



Meeting Agenda

Regular Meeting

Meeting No.353
Wednesday, December 4, 2024 - 7:00 p.m.
VIA HYBRID ACCESS

David J. Chetcuti Community Room
450 Poplar Ave | Millbrae, CA 94030
*see attached venue map & parking

Public may also join the virtual webinar:
<https://smcgov.zoom.us/j/93011857218>

Or Dial in:

US: +1(669)900-6833 Webinar ID: 930 1185 7218

This meeting of the San Francisco Airport Community Roundtable will be in person at the above-mentioned address. Members of the public will be able to participate in the meeting remotely via the Zoom platform or in person at 450 Poplar Avenue, Millbrae, CA 94030. For information regarding how to participate in the meeting, either in person or remotely, please refer to the instructions at the end of the agenda.

HYBRID PUBLIC PARTICIPATION:

A list of attendees (using Zoom sign-in credentials) will be displayed periodically throughout the meeting.

Public Comment

*Written public comments can be emailed to SFORoundtable@smcgov.org and should include specific agenda items to which you are commenting.

*Spoken public comments will also be accepted during the meeting in-person or via Zoom on Items NOT on the Agenda and for each Regular Agenda Item and at the end of Presentations, at the option of the speaker.

**Please see instructions for written and spoken comments at the end of this agenda.

ADA Requests

Individuals who require special assistance or a disability-related modification or accommodation to participate in this meeting, or who have a disability and wish to request an alternative format for the agenda packet or other writings that may be distributed at the meeting, should contact staff as early as possible but no later than 10:00 am the day before the meeting at SFORoundtable@smcgov.org. Notification in advance of the meeting will enable Staff to make reasonable arrangements to ensure accessibility to this meeting, the materials related to it, and your ability to comment.

AGENDA

Call to Order / Roll Call / Declaration of a Quorum Present

Al Royse, Roundtable Chairman

Public Comment on Items NOT on the Agenda

Speakers are limited to two minutes. Roundtable members cannot discuss or take action on any matter raised under this item.

Action to set Agenda and to Approve Consent Items

Al Royse, Roundtable Chairman

CONSENT AGENDA

All items on the Consent Agenda are approved/accepted in one motion. A Roundtable Member can make a request, before action on the Consent Agenda, to transfer a Consent Agenda item to the Regular Agenda. Any items on the Regular Agenda may be similarly transferred to the Consent Agenda. Public Comment is received before approval of the Consent Agenda.

1. Approval of Draft Minutes (*Page 9*)
 - a. October 2, 2024, Regular Meeting
2. Airport Director's Reports (*Page 14*)
 - a. September 2024
 - b. October 2024
3. Budget vs. Actuals Update (*Page 28*)

REGULAR AGENDA

Public Comment received on Regular Agenda items prior to action.

4. **ACTION** Approval of a letter to the FAA recommended by the Technical Working Group regarding two SFO Flight Operations: Nighttime SSTIK Departure Vectors and Nighttime 28R Offset Arrivals (*Page 29*)
Attachment: Draft Letter to the FAA re SSTIK and Runway 28R Offset Arrivals - recommended by the TWG

PRESENTATIONS

Public Comment on Presentation items will be taken after the last item under presentations.

5. FAA Reauthorization: Legislation Sections for Roundtable to Monitor (*Page 32*)
Timothy Middleton, C.M., Principal Consultant, HMMH
Attachment: FAA Reauthorization, Noise Provisions of Roundtable Interest Progress Update, December 2024
6. Overview of FAA Regulations for eVTOL Operations (*Page 43*)
Timothy Middleton, C.M., Principal Consultant, HMMH
Attachment: Overview of New FAA Regulations for eVTOL Operations
7. Chairman Update
 - a. 2024 Roundtable Year End Review
Al Royse, Roundtable Chairman

8. Airport Director Update

Ivar Satero, Airport Director

a. Aircraft Noise Office Update

Bert Ganoung, Aircraft Noise Office Manager

9. FAA Announcements and Updates

Moifair Chin, FAA Community Engagement Officer

10. SFO Roundtable Technical Consultant Update

Eugene Reindel, HMMH, SFO Roundtable Technical Consultant

Attachment: Did You Know? CNEL vs What We Hear

11. Subcommittee Updates

a. Technical Working Group Subcommittee (TWG)

Sam Hindi, TWG Subcommittee Chair

LINK: [Technical Working Group Subcommittee \(TWG\) November 19, 2024 Meeting Page](#)

b. Legislative Subcommittee

No meeting to report on since the last Regular Roundtable Meeting

c. Ground-Based Noise Subcommittee

No meeting to report on since the last Regular Roundtable Meeting

MEETING CLOSURE

12. Recognition of Departing Members

13. Member and Subcommittee Communications / Announcements

Roundtable Members and Staff

14. Adjourn

Al Royse, Roundtable Chairman

Information Only

- i. HMMH FAA IFP Information Gateway Memo – October 2024
- ii. HMMH FAA IFP Information Gateway Memo – November 2024
- iii. SFO Roundtable Calendar of Upcoming Regular Meetings
 1. February 5, 2025
 2. April 2, 2025
 3. June 4, 2025
 4. August 6, 2025
 5. October 1, 2025
 6. December 3, 2025

Consult the [SFO Roundtable Website](#) for the latest Roundtable meeting information.

****Instructions for Public Comment during Meeting**

During the meeting, members of the public may address the Membership as follows:

Written Comments:

Written public comments may be emailed in advance of the meeting. Please read the following instructions carefully:

1. Your written comment should be emailed to sforoundtable@smcgov.org
2. Your email should include the specific agenda item for which you are submitting a comment.
3. The members of the public are limited to one comment per agenda item.
4. The length of the emailed comment should be commensurate with two minutes customarily allowed for verbal comments, which is approximately 250-300 words.
5. If your emailed comment is received by 5:00 pm on the day before the meeting, it will be provided to the Roundtable and made publicly available on the agenda website under the specific item to which the comment pertains. The Roundtable will make every effort to read emails received after that time but cannot guarantee such emails will be read during the meeting, however, such emails will still be included in the administrative record.

Spoken Comments:

In-person Participation:

1. If you wish to speak to the Membership, please fill out a speaker's slip located at the entrance. If you have anything you want to distribute to the Membership and include in the official record, please hand it to the Clerk who will distribute the information to the Membership and Staff.

Via Teleconference (Zoom):

The meeting may be accessed through Zoom online at <https://smcgov.zoom.us/j/93011857218>

1. The webinar ID: 930 1185 7218. The meeting may also be accessed via telephone by dialing +1-669-900-6833, entering webinar 930 1185 7218 then pressing #. Members of the public can also attend this meeting physically at the David J. Chetcuti Community Room, 450 Poplar Ave | Millbrae, CA 94030.
2. You may download the Zoom client or connect to the meeting using the internet browser. If you are using your browser, make sure you are using a current, up-to-date browser: Chrome 30+, Firefox 27+, Microsoft Edge 12+, Safari 7+. Certain functionality may be disabled in older browsers including Internet Explorer.
3. You will be asked to enter an email address and name. We request that you identify yourself by name as this will be visible online and will be used to notify you that it is your turn to speak.
4. When the Chairperson calls for the item on which you wish you speak click on the "raise-hand" icon. You will then be called on and unmuted to speak.

***Additional Information:**

For any questions or concerns regarding Zoom, including troubleshooting, privacy, or security settings, kindly contact Zoom directly.

Note: Public records that relate to any item on the open session Agenda (Consent and Regular Agendas) for a Regular Airport/Community Roundtable Meeting are available for public inspection. Those records that are distributed less than 72 hours prior to a Regular Meeting are available for public inspection at the same time they are distributed to all Roundtable Members, or a majority of the Members of the Roundtable. The Roundtable has designated the San Mateo County Planning & Building Department, at 455 County Center, 2nd Floor Redwood City, California 94063, for the purpose of making those public records available for inspection. The documents are also available on the Roundtable website at: www.sforoundtable.org.

Welcome

The Airport/Community Roundtable is a voluntary committee that provides a public forum to address community noise issues related to aircraft operations at San Francisco International Airport. The Roundtable encourages orderly public participation and has established the following procedure to help you, if you wish to present comments to the committee at this meeting in-person or via Zoom.

- For written comments you may email your comments ahead of time to sforoundtable@smcgov.org.
- To speak during the meeting in-person, submit a speaker slip to staff.
- To speak during the meeting via Zoom, you may use "raise-hand."
- The Roundtable Staff will call your name and allow you to speak. Full instructions in agenda below.

The Roundtable may receive several speaker requests on more than one Agenda item; therefore, each speaker is limited to two (2) minutes to present his/her comments on any Agenda item unless given more time by the Roundtable Chairperson. The Roundtable meetings are recorded. Video file of meeting will be posted to website once available. Please contact the Roundtable Coordinator for any request.

Roundtable Meetings are accessible to people with disabilities. Individuals who need special assistance or a disability-related modification or accommodation to participate in this meeting, or who have a disability and wish to request an alternative format for the Agenda, Meeting Packet, or other writings that may be distributed at the meeting, should contact the Roundtable Coordinator at least two (2) working days before the meeting at the phone or e-mail listed below. Notification in advance of the meeting will enable Roundtable staff to make reasonable arrangements to ensure accessibility to this meeting.



About the SFO Airport Community Roundtable

The Airport/Community Roundtable was established in May 1981, by a Memorandum of Understanding (MOU), to address noise impacts related to aircraft operations at San Francisco International Airport (SFO). The Airport is owned and operated by the City and County of San Francisco, but it is located entirely within San Mateo County.

This voluntary committee consists of 25 appointed and elected officials from the City and County of San Francisco, the County of San Mateo, and several cities in San Mateo County (see attached Membership Roster). It provides a forum for the public to address local elected officials, Airport management, FAA staff, and airline representatives, regarding aircraft noise issues.

The committee monitors a performance-based aircraft noise mitigation program, as implemented by Airport staff, interprets community concerns, and attempts to achieve additional noise mitigation through a cooperative sharing of authority brought forth by the airline industry, the FAA, Airport management, and local government officials. The Roundtable adopts an annual Work Program to address key issues.

In 2024, the Roundtable is scheduled to meet on the first Wednesday of the following months: February, April, June, August, October and December. Regular Meetings are held on the first Wednesday of the designated month at 7:00 p.m. at **the David Chetcuti Community Room at 450 Poplar Avenue, Millbrae, California unless otherwise noted. Meetings are also broadcast via Zoom to encourage public participation.** Special Meetings and workshops are held as needed. The members of the public are encouraged to attend the meetings and workshops to express their concerns and learn about airport/aircraft noise and operations.

FEDERAL PREEMPTION RE: AIRCRAFT FLIGHT PATTERNS

The authority to regulate flight patterns of aircraft is vested exclusively in the Federal Aviation Administration (FAA). Federal law provides that:

“No state or political subdivision thereof and no interstate agency or other political agency of two or more states shall enact or enforce any law, rule, regulation, standard, or other provision having the force and effect of law, relating to rates, routes, or services of any air carrier having authority under subchapter IV of this chapter to provide air transportation.”

(Source: 49 U.S.C. A. Section 1302(a)(1)).



SFO Roundtable Regular Meetings

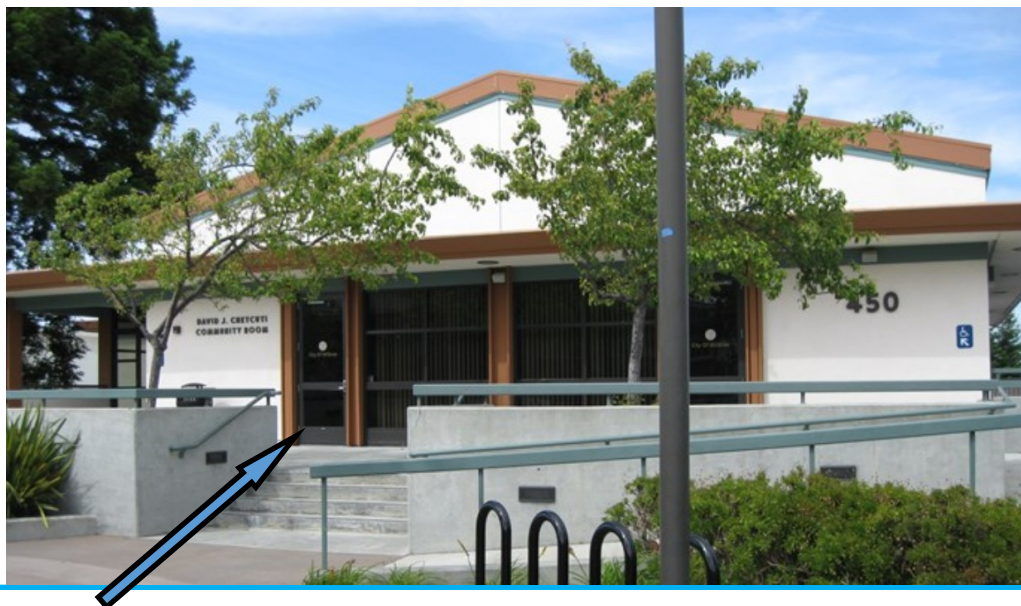
David J. Chetcuti Community Room

450 Poplar Avenue, Millbrae

- PARKING:**
1. Library parking lot (Poplar Street) adjacent to the Chetcuti Room
 2. Parking lot on Library Avenue
 3. City Hall parking lot (some restrictions). Take outdoor stairs up to Chetcuti Room
 4. Nearby neighborhood on-street parking

ENTRANCE: Chetcuti building can typically be entered from glass door at front of building.

ACCESSIBILITY: Ramp from Library Parking Lot to Chetcuti Room.





Member Roster

November 2024

**CITY AND COUNTY OF SAN FRANCISCO
BOARD OF SUPERVISORS**
Vacant

**CITY AND COUNTY OF SAN FRANCISCO
MAYOR'S OFFICE**
Alexandra Sweet, (Appointed)

**CITY AND COUNTY OF SAN FRANCISCO
AIRPORT COMMISSION REPRESENTATIVE**
Ivar Satero, Airport Director (Appointed)
Alternate: Doug Yakel, Public Information Officer

**COUNTY OF SAN MATEO
BOARD OF SUPERVISORS**
Dave Pine

**CITY/COUNTY ASSOCIATION OF GOVERNMENTS
AIRPORT LAND USE COMMITTEE (ALUC)**
Carol Ford (Appointed)

TOWN OF ATHERTON
Stacy Holland
Alternate: Bill Widmer

CITY OF BELMONT
Robin Pang-Maganaris
Alternate: Davina Hurt

CITY OF BRISBANE
Terry O'Connell
Alternate: Madison Davis

CITY OF BURLINGAME
Andrea Pappajohn
Alternate: Peter Stevenson

TOWN OF COLMA
Joanne del Rosario
Alternate: John Goodwin

CITY OF DALY CITY
Pamela DiGiovanni
Alternate: Rod Daus-Magbual

CITY OF EAST PALO ALTO
Martha Barragan
Alternate: Antonio Lopez

CITY OF FOSTER CITY
Sam Hindi
Alternate: Vacant

CITY OF HALF MOON BAY
Joaquin Jimenez
Alternate: Robert Brownstone

TOWN OF HILLSBOROUGH
Alvin Royse
Alternate: Christine Krolik

CITY OF MENLO PARK
Drew Combs
Alternate: Cecilia Taylor

CITY OF MILLBRAE
Alternate: Ann Schneider

CITY OF PACIFICA
Christine Boles
Alternate: Sue Vaterlaus

TOWN OF PORTOLA VALLEY
Judith Hasko
Alternate: Craig Hughes

CITY OF REDWOOD CITY
Kaia Eakin
Alternate: Chris Sturken

CITY OF SAN BRUNO
Sandy Alvarez
Alternate: Tom Hamilton

CITY OF SAN CARLOS
Pranita Venkatesh
Alternate: John Dugan

CITY OF SAN MATEO
Rob Newsom
Alternate: Lisa Diaz Nash

CITY OF SOUTH SAN FRANCISCO
Mark Nagales
Alternate: James Coleman

TOWN OF WOODSIDE
Paul Goeld
Alternate: Dick Brown

ROUNDTABLE ADVISORY MEMBERS

AIRLINES/FLIGHT OPERATIONS
Chief Pilot Lawrence Ellis, United Airlines

FEDERAL AVIATION ADMINISTRATION
Rachel Girvin, Regional Administrator
Faviola Garcia, Deputy Regional Administrator
Carlette Young, Supervisory Senior Advisor
Joseph Bert, Team Manager, Western Service Center

ROUNDTABLE STAFF
Vanessa Lee, Roundtable Coordinator
Kathleen Wentworth, Roundtable Senior Advisor
Diane Estipona, Roundtable Administrative Secretary
Gene Reindel, Technical Consultant (HMMH)

