



Meeting Announcement

Regular Meeting

Meeting No. 326
Wednesday, August 5, 2020 - 7:00 p.m.

BY VIDEO CONFERENCE ONLY

Please click the link below to join the webinar:

<https://smcgov.zoom.us/j/99653398354>

Or Dial in:

US: +1(669)900-6833 Webinar ID: 996 5339 8354

Note: To arrange an accommodation under the Americans with Disabilities Act to participate in this public meeting, please call (650) 363-4220 at least 2 days before the meeting date.

PUBLIC PARTICIPATION:

Written public comments can be emailed to info@sforoundtable.org, and should include specific agenda item to which you are commenting. Spoken public comments will also be accepted during the meeting through Zoom.

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

AGENDA

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

Ricardo Ortiz, Roundtable Chairperson

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

Ricardo Ortiz, Roundtable Chairperson

CONSENT AGENDA

All items on the Consent Agenda are approved/accepted in one motion. A Roundtable Representative can make a request, prior to action on the Consent Agenda, to transfer a Consent Agenda item to the Regular Agenda. Any items on the Regular Agenda may be transferred on the Consent Agenda in a similar manner.

1. Airport Director's Reports

a. November 2019

pg. 9

b. December 2019

pg. 14

- c. January 2020 pg. 19
- d. February 2020 pg. 24
- e. March 2020 pg. 29
- f. April 2020 pg. 34

2. Minutes from the June 3, 2020, Regular Meeting pg. 39

PRESENTATIONS

3. Chairman's Update

Ricardo Ortiz, Roundtable Chairperson

- a. HMMH Contract FY2020-2021 pg. 45

4. Presentation on Process for Amending Roundtable Membership

Linda Wolin, Acting Roundtable Coordinator

- a. Cover Memo pg. 57
- b. MOU pg. 59
- c. Bylaws pg. 68

5. Report from San Francisco Airport Commission

Ivar Satero, Airport Director – San Francisco International Airport

REGULAR AGENDA

6. Update from Technical Working Group Meeting (July 29, 2020)

Ricardo Ortiz, Roundtable Chairperson

- a. Cover Memo pg. 79
- b. Letter from Chair Ortiz to FAA on June 15, 2020 pg. 80
- c. FAA Presentation to TWG on NIITE/HUSSH pg. 84

7. Update from Portable Noise Monitor Placement Subcommittee

Terry O'Connell, Subcommittee Chair

8. Update from Ground Based Noise Subcommittee Meeting (July 30, 2020)

Ann Schneider, Subcommittee Chair

REPORTS

9. Legislative Subcommittee

Janet Borgens, Subcommittee Chair

- a. Chair Update
 - i.- Final Roundtable Comment on Proposed Rulemaking, Noise Certification of Supersonic Aircraft (June 8, 2020) pg. 97
- b. Federal Legislative Update
Emily Tranter, Executive Director - National Organization to Insure a Sound Controlled Environment

Regular Meeting Agenda

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10. Update on General Aviation Noise Issues

Justin Cook, Roundtable Technical Consultant, HMMH

- a. IFP Gateway Report – July 2020
- b. HMMH Noise News August 2020

pg. 99
pg. 101

11. Member Communications / Announcements

Roundtable Members and Staff

12. Adjourn

Ricardo Ortiz, Roundtable Chairperson

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

During videoconference meetings of the SFO Airport/Community Roundtable, members of the public may address the Roundtable 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 info@sforoundtable.org.
2. Your email should include the specific agenda item on which you are commenting.
3. 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 7:00 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 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, although such emails will still be included in the administrative record.

Spoken Comments:

Spoken public comments will be accepted during the meeting through Zoom. Please read the following instructions carefully:

1. The August 5, 2020 SFO Roundtable regular meeting may be accessed through Zoom online at <https://smcgov.zoom.us/j/99653398354>. The meeting ID: 996 5339 8354. The meeting may also be accessed via telephone by dialing in +1-669-900-6833, entering meeting ID: 996 5339 8354, then press #.
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 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.

Regular Meeting Agenda

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4. When the Roundtable Chairperson calls for the item on which you wish you speak click on “raise-hand” icon. You will then be called on and unmuted to speak.
5. When called, please limit your remarks to the time limit allotted.

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.



Member Roster

February 2020

**CITY AND COUNTY OF SAN FRANCISCO
BOARD OF SUPERVISORS**
Ahsha Safai, Supervisor

**CITY AND COUNTY OF SAN FRANCISCO MAYOR'S
OFFICE**
Edward McCaffrey, (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
Alternate: Don Horsley

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

TOWN OF ATHERTON
Elizabeth Lewis
Alternate: Rick DeGolia

CITY OF BELMONT
Davina Hurt
Alternate: Tom McCune

CITY OF BRISBANE
Terry O'Connell
Alternate: Madison Davis

CITY OF BURLINGAME
Ricardo Ortiz

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

CITY OF FOSTER CITY
Sam Hindi
Alternate: Sanjay Gehani

CITY OF HALF MOON BAY
Harvey Rarback
Alternate: Adam Eisen

TOWN OF HILLSBOROUGH
Alvin Royse
Alternate: Shawn Christianson

CITY OF MENLO PARK
Cecilia Taylor
Alternate: Cathy Carlton

CITY OF MILLBRAE
Ann Schneider
Alternate: Anne Oliva

CITY OF PACIFICA
Mike O'Neill
Alternate: Deirdre Martin

TOWN OF PORTOLA VALLEY
Ann Wengert
Alternate: Craig Hughes

CITY OF REDWOOD CITY
Janet Borgens
Alternate: Giselle Hale

CITY OF SAN BRUNO
Marty Medina
Alternate: Rico Medina

CITY OF SAN CARLOS
Adam Rak
Alternate: Mark Olbert

CITY OF SAN MATEO
Eric Rodriguez
Alternate: Diane Papan

CITY OF SOUTH SAN FRANCISCO
Mark Addiego
Alternate: Mark Nagales

TOWN OF WOODSIDE
Thomas Livermore
Alternate: Richard Brown

ROUNDTABLE ADVISORY MEMBERS

AIRLINES/FLIGHT OPERATIONS
Captain James Abell, United Airlines
Glenn Morse, United Airlines

FEDERAL AVIATION ADMINISTRATION
Thann McLeod, NORCAL TRACON
Tony DiBernardo, FAA Sierra-Pacific District

ROUNDTABLE STAFF
Linda Wolin, Acting Roundtable Coordinator
Angela Montes, Roundtable Administrative Assistant
Gene Reindel, Technical Consultant (HMMH)
Justin Cook, Technical Consultant (HMMH)
Adam Scholten, Technical Consultant (HMMH)

SFO AIRPORT NOISE ABATEMENT STAFF
Bert Ganoung, Noise Abatement Manager
David Ong, Noise Systems Manager
Nastasja von Conta, Senior Noise Abatement Specialist
Anthony Carpeneti, Noise Abatement Specialist

Anneliese Taing, Noise Abatement Specialist



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.

- You must fill out a Speaker Slip and give it to the Roundtable Coordinator at the front of the room, as soon as possible, if you wish to speak on any Roundtable Agenda item at this meeting.
- To speak on more than one Agenda item, you must fill out a Speaker Slip for each item.
- The Roundtable Chairperson will call your name; please come forward to present your comments.

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. Copies of the audio file can be made available to the public upon request. 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 Notice, 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 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 22 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 2020, 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 Millbrae City Hall, 450 Poplar Avenue, Millbrae, California** unless noted. 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. For more information about the Roundtable, please contact Roundtable staff at (650) 363-4220.

POLICY STATEMENT

The Airport/Community Roundtable reaffirms and memorializes its longstanding policy regarding the “shifting” of aircraft-generated noise, related to aircraft operations at San Francisco International Airport, as follows:

“The Airport/Community Roundtable members, as a group, when considering and taking actions to mitigate noise, will not knowingly or deliberately support, encourage, or adopt actions, rules, regulations or policies, that result in the “shifting” of aircraft noise from one community to another, when related to aircraft operations at San Francisco International Airport.”

(Source: Roundtable Resolution No. 93-01)

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)).



Airport Director's Report

Presented at the August 5, 2020
Airport Community Roundtable Meeting

Aircraft Noise Abatement Office
November 2019 -Revision1



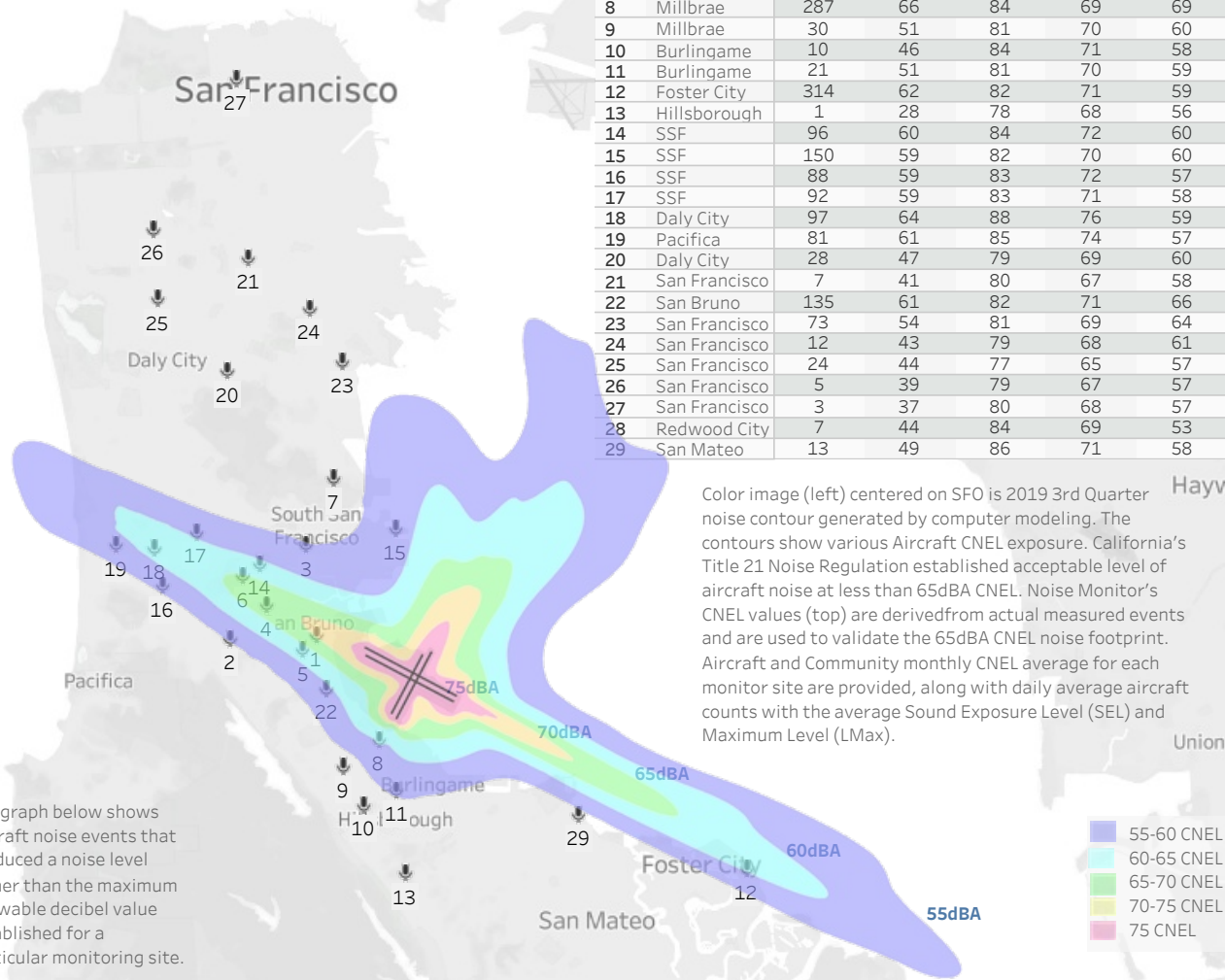
San Francisco
International
Airport

Aircraft Noise Levels

November 2019

The map shows 29 aircraft noise monitoring locations that keep track of noise levels in the communities around the airport. Image centered on SFO airport shows quarterly aircraft noise levels (dBA) exposure. The green zone marks 65dBA Community Noise Exposure Level (CNEL). The CNEL metric is used to assess and regulate aircraft noise exposure in communities surrounding the airport.

