(1). ¹¹<u>https://www.congress.gov/bill/116th-congress/house-bill/5106/text</u>

¹²https://www.ecfr.gov/cgi-

<u>bin/retrieveECFR?gp=1&SID=243d803bf33a2f497a575740f07a2010&ty=HTML&h=L&mc=true&r=PART&n=pt14.3.161#sp14.3.161</u>

internationally would be considered as creating a burden on interstate or foreign commerce, and would be rejected by the FAA.

5. Support proposed bill <u>HR 5109 - Fairness in Airspace Includes Residents Act or the F-AIR Act</u>,¹³

sponsored by Jackie Speier (D-CA-14) and co-sponsored by 15 members including Anna Eshoo (D-CA-18), Ro Khanna (D-CA-17), and Jimmy Panetta (D-CA-20).

• Redefines FAA priorities as (i) safety of aircraft; and (ii) co-equal priorities: the efficient use of airspace and the minimization of the impact of aviation noise, and other health impacts, on residents and communities, and other impacts of the use of airspace on the environment.

6. Track and comment on Section 187 - Aircraft Noise Exposure Study, <u>FAA Reauthorization Act of</u> <u>2018</u>.¹⁴ Then, if necessary, request a new bill to address potential gaps or perform additional follow up.

- Section 187 (enacted on October 5, 2018) states that the FAA shall conclude its "ongoing review of the relationship between aircraft noise exposure and its effects on communities around airports" and that the report shall be submitted to Congress within 2 years after the Reauthorization Act and include preliminary recommendations deemed appropriate for revising land use compatibility guidelines.
- The FAA did not deliver the original study expected in 2016. (Per FAA <u>press release dated</u> 2015.05.07,¹⁵ the FAA was supposed to begin work soon on a multi-year survey with hopes to finish by 2016.)
- The FAA report based on Section 187 is due by October 5, 2020.
- Future legislative language can be crafted based on any gaps in the review and what is needed for representing the health and environmental impacts of NextGen implementations.
- Notes:
 - As far back as April 5, 2000, Congress required expert information on aviation noise from a National Academies study. To our knowledge, that study was never issued. Specifically, on November 22, 2000, Congress amended the April 5, 2000 legislation to request a study to examine "(1) the threshold of noise at which health begins to be affected; (2) the effectiveness of noise abatement programs at airports located in the United States; (3) the impacts of aircraft noise on communities, including schools; and (4) the noise assessment practices of the Federal Aviation Administration and whether such practices fairly and accurately reflect the burden of noise on communities." The specific study requirements 1-4 need to be examined in the context of NextGen.
 - The <u>April 5, 2000 legislation¹⁶</u> is also cited as the "Wendell H. Ford Aviation Investment and Reform Act for the 21st Century".
 - The November 22, 2000 amendment requires a National Academies of Sciences study, not a GAO study as written originally, and is documented in <u>US Code</u> 47501 Sec 745.¹⁷
 - As mandated by the 1979 Aviation Safety and noise Abatement Act (ASNA),¹⁸ the FAA is required to "establish a single system of measuring noise for which there is a highly

¹³https://www.congress.gov/bill/116th-congress/house-bill/5109/text?r=7&s=1

¹⁴https://www.congress.gov/115/plaws/publ254/PLAW-115publ254.pdf

¹⁵https://www.faa.gov/news/press_releases/news_story.cfm?newsId=18774

¹⁶https://www.congress.gov/106/plaws/publ181/PLAW-106publ181.pdf

¹⁷<u>https://www.govinfo.gov/content/pkg/USCODE-2011-title49/pdf/USCODE-2011-title49-subtitleVII-partB-chap475-subchapI.pdf</u>

reliable relationship between projected noise exposure and the surveyed reactions of people to noise to be used to measure noise at airports and surrounding areas." The FAA may be conducting a survey; however, it is unclear whether the survey is reflecting the new NextGen conditions.