SFO AIRPORT NOISE OFFICE STAFF
Nupur Sinha, Director of Planning & Environmental Affairs
Bert Ganoung, Aircraft Noise Office Manager

SFO Airport/Community Roundtable

Meeting No 353 -- Minutes

Wednesday, October 2, 2024

Call to Order / Roll Call / Declaration of a Quorum Present (00:00:30)

Roundtable Chairman Al Royse called to order the Regular Meeting of the SFO Airport/Community Roundtable on October 2, 2024, at 7:06 p.m., at the David J. Chetcuti Community Room, 450 Poplar Avenue, Millbrae, CA. A quorum (at least 13 Regular Members) was present as follows:

REGULAR MEMBERS PRESENT

Doug Yakel – City and County of San Francisco Airport Commission
Robin Pang-Maganaris – City of Belmont
Terry O' Connell – City of Brisbane
Andrea Pappajohn – City of Burlingame
Joanne del Rosario – Town of Colma
Antonio Lopez -- City of East Palo Alto (~7:45pm)
Sam Hindi – City of Foster City
Al Royse – Town of Hillsborough
Ann Schneider – City of Millbrae
Christine Boles – City of Pacifica
Kaia Eakin – City of Redwood City
Rob Newsom – City of San Mateo
Mark Nagales – City of South San Francisco
Paul Goeld – Town of Woodside

REGULAR MEMBERS ABSENT

City and County of San Francisco Board of Supervisors
City and County of San Francisco Mayor's Office
County of San Mateo Board of Supervisors
C/CAG Airport Land Use Committee (ALUC)
Town of Atherton
City of Daly City
City of Half Moon Bay
City of Menlo Park
Town of Portola Valley
City of San Bruno
City of San Carlos

ROUNDTABLE STAFF

Vanessa Lee – Roundtable Coordinator
Kathleen Wentworth – Roundtable Senior Advisor
Diane Estipona – Roundtable Administrative Secretary
Maria Gonzalez – Planning Department Administrative Secretary
Eugene Reindel, HMMH – Roundtable Technical Consultant

SAN FRANCISCO INTERNATIONAL AIRPORT STAFF

Bert Ganoung, Noise Office Manager
Kevin Bumen, Chief Financial and Commercial Officer
Nupur Sinha, Director of Planning, Design, and Construction
David Ong, Noise Systems Manager
Anthony Carpeneti, Noise Abatement Specialist
William Wong, Noise Abatement Specialist

FAA STAFF

Carlette Young, Supervisory Senior Advisor
Moifair Chin, Community Engagement Officer

AIRLINE REPRESENTATIVES PRESENT

Ashley Zayed, Senior Specialist, Air & Noise, United Airlines

Chairman Royse recognized Christine Krolik, mayor of Hillsborough, in attendance.

Public Comments for Items NOT on the Agenda (00:08:12)

Chairman Royse opened public comments for items not on the agenda.

Remi Tan, resident of Pacifica, made a public comment (00:17:42)

Chairman Royse closed public comments for items not on the agenda.

1.- 2. Action to set Agenda and to Approve Consent Items (00:18:41)

Terry O'Connell **MOVED** to approve the consent items as corrected. The motion was seconded by Rob Newsom and **CARRIED** unanimously by roll call vote. (00:20:30)

3. ACTION: Consideration of Approval: Annual Budget FY 2024-25 (00:20:40)

Member Schneider made a comment regarding Cost-of-Living Adjustment (COLA) and budgeting regarding subcommittee meetings (00:27:26). Ms. Wentworth, SFO Roundtable Coordinator, suggested addressing these topics at the next Strategic Planning subcommittee meeting.

Chairman Royse opened and closed public comment. No comments were received.

Rob Newsom **MOVED** to approve the consent items as corrected. The motion was seconded by Mark Nagales and **CARRIED** by roll call vote. (00:32:00)

4. ACTION: Consideration of Approval: Letter in Support of Provisions in the FAA Reauthorization (00:33:18)

Chairman Royse noted that the Legislative subcommittee met in prior months to discuss the provisions of the FAA Reauthorization and HMMH technical consultants will provide a more detailed presentation at a later Roundtable meeting.

Chairman Royse also summarized that letter, noting specifically the support of diverse community involvement in the national committee.

Member Schneider made a comment regarding including additional information to the letter. (00:35:11)

Chairman Royse opened public comment.

Remi Tan, resident of Pacifica, made a public comment (00:36:36).

Chairman Royse closed public comment.

Member Boles confirmed that the information regarding nighttime aircraft noise being a health concern is included in the letter (00:38:27).

PRESENTATIONS

5. Using 20th Century Tools for a 21st Century Problem: Legal Tools for Addressing Airport Noise (00:39:10)

Chairman Royse welcomed renowned speaker, Peter Kirsch, Aviation Attorney at Kaplan Kirsch law firm.

Mr. Kirsch opened his presentation (41:13).

Alternate member Krolik asked a question about decimal levels. (01:32:19)

Member Eakin made a comment regarding technology as it relates to reducing smog and noise. (01:35:01)

Member Schneider made a comment regarding visual representation for noise occurrences. (01:38:37)

Chairman Royse questioned the state mandates regarding affordable housing and noise impacts (1:43:53).

Member Hindi made a comment noting that the metrics used today seem outdated and questioned how the FAA can be encouraged to work with airlines to reduce the impact of noisy flight procedures. (01:45:44).

Vice Chair O'Connell asked for a recommendation on how to manage future low energy, high frequency noise from electric vehicles (01:52:29).

Member Boles made a comment regarding curfews and if international noise policies can be studied for reference (01:57:16).

Member Lopez made a comment related to housing element (02:00:05).

Chairman Royse opened public comment.

Remi Tan, resident of Pacifica, made a public comment (02:03:36).

Darlene Yaplee, resident of Palo Alto, made a public comment (02:05:32).

Member Schneider asked about the existing work plan for the Ground-based Noise Subcommittee (02:09:40).

Chairman Royse presented Mr. Kirsch with a small token of appreciation. (02:11:49)

6. Chairman Update (02:12:30)

Chairman Royse announced an upcoming Technical Working Group Subcommittee in Foster City on November 19, 2024, and highlighted possible topics for future roundtable discussions.

Chairman Royse also stated that December is the last Roundtable meeting for the year with a few departing members who will not be joining next year.

7. Airport Director Update (02:15:59)

Doug Yakel provided updates for passenger traffic, flight operations, and new seasonal airline service from Frontier airlines in December. Mr. Yakel also stated that an injunction has been filed against the Oakland Airport against the adoption of their new name. Additionally, SFO has engaged with UC Berkeley's Transportation Sustainable Research Center to study eVTOLS and advanced air mobility.

a) Aircraft Noise Office Update (02:27:08)

Bert Ganoung reported on Ground-based Noise (GBN) monitoring, Second Chance Initiative (SCI), and Expanded Eligibility Initiative (EEI).

8. FAA Announcements and Update (02:22:14)

Moifair Chin stated that there no updates at this time.

9. SFO Roundtable Technical Consultant Update (02:22:24)

Chairman Royse, for the interest of time, deferred this presentation to the December meeting.

10. Subcommittee Updates (02:22:50)

Chairman Royse reported that the Legislative Subcommittee met on August 14, 2024 and will present the FAA reauthorization report at the December meeting.

Public Comment (02:23:45)

Chairman Royse opened public comment.

Remi Tan, resident of Pacifica, made a public comment (02:24:06).

Chairman Royse closed public comment.

Chair Royse closed public comments.

11. Member and Subcommittee Communications / Announcements (02:25:05)

Chairman opened and closed discussion. No comments were received.

12. Adjournment (02:14:00)

Chairman Royse adjourned the meeting at approximately 9:21 P.M.

Roundtable action minutes are considered draft until approved by the Roundtable at a regular meeting. A video recording of this meeting is available on the [Roundtable website](#).

Harvey Milk Terminal Terminal 1

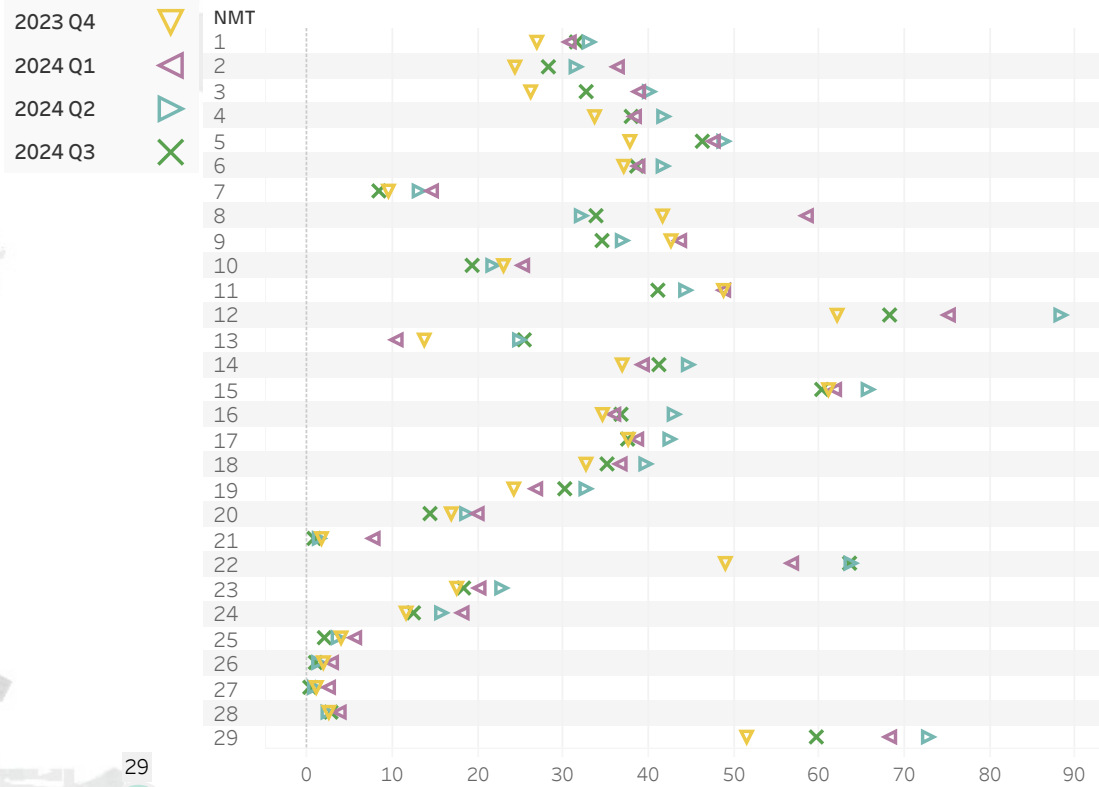
SFO

Airport Director's Report

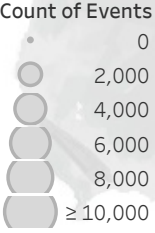
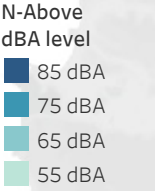
Presented at the December 4, 2024
Airport/Community Roundtable Meeting

Aircraft Noise Office
September 2024

Nighttime N-Above 55 dBA Daily Average

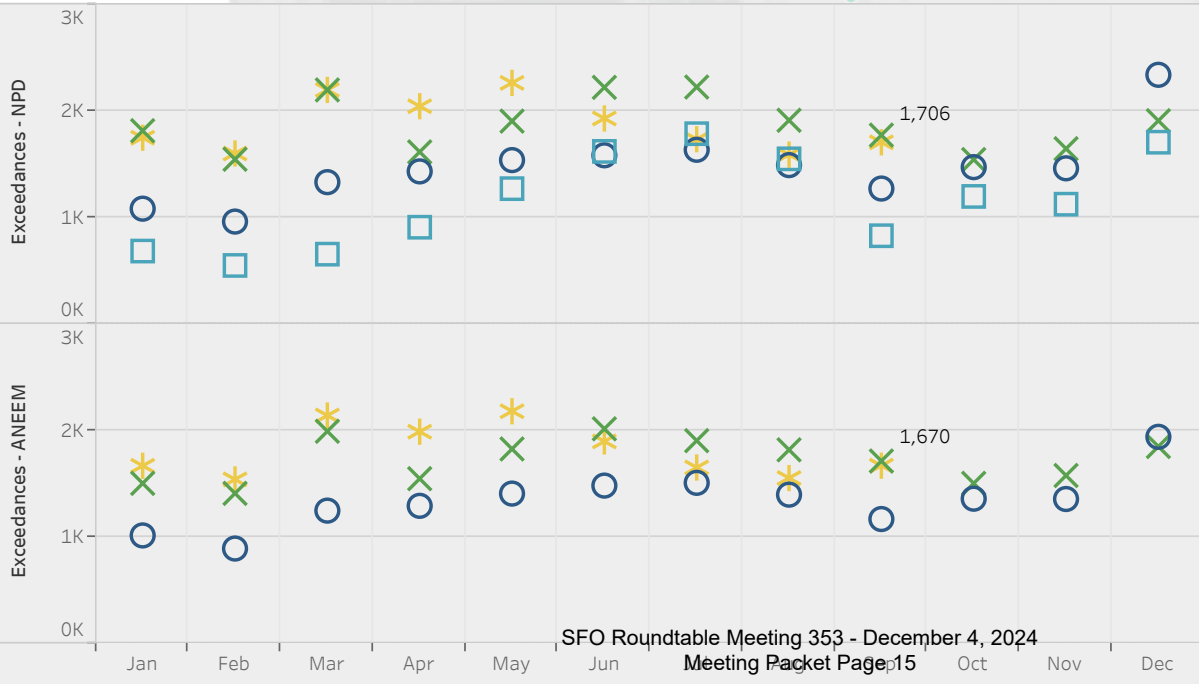


The chart above depicts the average daily N-Above 55dBA SFO aircraft noise events per NMT during nighttime hours (10pm-7am) compared to the previous 4 quarters. Values are derived from the ANEEM algorithm.



The map displays the N-Above counts at each NMT by N-Above Noise Level based on SFO aircraft noise events. Darker circles represent louder noise events and larger circles represent a larger number of noise events relative to the N-Above noise level. Values are derived from the ANEEM algorithm.

Significant Exceedances



Significant Exceedances (right) displays a total count of SFO aircraft noise events that produced a noise level higher than the maximum allowable decibel value established for a particular monitoring site.

Aircraft Noise Levels Details

NMT	City	ANOMS						ANEEM			
		Aircraft			Community			Aircraft			
		Noise Events (AVG Day)	CNEL (dBA)	SEL (dBA)	LMax (dBA)	CNEL (dBA)	Ambient Level (dBA)	Noise Events (AVG Day)	CNEL (dBA)	SEL (dBA)	LMax (dBA)
1	San Bruno	130	73	95	83	67	56	121	73	95	84
2	San Bruno	73	55	80	68	63	51	86	56	80	68
3	SSF	52	51	79	67	60	46	165	54	76	63
4	SSF	115	68	90	78	59	46	169	67	88	73
5	San Bruno	118	66	89	77	61	47	176	66	87	73
6	SSF	107	64	87	75	57	44	176	64	85	70
7	Brisbane	17	47	78	67	58	45	74	49	75	62
8	Millbrae	14	53	85	73	65	50	122	56	78	67
9	Millbrae	8	37	75	64	58	43	158	51	72	60
10	Burlingame	4	35	76	64	58	43	84	48	74	61
11	Burlingame	7	36	75	64	56	42	198	51	71	59
12	Foster City	364	62	82	71	57	42	431	62	81	69
13	Hillsborough	2	32	77	65	58	46	48	47	73	61
14	SSF	106	60	83	71	59	44	203	60	81	67
15	SSF	153	57	81	68	59	45	288	58	78	65
16	SSF	89	58	82	71	57	43	162	58	80	66
17	SSF	97	58	82	70	58	44	164	58	80	67
18	Daly City	96	63	87	76	58	44	152	63	85	70
19	Pacifica	84	59	84	73	56	39	127	60	82	69
20	Daly City	85	50	78	65	60	45	121	49	75	63
21	San Francisco	31	43	76	63	61	52	18	40	76	66
22	San Bruno	76	57	82	71	63	45	287	60	78	66
23	San Francisco	89	53	80	68	60	46	156	54	78	66
24	San Francisco	58	48	76	65	59	47	113	48	74	63
25	San Francisco	19	41	82	66	58	41	45	41	72	61
26	San Francisco	4	34	76	65	56	43	19	38	73	61
27	San Francisco	5	37	79	66	57	45	17	38	73	62
28	Redwood City	6	36	75	64	53	38	30	40	71	58
29	San Mateo	97	50	77	64	57	42	353	53	73	60

Noise Monitor's CNEL values (above) are derived from actual measured events and are used to validate the 65dBA CNEL noise footprint. Aircraft monthly CNELs from both ANOMS NPD and ANEEM algorithms for each monitor site are provided with daily average aircraft counts, the average Sound Exposure Level (SEL), and average Maximum Level (LMax). Noise levels from other noise sources in the community calculated by ANOMS is provided as Community CNEL. Ambient Level is represented by the LA90 noise value which is the noise level exceeded at the monitor for 90% of the time.