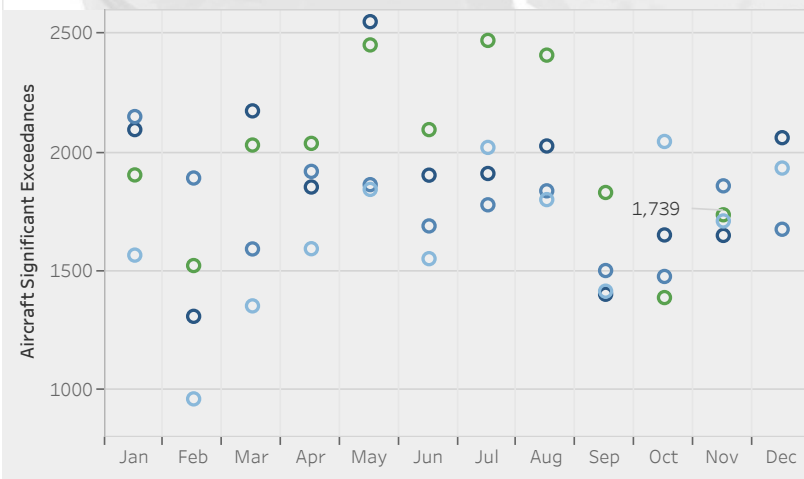
Site	City	Noise Events (AVG Day)	Aircraft		Community	
			CNEL (dBA)	SEL (dBA)	LMax (dBA)	CNEL (dBA)
1	San Bruno	169	73	94	79	69
2	San Bruno	47	55	82	70	65
3	SSF	34	53	81	69	64
4	SSF	110	68	91	79	61
5	San Bruno	125	67	89	77	65
6	SSF	101	65	88	76	59
7	Brisbane	15	49	80	70	58
8	Millbrae	287	66	84	69	69
9	Millbrae	30	51	81	70	60
10	Burlingame	10	46	84	71	58
11	Burlingame	21	51	81	70	59
12	Foster City	314	62	82	71	59
13	Hillsborough	1	28	78	68	56
14	SSF	96	60	84	72	60
15	SSF	150	59	82	70	60
16	SSF	88	59	83	72	57
17	SSF	92	59	83	71	58
18	Daly City	97	64	88	76	59
19	Pacifica	81	61	85	74	57
20	Daly City	28	47	79	69	60
21	San Francisco	7	41	80	67	58
22	San Bruno	135	61	82	71	66
23	San Francisco	73	54	81	69	64
24	San Francisco	12	43	79	68	61
25	San Francisco	24	44	77	65	57
26	San Francisco	5	39	79	67	57
27	San Francisco	3	37	80	68	57
28	Redwood City	7	44	84	69	53
29	San Mateo	13	49	86	71	58



Color image (left) centered on SFO is 2019 3rd Quarter noise contour generated by computer modeling. The contours show various Aircraft CNEL exposure. California's Title 21 Noise Regulation established acceptable level of aircraft noise at less than 65dBA CNEL. Noise Monitor's CNEL values (top) are derived from actual measured events and are used to validate the 65dBA CNEL noise footprint. Aircraft and Community monthly CNEL average for each monitor site are provided, along with daily average aircraft counts with the average Sound Exposure Level (SEL) and Maximum Level (LMax).

The graph below shows aircraft noise events that produced a noise level higher than the maximum allowable decibel value established for a particular monitoring site.

Significant Exceedances



Note: Site 2 online starting 11/20/2019

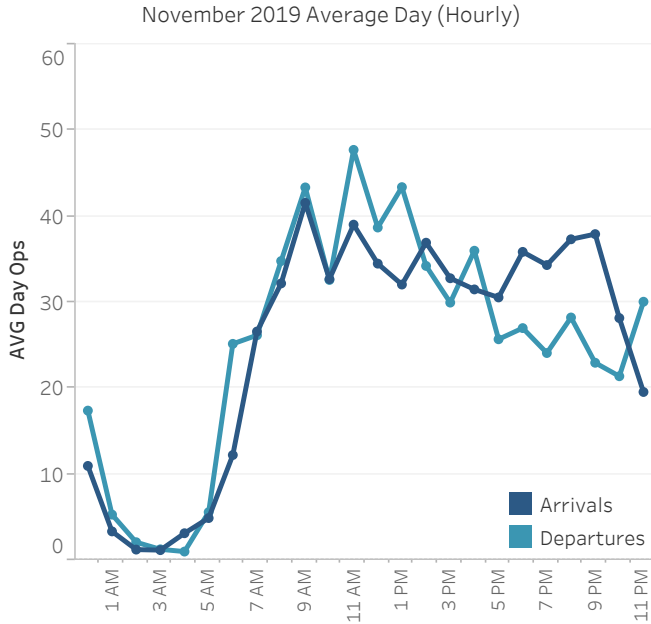
Operations

November 2019

Monthly Ops AVG Daily Ops 12 Month AVG YOY Growth

36,022	1,201	37,811	-0.4%
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Major Arrival and Departure Routes (West Flow)



West Flow is depicted in the above image and is a predominate flow at SFO. West Flow 97%

Top Destinations

Los Angeles	Seattle
7%	6%

Down the Bay vs Peninsula

1.1 BDEGA East	27%
1.2 BDEGA West	73%

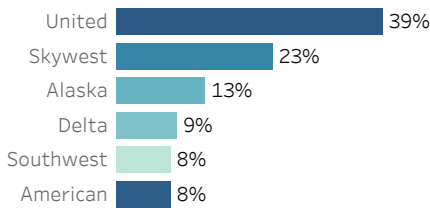
Arrival Route

1. BDEGA	27%
2. DYAMD	40%
3. SERFR	27%
4. PIRAT	6%

Departure Route

A. GAP	19%
B. SSTIK	32%
C. NIITE	8%
D. TRUKN RWY 01	40%
D. TRUKN RWY 28	2%

Airlines with the Most Operations



Non Airline

7%



Narrow Body

77%

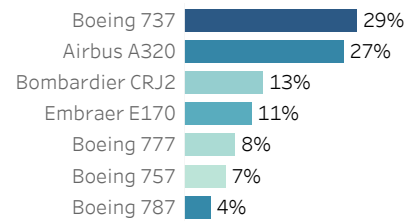


Wide Body

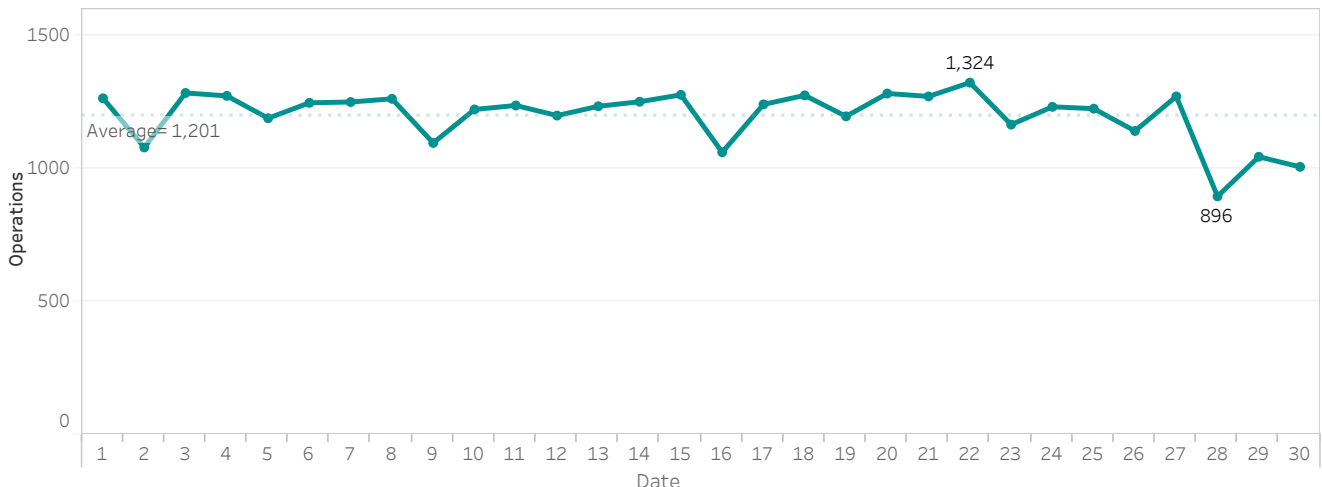
16%



Most Utilized Aircraft Types



Daily Aircraft Operations



Runway Usage and Nighttime Operations

Monthly Runway usage is shown for arrivals and departures, further categorized by all hours and nighttime hours. Graph at the bottom of the page shows hourly nighttime operations for each day. Power Runup locations are depicted on the airport map with airlines nighttime power runup counts shown below. Percent [%] is rounded to the nearest whole number.

Runway Utilization

	Arrivals	Departures
01 L/R		79% 13,508
10 L/R		3% 534
19 L/R	3% 527	0% 9
28 L/R	97% 16,482	17% 2,980

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

	Departures
10 L/R	3% 12
01 L/R	59% 219
28 L/R	38% 143

Runway Utilization

Arrivals	
28L	28R
44%	56%

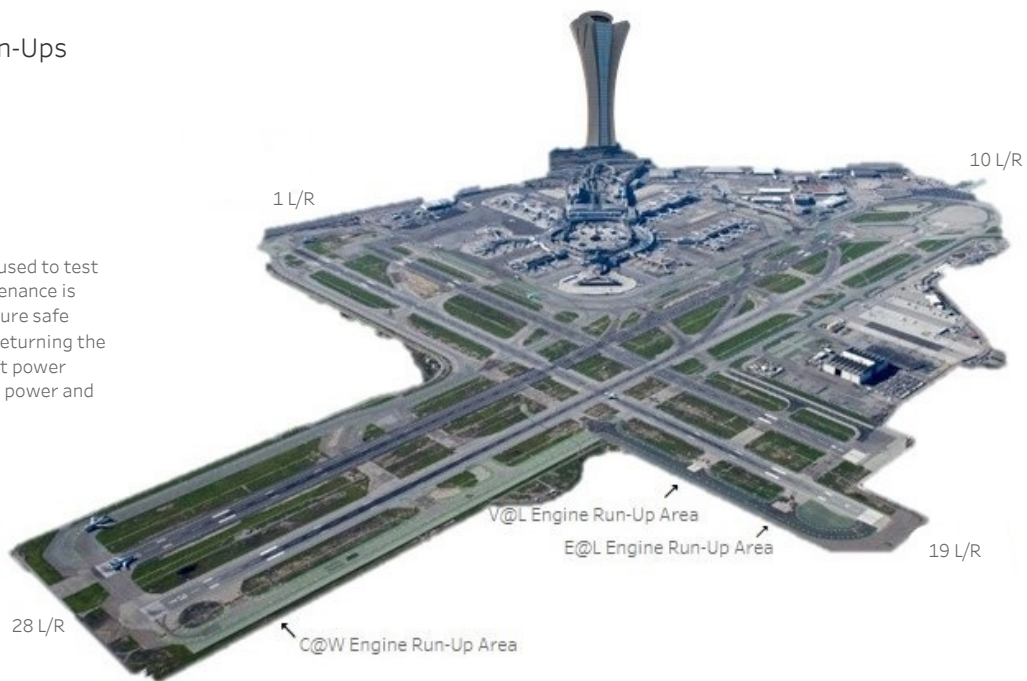
Night (10pm-7am)	
28L	28R
29%	71%

Nighttime Power Run-Ups

10pm-7am

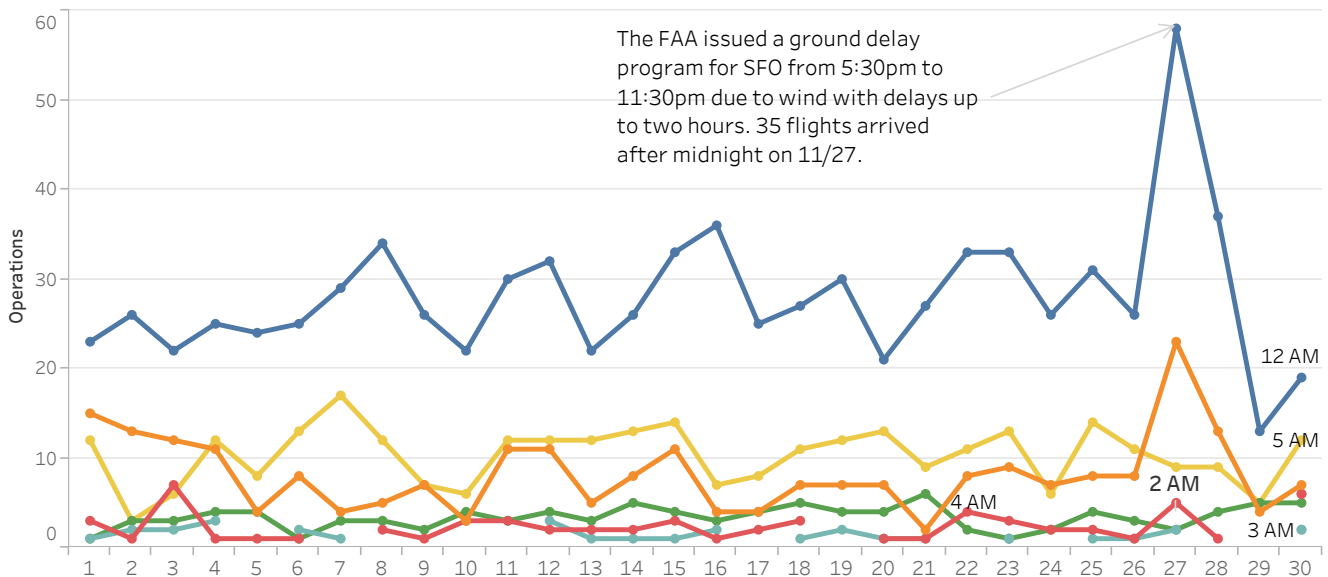
- Alaska Airlines 7
- American Airlines 6
- United Airlines 9

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.