7. Request amendment of proposed bill <u>HR 5107 - Serious Noise Reduction Efforts (SNORE) Act</u>,¹⁹ sponsored by Jackie Speier (D-CA-14) and co-sponsored by 3 members, including Anna Eshoo (D-CA-18) and Jimmy Panetta (D-CA-20).

- Amend HR 5107 to change the eligibility requirements for noise mitigation and other sound proofing strategies for communities surrounding airports to have a national scope beyond the San Francisco International airport.
- Under the current Program Requirements, residents would qualify if "in any 2 consecutive or nonconsecutive months in a fiscal year, a total of 10 or more measurements of 75 dBA or greater (on a noise monitor operated or approved by San Francisco International Airport) are taken within a single city or county between the hours of 10 p.m. and 7 a.m. due to San Francisco International Airport operations, including aircraft arriving or departing the airport." (Page 3, Program Requirements)
- Notes:
 - Residents living near an airport but **outside the 65 dB DNL contour would likely qualify based on the program requirements of the bill.**
 - Residents living further away from airports may or may not benefit. However, these
 residents are not asking for noise insulation mitigation programs. These residents want
 the FAA to use technology to design procedures and flight paths that reduce noise over
 their homes to a level similar to what existed pre-NextGen.

8. Support proposed bill <u>HR 5112 - Low-frequency Energetic Acoustics and Vibrations Exasperate</u>

(LEAVE) Act,²⁰ sponsored by Jackie Speier (D-CA-14) and co-sponsored by 4 members, including Anna Eshoo (D-CA-18).

• Permits states to perform studies of Ground-Based-Noise (GBN) caused by aircraft operations at an airport to identify GBN levels and determine substantial impacts, including any decrease in property values.

¹⁹<u>https://www.congress.gov/bill/116th-congress/house-bill/5107/text</u>

²⁰https://www.congress.gov/bill/116th-congress/house-bill/5112?s=1&r=8

- A full and comprehensible disclosure document of the proposed change. Such full disclosure, which does not exist today, would require more than a navigational chart. The disclosure should:
 - Explain the changes proposed and describe the differences between the current environment and the future environment in a manner that is comprehensible to the public.
 - Articulate in specific terms the objectives and reasons behind the proposed change (including safety or efficiency objectives and reasons).
 - Describe, in qualitative <u>and</u> quantitative terms, the expected benefits (including safety or efficiency improvements) that may be realized once the change is implemented.
- The **environmental review document and its associated documentation** (including the description of all assumptions made and the methods and tools used in the analysis with their rationale) to describe the full, predicted community impacts on a cumulative basis.
- The actual impact validation results (as described in item 5 above) and final status of the conditionally-approved environmental review.
- Implement a 90-day community comment period after each document publication.
- Provide a **web or other mechanism for communities to submit comments** (similar to what industry can do on the IFP gateway).
- Support proposed bills: HR 5105 RESPECT Act, HR 5110 APPRISE Act, and HR 5111 NOTIFIED Act.

expected to endure any cost when safety is raised as an issue, no matter how insignificant the tradeoff or how abstract the argument. More rigorous analysis is required.

The Roundtable further suggests that, based on the above, this broader basket could also include lesspreferred operational practices with regard to safety that are nevertheless <u>acceptably</u> safe.

• This might include increasing the amount of communication between ATC and pilots to the level that was considered safe in the decades pre-NextGen when circumstances permit. Among other things, this might enable pilots and ATC to reintroduce dispersion into routes that NextGen concentrated into rails.

The Roundtable suggests that the FAA consider defining significance criteria associated with this broader basket of measures and mitigations. The significance criteria might apply to specific measures and mitigations (as the DNL 65 criteria does to soundproofing homes) or to baskets of mitigations. Importantly, the significance criteria would convey the authority and, where appropriate, the obligation to use them.