SFO N-Above NPD

SFO N-Above ANEEM

NMT	Min:Max							Min:Max						
	LMax	55 dBA	60 dBA	65 dBA	70 dBA	75 dBA	80 dBA	LMax	55 dBA	60 dBA	65 dBA	70 dBA	75 dBA	80 dBA
1	66:99	3,776	3,776	3,776	3,548	3,168	2,610	60:99	3,565	3,562	3,554	3,476	3,124	2,580
2	61:81	2,167	2,167	1,865	613	15	3	55:81	2,496	2,465	2,077	617	14	1
3	62:84	1,428	1,428	1,179	229	34	8	53:84	4,194	3,398	1,620	230	23	4
4	61:95	3,424	3,424	3,317	2,964	2,509	1,637	53:95	4,710	4,367	3,510	3,005	2,512	1,633
5	62:89	3,464	3,464	3,432	3,029	2,307	1,255	54:89	5,111	4,917	4,139	3,080	2,302	1,253
6	61:90	3,208	3,208	3,124	2,731	1,845	497	53:90	4,947	4,360	3,253	2,732	1,841	496
7	61:81	425	425	310	86	8	1	53:81	1,476	924	405	101	12	1
8	68:89	397	397	397	343	100	27	53:89	3,577	3,457	2,564	823	154	29
9	59:78	113	105	22	5	1	0	53:84	4,092	1,983	515	126	13	3
10	59:80	54	51	15	2	1	1	46:78	1,875	1,032	251	45	11	0
11	60:72	52	51	20	3	0	0	45:79	4,865	2,083	524	78	5	0
12	64:85	11,021	11,021	10,953	7,099	591	17	53:85	12,863	12,164	11,031	7,080	577	12
13	60:68	20	18	5	0	0	0	53:70	1,314	856	180	5	0	0
14	62:86	3,158	3,158	3,014	1,868	545	29	47:85	5,185	4,577	3,228	1,849	528	21
15	61:85	4,602	4,602	3,973	1,199	118	16	53:83	8,381	7,428	4,430	1,190	90	7
16	61:83	2,655	2,655	2,532	1,529	243	2	53:83	4,520	3,777	2,635	1,530	242	2
17	61:84	2,915	2,915	2,712	1,426	140	3	53:81	4,688	4,296	2,937	1,431	136	1
18	65:89	2,866	2,866	2,859	2,538	1,761	403	53:89	4,316	3,876	3,109	2,550	1,767	404
19	65:83	2,508	2,508	2,507	1,967	689	21	53:83	3,696	3,249	2,713	1,971	690	22
20	59:92	2,358	2,298	1,023	317	96	26	53:80	3,016	2,392	854	172	27	1
21	58:79	474	448	139	9	1	0	58:74	267	266	134	13	0	0
22	64:85	2,182	2,182	2,169	1,340	152	7	53:81	8,327	7,357	4,827	2,038	232	5
23	63:86	2,593	2,593	2,357	608	39	7	54:81	3,956	3,753	2,498	592	27	4
24	59:79	1,453	1,440	637	84	10	0	53:77	2,484	1,967	630	83	4	0
25	58:80	417	384	206	52	5	0	53:78	868	564	219	27	3	0
26	60:74	67	66	22	1	0	0	53:74	252	146	28	1	0	0
27	61:82	16	16	11	4	3	1	54:76	73	55	15	2	1	0
28	59:74	103	93	17	5	0	0	53:70	462	156	15	0	0	0
29	59:82	2,951	2,851	859	196	29	3	53:77	10,404	5,359	757	85	3	0

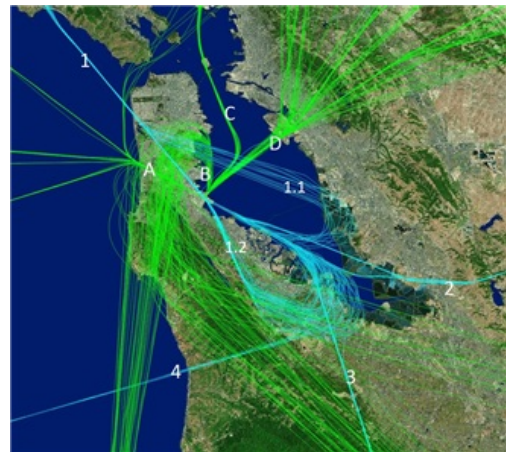
Noise Monitor N-Above values (above) are derived from actual measured events and assigned to aircraft overflights using both ANOMS NPD and ANEEM algorithms. N-Above represents the count of events where the peak noise (LMax) reached above the designated dBA value. Note, the charts on this page represent only SFO aircraft-related noise events.

Operations

September 2024

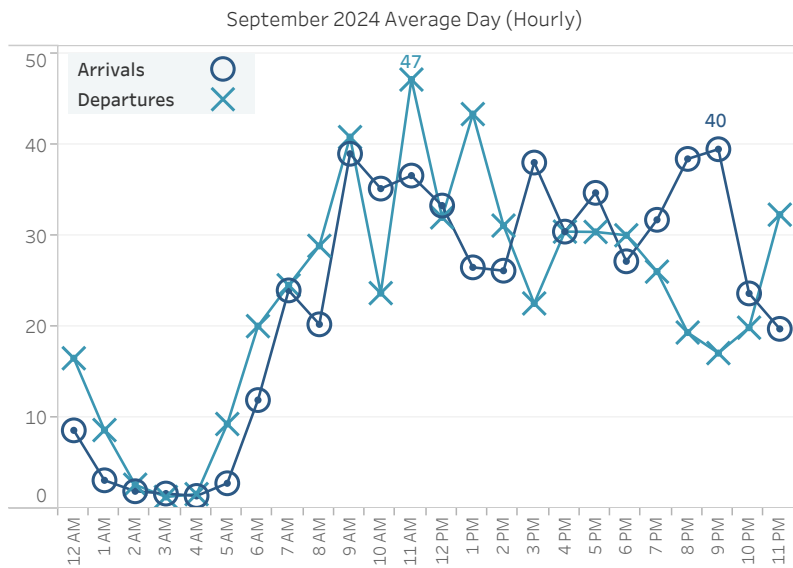
Monthly Ops	AVG Daily Ops	12 Month AVG	YOY Growth
33,434	1,114	31,382	2%

Major Arrival and Departure Routes (West Flow)



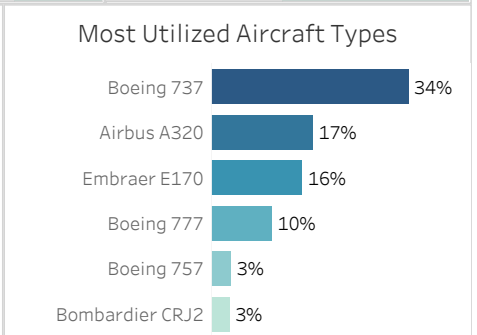
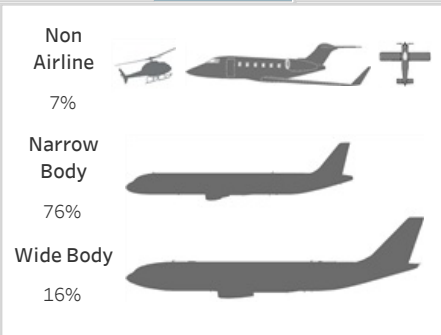
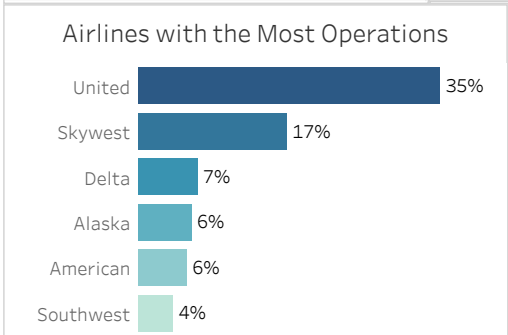
West Flow is depicted in the above image and is a predominate flow at SFO.

West Flow
100%

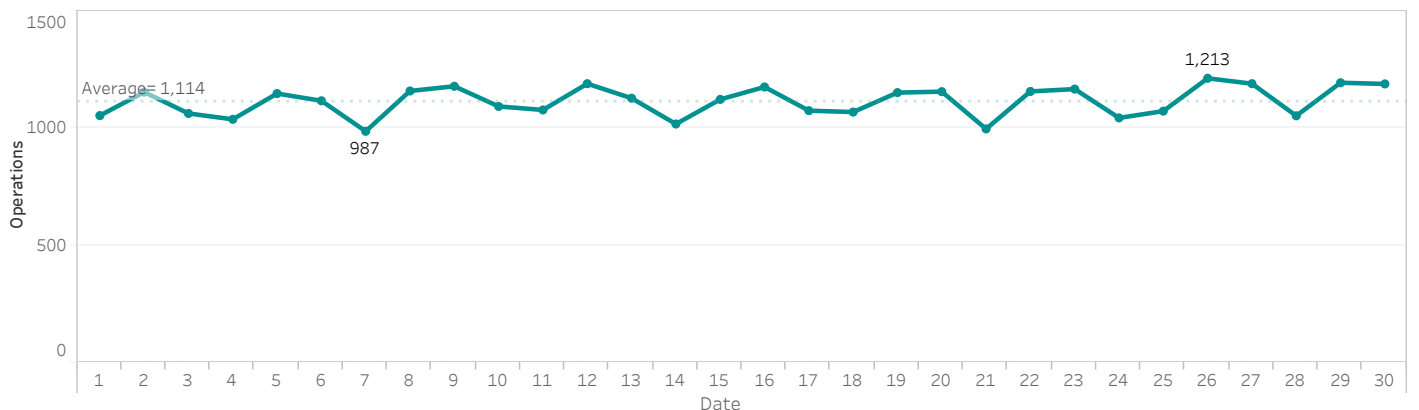


Arrival Route		Departure Route	
1. BDEGA	32%	A. GAP	19%
2. DYAMD	38%	B. SSTIK	29%
3. SERFR	25%	C. NIITE	10%
4. PIRAT	5%	D. TRUKN RWY 01	39%
		D. TRUKN RWY 28	2%

Top Destinations			Down the Bay vs Peninsula	
Los Angeles	Seattle	Las Vegas	1.1 Down the Bay Visual	33%
6%	4%	4%	1.2 BDEGA Arrival	67%



Daily Aircraft Operations



Runway Usage and Nighttime Operations

Leftmost Runway Utilization table shows percent of runway usage for arrivals and departures by runway based on air carrier operations using jet, regional jet, and turboprop aircraft. Late Night Preferential Runway Use table depicts departure runway usage between 1am - 6am for jet aircraft for the whole month (top) and during nighttime hours only (bottom). Percentages [%] are rounded to the nearest whole number.

Runway Utilization

	Arrivals	Departures
01 L/R		80% 12,406
10 L/R		0% 1
28 L/R	100% 15,482	20% 3,106

Late Night Preferential Runway Use (1 am - 6 am)

	Departures
10 L/R	0% 1
01 L/R	49% 312
28 L/R	51% 330

Runway Utilization Arrivals

	28L	28R
	40%	60%
Night (10pm-7am)	25%	75%

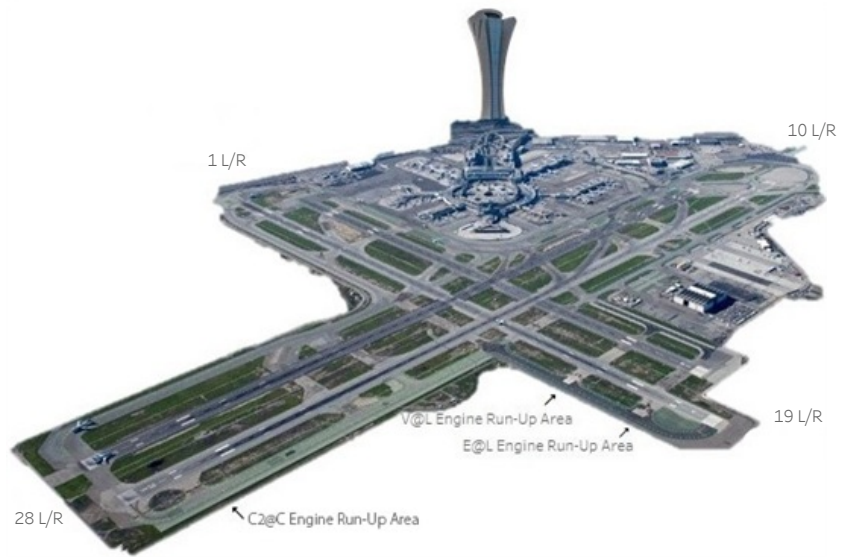
Nighttime Power Run-Ups

10pm-7am

American Airlines 4
United Airlines 8

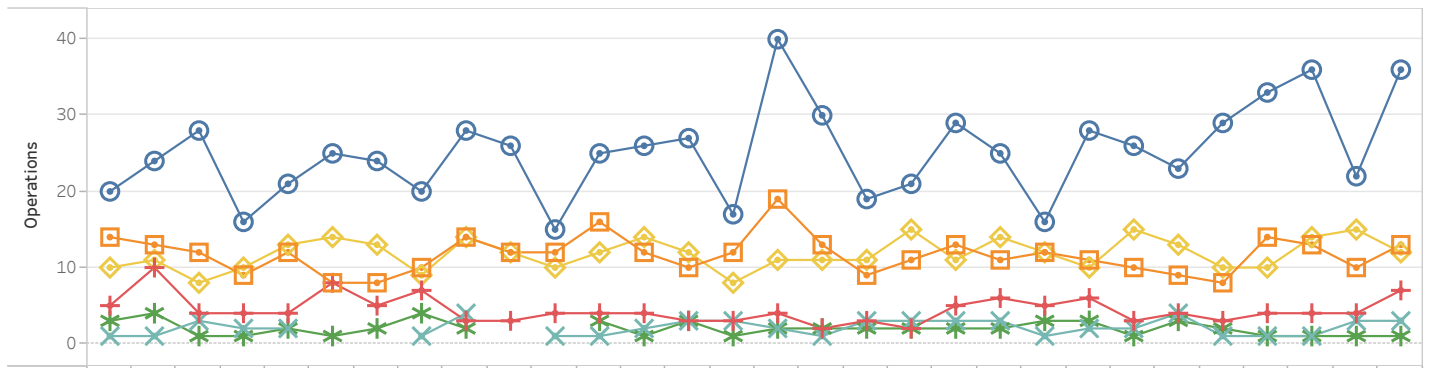
A power runup is a procedure used to test an aircraft engine after maintenance is completed. This is done to ensure safe operating standards prior to returning the aircraft to service. The Aircraft power settings range from idle to full power and may vary in duration.

Designated Power Runup locations are 19 L/R depicted on the airfield map (right) with airlines nighttime power runup counts shown above.



