

# OAKLAND AIRPORT-COMMUNITY NOISE MANAGEMENT FORUM WORK PLAN 2021

The Forum's Work Plan consists of three primary components:

1. Legislative and Regulatory Initiatives;
2. Studies; and
3. Presentations

## **1. LEGISLATIVE AND REGULATORY INITIATIVES**

The “Initiatives” component of the Work Plan sets forth the Forum’s legislative and policy agenda with respect to broadening the Forum’s influence on federal aircraft noise and air quality legislation and the closing of ANCA loopholes for the benefit of communities affected by aircraft noise.

## **2. STUDIES**

The “Study” component of the Work Plan is designed to address the technical issues of aircraft noise and air quality at OAK and its effects on local communities. In general, studies will require some degree of original research, technical analyses, and result in specific findings or conclusions and/or recommendations. The end product of a study task will be either a working paper or technical report prepared by a person or firm with the necessary qualifications and experience to develop a credible product.

## **3. PRESENTATIONS**

The “Presentation” component of the Work Plan is an on-going feature of Forum meetings. Presentations are to be of an informational or educational nature, and are designed to inform Forum members on matters of interest. Presentations may also be made to interested groups as directed by the Forum. Presentations may be made by the facilitator, staff, advisors and other experts, individual Forum members, or members of the public. It will be the role of the Facilitator to arrange for informational presentations in accordance with the approved Work Plan. Individuals interested in an opportunity to make a presentation to the Forum should make a written request to the Facilitator. It would be up to the Forum to decide what additional presentations it would be interested in hearing. Individual presentations of more than five minutes must be placed on the Forum’s agenda.

**WORK PLAN** (Initiatives, Studies and Presentations listed in order of relative priority):

### **A. Initiatives.**

- 1. Review and establish Forum positions on proposed aviation noise legislation, airplane noise research, air traffic noise and pollution, and airplane noise and pollution impacts mitigation.**
- 2. Review, comment on, and monitor status of “FAA Initiative to Address Concerns of Santa Cruz/Santa Clara/San Mateo/ San Francisco Counties”**

The FAA’s proposed initiative was instituted at the behest of several Peninsula Area Congressional Representatives. Because of its titular focus on the Peninsula area it is imperative that the Forum continue to make known that its communities are equally impacted by implementation of the Metroplex (OAPM) flight procedures and must be included in the FAA’s study.

**Status:** The FAA completed the first two phases of a three-phased study. In the first phase the FAA conducted an analysis and preliminary feasibility study of flight procedures criteria and overall “fly-ability” of new Performance Based Navigation (PBN) procedures, including potential modifications. Phase One also included an assessment of the impacts to operations and procedures at affected airports. In Phase Two the FAA considered any amendments and/or new procedures that were initially determined to be feasible, flyable, and operationally safe. As part of the Phase Two effort FAA conducted formal environmental and safety reviews, coordinated and sought feedback from the Forum, SFO Roundtable, members of affected industry and the National Air Traffic Controllers Association before initiating any formal amendments.

During Phase Three the FAA began to implement procedures, conduct any required airspace changes, and additional negotiated actions, as needed. Concerns raised by community groups and other organizations were elevated to the level of Congressional inquiries, which have resulted in additional coordination and communications between the FAA and affected parties to review the adverse noise effects of some of the proposed procedures. Certain of these procedures have been reviewed by a committee of the Forum and recommendations for amending the procedures have been forwarded to the FAA for review. In December 2018, the FAA provided an update to the status of its Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties. In July 2019, a further update on Phase Two was provided on the Peninsula’s Select Committee’s recommendations to the FAA. The FAA met with OAK and SFO representatives to discuss potential operational impacts of the HUSSH procedure. In October 2020 the FAA advised the Forum that its review of both the OAK and SFO HUSSH recommendations were under internal FAA review.