The following illustrates a possible application of the above suggestion:

Significance Level 1 – The negative effects to public health and welfare require the FAA <u>to</u> <u>consider</u> and, if possible, use less preferred procedures and operations at a <u>modest</u> cost to efficiency or a less than 'significant' compromise to safety. *This might apply to the changes made to PIRAT*.

Significance Level 2 – The negative effects to public health and welfare require the FAA to consider, and if possible, use less preferred procedures and operations at a significant cost (to be defined) to efficiency and to consider all procedures that provide 'acceptable' levels of safety. *This might apply to the changes made to South Flow to SJC*.

Significance Level 3 - The negative effects to public health and welfare require the FAA to <u>remediate or mitigate</u> the effects even at <u>substantial</u> cost (to be defined). *This might apply to BSR/SERFR*.

Significance level 4 – At this level, the negative effects to public health and welfare are so severe as to not allow operations under normal circumstances.

Note that each of these levels of significance could be accompanied by multiple independent tests.

September 11, 2020

From

Robert Holbrook

То

Legislative Committee - SCSC Roundtable

Message

Input for the Leg Committee: Noise Metrics; Environmental Impacts

Please find attached my input for the Legislative Committee on noise metrics and the health and environmental impacts of aircraft noise and emissions.

My comment regarding the Center of Excellence for Public Health and Welfare applies to both topics, but the need for research on the effects to health and welfare is more acute.

Robert Holbrook

Attachment Name

20200911_R_Holbrook_CoE Public Health and Welfare 091120 20200911_R_Holbrook_Noise Metrics Input 091120 20200911_R_Holbrook_Standards of Significance and Mitigations for Aircraft Noise 091120 Robert Holbrook September 11, 2020

Proposal for an FAA Center of Excellence for Public Health and Welfare

Congress might want to consider asking the FAA to establish a Center of Excellence dedicated exclusively to the FAA's statutory duty "To relieve and protect the public health and welfare from aircraft noise and sonic boom..." (49 USC 44715). This might be called the Center of Excellence for Public Health and Welfare.

Independent of this, Congress might want to consider asking the FAA to provide them with an annual report detailing where the FAA stands with regard to this duty. The FAA might be asked to include in the report an update on progress the FAA has made toward improving public health and welfare during the past year as well as identify initiatives in progress.

Congress mandated the establishment of FAA Air Transportation Centers of Excellence in the Omnibus Budget Reconciliation Act of 1990 and several Centers of Excellence ('CoE') now exist, some as fully selffunded entities. Unlike the other Centers of Excellence, a center of Excellence dedicated to the Public Health and Welfare would not necessarily serve the interests of industry and pilots and so the expectation that it is to become self-funding or require matching contributions should be waived.

Previously, A Center of Excellence of Aircraft Noise and Aviation Emissions Mitigation existed, but it was disbanded and replaced by the Center of Excellence for Alternative Jet Fuels and Environment. In light of the widespread concerns raised by the residential public in the wake of NextGen, it might be good to revisit this decision.

The FAA states, "The mission of the FAA's COE program is to help develop the nation's technology base while educating the next generation of aviation professionals...." If a CoE for Public Health and Welfare were to be established, this mission statement would need to be broadened to reflect the interests of residents as stakeholders in the nation's air transportation system.

Whether such an office is established as a CoE or elsewhere within the FAA, there would be value in having a central coordinating and administrative role within the FAA with regard to the following:

- Technical matters pertaining to Aircraft Noise and Emissions Mitigation
 - Initiating and coordinating research into the health effects of aircraft;
 - o Initiating and coordinating research into the noise impacts of aircraft;
 - Definition of an expanded set of measures and mitigations that can be used to mitigate the negative effects of aircraft; and
 - Definition of thresholds of significance that can be used to enable or require these new mitigating measures to be taken and initiating and coordinating any research required to support these determinations.