Hourly Nighttime Operations

○ 12 AM □ 1 AM + 2 AM × 3 AM * 4 AM ◇ 5 AM



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
12 AM	20	24	28	16	21	25	24	20	28	26	15	25	26	27	17	40	30	19	21	29	25	16	28	26	23	29	33	36	22	36
1 AM	14	13	12	9	12	8	8	10	14	12	12	16	12	10	12	19	13	9	11	13	11	12	11	10	9	8	14	13	10	13
2 AM	5	10	4	4	4	8	5	7	3	3	4	4	4	3	3	4	2	3	2	5	6	5	6	3	4	3	4	4	4	7
3 AM	1	1	3	2	2			1	4		1	1	2	3	3	2	1	3	3	3	3	1	2	2	4	1	1	1	3	3
4 AM	3	4	1	1	2	1	2	4	2			3	1	3	1	2	2	2	2	2	2	3	3	1	3	2	1	1	1	1
5 AM	10	11	8	10	13	14	13	9	14	12	10	12	14	12	8	11	11	11	15	11	14	12	10	15	13	10	10	14	15	12

Noise Reports

Reporters Annual AVG

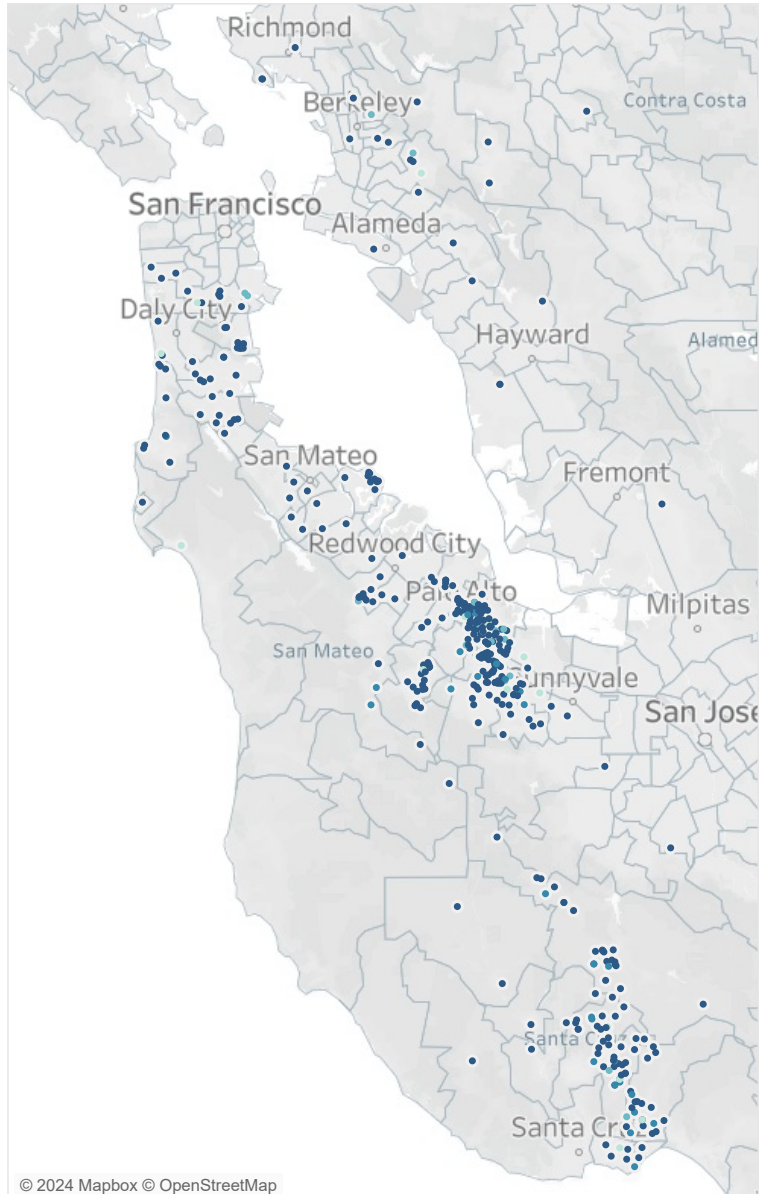
Noise Reporters Location Map

September 2024

Noise Reporters / Noise Reports

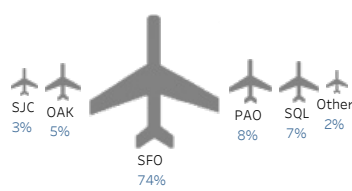
	Noise Reporters	Noise Reports
Atherton	3	107
Belmont	2	4
Brisbane	10	123
Burlingame	1	1
Daly City	5	1,332
East Palo Alto	1	1
El Granada	1	916
Emerald Hills	6	472
Foster City	11	293
Hillsborough	2	14
Menlo Park	14	255
Millbrae	1	24
Montara	1	186
Pacifica	7	675
Portola Valley	22	6,975
Redwood City	6	520
San Bruno	7	20
San Carlos	1	3
San Francisco	12	2,564
San Mateo	5	162
South San Francisco	9	145
Woodside	5	1,793
Alameda	1	164
Ben Lomond	1	1
Berkeley	5	574
Boulder Creek	2	3
Capitola	2	16
Castro Valley	1	14
Cupertino	1	34
Felton	3	47
Fremont	1	64
Hayward	2	5
La Honda	1	5
Lafayette	1	19
Los Altos	39	4,341
Los Altos Hills	10	990
Los Gatos	26	2,808
Moraga	2	58
Mountain View	6	2,561
Oakland	6	3,055
Orinda	1	103
Palo Alto	95	15,742
Richmond	3	182
San Jose	1	2
San Leandro	1	1
Santa Cruz	28	8,013
Scotts Valley	23	2,880
Soquel	19	3,051
Stanford	2	462
Sunnyvale	2	67
Watsonville	1	60
Grand Total	418	61,907

480
Reports Annual AVG
71,361
New Reporters
11
New Reporters Top City
Palo Alto Foster City
Furthest Report
64 miles
Reports per SFO Operation
2
Top Aircraft Types
B737 A320 E75L
Top Flight Numbers
UAL552 KAL214 UAL2110



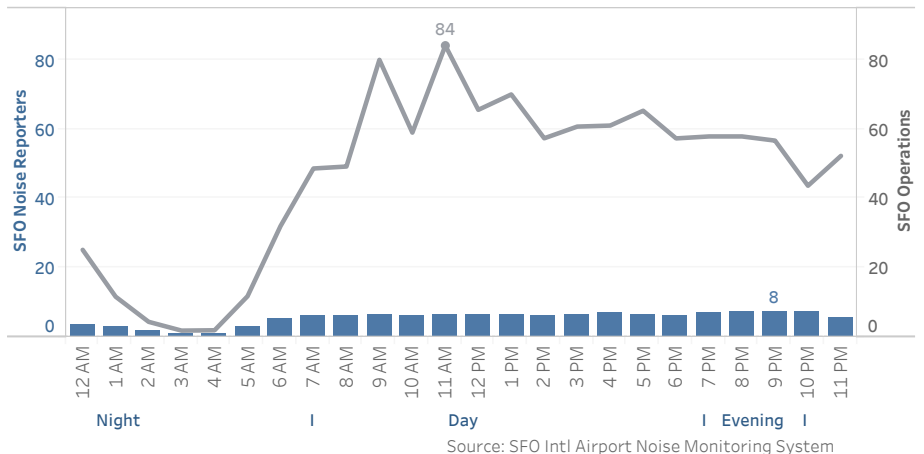
Notes:
Address validation Relies on USPS-provided ZIP Code look up table and USPS-specified default city values.

Noise Reports by Airport



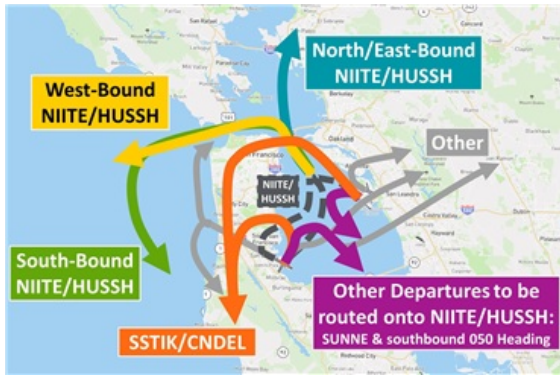
99% of noise reports correlate to a flight origin/destination airport.

Hourly Noise Reporters (Average Day in a Month)

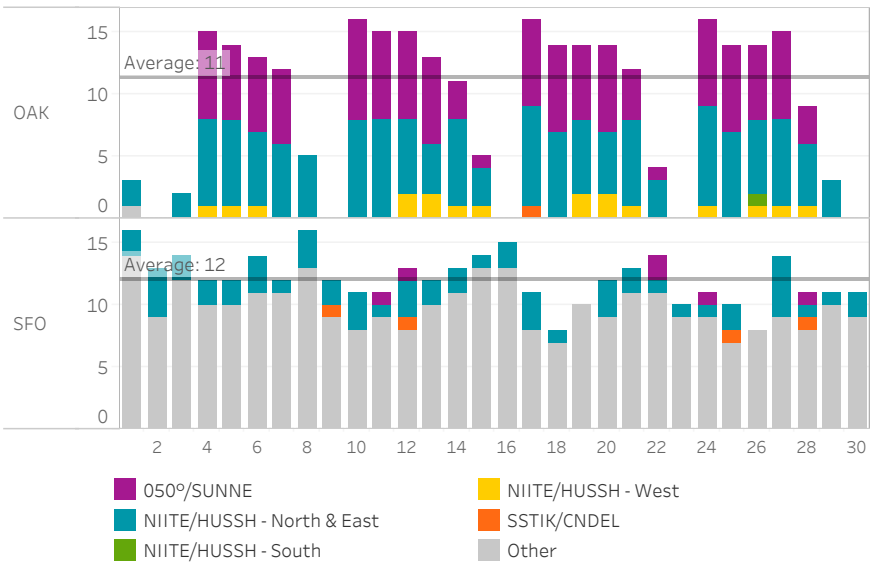


Source: SFO Intl Airport Noise Monitoring System

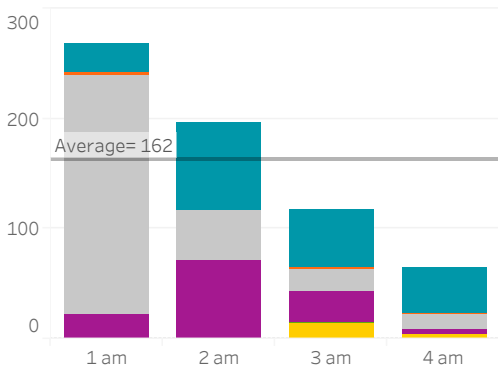
NIITE to GOBBS 1 am to 5 am (September 2024)



Count of Departures per Night



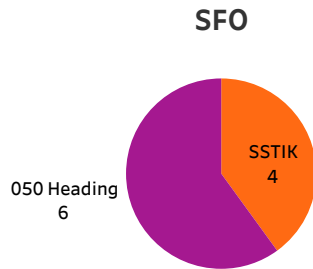
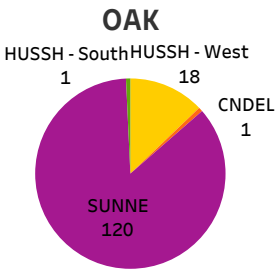
Average Total Departures per Hour



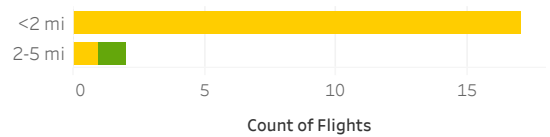
Departure Runway Usage

OAK	SFO				
30	01L	01R	10L	28L	28R
100%	1%	16%	0%	54%	29%

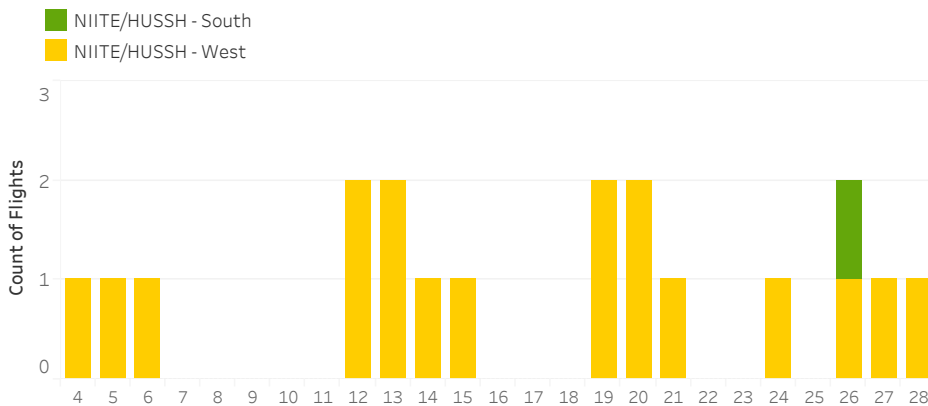
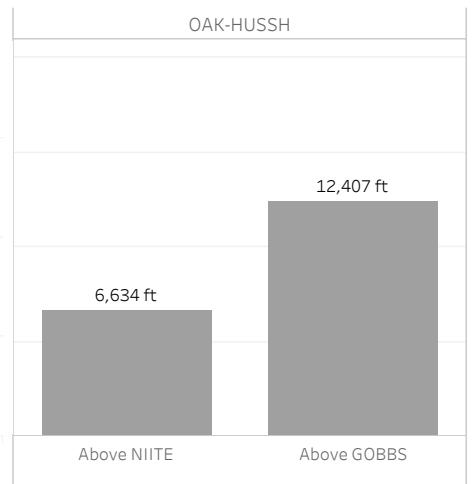
CNDEL and SSTIK Departures vs HUSSH and NIITE



How Close are Aircraft Flying to GOBBS?



Average Altitude at NIITE and GOBBS



Harvey Milk Terminal Terminal 1

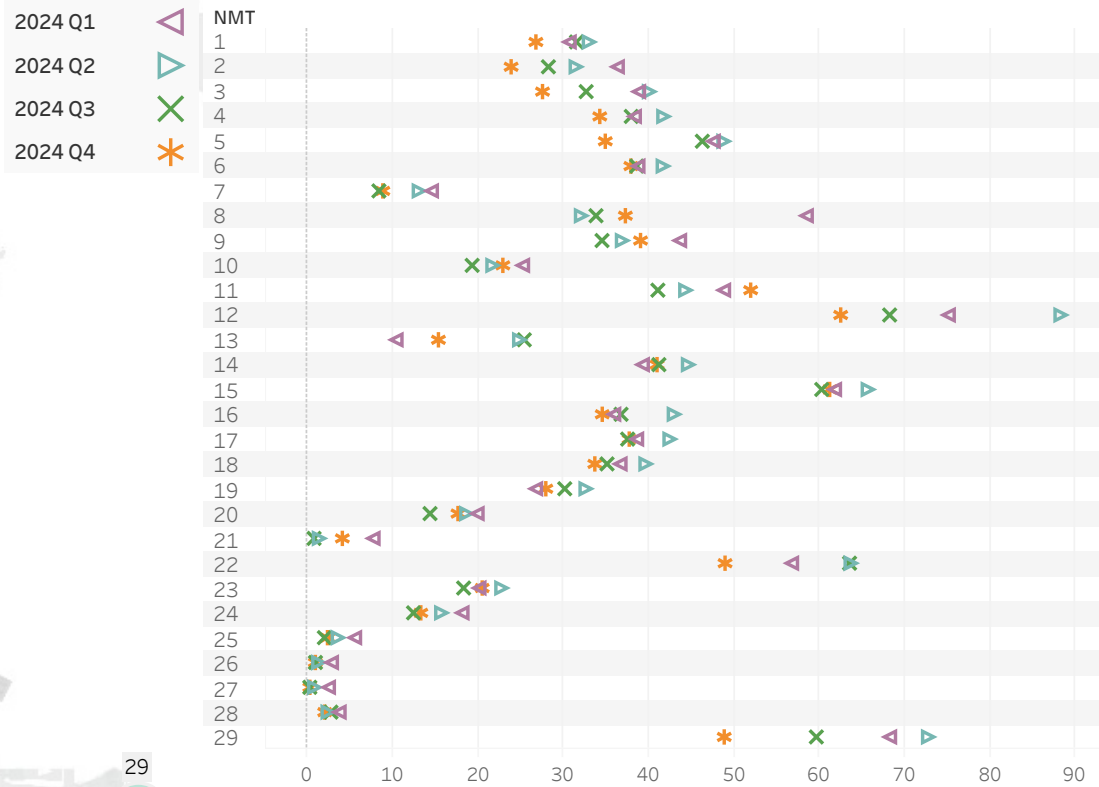
SFO

Airport Director's Report

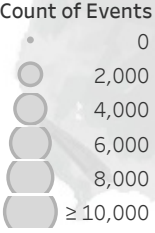
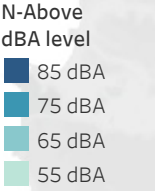
Presented at the December 4, 2024
Airport/Community Roundtable Meeting

Aircraft Noise Office
October 2024

Nighttime N-Above 55 dBA Daily Average

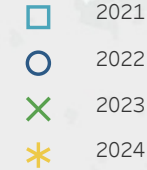
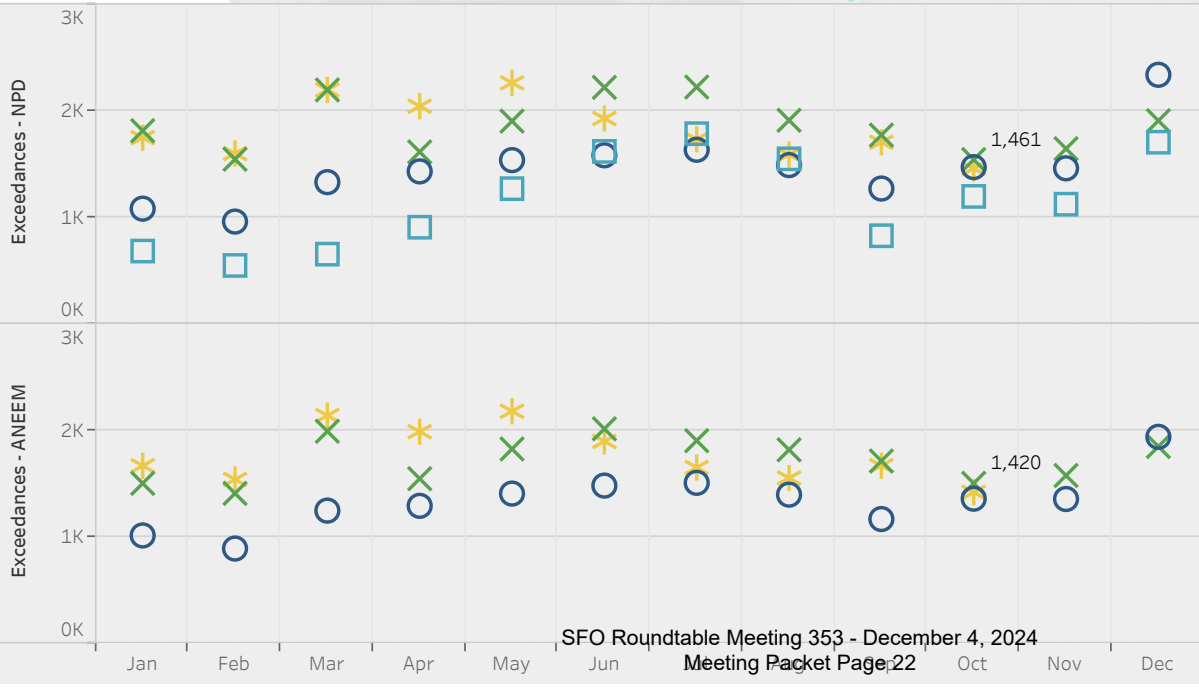


The chart above depicts the average daily N-Above 55dBA SFO aircraft noise events per NMT during nighttime hours (10pm-7am) compared to the previous 4 quarters. Values are derived from the ANEEM algorithm.