Hourly Nighttime Operations

Hour 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM



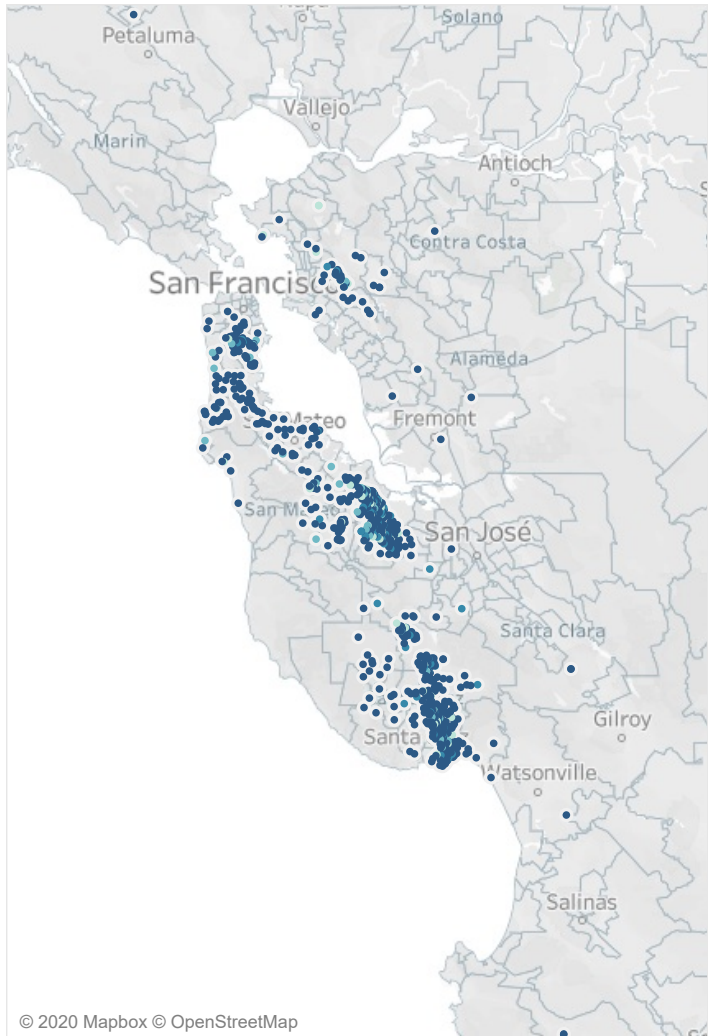
Noise Reports

Noise Reporters / Noise Reports

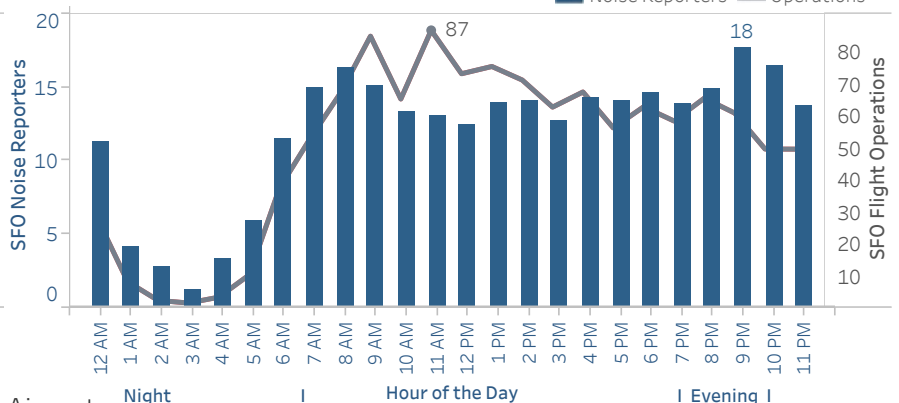
	Reporters	Noise Reports
Roundtable		
Atherton	5	1,009
Belmont	4	252
Brisbane	18	1,166
Burlingame	7	111
Daly City	8	1,228
El Granada	1	847
Foster City	8	269
Half Moon Bay	4	15
Hillsborough	3	17
Menlo Park	18	1,683
Millbrae	5	6
Montara	1	692
Moss Beach	1	5
Pacifica	24	2,062
Portola Valley	26	6,696
Redwood City	8	1,048
San Bruno	11	311
San Carlos	2	64
San Francisco	43	5,961
San Mateo	12	849
South San Francisco	11	159
Woodside	10	2,694
Other		
Alameda	2	2
Aptos	6	204
Ben Lomond	3	12
Berkeley	5	2,121
Bonny Doon	2	30
Boulder Creek	9	91
Capitola	16	1,311
Carmel Valley	3	20
Cupertino	1	406
Emerald Hills	6	3,720
Felton	8	672
Fremont	1	183
Hayward	2	261
La Selva Beach	1	7
Los Altos	107	11,981
Los Altos Hills	23	9,911
Los Gatos	96	14,397
Moraga	4	355
Morgan Hill	2	37
Mountain View	24	2,753
Oakland	28	6,867
Orinda	2	60
Palo Alto	162	34,502
Penngrove	1	19
Richmond	5	3,522
Santa Clara	1	1
Santa Cruz	100	16,137
Saratoga	3	343
Scotts Valley	60	7,860
Soquel	61	7,734
Stanford	4	1,060
Sunnyvale	5	326
Sunol	1	3
Walnut Creek	1	1
Watsonville	1	205
Grand Total	986	154,258

Reporters Annual AVG Noise Reporters Location Map

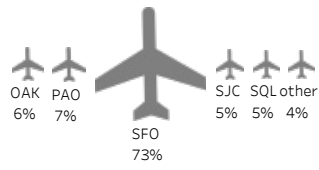
1,155
Reports Annual AVG
178,106
New Reporters
38
New Reporters Top City
San Francisco
Furthest Report
88 miles
Reports per SFO Operation
4
Top Aircraft Types
B737 A320 E75L
Top Flight Numbers
UAL2201 SWA978 ASA1947



Hourly Noise Reports (Average Day in a Month)



Airport



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

Source: SFO Intl Airport Noise Monitoring System

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



Airport Director's Report

Presented at the August 5, 2020
Airport Community Roundtable Meeting

Aircraft Noise Abatement Office
December 2019



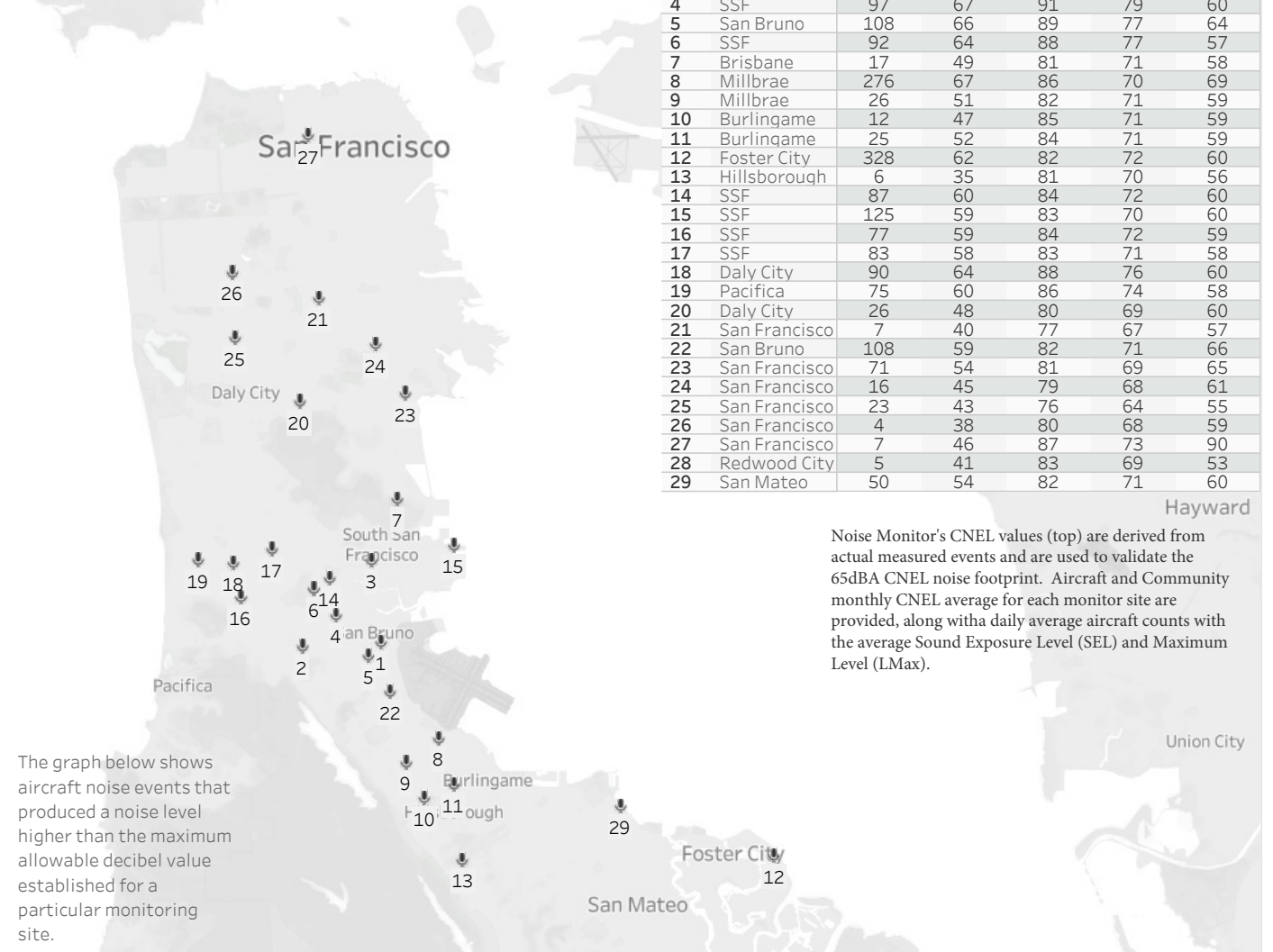
San Francisco
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Aircraft Noise Levels

December 2019

The map shows 29 aircraft noise monitoring locations that keep track of noise levels in the communities around the airport. Image centered on SFO airport shows quarterly aircraft noise levels (dBA) exposure. The green zone marks 65dBA Community Noise Exposure Level (CNEL). The CNEL metric is used to assess and regulate aircraft noise exposure in communities surrounding the airport.

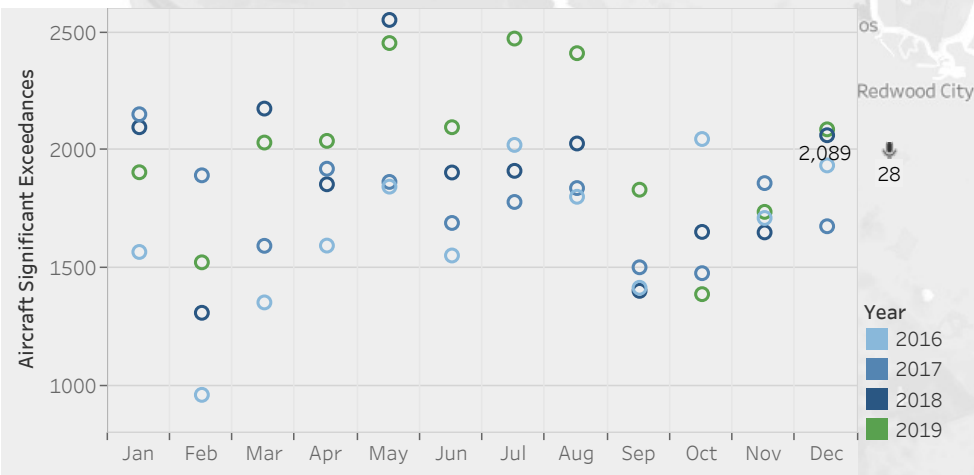
Site	City	Noise	Aircraft			Community
		Events (AVG Day)	CNEL (dBA)	SEL (dBA)	LMax (dBA)	CNEL (dBA)
1	San Bruno	145	72	94	79	69
2	San Bruno	40	53	82	71	64
3	SSF	28	52	81	69	64
4	SSF	97	67	91	79	60
5	San Bruno	108	66	89	77	64
6	SSF	92	64	88	77	57
7	Brisbane	17	49	81	71	58
8	Millbrae	276	67	86	70	69
9	Millbrae	26	51	82	71	59
10	Burlingame	12	47	85	71	59
11	Burlingame	25	52	84	71	59
12	Foster City	328	62	82	72	60
13	Hillsborough	6	35	81	70	56
14	SSF	87	60	84	72	60
15	SSF	125	59	83	70	60
16	SSF	77	59	84	72	59
17	SSF	83	58	83	71	58
18	Daly City	90	64	88	76	60
19	Pacifica	75	60	86	74	58
20	Daly City	26	48	80	69	60
21	San Francisco	7	40	77	67	57
22	San Bruno	108	59	82	71	66
23	San Francisco	71	54	81	69	65
24	San Francisco	16	45	79	68	61
25	San Francisco	23	43	76	64	55
26	San Francisco	4	38	80	68	59
27	San Francisco	7	46	87	73	90
28	Redwood City	5	41	83	69	53
29	San Mateo	50	54	82	71	60



The graph below shows aircraft noise events that produced a noise level higher than the maximum allowable decibel value established for a particular monitoring site.

Hayward
Noise Monitor's CNEL values (top) are derived from actual measured events and are used to validate the 65dBA CNEL noise footprint. Aircraft and Community monthly CNEL average for each monitor site are provided, along with the daily average aircraft counts with the average Sound Exposure Level (SEL) and Maximum Level (LMax).