- Full incorporation of residents affected by aircraft as stakeholders in the nation's air transportation system
 - Serving as a focal point for residential advocacy within the FAA the office could be tasked with ensuring effective execution of the ombudsman role established by Congress;
 - More effective community engagement in the evolution of the nation's airspace.
 - Better definition of the process to involve communities impacted by aircraft noise and emissions in the rollout - before the fact, while change is still possible - of FAA procedures and standards; and
 - Preparation of any reports requested by Congress on progress toward Public Health and Welfare.
 - In the future, such an office might be asked to undertake a periodic survey of the various roundtables around the country for feedback and suggestions. This might be akin to a Customer Satisfaction Survey, which many corporations use to drive progress.

Requiring an annual report on the progress of the FAA toward relieving and protecting public health and welfare from aircraft noise and sonic boom would help ensure that the FAA understands the continuing interest of Congress in the FAA's execution of this duty – and this interest would be further driven home should a subcommittee or the Quiet Skies Caucus choose to follow up with the Administrator to discuss the report.

Robert Holbrook September 11, 2020

A Few More Thoughts About Noise Metrics

DNL and Reverse Flow

The DNL standard suffers from a major problem. It is calculated as the annual average of 365 DNL values each of which is calculated over 24h. Consider the implications of this with regard to normal flow traffic and reverse flow of traffic. A location with no reverse flow could have twice as many airplanes overhead during normal flow conditions as a location with a 50/50 split of normal flow to reverse flow. More alarming, the DNL standard would permit an area where reverse flow occurs one in eight days to have seven times as many airplanes as the normal flow area during those hours. Alternately, it would permit each noise event to be ~8dB louder. This could be an issue with South Flow traffic into SJC, where residents can experience months of heavy south flow traffic – and where arrivals are expected to be louder than at present with new aircraft like the Boeing 737-8Max. The fundamental problem is that people are annoyed – annoyed enough to take action – in periods much shorter than a year, and these concerns should not be washed out by an overly broad metric.

Number of noise events

I don't believe that annoyance can be effectively characterized without understanding the number of noise events during the measurement period. It has been suggested that a simple enhancement to the DNL metric would be to report the number of events assumed per day (but see above), This would allow us to distinguish a DNL 63/n20 experience from a DNL 63/n350 experience.

It is Important to Tie out FAA Models with Real World Data

In 2001, the Wyle Acoustics Group indicated to the SFO Noise Abatement Office that meteorological effects are the major factor affecting sound propagation over long distances. Temperature inversions ad downwind propagation increase low-frequency noise levels. (Sharp, Gurovich, & Albee, Wyle Acoustics Group, for Noise Abatement Office, SFO, 2001)

It is important to model noise with real-world conditions, not an average or typical condition. The noise made flying into a 4 knot headwind and flying away from a 4 knot tailwind will not equal the noise made by two flights flying through still air.

To help verify FAA predictions, it would be helpful if the FAA were to provide a breakdown for its DNL assessments. Getting technical for a moment, if the FAA were to bin the projected noise events over a year into 4h buckets starting at 7am and then report the number of buckets in a year expected to exceed 65 DNL, 62 DNL, 59 DNL, etc., we would have a much better sense for the profile of noise the FAA expects – and whether that is likely to tie out with our expectations. Note that this would flag the normal/reverse flow effect I noted above.

Tone

Studies suggest that tone can be an important factor in annoyance. The shriek of the airbus whine affects us differently than the rumble of engines or the deployment of flaps and slats. In 1973, the EPA wrote "One difficulty in the use of the A-…weighted sound level is that psychoacoustic judgment data indicate that effects of tonal components are sometimes not adequately accounted for by a simple sound level." (p.4, Impact Characterization of Noise Including Implications of Identifying and Achieving Levels of Cumulative Noise Exposure ; EPA Aircraft/Airport Noise Study 27 July 1973, http://nepis.epa.gov/Exe/ZyPDF.cgi/9101DPQN.PDF?Dockey=9101DPQN.PDF)