The map displays the N-Above counts at each NMT by N-Above Noise Level based on SFO aircraft noise events. Darker circles represent louder noise events and larger circles represent a larger number of noise events relative to the N-Above noise level. Values are derived from the ANEEM algorithm.

Significant Exceedances



Significant Exceedances (right) displays a total count of SFO aircraft noise events that produced a noise level higher than the maximum allowable decibel value established for a particular monitoring site.

Aircraft Noise Levels Details

NMT	City	ANOMS						ANEEM			
		Aircraft			Community			Aircraft			
		Noise Events (AVG Day)	CNEL (dBA)	SEL (dBA)	LMax (dBA)	CNEL (dBA)	Ambient Level (dBA)	Noise Events (AVG Day)	CNEL (dBA)	SEL (dBA)	LMax (dBA)
1	San Bruno	112	72	95	84	67	56	107	72	95	85
2	San Bruno	69	55	80	68	63	51	74	55	80	68
3	SSF	41	51	78	67	61	47	162	53	75	63
4	SSF	110	66	90	78	59	46	160	66	88	72
5	San Bruno	103	66	89	77	61	48	149	65	87	73
6	SSF	102	63	87	75	56	43	181	63	84	68
7	Brisbane	17	45	78	67	56	45	76	48	74	61
8	Millbrae	24	56	84	73	66	51	119	58	80	68
9	Millbrae	9	38	75	63	59	45	172	52	73	61
10	Burlingame	6	37	77	64	58	43	86	48	72	60
11	Burlingame	10	41	76	64	58	43	225	54	73	61
12	Foster City	339	62	82	71	58	43	407	62	81	69
13	Hillsborough	3	33	78	64	57	46	59	46	72	60
14	SSF	96	59	83	71	58	44	201	59	80	66
15	SSF	147	57	80	68	59	45	295	58	78	64
16	SSF	84	58	82	70	56	43	164	58	80	65
17	SSF	93	58	82	70	58	43	169	58	80	66
18	Daly City	93	63	87	75	58	45	150	63	84	70
19	Pacifica	82	59	84	73	56	41	126	60	82	68
20	Daly City	98	52	79	66	61	45	119	50	75	63
21	San Francisco	20	42	75	64	58	46	46	43	73	61
22	San Bruno	58	55	81	70	63	47	253	58	78	65
23	San Francisco	90	53	79	68	59	47	167	54	78	65
24	San Francisco	58	48	76	65	59	47	118	49	74	62
25	San Francisco	18	41	77	66	56	41	50	42	72	61
26	San Francisco	4	35	77	65	55	42	24	39	72	59
27	San Francisco	6	39	79	67	64	45	20	39	74	62
28	Redwood City	6	38	76	64	53	38	30	39	71	58
29	San Mateo	82	50	78	64	59	42	334	53	73	60

Noise Monitor's CNEL values (above) are derived from actual measured events and are used to validate the 65dBA CNEL noise footprint. Aircraft monthly CNELs from both ANOMS NPD and ANEEM algorithms for each monitor site are provided with daily average aircraft counts, the average Sound Exposure Level (SEL), and average Maximum Level (LMax). Noise levels from other noise sources in the community calculated by ANOMS is provided as Community CNEL. Ambient Level is represented by the LA90 noise value which is the noise level exceeded at the monitor for 90% of the time.

SFO N-Above NPD

SFO N-Above ANEEM

NMT	Min:Max							Min:Max						
	LMax	55 dBA	60 dBA	65 dBA	70 dBA	75 dBA	80 dBA	LMax	55 dBA	60 dBA	65 dBA	70 dBA	75 dBA	80 dBA
1	66:97	3,341	3,341	3,341	3,215	3,011	2,533	57:97	3,256	3,252	3,252	3,205	2,996	2,517
2	61:78	2,122	2,122	1,751	552	19	0	55:78	2,242	2,216	1,890	547	14	0
3	62:85	1,115	1,115	889	143	21	4	53:85	4,128	3,181	1,251	142	15	3
4	61:93	3,365	3,365	3,258	2,926	2,469	1,429	53:93	4,582	4,197	3,332	2,922	2,460	1,423
5	62:89	3,106	3,106	3,080	2,769	2,100	1,176	53:89	4,356	4,145	3,454	2,786	2,092	1,171
6	62:89	3,147	3,147	3,041	2,653	1,692	340	53:89	5,158	4,296	3,158	2,649	1,685	338
7	61:76	423	423	287	52	5	0	53:76	1,597	924	327	54	5	0
8	68:83	705	705	705	611	187	8	55:86	3,556	3,490	2,845	1,105	235	13
9	59:74	104	96	27	6	0	0	53:79	4,687	2,537	777	183	13	0
10	60:81	72	68	13	3	3	1	46:76	2,107	1,105	254	38	4	0
11	60:79	61	59	25	7	1	0	43:81	5,931	3,372	1,099	221	24	1
12	63:83	10,596	10,596	10,482	6,316	549	13	53:83	12,502	11,719	10,494	6,274	519	8
13	59:69	20	18	6	0	0	0	53:71	1,580	901	150	6	0	0
14	61:86	2,939	2,939	2,758	1,660	410	17	46:82	5,486	4,667	2,992	1,650	398	10
15	61:84	4,542	4,542	3,672	976	66	11	53:84	8,856	7,487	4,097	973	57	5
16	61:87	2,625	2,625	2,456	1,446	232	5	53:81	4,695	3,692	2,541	1,448	228	3
17	61:81	2,868	2,868	2,578	1,325	150	3	53:81	4,924	4,331	2,823	1,310	137	2
18	64:87	2,873	2,873	2,868	2,512	1,628	337	53:87	4,477	3,892	3,021	2,497	1,620	333
19	65:83	2,526	2,526	2,526	1,974	686	30	53:83	3,768	3,271	2,710	1,971	683	30
20	59:87	2,794	2,706	1,278	433	109	20	53:82	3,082	2,439	935	174	21	2
21	59:72	341	325	95	5	0	0	53:72	844	479	109	4	0	0
22	64:85	1,646	1,646	1,636	962	78	5	53:82	7,407	6,470	3,825	1,387	92	2
23	63:87	2,672	2,672	2,356	584	59	8	54:82	4,299	4,044	2,543	579	39	2
24	59:82	1,493	1,460	534	72	13	3	53:78	2,759	2,057	579	75	3	0
25	58:81	420	390	198	63	8	1	53:75	1,031	607	214	24	0	0
26	60:74	66	65	24	4	0	0	53:74	350	165	26	3	0	0
27	62:83	33	33	21	12	8	2	53:81	90	59	15	6	3	1
28	59:76	113	103	27	6	1	0	53:71	436	155	16	1	0	0
29	59:86	2,571	2,441	679	256	72	15	53:82	10,022	4,644	543	55	11	2

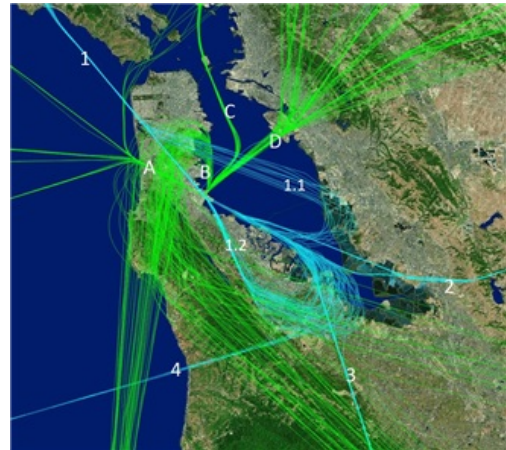
Noise Monitor N-Above values (above) are derived from actual measured events and assigned to aircraft overflights using both ANOMS NPD and ANEEM algorithms. N-Above represents the count of events where the peak noise (LMax) reached above the designated dBA value. Note, the charts on this page represent only SFO aircraft-related noise events.

Operations

October 2024

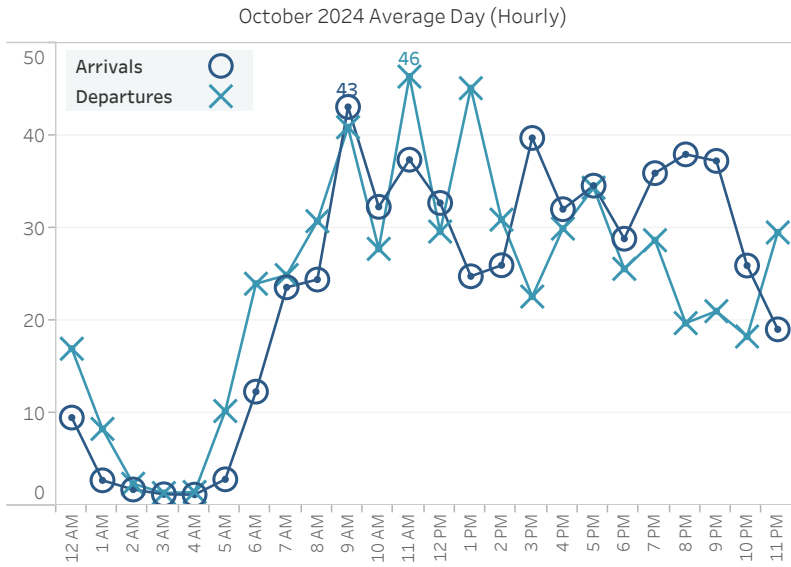
Monthly Ops	AVG Daily Ops	12 Month AVG	YOY Growth
35,265	1,138	31,568	6%

Major Arrival and Departure Routes (West Flow)



West Flow is depicted in the above image and is a predominate flow at SFO.

West Flow
100%



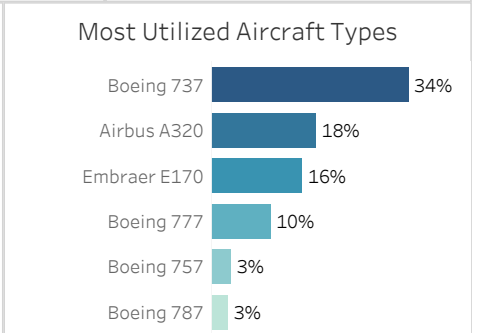
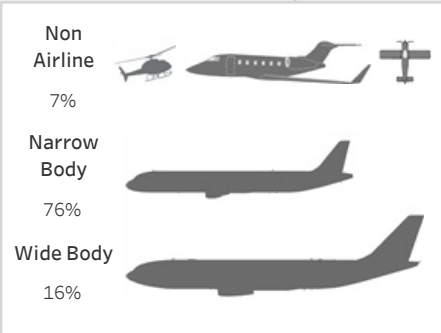
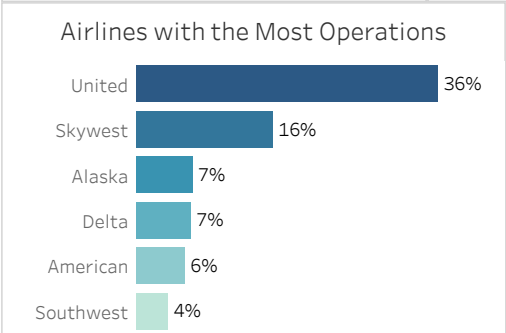
Top Destinations

Los Angeles	Seattle	Las Vegas
7%	4%	4%

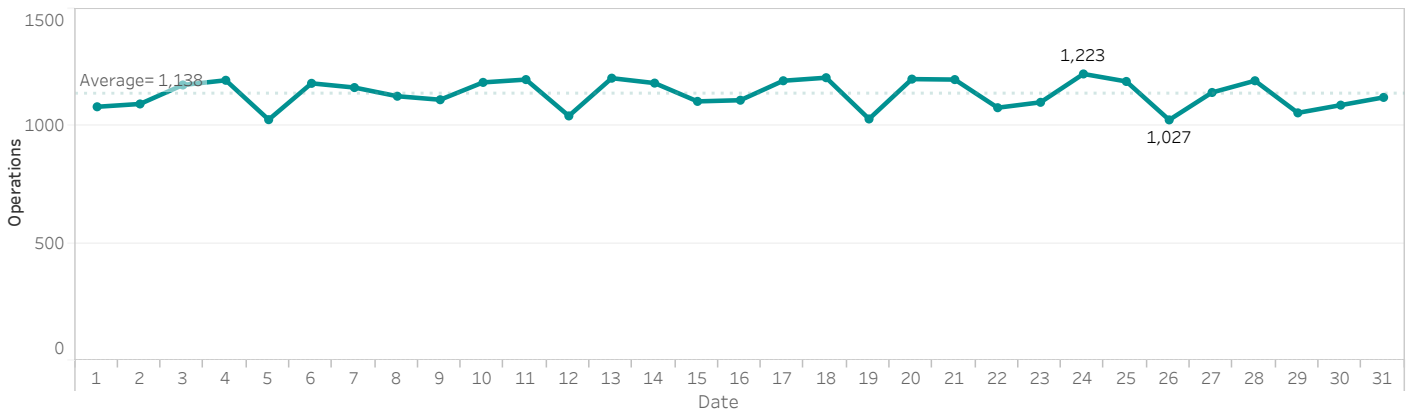
Down the Bay vs Peninsula

1.1 Down the Bay Visual	33%
1.2 BDEGA Arrival	67%

Arrival Route	Percentage	Departure Route	Percentage
1. BDEGA	30%	A. GAP	18%
2. DYAMD	38%	B. SSTIK	30%
3. SERFR	27%	C. NIITE	10%
4. PIRAT	5%	D. TRUKN RWY 01	41%
		D. TRUKN RWY 28	0%



Daily Aircraft Operations



Runway Usage and Nighttime Operations

Leftmost Runway Utilization table shows percent of runway usage for arrivals and departures by runway based on air carrier operations using jet, regional jet, and turboprop aircraft. Late Night Preferential Runway Use table depicts departure runway usage between 1am - 6am for jet aircraft for the whole month (top) and during nighttime hours only (bottom). Percentages [%] are rounded to the nearest whole number.

