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:
https://www.youtube.com/channel/UCtPEqHsvTSnRcJUCQxX2Ofw

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:

1. Email comments to scscroundtable@gmail.com 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:** *Identify the Agenda Item number in the subject line of your email. All emails received will be entered into the record for the meeting.*
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/ Action

   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.

   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*

In compliance with the Americans with Disabilities Act and the Brown Act, those requiring accommodation for this meeting should notify the City of Mountain View staff regarding ADA needs 24 hours prior to the meeting at (650) 903-6215.

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 non-noise 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 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.
- 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

To

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_115-254_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

To

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] https://www.govinfo.gov/content/pkg/USCODE-2011-title49/pdf/USCODE-20
[2] https://www.usatoday.com/story/travel/airline-news/2020/06/17/coronavirus-faa-refuses-make-masks-mandatory-airlines/3209903001/
[3] FAA website, https://www.faa.gov/about/mission/

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

Recommendations:

1. Support proposed bill HR 976 - Aircraft Noise and Pollution Expert Consensus Act 2019,[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 Senate S2506[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 ≤ 0.1 µm.
  - 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 "An Integrated Measurement 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

[4]FAA website, https://www.faa.gov/nextgen/what_is_nextgen/
[5]https://www.congress.gov/bill/116th-congress/house-bill/976?q=%7B%22search%22%3A%5B%22hr976%22%5D%7D&s=1&r=1
[6]https://www.congress.gov/bill/116th-congress/senate-bill/2506
[7]https://www.congress.gov/bill/116th-congress/house-bill/2351?q=%7B%22search%22%3A%5B%22hr2351%22%5D%7D&s=2&r=1
[8]https://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 HR 3001 - Quiet Communities Act,[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 HR 5106 - Restore Everyone's Sleep Tonight (REST) Act,[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 (PART 161—NOTICE AND APPROVAL OF AIRPORT NOISE AND ACCESS RESTRICTIONS, 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

[9] https://www.congress.gov/bill/116th-congress/house-bill/3001/text?q=%7B%22search%22%3A%5B%22keeping+all+students%22%5D%7D&r=46&s=1

[10] Aviation Safety and Noise Abatement Act, 1979, https://uscode.house.gov/statutes/pl/96/193.pdf, Sec.102(1).

[11] https://www.congress.gov/bill/116th-congress/house-bill/5106/text

[12] https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=243d803bf33a2f497a575740f07a2010&ty=HTML&h=L&mc=true&r=PART&n=pt14.3.161#sp14.3.161.b

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

5. Support proposed bill HR 5109 - Fairness in Airspace Includes Residents Act or the F-AIR Act,[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, FAA Reauthorization Act of 2018.[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 press release dated 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 April 5, 2000 legislation[16] 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 US Code 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

[13] https://www.congress.gov/bill/116th-congress/house-bill/5109/text?r=7&s=1
[14] https://www.congress.gov/115/plaws/publ254/PLAW-115publ254.pdf
[15] https://www.faa.gov/news/press_releases/news_story.cfm?newsId=18774
[16] https://www.congress.gov/106/plaws/publ181/PLAW-106publ181.pdf
[17] https://www.govinfo.gov/content/pkg/USCODE-2011-title49/pdf/USCODE-2011-title49-subtitleVII-partB-chap475-subchapI.pdf
[18] Ibid.

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 HR 5107 - Serious Noise Reduction Efforts (SNORE) Act,[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 HR 5112 - Low-frequency Energetic Acoustics and Vibrations Exasperate (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] https://www.congress.gov/bill/116th-congress/house-bill/5107/text
[20] https://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 and 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 less-preferred operational practices with regard to safety that are nevertheless acceptably 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 to consider and, if possible, use less preferred procedures and operations at a modest 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 remediate or mitigate the effects even at substantial 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)

To

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):

- <u>NEW FAA NOISE METRICS:</u>
    - 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 post-implementation 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.

- <u>FUTURE ANTICIPATED FLIGHT PATH USAGE:</u>
  - 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.

- <u>WITHIN METROPLEXES NOISE OVER EFFICIENCY</u>

  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.

- <u>FAA MODELING OF NEW FLIGHT PATHS</u>
  - 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.

- <u>65 DNL NOT TO BE EXCEEDED OVER RESIDENTIAL AREAS</u>

  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

To

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
To
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."