"The psychologist John G. Neuhoff found that for the rising level our hearing is more sensitive than for the declining level. For the same sound level difference the change of loudness from quiet to loud is stronger than from loud to quiet." (John G. Neuhoff, "An adaptive bias in the perception of looming auditory motion", 2001, Ecological Psychology 13 (2) pp. 87 - 110 and John G. Neuhoff, "Perceptual Bias for Rising Tones", 1998, Nature, Volume 395, 10 September http://www.sengpielaudio.com/TableOfSoundPressureLevels.htm)

Noise Level

In 1973, the EPA wrote, "An outdoor Ldn of approximately 60 dB or less is required in order that no more than 23% of the population exposed to noise would be individually highly annoyed.... It therefore appears reasonable to propose an Ldn of 55 to 60 dB as the long range goal for maximum permissible average sound level with respect to health and welfare. (Note that this level is not considered optimum, merely the upper limit of permissibility. No endorsement is intended of degradation of existing areas having a lower noise level.)" (p.43, Impact Characterization of Noise Including Implications of Identifying and Achieving Levels of Cumulative Noise Exposure ; EPA Aircraft/Airport Noise Study 27 July 1973, http://nepis.epa.gov/Exe/ZyPDF.cgi/9101DPQN.PDF?Dockey=9101DPQN.PDF)

Low-frequency noise

Low-frequency sound travels further and better penetrates walls and windows than higher frequency sound. A Low Frequency Noise Study by the Partnership for AiR Transportation Noise & Emissions Reduction (FAA/NASA/Transport Canada, Hodgdon, Atchley, Bernhard, April 2007) cited work by researchers Tokita and Namura showing that the delta between being able to detect low frequency noise and being highly annoyed by it narrowed for low frequencies all the way down to 31.5 Hz. The Tokita & Nakamura annoyance thresholds were validated as predictors of annoyance due to low-frequency aircraft noise. They were found to relate favorably to the subjective annoyance assessments. Linear regression analysis showed that the C-weighted sound exposure level LCE was the best single-metric predictor of subjective annoyance response, explaining over 90% of the variability of the data set. LCE correlated better with the subjective data than metrics specifically designed to quantify low-frequency noise impact.

In 2001, the Wyle Acoustics Group indicated to the SFO Noise Abatement Office that C-weighting is preferred over A-weighting to describe backblast noise. (Sharp, Gurovich, & Albee, Wyle Acoustics Group, for Noise Abatement Office, SFO, 2001)

A-Weighting discounts the sound energy measured at 125Hz by 15.9 dB relative to A- weighting. At 64 Hz, the discount is 25.4dB.

Robert Holbrook September 11, 2020

Standards of Significance and Mitigations for Aircraft Noise

The following contains my thoughts stated in the form of Roundtable findings and resolutions that have not yet been considered or adopted.

Mindful of the FAA's duty "To relieve and protect the public health and welfare from aircraft noise and sonic boom..." 49 USC 44715, the Roundtable finds that the increase in airplane noise since the introduction of NextGen has negatively impacted the public welfare of residents in our jurisdiction and that these negative impacts are not limited to the area immediately surrounding the airports, but extend across the metroplex.

The Roundtable observes that the DNL 65 standard, as applied, does nothing for people residing more than a few miles from an airport. The Roundtable calls upon the FAA to take measures to mitigate the significant negative impacts of airplane noise on the public welfare of residents throughout our jurisdiction and residents outside our jurisdiction who have been negatively affected by airports within our jurisdiction.

The Roundtable believes that the current DNL 65 standard of 'significance' cannot by itself fulfill the FAA's duty "to protect the public health and welfare" to the satisfaction of the Roundtable. The Roundtable therefore believes that the FAA is likely to require new metrics and standards of significance. Noting that a threshold of significance can have no more effect than the measures to be taken when that significance threshold is reached, and that the existing measures and mitigations have proven to be inadequate under NextGen, the Roundtable believes that a broader basket of measures and mitigations is required.

The Roundtable suggests that this broader basket could include the use of less-preferred operational practices with regard to efficiency and that this is not inconsistent with the FAA's charter.