Runway Utilization

	Arrivals	Departures
01 L/R		84% 13,715
10 L/R		0% 1
28 L/R	100% 16,307	16% 2,606

Late Night Preferential Runway Use (1 am - 6 am)

	Departures
10 L/R	0% 1
01 L/R	56% 379
28 L/R	44% 302

Runway Utilization Arrivals

	28L	28R
	41%	59%
Night (10pm-7am)		
	24%	76%

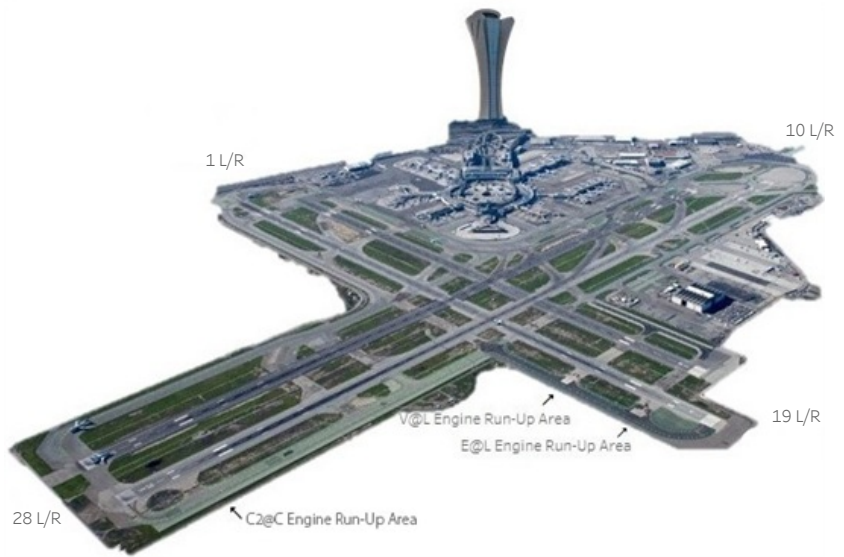
Nighttime Power Run-Ups

10pm-7am

American Airlines 3
Delta Airlines 1
United Airlines 12

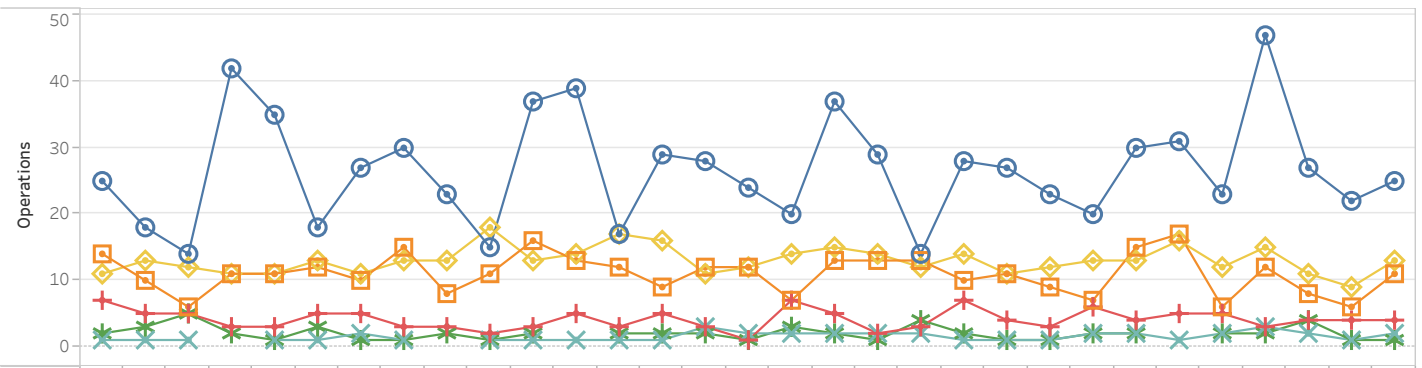
A power runup is a procedure used to test an aircraft engine after maintenance is completed. This is done to ensure safe operating standards prior to returning the aircraft to service. The Aircraft power settings range from idle to full power and may vary in duration.

Designated Power Runup locations are 19 L/R depicted on the airfield map (right) with airlines nighttime power runup counts shown above.



Hourly Nighttime Operations

○ 12 AM □ 1 AM + 2 AM × 3 AM * 4 AM ◇ 5 AM



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
12 AM	25	18	14	42	35	18	27	30	23	15	37	39	17	29	28	24	20	37	29	14	28	27	23	20	30	31	23	47	27	22	25
1 AM	14	10	6	11	11	12	10	15	8	11	16	13	12	9	12	12	7	13	13	13	10	11	9	7	15	17	6	12	8	6	11
2 AM	7	5	5	3	3	5	5	3	3	2	3	5	3	5	3	1	7	5	2	3	7	4	3	6	4	5	5	3	4	4	4
3 AM	1	1	1		1	1	2	1		1	1	1	1	1	3	2	2	2	2	2	1	1	1	2	2	1	2	3	2	1	2
4 AM	2	3	5	2	1	3	1	1	2	1	2		2	2	2	1	3	2	1	4	2	1	1	2	2		2	2	4	1	1
5 AM	11	13	12	11	11	13	11	13	13	18	13	14	17	16	11	12	14	15	14	12	14	11	12	13	13	16	12	15	11	9	13

Noise Reports

Reporters Annual AVG

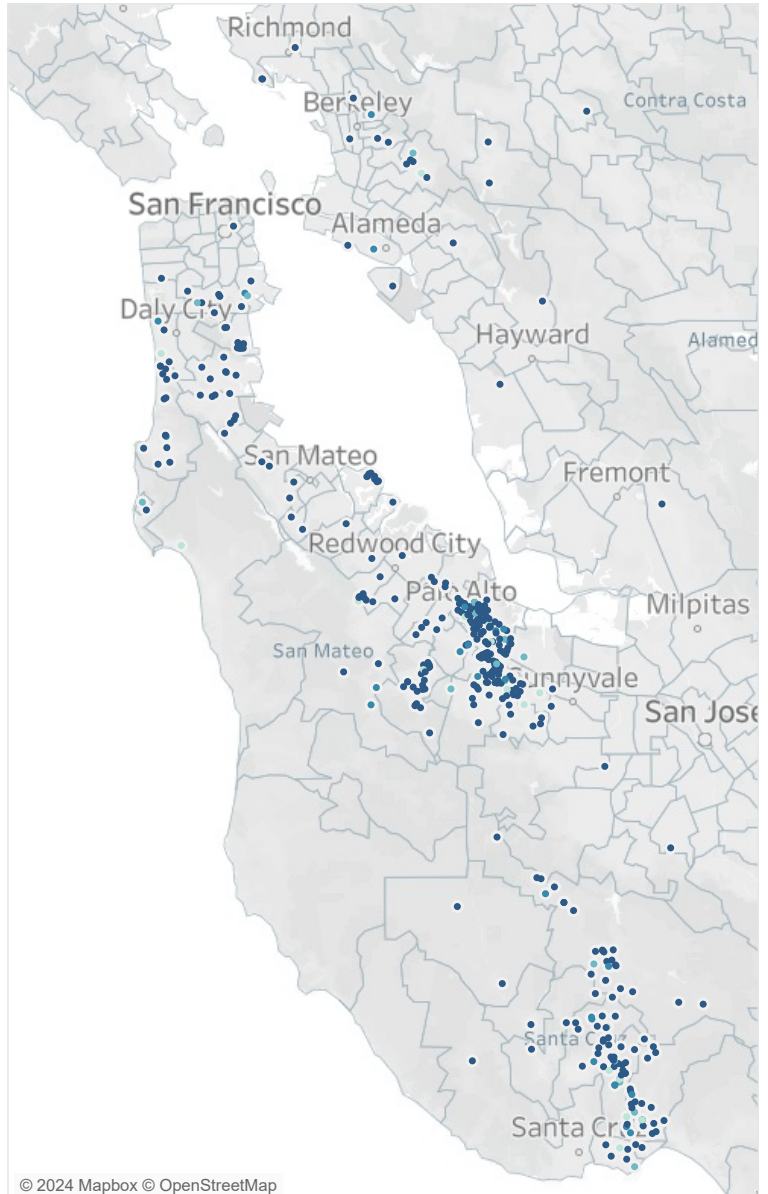
Noise Reporters Location Map

October 2024

Noise Reporters / Noise Reports

	Noise Reporters	Noise Reports
Atherton	2	70
Belmont	1	3
Brisbane	11	112
Burlingame	1	1
Daly City	6	1,304
East Palo Alto	1	4
El Granada	1	1,222
Emerald Hills	5	333
Foster City	9	170
Hillsborough	3	14
Menlo Park	11	190
Millbrae	1	5
Montara	2	618
Pacifica	14	723
Portola Valley	24	13,329
Redwood City	6	337
San Bruno	4	6
San Carlos	1	4
San Francisco	12	2,132
San Mateo	2	111
South San Francisco	9	262
Woodside	5	1,807
Alameda	3	447
Ben Lomond	1	5
Berkeley	5	337
Boulder Creek	2	6
Capitola	1	19
Castro Valley	1	15
Cupertino	1	5
Felton	3	105
Fremont	1	6
Hayward	1	2
Lafayette	1	17
Los Altos	41	4,221
Los Altos Hills	10	1,054
Los Gatos	27	3,065
Moraga	2	77
Mountain View	7	2,753
Oakland	7	2,940
Palo Alto	94	14,255
Penngrove	1	1
Richmond	3	227
Santa Cruz	30	9,260
Scotts Valley	23	3,823
Soquel	20	3,472
Stanford	1	289
Sunnyvale	1	42
Watsonville	1	63
Grand Total	419	69,263

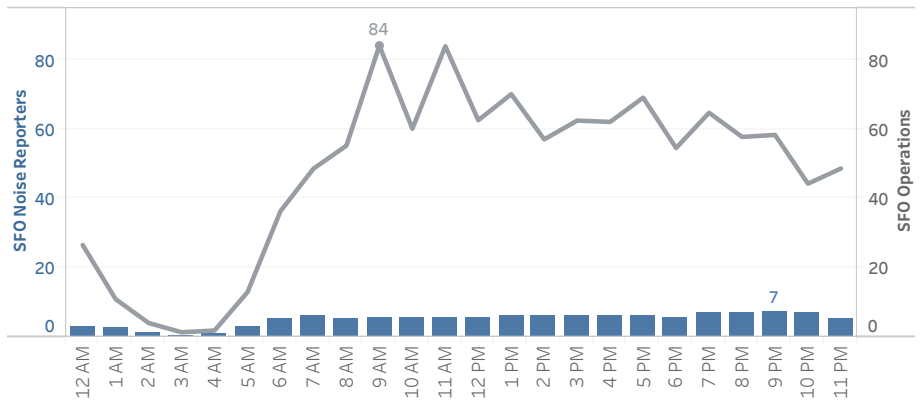
470
Reports Annual AVG
69,926
New Reporters
9
New Reporters Top City
Foster City South San Francisco
Furthest Report
64 miles
Reports per SFO Operation
2
Top Aircraft Types
A320 B737 E75L
Top Flight Numbers
UAL505 UAL1272 KAL214 AAR284



Other

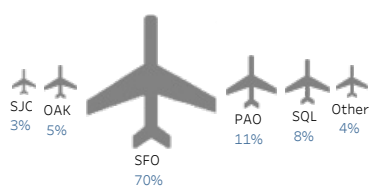
Hourly Noise Reporters (Average Day in a Month)

Noise Reports
Operations



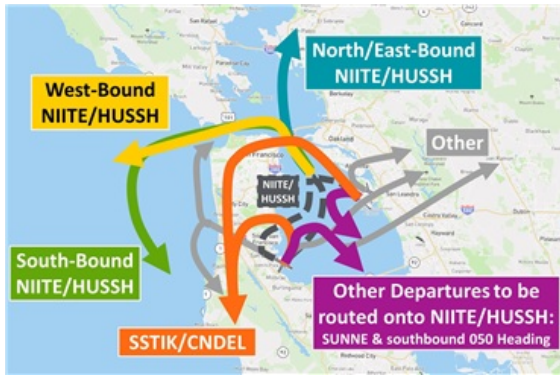
Notes:
Address validation Relies on USPS-provided ZIP Code look up table and USPS-specified default city values.

Noise Reports by Airport

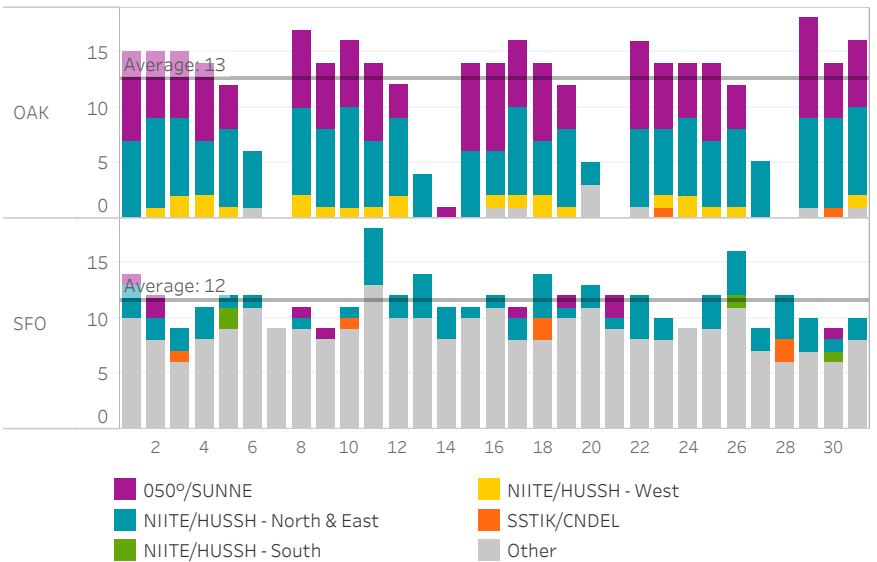


99% of noise reports correlate to a flight origin/destination airport.

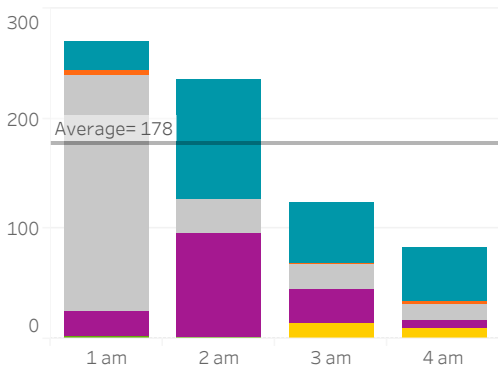
NIITE to GOBBS 1 am to 5 am (October 2024)



Count of Departures per Night



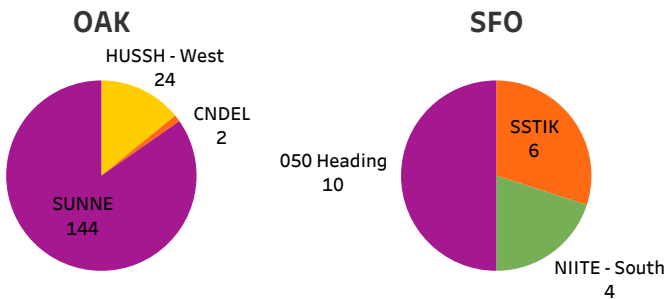
Average Total Departures per Hour



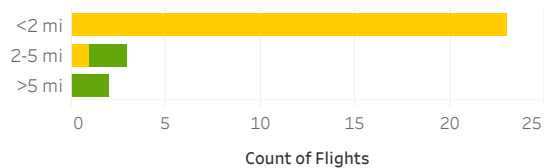
Departure Runway Usage

OAK			SFO				
12	28L	30	01L	01R	10L	28L	28R
1%	0%	99%	4%	18%	0%	31%	46%

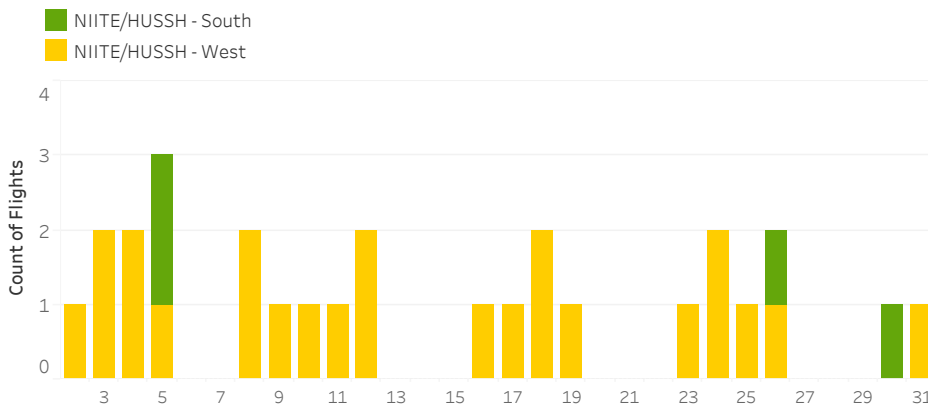
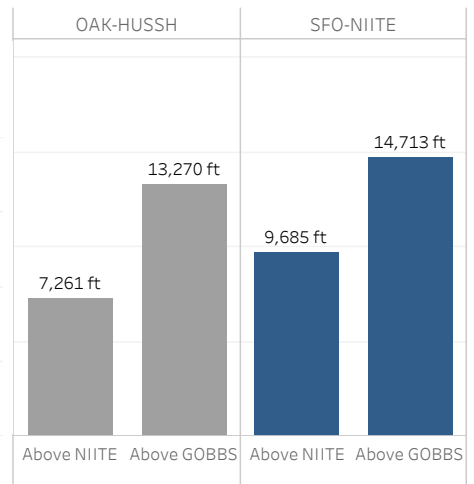
CNDEL and SSTIK Departures vs HUSSH and NIITE



How Close are Aircraft Flying to GOBBS?