Significant Exceedances



Note: Site 2 online starting 11/20/2019

Operations

December 2019

Monthly Ops AVG Daily Ops 12 Month AVG YOY Growth

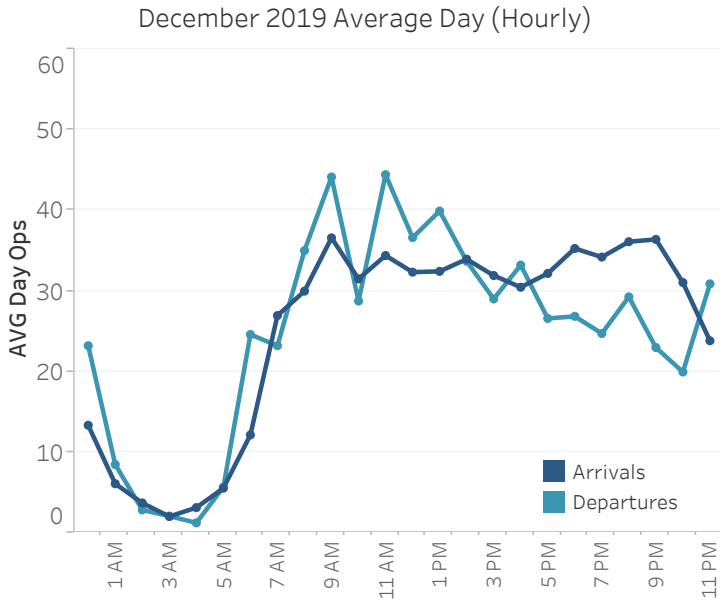
36,814	1,188	37,764	-1.5%
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Major Arrival and Departure Routes (West Flow)



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

West Flow
80%



Top Destinations

Los Angeles	Seattle	Las Vegas
7%	4%	4%

Down the Bay vs Peninsula

1.1 BDEGA East	25%
1.2 BDEGA West	75%

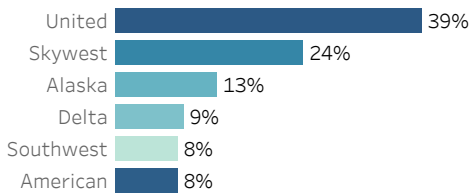
Arrival Route

1. BDEGA	28%
2. DYAMD	37%
3. SERFR	27%
4. OCEANIC	8%

Departure Route

A. GAP	19%
B. SSTIK	32%
C. NIITE	8%
D. TRUKN RWY 01	41%
D. TRUKN RWY 28	0%

Airlines with the Most Operations



Non Airline



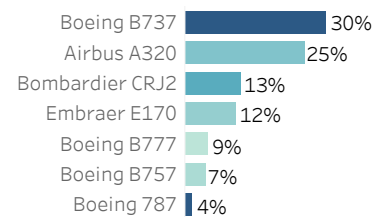
Narrow Body



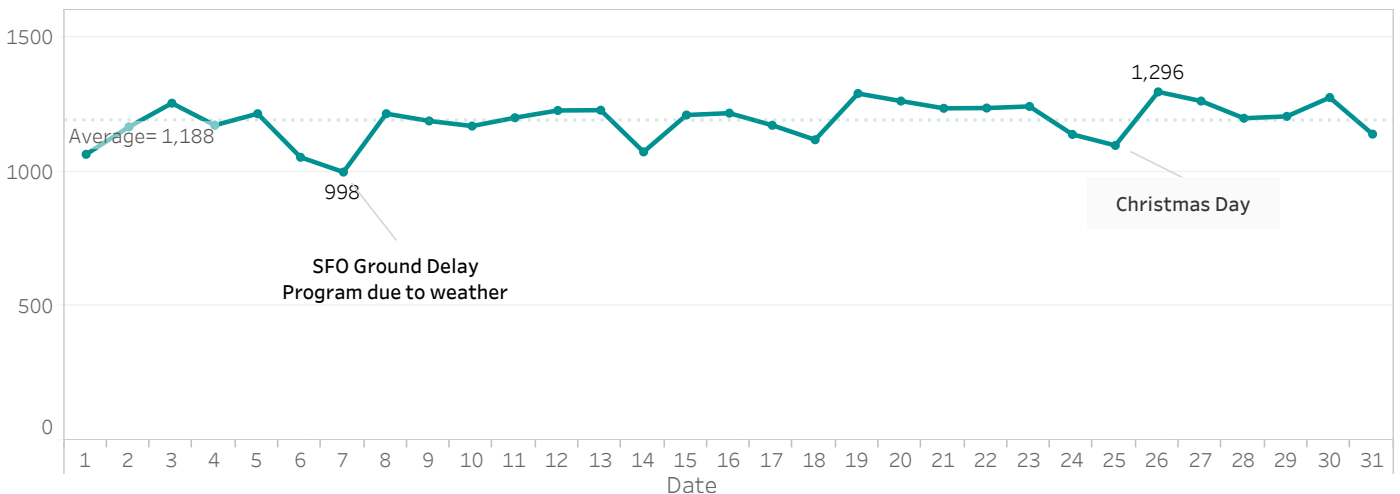
Wide Body



Most Utilized Aircraft Types



Daily Aircraft Operations



Runway Usage and Nighttime Operations

Monthly Runway usage is shown for arrivals and departures, further categorized by all hours and nighttime hours. Graph at the bottom of the page shows hourly nighttime operations for each day. Power Runup locations are depicted on the airport map with airlines nighttime power runup counts shown below. Percent [%] is rounded to the nearest whole number.

Runway Utilization

	Arrivals	Departures
01 L/R		66% 11,705
10 L/R	1% 194	19% 3,407
19 L/R	18% 3,261	1% 150
28 L/R	80% 14,188	13% 2,373

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

	Departures
10 L/R	39% 200
01 L/R	41% 208
28 L/R	20% 99

Runway Utilization

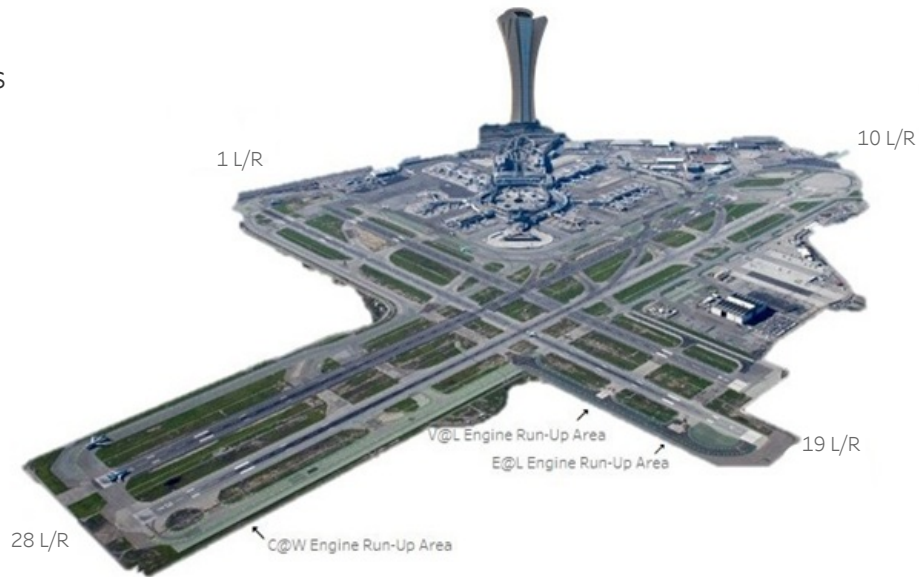
Arrivals	
28L	28R
45%	55%
Night (10pm-7am)	
32%	68%

Nighttime Power Run-Ups

10pm-7am

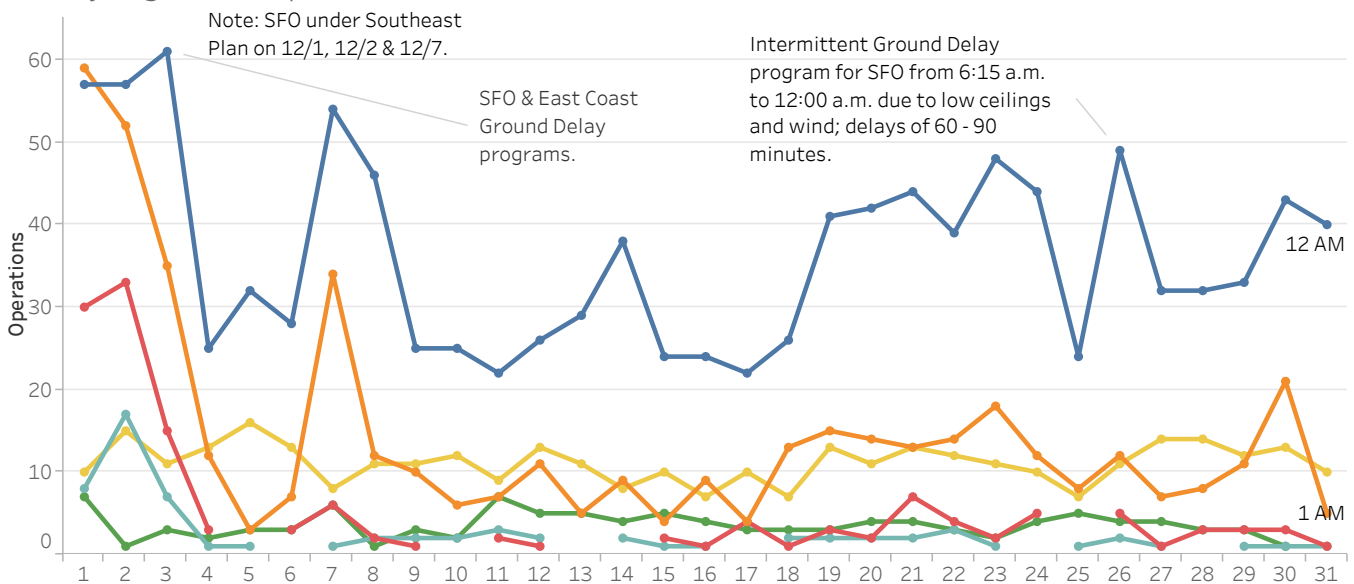
- Alaska Airlines 7
- American Airlines 6
- United Airlines 8

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.



Hourly Nighttime Operations

Hour 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM



Noise Reports

Noise Reporters / Noise Reports

	Reporters	Noise Reports
Atherton	5	998
Belmont	5	194
Brisbane	24	1,468
Burlingame	5	77
Daly City	12	1,057
El Granada	2	1,073
Foster City	12	551
Half Moon Bay	2	9
Menlo Park	22	1,930
Millbrae	7	39
Montara	1	364
Moss Beach	1	6
Pacifica	25	3,205
Portola Valley	26	6,994
Redwood City	17	1,477
San Bruno	7	113
San Carlos	1	34
San Francisco	44	5,593
San Mateo	24	1,035
South San Fra..	10	155
Woodside	9	2,887
Alameda	5	106
Aptos	6	241
Ben Lomond	3	16
Berkeley	14	3,240
Bonny Doon	2	27
Boulder Creek	7	123
Brookdale	1	1
Capitola	14	1,361
Carmel Valley	2	26
Castro Valley	1	1
Cupertino	1	1,536
Danville	2	32
East Palo Alto	2	47
Emerald Hills	8	2,600
Felton	7	370
Fremont	1	309
Hayward	1	355
Kensington	1	3
La Selva Beach	1	5
Lafayette	1	1
Los Altos	95	13,459
Los Altos Hills	23	8,612
Los Gatos	86	10,196
Moraga	4	552
Morgan Hill	2	27
Mountain View	30	3,053
Oakland	31	7,491
Orinda	3	36
Palo Alto	157	34,551
Penngrrove	1	11
Richmond	6	4,037
San Jose	1	1
Santa Cruz	94	14,101
Saratoga	2	218
Scotts Valley	59	6,189
Soquel	56	8,744
Stanford	4	791
Sunnyvale	8	788
Watsonville	1	193
Grand Total	1,004	152,709

Reporters
Annual AVG

1,138

Reports
Annual AVG

177,683

New
Reporters

74

New
Reporters
Top City

San Francisco

Furthest
Report

88 miles

Reports per
SFO
Operation

4

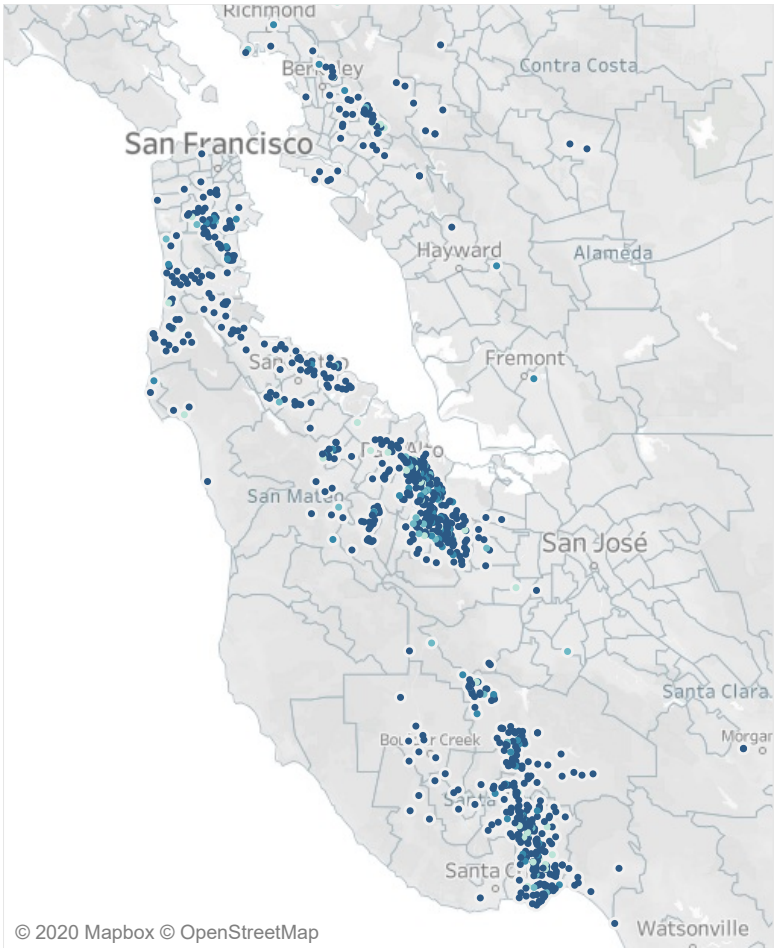
Top Aircraft
Types

B737
A320
E75L

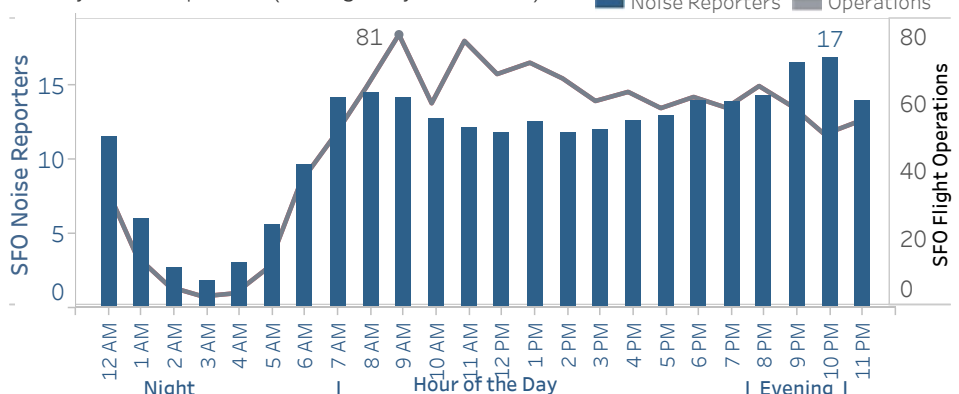
Top Flight
Numbers

UAL2201
ASA945
ASA1969

Noise Reporters Location Map



Hourly Noise Reporters (Average Day in a Month)