- This might include routing airplanes over longer paths to avoid populated areas.
- This might include increasing the staffing of ATC controllers when unused tower capacity is available, to allow for more communication between ATC and pilots.
- This might include encouraging airplanes to fly slower, but quieter.
- This might include invoking procedures that optimize efficiency at the expense of noise only when the operational conditions actually demand that efficiency and using less impactful procedures when operational conditions permit, for example, during off-peak periods.

The Roundtable suggests that Congress might want to consider asking the FAA to define significance standards pertaining to the safety of operational procedures. This would allow for the possibility of an <u>acceptable compromise to safety</u>, which might no longer exist under current law per section 329 of the FAA Reauthorization Act of 2018. Whereas aircraft manufacturers are permitted to (and, in fact, must) make cost-benefit tradeoffs to safety when making engineering design decisions, residents are now

expected to endure any cost when safety is raised as an issue, no matter how insignificant the tradeoff or how abstract the argument. More rigorous analysis is required.

The Roundtable further suggests that, based on the above, this broader basket could also include lesspreferred operational practices with regard to safety that are nevertheless <u>acceptably</u> safe.

• This might include increasing the amount of communication between ATC and pilots to the level that was considered safe in the decades pre-NextGen when circumstances permit. Among other things, this might enable pilots and ATC to reintroduce dispersion into routes that NextGen concentrated into rails.

The Roundtable suggests that the FAA consider defining significance criteria associated with this broader basket of measures and mitigations. The significance criteria might apply to specific measures and mitigations (as the DNL 65 criteria does to soundproofing homes) or to baskets of mitigations. Importantly, the significance criteria would convey the authority and, where appropriate, the obligation to use them.

The following illustrates a possible application of the above suggestion:

Significance Level 1 – The negative effects to public health and welfare require the FAA <u>to</u> <u>consider</u> and, if possible, use less preferred procedures and operations at a <u>modest</u> cost to efficiency or a less than 'significant' compromise to safety. *This might apply to the changes made to PIRAT*.

Significance Level 2 – The negative effects to public health and welfare require the FAA to consider, and if possible, use less preferred procedures and operations at a significant cost (to be defined) to efficiency and to consider all procedures that provide 'acceptable' levels of safety. *This might apply to the changes made to South Flow to SJC*.

Significance Level 3 - The negative effects to public health and welfare require the FAA to <u>remediate or mitigate</u> the effects even at <u>substantial</u> cost (to be defined). *This might apply to BSR/SERFR*.

Significance level 4 – At this level, the negative effects to public health and welfare are so severe as to not allow operations under normal circumstances.

Note that each of these levels of significance could be accompanied by multiple independent tests.

September 11, 2020

From

Jen (Sunnyvale)

То

Legislative Committee - SCSC Roundtable

Message

Information for the Legislative committee regarding FAA Noise policy

Hi Steve, Evan, and Glenn:

Enclosed is a document for the legislative committee regarding FAA noise policy.

My apologies that the document is not polished - I did not realize the deadline was 5PM today, so I did not have a chance to finish.

Thanks,

Jennifer Tasseff

Attachment Name

20200911_J_Tasseff_Noise_metrics_FAA_V1

SUMMARY:

This document is a position paper from the SCSC Roundtable regarding proposed changes to the current FAA noise metrics in order to protect residents and noise sensitive resources. Please note, this is a working paper that will evolve & include more specific detail with time, as our understanding of noise, and proposals/legislation deem necessary.

BACKGROUND:

- Millions of aircraft noise complaints and public discord have resulted from the FAA's implement of Nextgen, and use of an antiquated FAA 65DNL metric for measuring residential noise impact.
- The current FAA metric of 65DNL has almost no value in determining whether an increase in airplane noise will cause significant annoyance to a community.
- The DNL 65 contours have no value outside the close proximity of an airport- Leaving areas outside the contour to be vulnerable to excessive noise increases
- The current metric being used is ineffective, and new effective FAA metrics need to be determined and implemented.

