

# OAKLAND AIRPORT-COMMUNITY NOISE MANAGEMENT FORUM WORK PLAN 2018

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 Position on Quiet Communities Act, FAA Community Accountability Act of 2015, Airplane Impacts Mitigation (AIM) Act of 2016, FAA Community Accountability Act of 2016, and Air Traffic Noise and Pollution Expert Consensus Act of 2017.**

H.R. 3938, the Air Traffic Noise and Pollution Expert Consensus Act of 2017 was introduced into the House on October 4, 2017 by Rep. Stephen Lynch (D-MA). The legislation seeks to address community

concerns about airplane noise and pollution by requiring the FAA to sponsor an expert consensus report to be issued by the National Academies of Sciences, Engineering and medicine on the health effects of airplanes flying over residential areas.

The Quiet Communities Act (H.R. 3384) was introduced in the House on July 29, 2015 by Rep. Grace Meng (D-NY). It would restore the EPA's Office of Noise Abatement and Control, which was created by Congress in 1972. This office oversaw the nation's noise control activities until it was defunded by Congress at the request of the Reagan Administration in 1981. In addition to restoring funding for this office, this bill requires the EPA Administrator to conduct a study of airport noise and examine the effectiveness of the FAA's noise measurement methods, health impact thresholds, and abatement programs. This will bring transparency to the FAA's current noise measurement and abatement practices.

The FAA Community Accountability Act of 2015 (H.R. 3965) was introduced on November 5, 2015 by Rep. Ruben Gallego (D-AZ). It would require the FAA to work with local communities and limit noise impacts when planning and implementing new flight paths. Importantly, the FAA Community Accountability Act would require the FAA to reconsider existing routes that are exposing residents to unacceptably high levels of aviation noise. The bill also creates a new Community Ombudsman in each FAA region to monitor the impact of NextGen implementation on affected communities, serve as a liaison between airport communities and the FAA, and make policy recommendations to Congress and the FAA.

H.R. 5075, the Airplane Impacts Mitigation (AIM) Act of 2016 was introduced on April 27, 2016 by Congressman Stephen F. Lynch (D-MA) and members of the bipartisan Quiet Skies Caucus. The AIM Act will examine the health impacts of airplane overflights on local communities and require independent research into the health impacts of prolonged exposure to airplane noise and emissions to inform the FAA policies and decision-making processes going forward. California Representatives, Eshoo, Farr, and Speier are among the 16 original co-sponsors of the bill.

S. 2761, the FAA Community Accountability Act of 2016 was introduced on April 7, 2016 by Massachusetts Senator Elizabeth Warren. This bill requires the Federal Aviation Administration (FAA), in considering flight paths or procedures as part of the implementation of the Next Generation Air Transportation System, to limit negative impacts on the human environment near airports. The FAA may give preference to overlays of existing flight paths or procedures to ensure compatibility with land use. .

**Status:**

H.R. 3938 was introduced in the House and referred to the Subcommittee on Aviation. The legislation appears not to have moved since it was introduced.

H.R. 3384 was referred to the Committees on Energy and Commerce, and Transportation and Infrastructure on July 29, 2015. There has been no further action since then. However, there are currently 25 co-sponsors including nine from California: Lee (D-CA-13); Farr (D-CA-20); Eshoo (D-CA-18); Speier (D-CA-14); Napolitano (D-CA-32); Lieu (D-CA-33); Bass (D-CA-37); Honda (D-CA-17); and Lowenthal (D-CA-47). The legislation appears not to have moved since it was introduced.

H.R. 3965 was referred to the House Committee on Transportation and Infrastructure on November 5, 2015 and to the Subcommittee on Aviation on November 5, 2015. There has been no further action since. It

currently has 29 co-sponsors including the above plus Huffman (D-CA-2); Peters (D-CA-52); and Davis (D-CA-53). The bill has not moved since it was introduced.

H.R. 5075 was referred to the House Subcommittee on Aviation on April 28, 2016. The bill has not moved since it was introduced.

S. 2761 was referred to referred to the Committee on Commerce, Science, and Transportation on April 7, 2016. The bill has not moved since it was introduced.

## **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 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 has 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 will be forthcoming and forwarded to the FAA for review.

## **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 (Metroplex) 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 has submitted its report and is looking forward to working with the FAA to help with the development of solutions to the NextGen implementation problems. The Forum is awaiting the FAA’s response.

## **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 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 65 dB threshold would be beneficial. For 2017 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.** *[The Optimized Profile Descent (OPD), originally referred to as the Continuous Descent Approach (CDA), is a method of operating an aircraft on approach that optimizes noise and emission reduction by minimizing changes in thrust through use of a favorable initial Flight Path Angle (FPA) and by strategic flap/landing gear management. Quite simply, use of an OPD produces the lowest possible single-event noise levels on the ground during approach in areas beyond 7 nautical miles from the runway landing threshold.]*

**Status:** This is an on-going Forum Initiative that was expanded to include GPS, R-NAV/RNP, FMS and other satellite-based systems. *[RNAV (Area Navigation) is a method of navigation that permits aircraft operation on any desired flight path within the coverage of ground or space based navigation aids or within the limits of the capability of self-contained aids, or a combination of these. In the future, there will be an increased dependence on the use of RNAV in lieu of routes defined by ground-based navigation aids. RNP (Required Navigation Performance) is RNAV with on-board navigation monitoring and alerting. A critical component of RNP is the ability of the aircraft navigation system to monitor its achieved navigation performance, and to identify for the pilot whether the operational requirement is, or is not being met during an operation. FMS (Flight Management System) is an integrated suite of sensors, receivers, and computers, coupled with a navigation database. These systems generally provide performance and RNAV guidance to displays and automatic flight control 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 2018 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 2017 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 report 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 2017 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 and OAK Forum. Develop an agenda around issues that could foster collaboration between the two noise committees. If successful, the prospect of an annual joint meeting should be pursued.

**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. *[See Initiative 7 above].*
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. *[See Initiative 7 above]*
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. Biennial 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.

**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 2017-18).
- 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, NOISE 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 for 2017:

<https://static1.squarespace.com/static/52b2097ce4b0ae613fde595f/t/59418f046a49637053399799/1497468677306/NOISE++Legislative+Priorities+2017.pdf>

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