Previously, on March 9, 2018, the FAA entered into the IFP Gateway a proposed action to “create an OAK departure procedure that flies down the Bay during nighttime hours.” This proposed procedure has received initial feasibility and Regional Airspace and Procedures Team approval and anticipated a publication in Spring 2020.

### **3. Support and Maintain Forum Subcommittee to Address NextGen Implementation Issues Affecting East Bay Communities**

The Forum has created a subcommittee to review the impacts of the implementation of NextGen (Metropex) flight procedures adversely impacting East Bay communities. The subcommittee has been charged with identifying problem areas and providing information to the FAA that will allow it to determine appropriate mitigation measures.

**Status:** The subcommittee continued its coordination and correspondence with the FAA concerning the status of the Forum’s NextGen recommendations. The subcommittee continues to meet with FAA technical representative and is looking forward to additional meetings. The subcommittee will continue to engage with the FAA’s technical experts on the following issues:

- Hold the FAA to its commitment to collaborate with the Forum and to provide appropriate technical personnel to work with the subcommittee to resolve NextGen issues;
- The Forum, as well as the SFO Roundtable and other airport noise groups, need to gain an understanding of the breadth and specificity of what the FAA requires of them when commenting on NextGen implementation issues and in the submittal of proposed solutions.
- The FAA needs to define what they mean with respect to the term “noise shifting” and how this is taken into account in their aircraft route planning and how it will be used going forward.

- The FAA should also be entreated to provide the Forum with definitive information on the timelines (schedules) and next steps in its review process for the HUSSH and WNDSR TWO procedures.

#### **4. Support expanding opportunity for community engagement/review and eliminating Categorical Exclusions (CATEX) when implementing Performance Based Navigation (PBN)**

This is a N.O.I.S.E. (National Organization to Ensure a Sound-Controlled Environment) legislative priority because PBN has the potential to bring significant changes to flight tracks. Although N.O.I.S.E. supports NextGen and its goal of modernizing the air traffic control system, it also contends that the community impacts of aviation noise should be considered as a crucial part of the calculation that determines the overall benefits of the proposed changes. Hence, the community impacts of aviation noise should be considered a crucial part of the calculation that determines the potential benefits of any proposed airspace utilization changes in addition to improved capacity and fuel savings. Changes should not be solely based on improved capacity and fuel savings. With the increased concentration of overflights due to the narrowing of flight paths and the decrease in separation between aircraft enabled by PBN, air traffic changes have become even more closely tied to impacts on the ground. The Forum supports N.O.I.S.E. on this issue and encourages the FAA to engage with affected communities to ensure that the impact and concerns of these communities are heard and incorporated into the final design of new airspace as much as fuel savings and efficiency of airspace. This would allow communities under a new or concentrated flight path guaranteed participation and due process during the implementation of PBN.

As a part of efforts to ensure adequate community engagement, the Forum supports N.O.I.S.E. in believing that both regulatory and legislative Categorical Exclusions or “CATEXs” in current NEPA regulation are not appropriate for the implementation of significant changes to our airspace system. The Forum supports N.O.I.S.E. in backing efforts by the FAA and Congress to develop, implement and maintain a more robust community impacts process, in addition to or outside of the traditional NEPA process. This process should insure that ground impacts are considered and community concerns are not only heard, but also incorporated into PBN and traditional track changes that will change noise exposure, even if it does not reach the current FAA threshold of “measurable impacts”

**Status:** N.O.I.S.E. continues to lobby for measures that will ensure adequate community engagement and require the FAA to conduct adequate environmental review to ensure that community concerns are adequately represented in discussions and the FAA decision making process.