Average Altitude at NIITE and GOBBS



SFO Airport/Community Roundtable
 July 1, 2024- October 31, 2024 Actual Revenue/ Expenses

December 4, 2024

SOURCES	2024-2025	2024-2025 Actual Revenue/ Expenses
Revenue		
San Francisco Airport Commission	\$220,000.00	-
Roundtable Membership	\$43,500.00	\$13,500.00
<i>In Kind Contributions*</i>		
Fund Balance Contribution	\$33,490.00	\$33,490.00
REVENUE TOTAL	\$296,990.00	\$46,990.00
EXPENSES		
Staffing & Coordination		
County of San Mateo Coordination Services	\$175,000.00	\$50,697.46
Roundtable Aviation Technical Consultant	\$90,000.00	\$16,365.48
	\$265,000.00	\$67,062.94
Administration/Operations		
Meeting Rooms * In-Kind	\$0.00	\$0.00
Postage / Printing	\$1,800.00	\$0.00
Website	\$1,800.00	\$0.00
Data Storage & Conference Services	\$990.00	\$0.00
Miscellaneous Office Expenses/Equipment	\$3,000.00	\$0.00
Video Services	\$8,000.00	\$918.00
	\$15,590.00	\$918.00
Projects, Programs, & Other		
Noise Conferences Attendance, Coordinator	\$1,500.00	\$0.00
Noise Conferences Attendance, Members	\$3,000.00	\$215.00
TRACON Field Trip(s)	\$1,500.00	\$0.00
Airport Noise Report subscription	\$2,500.00	\$0.00
N.O.I.S.E. Membership	\$4,300.00	\$0.00
Fly Quiet Awards	\$600.00	\$0.00
Special Study	\$0.00	-
Staff Professional Development	\$3,000.00	\$330.00
	\$16,400.00	\$545.00
EXPENSES TOTAL	\$296,990.00	<u>\$68,525.94</u>
UNCOMMITTED FUNDS / YEAR END BALANCE		
Fund Balance	\$444,766.00	\$499,375.06
Contingency Reserve	\$40,000.00	\$40,000.00
END OF YEAR UNCOMMITTED FUNDS TOTAL	\$484,766.00	<u>\$539,375.06</u>



December 4, 2024

Jennifer Coady
Regional Administrator (A)
FAA Western-Pacific Region

Francine Malabo
Air Traffic Manager
FAA Northern California TRACON

Via: Email

Re: Two SFO Flight Operations- Nighttime SSTIK Departure Vectors and Nighttime 28R Offset Arrivals

Dear Acting Regional Administrator Coady and Air Traffic Manager Malabo:

We are writing, first of all, to convey our appreciation for the engagement efforts of the FAA Western Region Administrator's office and the staff of Mission Support Services at the Western Service Center.

Established in 1981, the San Francisco Airport/Community Roundtable, (Roundtable) represents more than 1.5 million residents in the City and County of San Francisco and San Mateo County with its 20 Roundtable represented cities. The Roundtable seeks to reduce aircraft noise to the community through collaboration among the stakeholders – the Roundtable, the Federal Aviation Administration (FAA), SFO management, the airline industry, elected officials and the public.

A critical focus for the Roundtable is the noise on the community from nighttime aircraft operations since noise during these hours affects sleeping with studies showing serious health effects resulting from sleep disruption. As noted in the 2023 FAA-funded scientific paper *Effects of Aircraft Noise on Sleep: Federal Aviation Administration National Sleep Study Protocol*: "Undisturbed sleep of sufficient length is of paramount importance for the maintenance of health and well-being...Noise can be a potent disruptor of sleep and is considered one of the most detrimental environmental effects of air traffic."

At the November 2024 meeting of the Roundtable's Technical Work Group Subcommittee, we engaged in a dialog with Mission Support and SFO staff to discuss two specific flight operations during the nighttime hours: arrivals to Runways 28L/R (improved use of the offset approaches to 28R) and SSTIK departures (elimination of vectoring to provide "shortcuts" to operators).



Background

The SFO Airport/Community Roundtable Technical Working Group Subcommittee (TWG) has defined two problems to address related to nighttime operations at SFO; particularly arrivals to Runways 28L/R and SSTIK departures from Runways 01L/R. Nighttime is defined as 10 pm to 7 am, which is the same definition as used for the Community Noise Equivalent Level (CNEL) noise metric used to assess land use compatibility with noise from aircraft operations.

Runway 28 Arrivals:

It has been estimated that aircraft arriving 28R using the offset approach are approximately 20 dB quieter than the straight in arrivals to 28L at the shoreline communities including Foster City, the eastern portion of the City of San Mateo, and the Redwood Shores area of Redwood City. This noise reduction is quite significant and may result in the elimination of awakenings from aircraft arrivals in these communities if all nighttime arrivals used the offset approach to 28R during normal “West Plan” operations.

Runway 01 Departures on SSTIK Procedure:

The Roundtable-preferred nighttime departures are those using the NIITE/HUSSH Procedures that take aircraft out over the Bay with those heading west or south then proceeding over the Golden Gate Bridge before turning south to avoid flying over the San Francisco Peninsula. The NIITE/HUSSH is only available between 1am – 5am.

For those aircraft not assigned to the NIITE/HUSSH, but rather assigned to the SSTIK Procedure, it is preferred those aircraft remain on the published procedure until reaching the PORTE Waypoint, which is on the western shore of the Peninsula. It is understood that aircraft are vectored off the SSTIK procedure when other aircraft traffic requires such deviation for safety – these operations, while not ideal for noise, are accepted.

However, there are instances when aircraft are vectored off the SSTIK Procedure at night as a “shortcut” either requested by the airlines or directed by FAA Air Traffic Control – these operations are not accepted as the “shortcut” results in those aircraft flying south down the “spine” of the Peninsula where the majority of the population reside. The SSTIK Procedure avoids high population areas whereas as the shortcut results in flying directly over the population areas avoided by the SSTIK.

Roundtable Request

Roundtable requests the FAA assist the Roundtable in determining next steps to obtain the following objectives to address avoidable nighttime noise from SFO aircraft operations:

- 1) Most (all preferred) aircraft arriving SFO on West Plan during the nighttime hours use the offset approaches to Runway 28R
- 2) Aircraft not vectored off the SSTIK for shortcuts during the nighttime hours

We value the cooperation from the FAA in assisting TWG with attempting to solve our nighttime noise problems, two of which are defined above, and request a response that provides a pathway to achieving these two clearly identified objectives.



We have yet to determine the date of the next TWG meeting but expect it to occur shortly after the February 5, 2025 Regular Roundtable meeting. We would appreciate receiving a response to this letter by February 5, 2025, if possible.

Please convey our continued appreciation and thanks to the FAA employees who work every day to keep our skies safe.

Very respectfully,



Al Royse, Chairman
SFO Airport/Community Roundtable
Member, Hillsborough Town Council



Terry O'Connell, Vice Chair
SFO Airport/Community Roundtable
Mayor, City of Brisbane



Sam Hindi, Chair,
Roundtable Technical Working Group
Member, Foster City Council

Attachment via Link: [November 19, 2024 SFO Roundtable Technical Working Group Meeting Page with Agenda and Video](#)

cc: Carlette Young, FAA Supervisory Senior Advisor, Western Pacific Region
Moifair Chin, FAA Community Engagement Officer, Western Pacific Region
Joe Bert, FAA, Team Manager, Environmental/Community Involvement, Western Service Center
Eric Tandberg, FAA Air Traffic Control Specialist, Western Service Center
Kyla S. Howell, Acting Support Manager for NCT Airspace & Procedures/Planning & Requirements
Bert Ganoung, SFO Airport Noise Office Manager
Members of the SFO Airport/Community Roundtable



FAA Reauthorization, Noise Provisions of Roundtable Interest Progress Update

Presentation to the San Francisco Airport (SFO) Community Roundtable
Timothy Middleton, C.M., Principal Consultant - HMMH
December 2024

FAA Reauthorization Act of 2024

- Summary of noise provisions in act
- Update on progress of select provisions in act:
 - Monitoring for expected FAA reports to Congress or other recipients.
 - Monitoring for action items – (for example, establish advisory committee, etc.)
 - Items on which the Roundtable may want to prepare to take action
 - (write a letter, contact local Member of Congress (MOC), etc.)



FAA Reauthorization Act of 2024 - Summary

Final text:

<https://www.congress.gov/bill/118th-congress/house-bill/3935/text>

- The term “Noise” occurs 77 times in the Act and is featured in the titles of 8 sections:
 - *Sections 101, 364, 786, 787, 790, 792, 795, and 908*
- 13 total provisions of interest related to Noise

FAA Reauthorization Act of 2024 – Key Noise and Environmental Provisions to Monitor

Sec.	Title	Description	Implementation Timeline	Categorization
775	ADDITIONAL PERMITTED USES OF PASSENGER FACILITY CHARGES	Allows small hub airports to construct noise barriers on specific basis	No timeline	No action
786	PART 150 NOISE STANDARDS UPDATE	Review and revise Part 150 to reflect all relevant laws and regulations, including Part 161	Not later than 1 year after the date of the act; administrator shall review and revise Part 150. Briefing required 90 days from passage of the act, and every 6 months thereafter.	Monitor for reports & action items
792	AIRCRAFT NOISE ADVISORY COMMITTEE	FAA must establish the “Aircraft Noise Advisory Committee” (ANAC)	FAA must establish the committee by November 12, 2024.	Monitor for action items; potential Roundtable action



FAA Reauthorization Act of 2024 – Key Noise and Environmental Provisions to Monitor

Sec.	Title	Description	Implementation Timeline	Categorization
787	REDUCING COMMUNITY AIRCRAFT NOISE EXPOSURE	FAA shall take additional action to reduce aircraft noise when implementing or revising a new flight procedure	No timeline	Monitor for reports
792 (d)	AIRCRAFT NOISE ADVISORY COMMITTEE	The ANAC must develop recommended changes to current aviation noise policies, and FAA must implement such changes, as appropriate.	The ANAC must submit its report to FAA within 1 year of being established , and FAA must submit the report to Congress within 180 days of receipt .	Monitor for action items; potential Roundtable action
793 (a)	COMMUNITY COLLABORATION PROGRAM	FAA shall establish a new “Community Collaboration Program” (CCP)	No timeline	Monitor for action items
793 (b)	COMMUNITY COLLABORATION PROGRAM	FAA must carry out engagement efforts related to air traffic procedure changes, coordinate with Regional Ombudsmen, increase the responsiveness of the FAA’s noise complaint process, and implement GAO recommendations related to improving outreach on noise.	FAA must brief Congress on the CCP within 2 years of implementing the GAO recommendations related to improving outreach on noise.	Monitor for action items



FAA Reauthorization Act of 2024 – Key Noise and Environmental Provisions to Monitor

Sec.	Title	Description	Implementation Timeline	Categorization
785	PILOT PROGRAM EXTENSION	Allows FAA to fund up to 6 projects <u>per year</u> that reduce/mitigate aviation impacts on noise, air quality, or water quality	FAA may fund no more than 6 projects each fiscal year through September 30, 2028 (end of FY28).	Monitor for action items; potential Roundtable action
786	PART 150 NOISE STANDARDS UPDATE	Review and revise Part 150 to reflect all relevant laws and regulations, including Part 161	Not later than 1 year after the date of the act; administrator shall review and revise Part 150. Briefing required 90 days from passage of the act, and every 6 months thereafter.	Monitor for reports & action items
793 (b)	COMMUNITY COLLABORATION PROGRAM	FAA must carry out engagement efforts related to air traffic procedure changes, coordinate with Regional Ombudsmen, increase the responsiveness of the FAA’s noise complaint process, and implement GAO recommendations related to improving outreach on noise.	FAA must brief Congress on the CCP within 2 years of implementing the GAO recommendations related to improving outreach on noise.	Monitor for reports & action items



FAA Reauthorization Act of 2024 – Key Noise and Environmental Provisions to Monitor

Sec.	Title	Description	Implementation Timeline	Categorization
795	MECHANISMS TO REDUCE HELICOPTER NOISE	Requirement to conduct a GAO study on ways state and local governments can mitigate commercial helicopter noise	GAO must submit a report to Congress by May 16, 2026.	Monitor for reports
909	ENVIRONMENTAL REVIEW AND NOISE CERTIFICATION	FAA must publish NEPA guidance relating to unmanned aircraft system-specific environmental reviews. Require appropriate noise measurement procedures to certify unmanned aircraft. FAA shall establish substantive criteria and standard metrics related to the noise impacts of an unmanned aircraft	Not later than 180 days after the act, FAA shall issue environmental review guidance for unmanned systems. Nonapplication of noise certification shall continue until administrator finalized the noise certification requirements for unmanned aircraft in part 36.	Monitor for reports & action items



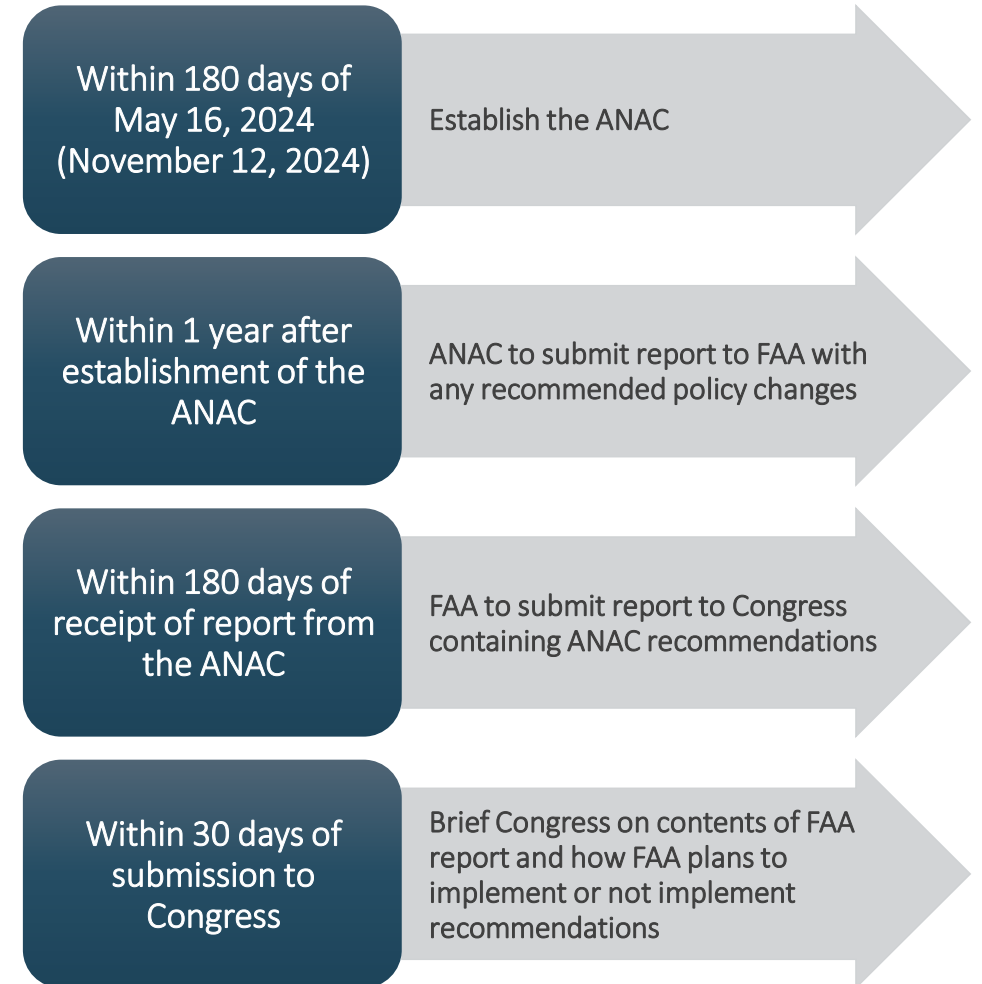
FAA Reauthorization Act of 2024 – Key Noise and Environmental Provisions to Monitor

Sec.	Title	Description	Implementation Timeline	Categorization
1017	CENTER OF EXCELLENCE FOR ALTERNATIVE JET FUELS AND ENVIRONMENT	(b)(1)(C), (b)(1)(E), (b)(2), (d)(1)(D) FAA shall continue efforts to reduce community noise exposure to civilian aircraft noise and pollutant emissions, improve and expand the scientific understanding of civil aviation noise; support improved modeling; examine the use of novel technologies and other forms of innovation to reduce noise, etc.	Duration of authorization	Monitor for reports
1044	FEDERAL AVIATION ADMINISTRATION UNMANNED AIRCRAFT SYSTEM AND ADVANCED AIR MOBILITY RESEARCH AND DEVELOPMENT	FAA shall support research, development, testing, and demonstration activities to facilitate the transition of new technologies to enable the safe integration into the national airspace system, including addressing noise and other societal and environmental impacts.	Duration of authorization	Monitor for reports




Section 792: AIRCRAFT Noise advisory committee (ANAC) membership and timeline(s)

- Requires FAA to establish an Aircraft Noise Advisory Committee (ANAC) to advise the FAA on issues facing the aviation community that are related to aircraft noise exposure and existing FAA noise policies and regulations
- Duties will include: (1) evaluation of research on aircraft noise, (2) assessment of alternative noise metrics, (3) evaluation of 65 dB noise threshold (4) evaluation of noise mitigation strategies and community engagement
- Must be formed pursuant to the Federal Advisory Committee Act (FACA) of 1972
- At least one representative each of:
 - Engine manufacturers
 - Air Carriers
 - Airport owners or operators
 - Aircraft manufacturers
 - AAM manufacturers or operators
 - Institutions of higher education
- Representatives of airport-adjacent communities from geographically diverse regions



WHAT IS A FACA GROUP?