Airports



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

Source: SFO Intl Airport Noise Monitoring System

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



Airport Director's Report

Presented at the August 5, 2020
Airport Community Roundtable Meeting

Aircraft Noise Abatement Office
January 2020



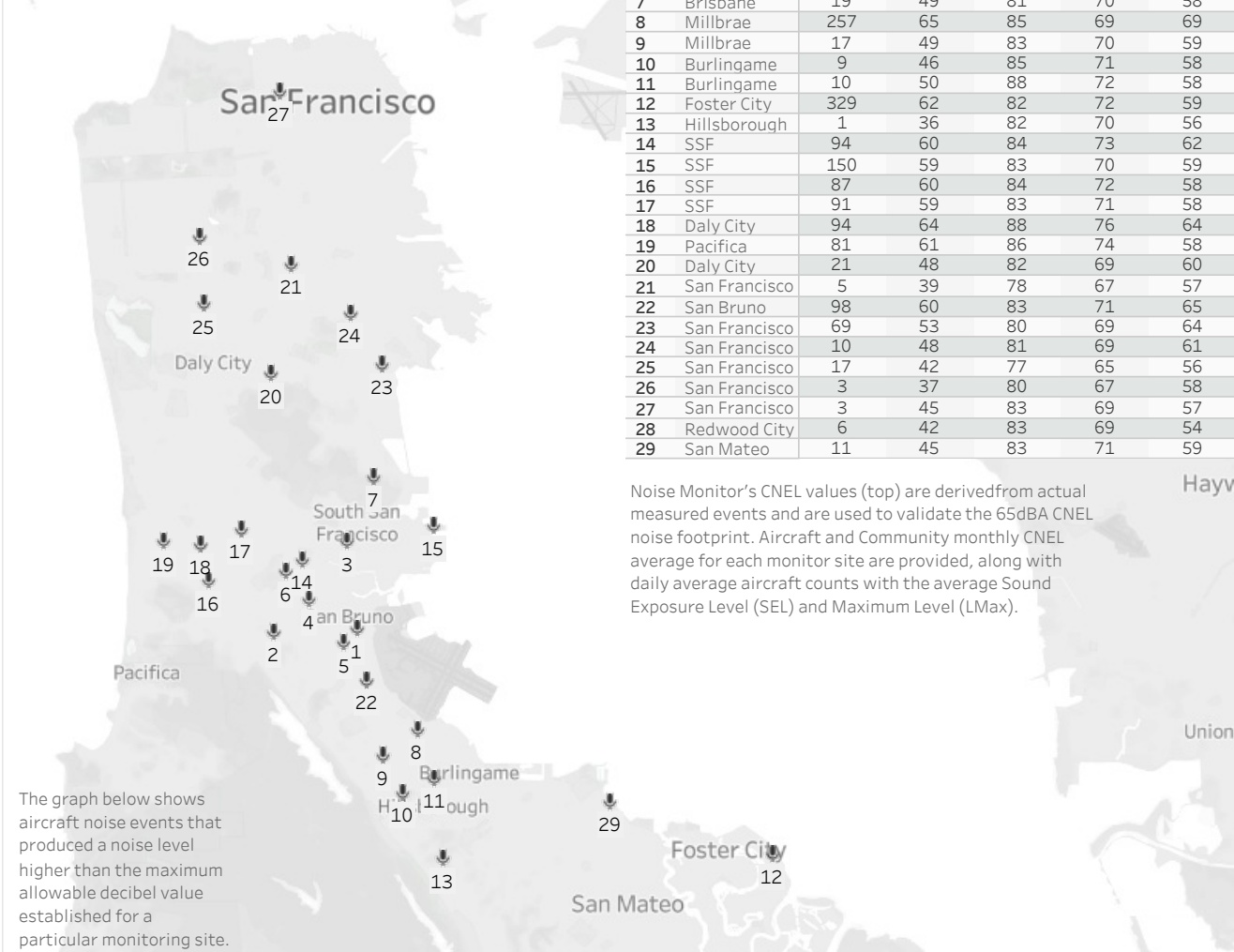
San Francisco
International
Airport

Aircraft Noise Levels

January 2020

The map shows 29 aircraft noise monitoring locations that keep track of noise levels in the communities around the airport. Image centered on SFO airport shows quarterly aircraft noise levels (dBA) exposure. The green zone marks 65dBA Community Noise Exposure Level (CNEL). The CNEL metric is used to assess and regulate aircraft noise exposure in communities surrounding the airport.

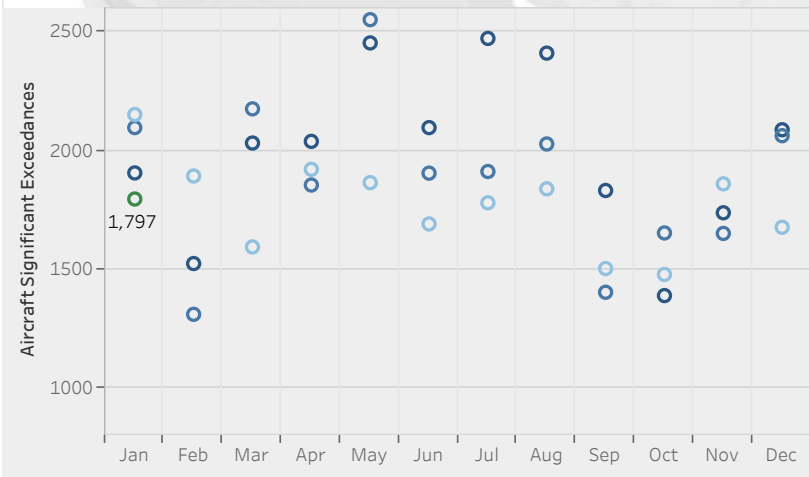
Site	City	Noise Events (AVG Day)	Aircraft		Community	
			CNEL (dBA)	SEL (dBA)	LMax (dBA)	CNEL (dBA)
1	San Bruno	144	73	94	81	69
2	San Bruno	48	54	82	71	64
3	SSF	35	53	82	70	63
4	SSF	105	67	91	79	60
5	San Bruno	111	67	90	77	64
6	SSF	99	65	89	77	57
7	Brisbane	19	49	81	70	58
8	Millbrae	257	65	85	69	69
9	Millbrae	17	49	83	70	59
10	Burlingame	9	46	85	71	58
11	Burlingame	10	50	88	72	58
12	Foster City	329	62	82	72	59
13	Hillsborough	1	36	82	70	56
14	SSF	94	60	84	73	62
15	SSF	150	59	83	70	59
16	SSF	87	60	84	72	58
17	SSF	91	59	83	71	58
18	Daly City	94	64	88	76	64
19	Pacifica	81	61	86	74	58
20	Daly City	21	48	82	69	60
21	San Francisco	5	39	78	67	57
22	San Bruno	98	60	83	71	65
23	San Francisco	69	53	80	69	64
24	San Francisco	10	48	81	69	61
25	San Francisco	17	42	77	65	56
26	San Francisco	3	37	80	67	58
27	San Francisco	3	45	83	69	57
28	Redwood City	6	42	83	69	54
29	San Mateo	11	45	83	71	59



Noise Monitor's CNEL values (top) are derived from actual measured events and are used to validate the 65dBA CNEL noise footprint. Aircraft and Community monthly CNEL average for each monitor site are provided, along with daily average aircraft counts with the average Sound Exposure Level (SEL) and Maximum Level (LMax).

The graph below shows aircraft noise events that produced a noise level higher than the maximum allowable decibel value established for a particular monitoring site.

Significant Exceedances



Note: Site 2 online starting 11/20/2019

Operations

January 2020

Monthly Ops AVG Daily Ops 12 Month AVG YOY Growth

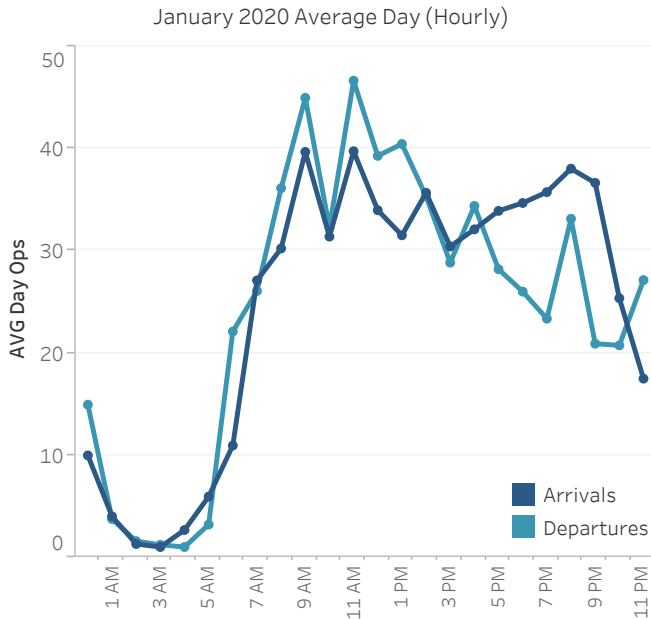
36,473	1,177	37,815	1.7%
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Major Arrival and Departure Routes (West Flow)



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

West Flow 97%



Top Destinations

Los Angeles	7.5%
Seattle	4.2%
Las Vegas	4.2%

Down the Bay vs Peninsula

1.1 BDEGA East	27%
1.2 BDEGA West	73%

Arrival Route

1. BDEGA	27%
2. DYAMD	38%
3. SERFR	28%
4. PIRAT	7%

Departure Route

A. GAP	18%
B. SSTIK	33%
C. NIITE	8%
D. TRUKN RWY 01	41%
D. TRUKN RWY 28	1%

Airlines with the Most Operations

United	37%
Skywest	26%
Alaska	13%
Delta	8%
Southwest	8%
American	8%

Non Airline

7%



Narrow Body

77%



Wide Body

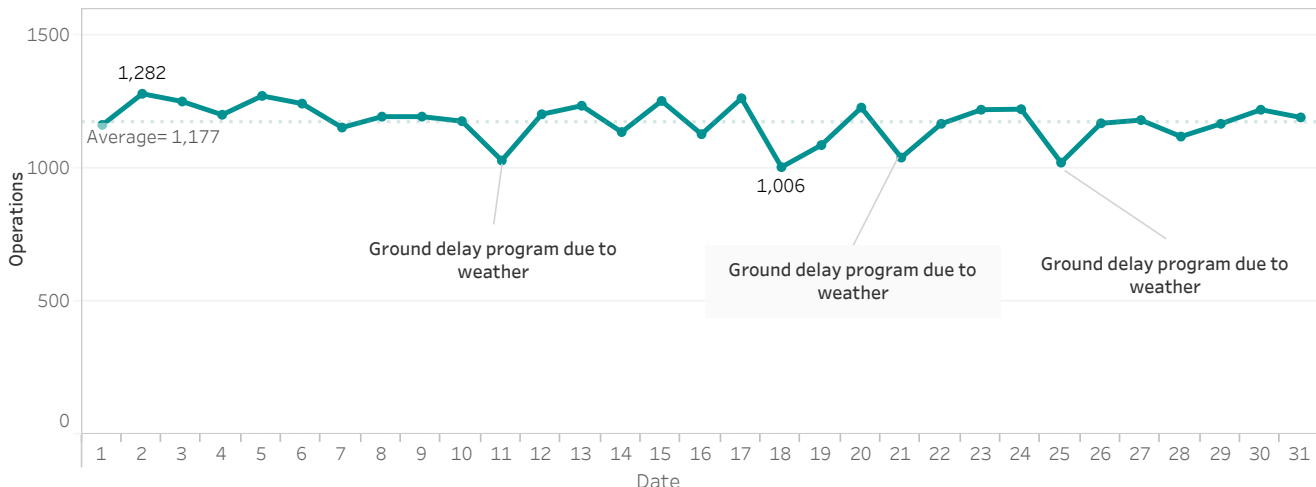
16%



Most Utilized Aircraft Types

Boeing 737	28%
Airbus A320	26%
Bombardier CRJ2	14%
Embraer E170	13%
Boeing 777	9%
Boeing 757	6%
Boeing 787	4%

Daily Aircraft Operations



Runway Usage and Nighttime Operations

Monthly Runway usage is shown for arrivals and departures, further categorized by all hours and nighttime hours. Graph at the bottom of the page shows hourly nighttime operations for each day. Power Runup locations are depicted on the airport map with airlines nighttime power runup counts shown below. Percent [%] is rounded to the nearest whole number.