RECOMMENDED REMEDIATIONS (GENERAL):

- NEW FAA NOISE METRICS:
 - Establish new reasonable and realistic noise metrics for accurately assessing the impact of flight procedure changes to residents.
 - Consideration to be given for human annoyance, sleep, health, learning, public spaces, natural quiet, and normal ambient noise levels in communities and neighborhoods
 - Cumulative and single event-noise metrics to be developed
 - Modify existing procedure approval processes to use these new metrics when approving any and all flight procedure modifications.
 - FAA to collect pre and post noise measurement changes for all new flight procedures.
 - This includes actual pre-change conditions, post-change conditions, and a postimplementation review process to confirm the "after" noise condition is the same or better noise level than the pre-change noise level.
 - If post implementation shows a higher noise level than prior pre-change conditions, then the FAA would be required to modify the flight procedure in a way that meets or exceeds the new standard.
 - If post noise measurements exceed the new standards and remediation cannot be completed within 30 days, then the flight path must be reverted back to its prior conditions within 30 days of implementation.
 - Any anticipated increases in flight path usage over time, and corresponding expected noise levels must meet the newly designated FAA noise metrics.

 This "before" and "after" noise information should be made readily available to the public.

• FUTURE ANTICIPATED FLIGHT PATH USAGE:

- For newly created or concentrated flight paths, any new FAA noise metrics must also consider future anticipated increases in the flight path usage.
- For example, FAA may have future expansion plans for usage of a new flight path, with initial flight usage low. In cases like this, FAA noise metrics, modeling, and post implementation analysis must consider future anticipated increases in flight path usage (i.e. over 10 years, 20 years), especially when creating a completely new or concentrated flight path.

<u>CREATE NOISE METRIC GRADIENTS FOR AREAS BEYOND AIRPORT VICINITY</u>

- Establish new graduated metrics for residential and noise sensitive areas outside an airport's contour
 - For illustrative purposes only:
 - i.e. 5 miles from an airport runway, the DNL cannot exceed 55; 10 miles from an airport runway the DNL cannot exceed 53, etc.
 - Regarding number of flights overhead (for illustrative purposes only)

(Please note- in the illustrations below, I refer to flights "directly in-line with a runway". On approach to an airport, typically commercial airlines "line up" pointing straight at the runway approx. 10 miles out from an airport. Since the following examples propose to limit the number of flights per hour, areas in-line with the runway were excluded from this proposal, because flights must be in-line with the runway in order to land.)

- i.e. For any areas 5 miles from airport and not directly in-line with the airport runway, for any 4-hour period, flights not to exceed 10 flights per hour directly overhead or within ¼ mile of location
- 10 miles from airport and not directly in-line with the airport runway, for any 4 hour period, flights not to exceed 5 flights per hour directly overhead or within ¼ mile of location
- 20 miles from airport (regardless of airport runway configuration), not to exceed 4 flights per hour, etc.

WITHIN METROPLEXES NOISE OVER EFFICIENCY

Metroplexes throughout the U.S. are heavily populated areas. Studies have shown that airplane noise can have serious health implications for residents under flight paths. Thousands of residents within a metroplex can and are impacted detrimentally by airplane noise and particulate matter.

 Because of the serious health impacts to residents and their children, noise considerations should take precedence over efficiency when developing new flight paths within the areas of a metroplex.

BACKGROUND:

- It is clear that one of the FAA's main objectives is to get "more planes in the air". This is an EFFICIENCY goal, not a safety goal. However, the FAA continually masks this goal ("more planes in the air") as a safety issue.
- In truth, getting "more planes in the air" is clearly an efficiency and economic goal only.
- In attempting to force more planes into the air, the FAA concentrates flights into rails, which creates serious health implications for residents under these flight paths.
- The FAA is currently trading the safety and health of residents under these flight paths, for efficiency standards.
- Per the FAA, safety should take precedence over efficiency. Yet, in this case, the FAA is backwards - The FAA is placing resident safety and health concerns at a level below efficiency (more planes in the air).
- This FAA mind set of efficiency at the expense of the safety/health of residents needs to be altered. The safety and health of residents under the flight paths should not be ignored.