- Federal Advisory Committee Act of 1972:
 - Legal foundation defining how federal advisory committees operate
 - The law has special emphasis on open meetings, chartering, public involvement, and reporting
- FAA compliance with FACA requirements are outlined in [The Federal Aviation Administration Rulemaking and Federal Advisory Committees Manual](#)
- Outlines various requirements for creating a Federal Advisory Committee including:
 - Required documents (Charter, Membership Balance Plan, Public Notification)
 - Membership selection and solicitation
 - Member roles and responsibilities
 - Advance notice and openness of meetings
 - Public availability of meeting materials

	Office of Rulemaking (ARM)	Revision 41
Title: The Federal Aviation Administration Rulemaking and Federal Advisory Committees Manual		Effective: Upon Signature
		Page 1 of 55

The Federal Aviation Administration Rulemaking and Federal Advisory Committees Manual

Approval:  Digitally signed by BRANDON LEE ROBERTS
Date: 2024.06.06 11:19:35 -04'00'
Executive Director, Office of Rulemaking

Thank you!

Questions, thoughts, further discussion?

Contact: Timothy Middleton, C.M.

Principal Consultant, HMMH

tmiddleton@hmmh.com



Overview of New FAA Regulation for eVTOL Operations

Presentation to the San Francisco Airport (SFO) Community Roundtable
Timothy Middleton, C.M., Principal Consultant - HMMH
December 2024

Powered-Lift Part
194 SFAR

Archer / Kilroy
Oyster-Point



Powered Lift Part 194 SFAR

- Makes changes to numerous existing regulations and establishes a Special Federal Aviation Regulation (SFAR) with new requirements to facilitate instructor and pilot certification and training
- Applies helicopter operating requirements to some phases of flight and adopts a performance-based approach to certain operating rules
- Allows pilots to train in powered-lift with a single set of flight controls; legacy rules require two flight controls – one for the student and one for the instructor



Powered Lift Part 194 SFAR

- **What is an aircraft in the powered-lift category?**
 - It is an aircraft capable of vertical takeoff, vertical landing, and low speed flight. After vertical takeoff, aircraft in the powered-lift category can then fly like an airplane during cruise flight. Powered lift operations include air taxis, cargo delivery and a variety of operations within urban and rural areas.
- **Why do we need this rule?**
 - This is a brand-new kind of aircraft not covered by previous regulations. This rule addresses the unique challenges of introducing a new hybrid category of aircraft, such as training pilots to fly aircraft that have both helicopter and airplane characteristics and operational characteristics unique to aircraft in the powered-lift category. This rule facilitates the certification of powered-lift pilots and instructors and clarifies operating rules for aircraft in the powered-lift category, which are the final steps necessary to integrate them into the National Airspace System (NAS).
- **Has the FAA adopted new noise certification requirements for aircraft in the powered-lift category?**
 - No. Existing noise regulations will apply to aircraft in the powered-lift category.

Archer & Kilroy MOU for Oyster Point



<https://www.kilroyoysterpoint.com/>

<https://kilroyrealty.com/properties/kilroy-oyster-point/>



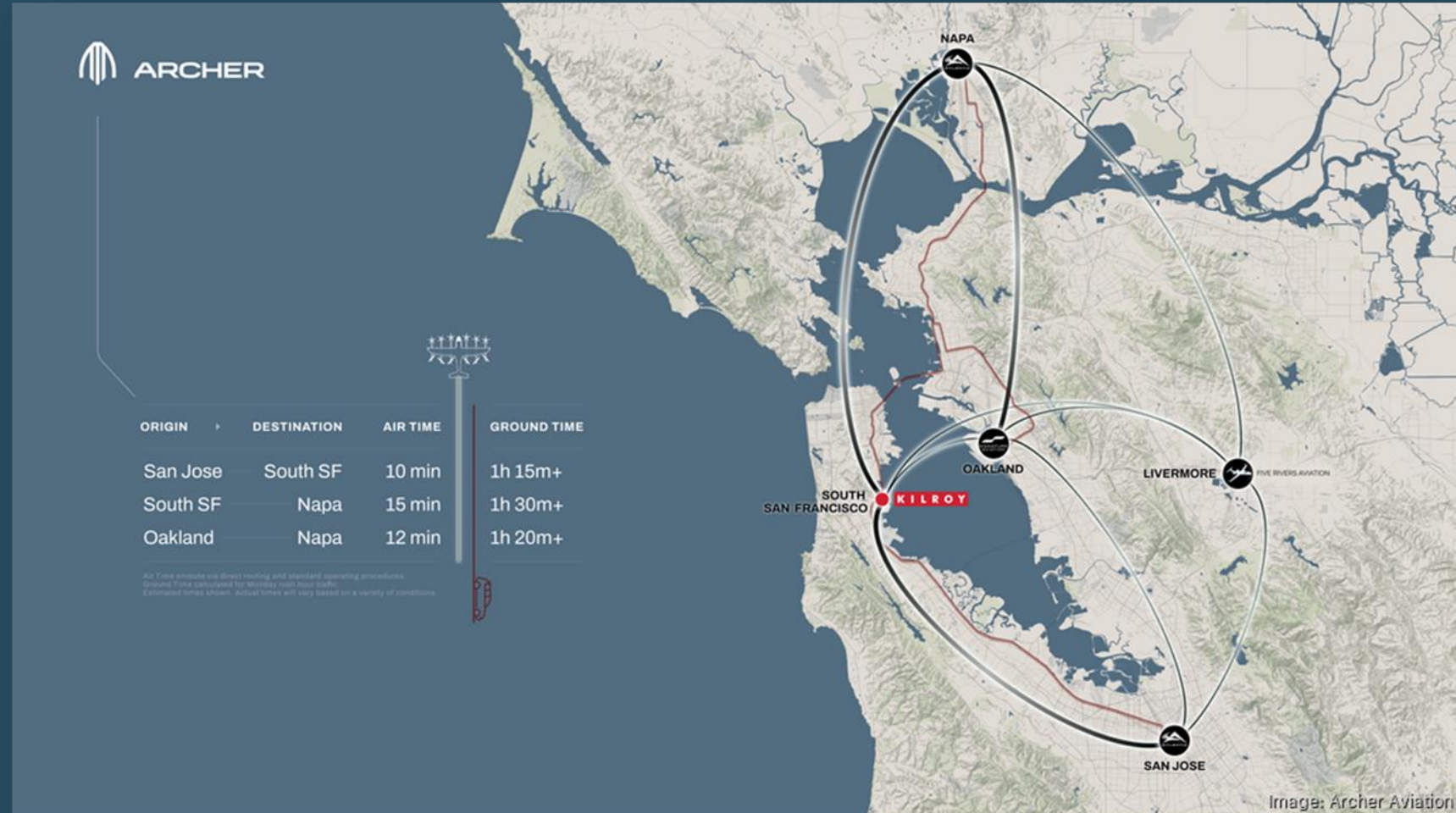
Thank you!

Questions, thoughts, further discussion?

Contact: Timothy Middleton, C.M.

Principal Consultant, HMMH

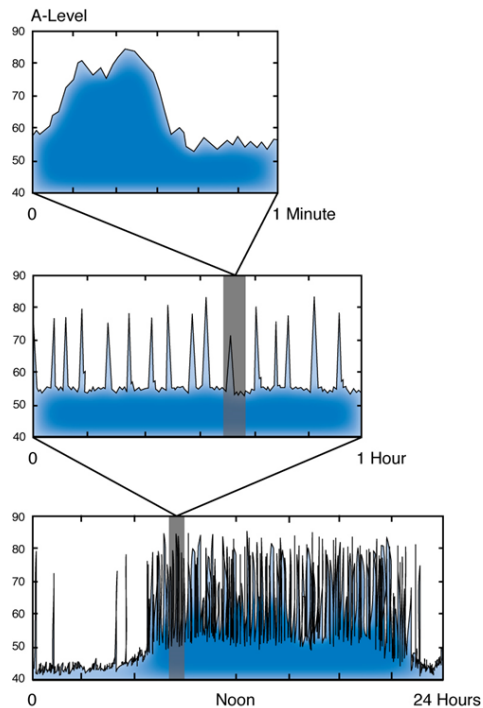
tmiddleton@hmmh.com



CNEL* vs What We Hear (or Experience)

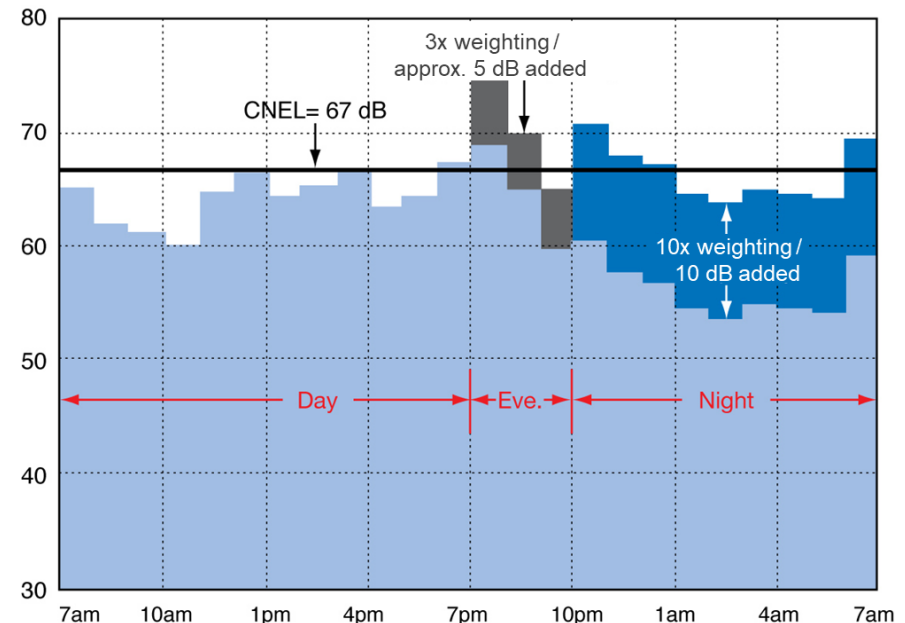
I am outside the CNEL 65 dB contour, yet I experience aircraft between 80 and 90 dB.

- The CNEL is a 24-hour **average of aircraft noise events**, with a 4.7-dB weighting for events occurring in the evening and a 10-dB weighting during the night.
- The noise often reported (experienced) is the **maximum noise level (Lmax) from a single event**.



- A resident outside the 65 CNEL contour will likely experience several noise events higher than 65 dB (Lmax).
- Example: More than 100 events at 94 dB (SENEL) is needed to reach CNEL 65.
- SENEL is typically 10 dB higher than Lmax for jet aircraft noise events.

Calculation of CNEL



*CNEL (used in California) is DNL modified to include additional noise penalty for flights between 7pm and 10pm.



MEMORANDUM

To: SFO Community Roundtable Members and Interested Parties

From: Jason R. Stoddard, Senior Airspace Analyst
Eugene M. Reindel, Vice President

Date: October 9, 2024

Subject: Federal Aviation Administration (FAA) Instrument Flight Procedures (IFP)
Information Gateway Review

Reference: HMMH Project Number 312310

At the request of the Roundtable, Harris Miller Miller & Hanson Inc. (HMMH) is monitoring and reviewing updates to procedures published onto the FAA's IFP Information Gateway in the regions of San Francisco International Airport (SFO), Metropolitan Oakland International Airport (OAK), and Norman Y. Mineta San Jose International Airport (SJC).

After analyzing the documents posted, HMMH determines proposed changes and the reason for the changes. The FAA IFP Information Gateway did not publish any updates this cycle. There are currently no open comment periods. The next publication is expected on October 31, 2024.

Important Terms and Items:

- FAA Stage Definitions
 1. FPT: Procedures are coordinated with Air Traffic, Tech Ops and Airports for feasibility, preparation, and priority (FPO)
 2. DEV: Development of the procedures
 3. FC: FAA Flight Inspection of the developed procedures
 4. PIT: Production Integration Team (TS)
 5. CHARTING: Procedures at Arnav Products Charting for publication (NACO)
- FAA Status Definitions
 1. At Flight Check: At Flight Inspection for procedure validation
 2. Awaiting Publication: At Arnav Products Charting for publication
 3. Complete: Procedure development action finished
 4. On Hold: Procedure waiting data/information to allow it to proceed/continue to next stage
 5. Pending: Procedure development work on-going
 6. Published: Procedure charted and published
 7. Under Development: Procedure is being worked on by the FAA
 8. Terminated: Procedure/project terminated
- Glossary
 - RNAV: Area Navigation
 - ATC: Air Traffic Control
 - IAP: Instrument Approach procedure
 - STAR: Standard Terminal Arrival Route
 - SID: Standard Instrument Departure
 - GPS: Global Positioning System
 - ILS: Instrument Landing System
 - LOC: Localizer

Updates:

- None
- **Next Publication:** We are not anticipating any updates in the October 31, publication.

Open Comment Periods:

- None



MEMORANDUM

To: SFO Community Roundtable Members and Interested Parties

From: Jason R. Stoddard, Senior Airspace Analyst
Eugene M. Reindel, Vice President

Date: November 19, 2024

Subject: Federal Aviation Administration (FAA) Instrument Flight Procedures (IFP)
Information Gateway Review

Reference: HMMH Project Number 312310

At the request of the Roundtable, Harris Miller Miller & Hanson Inc. (HMMH) is monitoring and reviewing updates to procedures published onto the FAA's IFP Information Gateway in the regions of San Francisco International Airport (SFO), Metropolitan Oakland International Airport (OAK), and Norman Y. Mineta San Jose International Airport (SJC).

After analyzing the documents posted, HMMH determines proposed changes and the reason for the changes. The FAA IFP Information Gateway published two updates for SFO, and seven updates for OAK. There are currently no open comment periods. The next publication is expected on November 28, 2024.

Important Terms and Items:

- FAA Stage Definitions
 1. FPT: Procedures are coordinated with Air Traffic, Tech Ops and Airports for feasibility, preparation, and priority (FPO)
 2. DEV: Development of the procedures
 3. FC: FAA Flight Inspection of the developed procedures
 4. PIT: Production Integration Team (TS)
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 - ILS: Instrument Landing System
 - LOC: Localizer

Updates:

- SFO RNAV (GPS) Z RWY 28R, AMDT 8
 - Status changed to Published
 - Publication date of October 31, 2024
- OAK ILS OR LOC RWY 28R, AMDT 38
 - Under Development
 - Publication date of April 17, 2025
- OAK RNAV (GPS) Y RWY 28L, AMDT 5
 - Under Development
 - Publication date of April 17, 2025
- OAK RNAV (GPS) Y RWY 30, AMDT 6
 - Under Development
 - Publication date of April 17, 2025
- OAK RNAV (RNP) Z RWY 30, AMDT 4
 - Under Development
 - Publication date of April 17, 2025
- SFO RNAV (GPS) Z RWY 19R, AMDT 0A
 - Under Development
 - Publication date of April 17, 2025
- OAK ILS OR LOC RWY 30, AMDT 32
 - Under Development
 - Publication date of April 17, 2025
- OAK RNAV (GPS) Y RWY 28R, AMDT 4
 - Under Development
 - Publication date of April 17, 2025
- OAK RNAV (RNP) Z RWY 28L, AMDT 3
 - Under Development
 - Publication date of April 17, 2025
- **Next Publication:** We are not anticipating any updates in the November 28, publication.

Open Comment Periods:

- None