Runway Utilization

	Arrivals	Departures
01 L/R		81% 13,882
10 L/R		3% 582
19 L/R	3% 516	
28 L/R	97% 16,637	16% 2,708

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

	Departures
10 L/R	4% 9
01 L/R	54% 129
28 L/R	42% 100

Runway Utilization

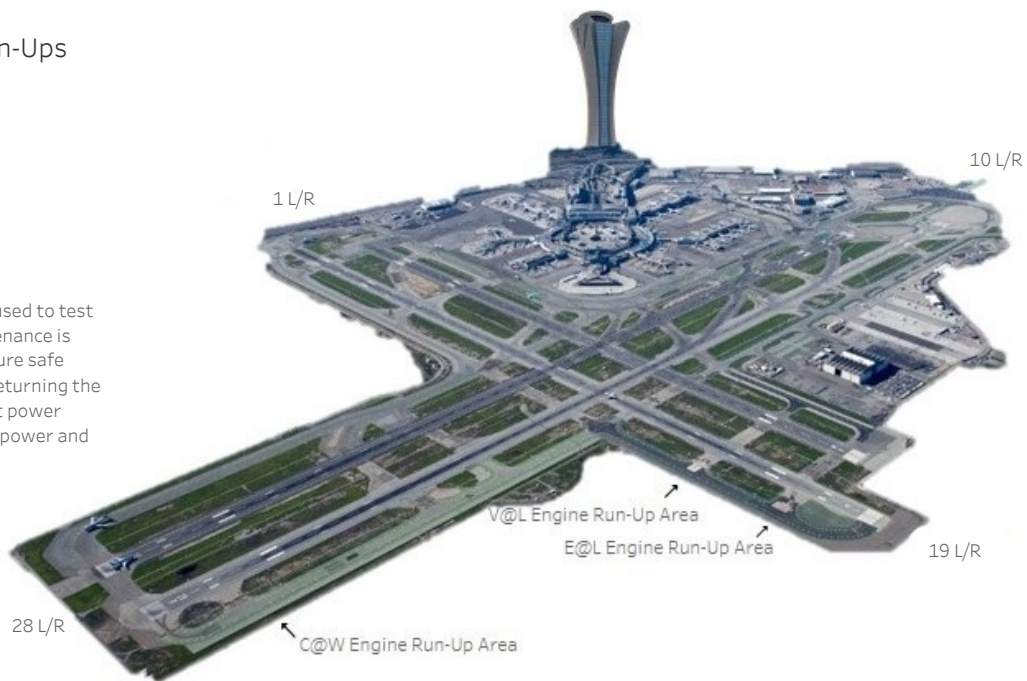
Arrivals	
28L	28R
45%	55%
Night (10pm-7am)	
25%	75%

Nighttime Power Run-Ups

10pm-7am

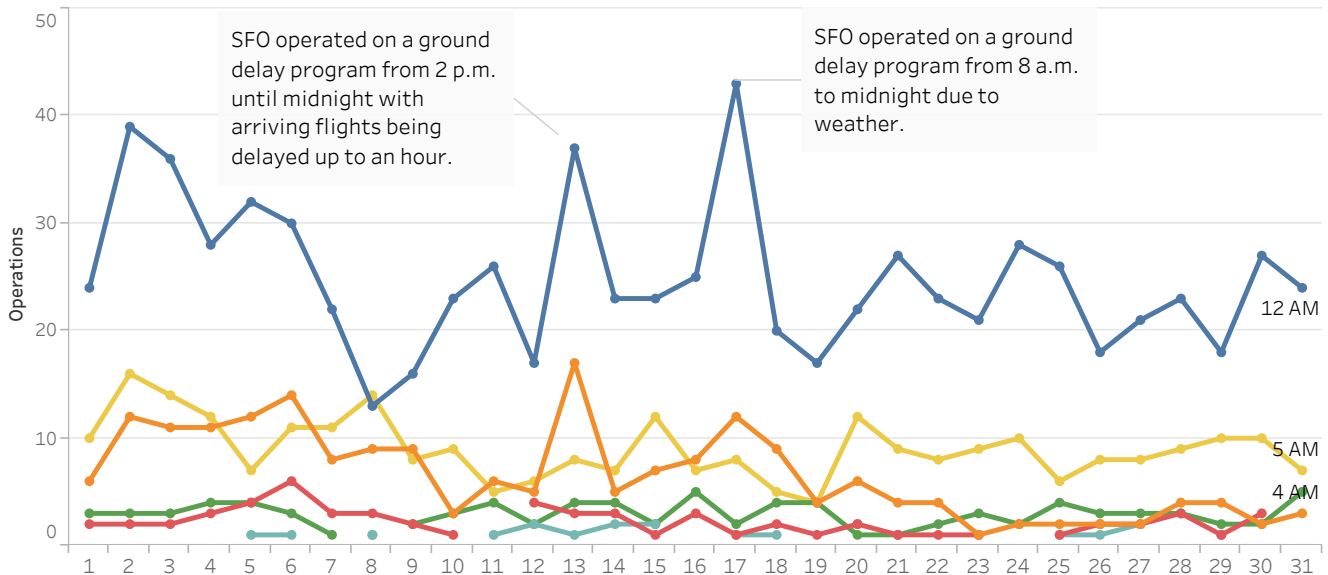
Alaska Airlines	9
American Airlines	10
Delta Airlines	3
Korean Airlines	1
Philippines Airlines	1
United Airlines	7

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.



Hourly Nighttime Operations

Hour 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM

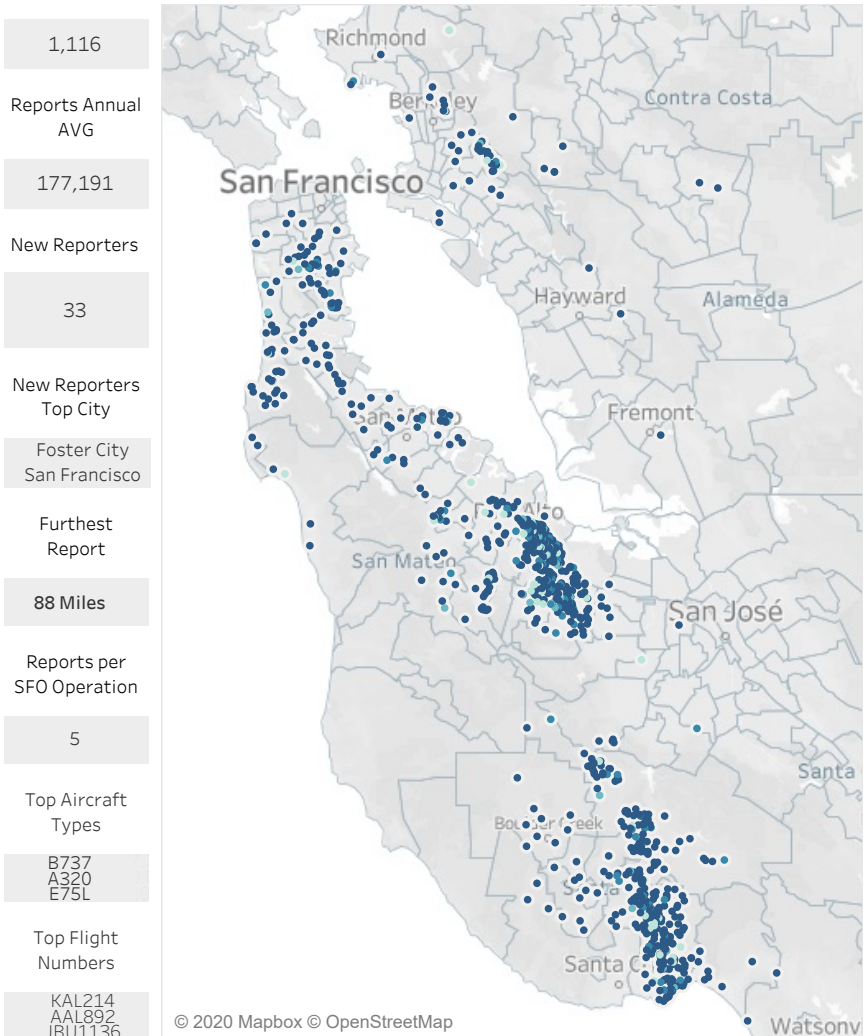


Noise Reports

Noise Reporters / Noise Reports

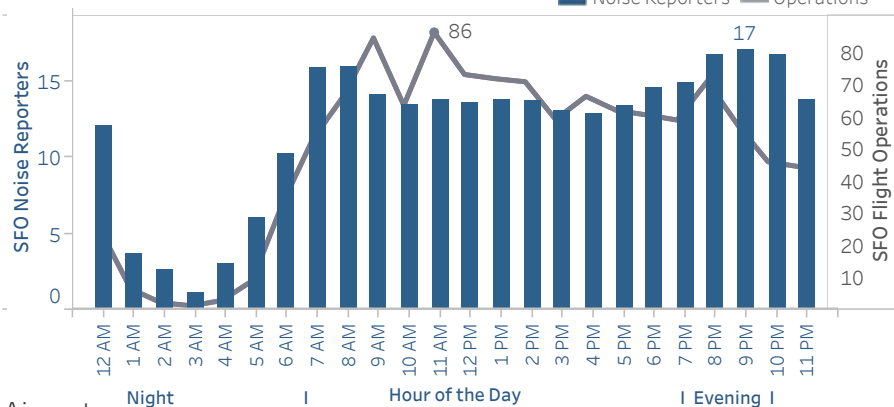
Roundtable	Atherton	6	1,302
	Belmont	2	155
	Brisbane	21	1,062
	Burlingame	2	108
	Daly City	8	1,169
	El Granada	2	837
	Foster City	12	1,092
	Half Moon Bay	2	2
	Hillsborough	3	4
	Menlo Park	22	1,966
	Millbrae	6	147
	Montara	2	143
	Pacifica	27	2,578
	Portola Valley	29	16,676
	Redwood City	12	1,426
	San Bruno	8	320
	San Carlos	2	45
San Francisco	35	4,590	
San Mateo	14	908	
South San Francisco	9	186	
Woodside	11	2,739	
Other	Alameda	2	3
	Aptos	8	188
	Ben Lomond	6	32
	Berkeley	9	1,828
	Bonny Doon	2	36
	Boulder Creek	8	89
	Capitola	15	1,557
	Carmel Valley	2	3
	Castro Valley	1	1
	Cupertino	1	814
	Danville	2	7
	East Palo Alto	1	45
	Emerald Hills	7	3,680
	Felton	11	450
	Fremont	1	152
	Hayward	1	139
	Kensington	1	3
	La Selva Beach	1	5
	Los Altos	98	15,663
	Los Altos Hills	24	11,675
	Los Gatos	91	12,011
	Moraga	4	523
	Morgan Hill	2	16
	Mountain View	31	3,112
	Oakland	25	6,183
	Orinda	1	40
	Palo Alto	168	38,192
	Penngrove	1	24
	Richmond	5	3,354
	Santa Clara	1	4
	Santa Cruz	94	16,908
	Saratoga	4	327
	Scotts Valley	65	7,888
Soquel	58	7,492	
Stanford	4	621	
Sunnyvale	6	259	
Walnut Creek	1	1	
Watsonville	1	172	
Grand Total	998	170,952	

Noise Reporters Location Map

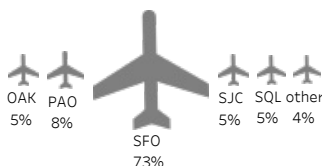


Reporters Annual AVG	1,116
Reports Annual AVG	177,191
New Reporters	33
New Reporters Top City	Foster City San Francisco
Furthest Report	88 Miles
Reports per SFO Operation	5
Top Aircraft Types	B737 A320 E75L
Top Flight Numbers	KAL214 AAL892 JBU1136

Hourly Noise Reports (Average Day in a Month)



Airport



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

Source: SFO Intl Airport Noise Monitoring System

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



Airport Director's Report

Presented at the August 5, 2020
Airport Community Roundtable Meeting

Aircraft Noise Abatement Office
February 2020



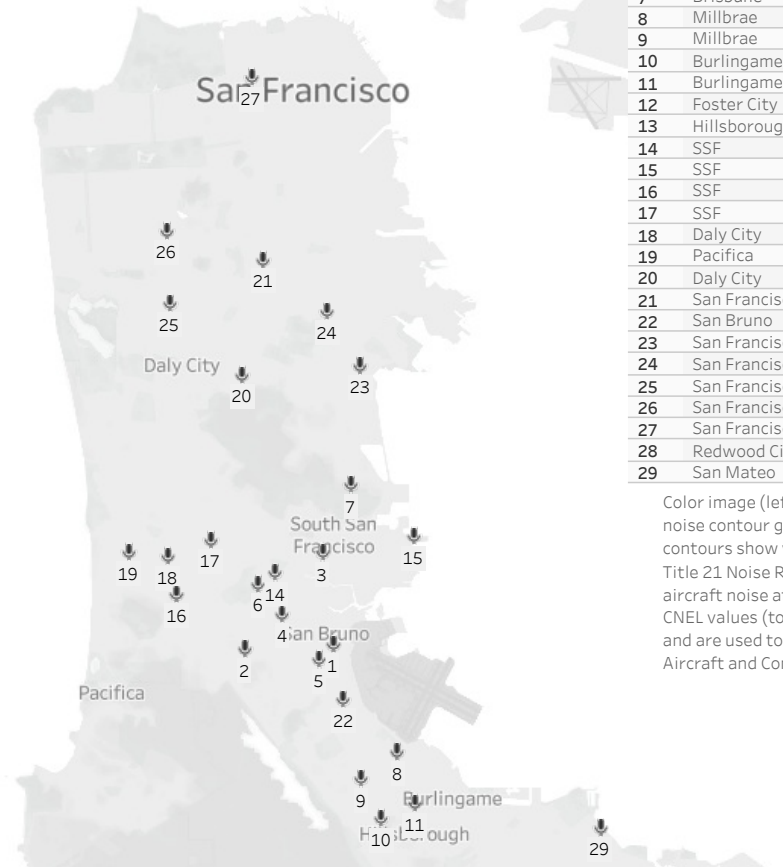
San Francisco
International
Airport

Aircraft Noise Levels

February 2020

The map shows 29 aircraft noise monitoring locations that keep track of noise levels in the communities around the airport. Image centered on SFO airport shows quarterly aircraft noise levels (dBA) exposure. The green zone marks 65dBA Community Noise Exposure Level (CNEL). The CNEL metric is used to assess and regulate aircraft noise exposure in communities surrounding the airport.