• FAA MODELING OF NEW FLIGHT PATHS

- Current models fall short of representing the true annoyance level to the community
- Develop new FAA noise models that represent the true situation on the ground for residents
 - In modeling for noise impact, the future anticipated increases in flight path usage (i.e. 10 years, 20 years) should also be considered in new flight path development.

• 65 DNL NOT TO BE EXCEEDED OVER RESIDENTIAL AREAS

RECOMMENDATION:

- When developing new flight paths, this 65 DNL should never be exceeded over residential areas.
- If 65 DNL will be exceeded over residential, then flight path alterations will be required to meet 65 DNL as the maximum level.

BACKGROUND:

- Currently at and around airports, the 65 DNL can be exceeded
- When the 65DNL is reached or exceeded, the only current remediation is economic.

- A city planning department decides that residential use of that space is prohibited in the future, OR
- There is monetary compensation for residents to purchase new windows

September 14, 2020

From

Jennifer Landesmann

То

Legislative Committee - SCSC Roundtable

Message

Legislative Committee - Public Health

Hi Kathy,

Thank you and to the SCSC Legislative Committee for the efforts to prioritize issues to raise for potential legislative initiatives and the focus on Health.

Am following up with the info on the Congressional survey that was done in 2015 that I mentioned in my public comment at your 8/17 meeting.

Here is the survey: https://iqconnect.lmhostediq.com/iqextranet/view_newsletter.aspx?id=168244&c=CA18AE

This three congressional district survey went to San Mateo, Santa Clara and Santa Cruz. The questions very much touched on health concerns. It would be great if the SCSC could help get these survey results to be made available for the public record. At the very least there needs to be some memorialization of this extensive outreach that eventually led to FAA senior management to come to the Bay Area that year.

For sure, there's quite a few bills out there about health studies but we need NEW incentives already for airports to address night time noise. ANCA reform is overdue (ANCA was premised on quieter aircraft but **a limit has been reached on how much quieter aircraft can get** thus *an update is needed to this law*).

Could the SCSC also pursue STATE initiatives?

At this point, it's very suspect that more "studies" would be needed to demonstrate the need for *proactive health risk management regarding night time noise*. SCSC communities have a notorious disruptor KE 214 making a hellish racket every night supposedly for that flight to rush to comply with **airport curfews in other countries**. Why is the US so behind on this? It was an absolute disgrace that at the last SFO Roundtable meeting Norcal TRACON appeared to be redefining nighttime as something like between 1 and 4 AM. FAA has been doing a good job of delaying policy changes about nighttime with a *never ending FAA sleep study* which literally puts me to sleep after years of hearing about it, with NOTHING ever coming out of it.

Could the state require an annual report from each airport on how they manage night time noise and address community concerns? Something like report cards on each airport are sorely needed.

Lastly, I leave you with an article about how US policy makers approach data and decision making

Why Does the U.S. Tolerate So Much Risk? NY Times Editorial Board. "The United States has a higher threshold than other developed nations for allowing corporations to risk the health and safety of consumers."

Time for change?

Thank you,

Jennifer

September 14, 2020

From

Robert Holbrook

То

Legislative Committee - SCSC Roundtable

Message

FAA web page on Centers of Excellence

A comment I submitted to the Legislative Committee on Friday suggested the creation of an FAA Center of Excellence for Public Health and Welfare. The Legislative Committee might be interested to know that more information on the FAA Center of Excellence program can be found here:

https://www.faa.gov/about/office_org/headquarters_offices/ang/grants/coe/

Among other things, this page states that the "The Center of Excellence for Aircraft Noise and Emissions Mitigation was re-competed and replaced by the Center of Excellence for Alternative Jet Fuels and Environment."