#### **5. Support FAA investigation and review of DNL and expanding the range of noise metrics to take into account the increased concentration of overflights due to narrowing of flight paths and decreased aircraft separation enabled by PBN procedures to ensure that these noise impacts are appropriately measured**

The Forum adopts this initiative on the part of N.O.I.S.E. because to be able to fully understand and address the impacts of aviation noise, it is first necessary to establish suitable metrics to measure such impacts. N.O.I.S.E. advocates that the FAA consider alternative metrics to supplement or even replace DNL (CNEL in California). The Forum concurs with N.O.I.S.E. that lowering the DNL level may allow for further mitigation for impacted communities, however; this alone will not address impacts that are caused by concentrated flight paths as characterized by PBN procedures. As DNL is an average and humans do not perceive noise in averages but rather as individual events, the supports N.O.I.S.E. in its belief that it is time to investigate alternative metrics for assessing noise impacts such as:

- The psychological impact of concentrated, extended noise

- The physiological impact of infrequent, significant noise spikes during nighttime hours
- Impact of less audible low frequency noise and vibration
- The length of each period of frequent, regular noise spikes “rush hours” due to over-flights
- The number of rush hours per day
- The average dB of a rush hour’s noise—not day-night average
- The intensity of spikes above the average dB of a rush hour’s noise
- The intensity and number of spikes above the average, for non-rush hours from 10 p.m. to 7 a.m.

Investigating more appropriate metrics to measure aviation noise impacts is crucial and will supplement efforts to greater engage the community and to understand their concerns regarding impacts.

**Status:** N.O.I.S.E. is lobbying the FAA to develop a more appropriate metric to measure aviation noise impacts, which would allow for greater understanding of community concerns.

**6. Support N.O.I.S.E. legislative priority for lowering of the FAA DNL standard from 65 decibels and to pursue a change in FAA Order 5010.1F (Environmental Impacts: Policies and Procedures) to consider what defines a significant noise impact for areas outside the 65 DNL contour.**

**Status:** Even though most airports around the country have mitigated their noise impacts for areas within their DNL/CNEL 65 dB and above noise contours, there still remain a large number of communities where additional mitigation below the 65dB threshold would be beneficial. For 2021 the Forum should support N.O.I.S.E in this initiative.

**7. Support a FAA headquarters initiative to continue research into NextGen air traffic control, including OPD procedures, R-NAV/RNP GPS-based approach/departure procedures, the application of flight management systems to noise abatement procedures, and to assist airports and ATC with implementing CDA/OPD and R-NAV noise abatement procedures in the vicinity of airports to reduce aircraft approach noise and reduce emissions.**

**Status:** This is an on-going Forum Initiative that was expanded to include GPS, R-NAV/RNP, FMS and other satellite-based systems.

**8. Monitor progress and evolution of FAA rule-making for civilian use of unmanned aerial vehicles (drones).**

More and more local government agencies are opting for the use of unmanned aerial surveillance vehicles. These aircraft are flown remotely and are not subject to 14 CFR Part 36 noise limits or altitude restrictions. It is in the interest of Forum communities to monitor the development and application of this technology in the event that regulatory actions may be required. Work to define the noise related issues that are appropriate to the purpose and role of the Forum (allowing, as always, for the safety of aircraft in flight and for people and property on the ground, and public privacy concerns).

**Status:** For 2021 ask for presentation on current FAA regulatory actions on civilian use of drones and advocate with news organizations for the use of drones for covering news/traffic in lieu of helicopters for noise control and cost savings (if allowed under FAA guidelines).

**9. Continue to work through North Field and South Field Research Groups to encourage voluntary noise compliance efforts on the part of aircraft operators at Oakland International Airport.**

**Status:** This is an ongoing initiative whereby the Forum will continue to support the efforts and research needs of the NFRG and SFRG.

**10. Continue to send member representatives to the FAA NORCAL TRACON and other FAA ATC facilities to familiarize them with FAA air traffic control procedures and provide first hand community input to FAA staff.**

**Status:** This is an ongoing initiative and is subject to available funding and member interest.

**11. Establish a Forum position on proposed FAA blocking of aircraft registration information.**

**Status:** There is on-going debate between aircraft operators and the FAA over federal policy on blocked aircraft registration. The FAA was requiring a Certified Security Concern be provided to the FAA before being added to the nation's list of blocked aircraft. The Certified Security Concern requirement has now been dropped which makes it easier for flights to be conducted in US airspace and their identification not be disclosed to the public. This could have an impact on the monitoring and compliance of OAK operations, as more and more aircraft choose to operate as a “black” (unidentified) flight. Have the Forum’s community noise consultant advise the Forum on the current status of the FAA’s Blocked Flight Policy for the purpose of having the Forum adopt a position in favor of or in opposition to the FAA policy. Submit comments to FAA if policy is still undergoing review. For 2021 request Port to authorize HMMH to research current status and report back to Forum.