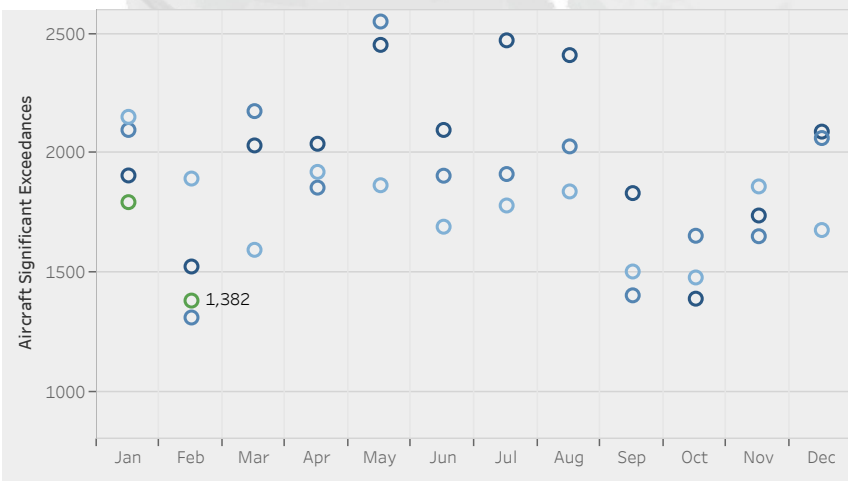
Site	City	Noise Events (AVG Day)	CNEL (dBA)	Aircraft		Community	
				SEL (dBA)	LMax (dBA)	CNEL (dBA)	CNEL (dBA)
1	San Bruno	154	72	93	79	69	
2	San Bruno	33	53	84	71	65	
3	SSF	26	52	81	69	63	
4	SSF	105	67	90	78	61	
5	San Bruno	121	66	88	76	64	
6	SSF	95	63	87	75	58	
7	Brisbane	15	47	80	70	59	
8	Millbrae	317	67	86	71	69	
9	Millbrae	30	50	82	70	60	
10	Burlingame	14	48	86	73	58	
11	Burlingame	19	50	83	71	58	
12	Foster City	283	61	82	71	59	
13	Hillsborough	7	37	82	71	56	
14	SSF	83	59	83	72	60	
15	SSF	144	58	82	70	61	
16	SSF	80	58	83	72	57	
17	SSF	77	57	83	71	60	
18	Daly City	90	62	87	75	59	
19	Pacifica	73	59	84	74	57	
20	Daly City	18	46	81	70	60	
21	San Francisco	4	38	77	68	60	
22	San Bruno	99	59	83	71	66	
23	San Francisco	53	52	80	69	63	
24	San Francisco	7	42	81	69	61	
25	San Francisco	16	42	77	65	57	
26	San Francisco	2	39	83	68	60	
27	San Francisco	2	35	79	69	57	
28	Redwood City	7	58	98	75	61	
29	San Mateo	5	42	84	71	59	



Color image (left) centered on SFO is 2019 2nd Quarter noise contour generated by computer modeling. The contours show various Aircraft CNEL exposure. California's Title 21 Noise Regulation established acceptable level of aircraft noise at less than 65dBA CNEL. Noise Monitor's CNEL values (top) are derived from actual measured events and are used to validate the 65dBA CNEL noise footprint. Aircraft and Community monthly CNEL average for each...

The graph below shows aircraft noise events that produced a noise level higher than the maximum allowable decibel value established for a particular monitoring site.

Significant Exceedances



Operations

February 2020

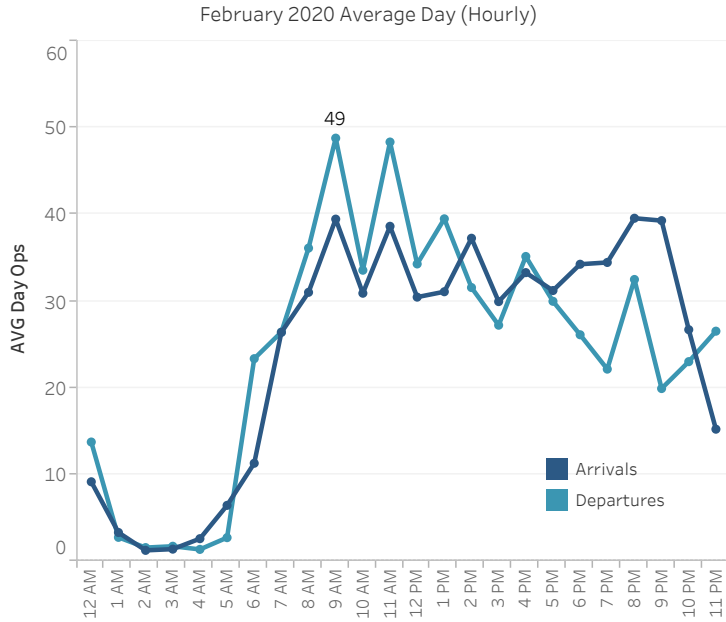
Monthly Ops	AVG Daily Ops	12 Month AVG	YOY Growth
33,991	1,172	38,008	6.8%

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
8%	4%	4%

Down the Bay vs Peninsula

1.1 BDEGA East	31%
1.2 BDEGA West	69%

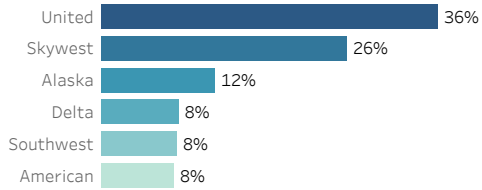
Arrival Route

1. BDEGA	28%
2. DYAMD	38%
3. SERFR	28%
4. OCEANIC	6%

Departure Route

A. GAP	18%
B. SSTIK	32%
C. NIITE	8%
D. TRUKN RWY 01	38%
D. TRUKN RWY 28	3%

Airlines with the Most Operations



Non Airline

8%

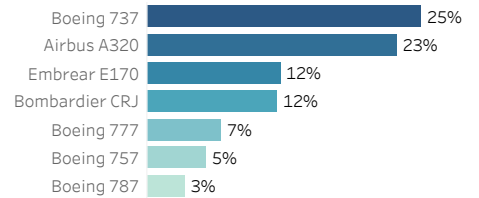
Narrow Body

77%

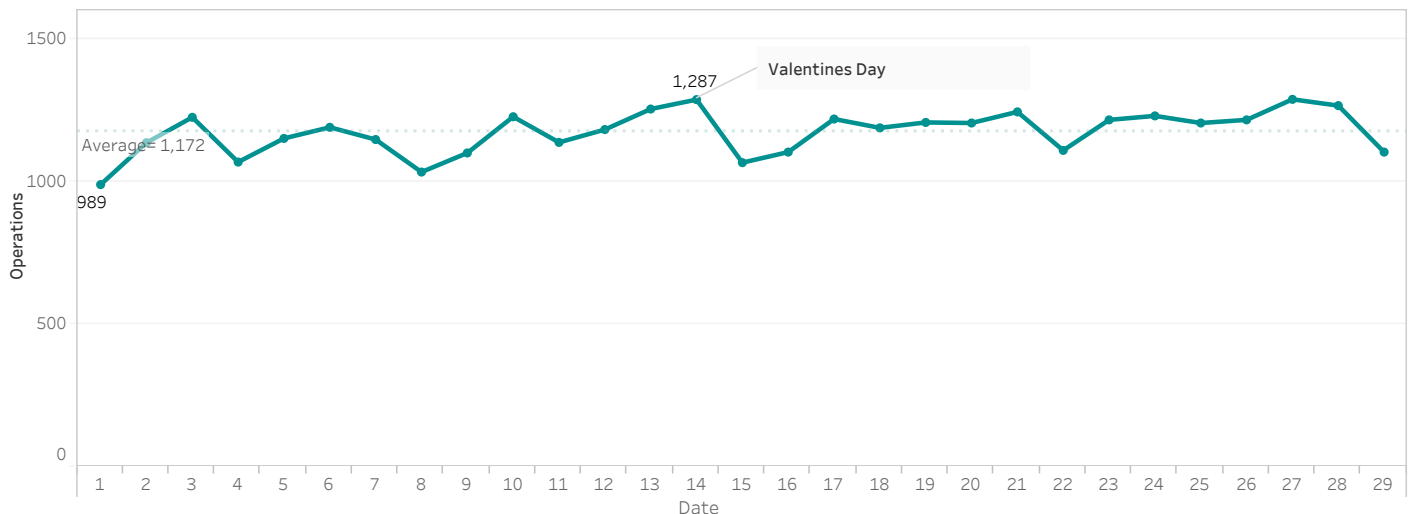
Wide Body

14%

Most Utilized Aircraft Types



Daily Aircraft Operations



Runway Usage and Nighttime Operations

Monthly Runway usage is shown for arrivals and departures, further categorized by all hours and nighttime hours. Graph at the bottom of the page shows hourly nighttime operations for each day. Power Runup locations are depicted on the airport map with airlines nighttime power runup counts shown below. Percent [%] is rounded to the nearest whole number.

Runway Utilization

	Arrivals	Departures
01 L/R	1% 117	80% 12,717
25R		0% 1
28 L/R	99% 15,707	20% 3,095

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

	Departures
01 L/R	52% 97
28 L/R	48% 89

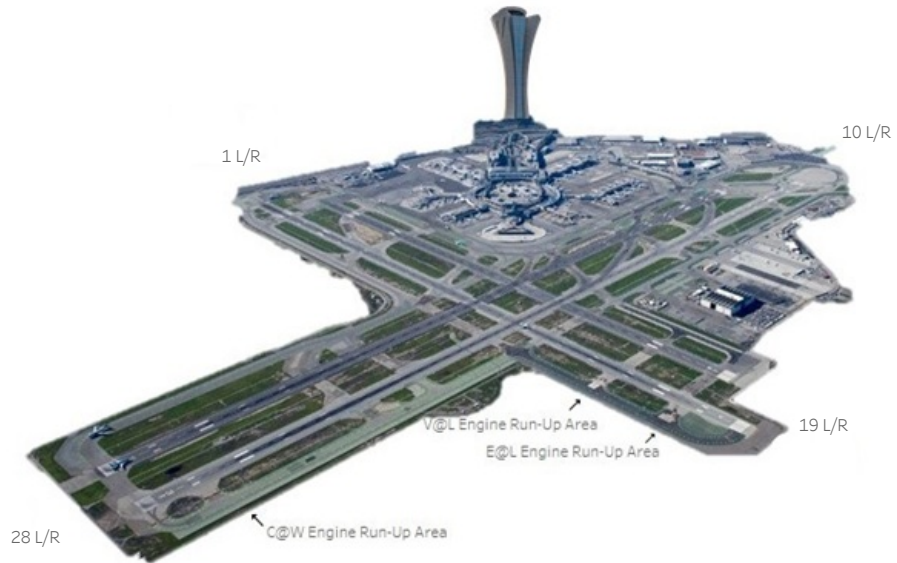
Runway Utilization

Arrivals	
28L	28R
45%	55%
Night (10pm-7am)	
26%	74%

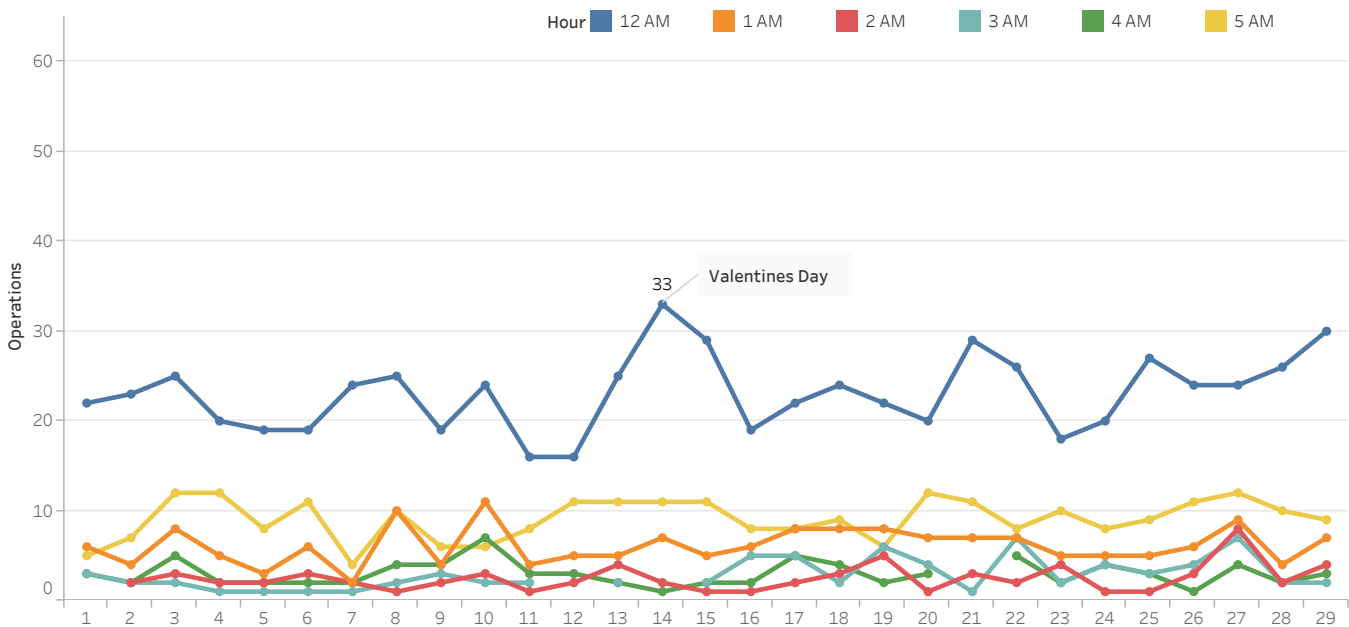
Nighttime Power Run-Ups (10pm - 7am)

American Airlines	8
Alaska Airlines	8
Hawaiian Airlines	3
Lufthansa Airlines	1
United Airlines	6

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.