**12. Undertake and Prepare Part 161 Status Report**

Provide updated status reports on the Burbank (BUR) and Los Angeles World Airports (LAWA) Part 161 studies, including Los Angeles International (LAX) and Van Nuys (VNY) Airports.

**Status:** This initiative is monitored and reported on at the Forum’s quarterly meetings. For 2021 the Forum will request a consolidated summary report on the status of current and completed Part 161 studies around the country, to include the sponsoring airport, filing date, proposed noise rule(s), procedure, cost, FAA findings, and staff/consultant opinion.

**13. Continue to send Forum representatives to appropriate congressional meetings/hearings, industry conferences, and symposiums on aviation noise and air quality issues to support and actively seek measures in line with stated Forum legislative and regulatory goals, and to advance regulatory reform of key issues.**

**Status:** This is an ongoing initiative and is subject to available funding.

**14. Request additional funding from Port to pursue above initiatives.**

**Status:** Forum to submit formal proposal(s) to Port, as may be necessary.

**15. Seek legislative modification or relief from ANCA and FAR Part 161 limitations.**

**Status:** This concern needs to be reiterated to Congress and the FAA. The Forum will continue to work with elected representatives and national and regional airport noise coalitions to advance this position. Forum will monitor the actions of other airport community groups and seek to be part of a broader, national coalition.

**16. Continue to lobby for the mandatory phase-out of Stage III hush-kitted aircraft from the air carrier and air cargo fleets.**

**Status:** This is an on-going Forum initiative. Forum should request report on status of Stage III hush-kitted air carrier and air cargo aircraft operating at OAK.

**17. Formalize the Forum’s coalition building and outreach efforts with other regional/national noise forums.**

**Status:** This is an on-going initiative. Plan and organize a joint meeting with key members of SFO Roundtable, Santa Clara/Santa Cruz Counties Roundtable and the OAK Forum. Develop an agenda around issues that could foster collaboration between the three noise committees. If successful, the prospect of an annual joint collaboration session/meeting between OAK Forum and SFO and SC/SC Counties Roundtables should be considered.

**B. Studies.** The following study topics are included in the Work Plan in order of their relative priorities:

1. Undertake a “data intelligence” study of noise data to determine if there are more incidents than as reported in noise complaints.
2. Study news helicopter operational activity and noise impacts on local communities, and possible noise abatement recommendations including the use of drones in lieu of helicopters. Include local TV news organizations in process.
3. Continue to study the progress toward developing a National Stage 5 noise limit and the phase-out of aircraft not meeting Stage 4 limits.
4. Request NFG/SFG initiate study of aircraft noise and overflights in the Hayward/Castro Valley/San Lorenzo corridor.
5. Monitor and support NASA aeronautics and other aviation industry research programs having the potential to produce important advances and improvements in environmental impacts (esp. noise and air quality), performance, efficiency, and safety of engines, airframes, and other components of aircraft construction.
6. Continue to study the potential benefit of Optimal Profile Descent (OPD) procedures to provide noise reduction in the approach corridor to OAK. Review OPD procedures for potential benefits and/or impacts.
7. Study potential for Optimized Ascent procedures as noise abatement measure.
8. Agendize a special presentation on helicopter operations and issues, and have representative(s) of news helicopter organizations make presentation(s) to the Forum.
9. Study effects of NextGen and other satellite-based aircraft advanced flight tracking capabilities using and their potential for significant noise reduction.
10. Study and recommend specific actions to be taken with re: ALUC adoption of CNEL 65dB noise limit and recommend noise easements for any new residential development near OAK with noise levels above CNEL 65dB and encourage communities to adopt same requirement.

**C. Presentations.** The following informational presentations are included in the Work Plan:

1. Noise 101 Program.
2. RAPC presentation on status of Regional Airport System Plans.
3. Ongoing updates of the Burbank, Van Nuys, and other Part 161 processes.
4. Status report on NextGen ATC program implementation.
5. Provide for ongoing updates and recommendations from the South Field and North Field Research Groups, and conduct further studies/programs as identified (for example rolling takeoffs, etc.).

6. The ALUC Planning Process and the State of California Land Use Planning Handbook.
7. Physical and physiological effects of noise on people.
8. Synthetic fuels development updates.
9. Port Air Quality and Environmental program updates.
10. Monitor AB 32 and other climate change initiatives.
11. Tours of the FAA's Oakland Air Traffic Control Tower for Forum members and advisors.
12. Tours of the FAA's Northern California TRACON air traffic Control Center.

**D. Completed Studies and Presentations.** The following major studies and presentations have been completed and are deleted or suspended from the current Work Plan. They may be recalled for updating at the Forum's pleasure:

- Implement a Noise Abatement Award Program (last program held in July 2013/Reconsider for 2022).
- RNP Noise Analysis.
- Review and evaluate noise abatement procedures, and develop new or revised procedures.
- Investigate the feasibility of operating restrictions or curfews, including restrictions on low overflights, and nighttime operations by large aircraft.
- Run-ups and airport policy.
- FAA air traffic control procedures and airspace use.
- FAR Part 36 and Stage 3 aircraft noise standards.
- The California Airport Noise Standards.
- North Field operations.
- Bay Area airport development plans (OAK, SFO & SJC).
- New, quieter jet engine technologies.
- Existing airport and airline noise abatement procedures.
- OAK flight activities by time of day.
- Feedback on noise complaints (Hotline).
- Characteristics of noise.
- Runway reconfiguration study.
- Curfews Presentation.
- "Silent 7" type departure to the south.
- General aviation preferential.
- Continuous Descent Approach.
- Crosswind Runway Analysis.
- VFR operations noise analysis.
- Runway 29 Rolling Takeoff Procedure.
- Runway 29 arrivals over Silverlock neighborhood in Fremont.
- Runway 29 ILS arrival over Hayward.
- Runway 29 departure turns below 3000 feet over Alameda.
- SALAD 1 departure procedures.
- Quiet Aircraft Technology Developed for the Boeing 787 and Emerging New Technologies;
- New Light Jets and Their Potential Effect on Aircraft Noise and Airport Operations, Including Small Aircraft Transportation, SAT.
- Reports on OAK Airport Master Plan Progress.
- Runway 11 Nighttime Right Turn Departure Procedure.
- North Field corporate jet operations and compliance issues.

- Review nighttime FedEx operational anomalies.
- Review corporate jet noise procedures/noise transfer impacts.
- Investigate helicopter noise issues.
- Status of Port LEED projects.
- Operations by lighter-than-air craft (blimps/zeppelins).
- Phase 1 study of temperature inversion effect on GRE noise.
- SWA presentation on new B-737 Max acquisitions and related technology.
- Runway 27 Preferential Runway Study (completed in 2012 with no action recommended).

#### **E. Link to N.O.I.S.E. Legislative Priorities**

N.O.I.S.E. assists and advises communities in working with Congress to address the issue of excessive aviation noise. Many of these issues may be addressed through changes in federal law. Over the years, N.O.I.S.E. has maintained an active set of Legislative Priorities and has represented local communities through participation in FAA and other advisory and policy panels. The following is a link to N.O.I.S.E.'s current list of legislative priorities: <http://www.aviation-noise.org/legadvocacy>

Work Plan approved on January 20, 2021