Hourly Nighttime Operations



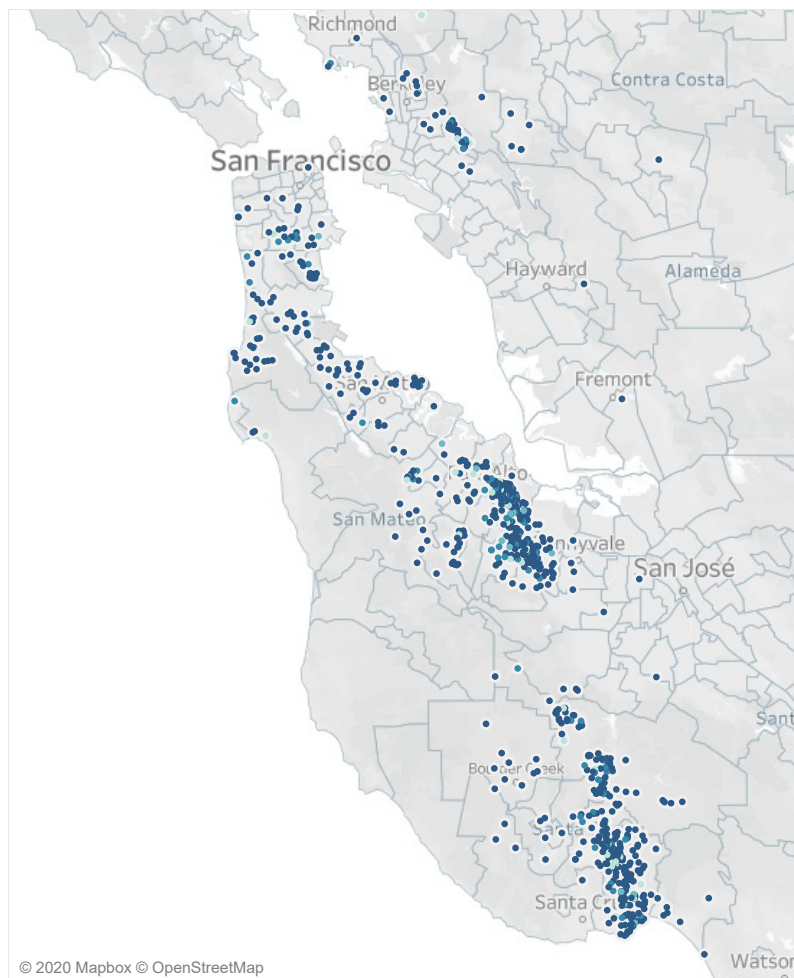
Noise Reports

Noise Reporters / Noise Reports

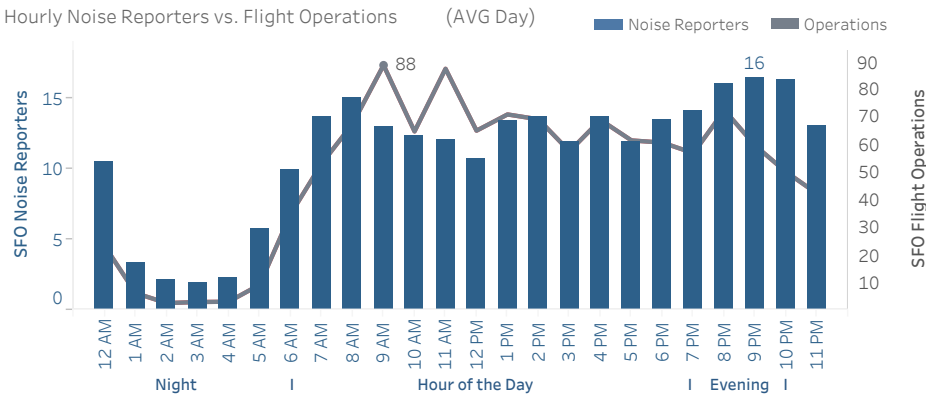
	Reporters	Noise Reports
Roundtable		
Atherton	4	1,697
Belmont	3	106
Brisbane	18	846
Burlingame	9	189
Daly City	7	912
El Granada	2	1,256
Foster City	10	638
Hillsborough	4	16
Menlo Park	19	1,817
Millbrae	8	134
Montara	1	325
Pacifica	24	2,331
Portola Valley	28	16,867
Redwood City	10	1,291
San Bruno	9	663
San Carlos	2	21
San Francisco	25	4,464
San Mateo	11	850
South San Francisco	4	140
Woodside	10	1,174
Other		
Aptos	6	143
Ben Lomond	2	10
Berkeley	11	1,484
Bonny Doon	2	23
Boulder Creek	9	74
Capitola	14	1,531
Carmel Valley	2	39
Cupertino	1	186
Danville	1	2
East Palo Alto	1	35
Emerald Hills	6	3,309
Felton	8	462
Fremont	1	96
Half Moon Bay	1	1
Hayward	1	129
Hercules	1	1
La Selva Beach	1	3
Los Altos	95	13,003
Los Altos Hills	19	8,223
Los Gatos	81	12,404
Moraga	5	654
Morgan Hill	2	9
Mountain View	18	1,965
Oakland	24	5,879
Orinda	1	10
Palo Alto	141	33,388
Penngrove	1	33
Richmond	5	3,011
Santa Clara	1	5
Santa Cruz	95	16,091
Saratoga	3	251
Scotts Valley	57	7,365
Sonoma	1	2
Soquel	59	7,833
Stanford	3	577
Sunnyvale	4	41
Watsonville	1	197
Grand Total	892	154,206

Reporters Annual AVG	1,096
Reports Annual AVG	177,821
New Reporters	14
Furthest Report	88 Miles
Reports per SFO Operation	5
Top Aircraft Type	A320 Boeing 737 E170
Top Flight Number	AAL892 UAL2201 ASA1933

Noise Reporters Location Map



Hourly Noise Reporters vs. Flight Operations (AVG Day)



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



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

Source: SFO Intl Airport Noise Monitoring System



Airport Director's Report

Presented at the August 5, 2020
Airport Community Roundtable Meeting

Aircraft Noise Abatement Office
March 2020



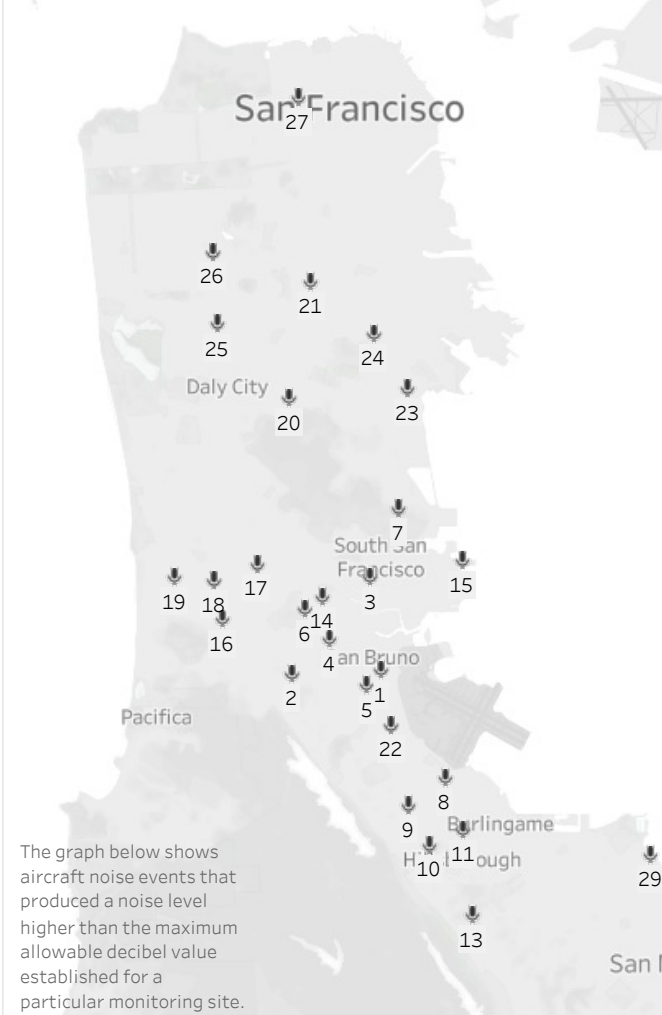
San Francisco
International
Airport

Aircraft Noise Levels

March 2020

The map shows 29 aircraft noise monitoring locations that keep track of noise levels in the communities around the airport. Image centered on SFO airport shows quarterly aircraft noise levels (dBA) exposure. The green zone marks 65dBA Community Noise Exposure Level (CNEL). The CNEL metric is used to assess and regulate aircraft noise exposure in communities surrounding the airport.

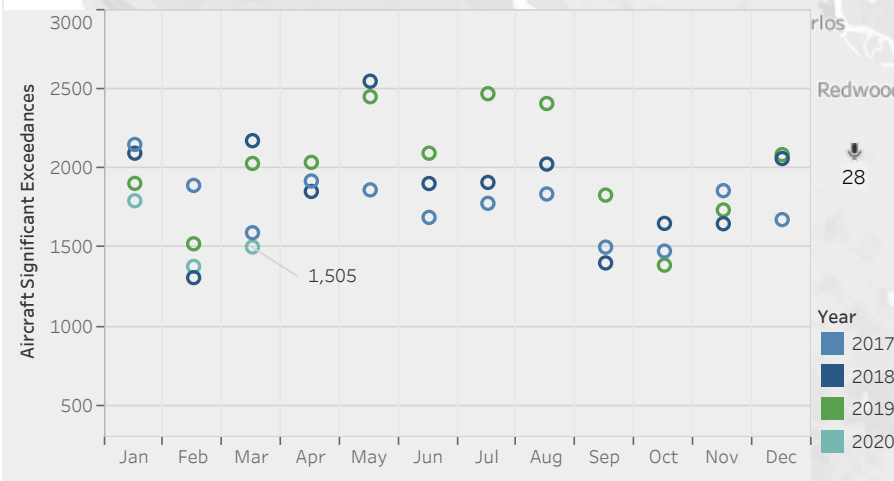
Site	City	Noise Events (AVG Day)	Aircraft		Community	
			CNEL (dBA)	SEL (dBA)	LMax (dBA)	CNEL (dBA)
1	San Bruno	121	70	93	80	67
2	San Bruno	24	51	81	71	63
3	SSF	24	51	82	70	61
4	SSF	88	66	90	78	59
5	San Bruno	97	64	88	76	62
6	SSF	79	63	88	76	56
7	Brisbane	15	48	80	71	58
8	Millbrae	175	62	85	70	67
9	Millbrae	14	47	82	71	58
10	Burlingame	4	41	85	72	56
11	Burlingame	15	49	86	73	56
12	Foster City	281	61	82	71	58
13	Hillsborough	1	25	80	69	54
14	SSF	75	59	84	72	58
15	SSF	133	59	82	71	59
16	SSF	67	58	83	72	56
17	SSF	69	58	83	71	57
18	Daly City	76	62	87	75	57
19	Pacifica	61	59	85	74	56
20	Daly City	15	46	80	70	59
21	San Francisco	5	37	78	68	56
22	San Bruno	59	57	82	71	63
23	San Francisco	44	51	80	69	63
24	San Francisco	6	39	79	69	59
25	San Francisco	11	40	77	65	55
26	San Francisco	3	34	79	68	58
27	San Francisco	2	35	81	69	56
28	Redwood City	4	44	88	69	55
29	San Mateo	5	52	93	74	58



Noise Monitor's CNEL values (top) are derived from actual measured events and are used to validate the 65dBA CNEL noise footprint. Aircraft and Community monthly CNEL average for each monitor site are provided, along with daily average aircraft counts with the average Sound Exposure Level (SEL) and Maximum Level (LMax).

The graph below shows aircraft noise events that produced a noise level higher than the maximum allowable decibel value established for a particular monitoring site.

Significant Exceedances



Note: Site 2 online starting 11/20/2019

Operations

March 2020

Monthly Ops AVG Daily Ops 12 Month AVG YOY Growth

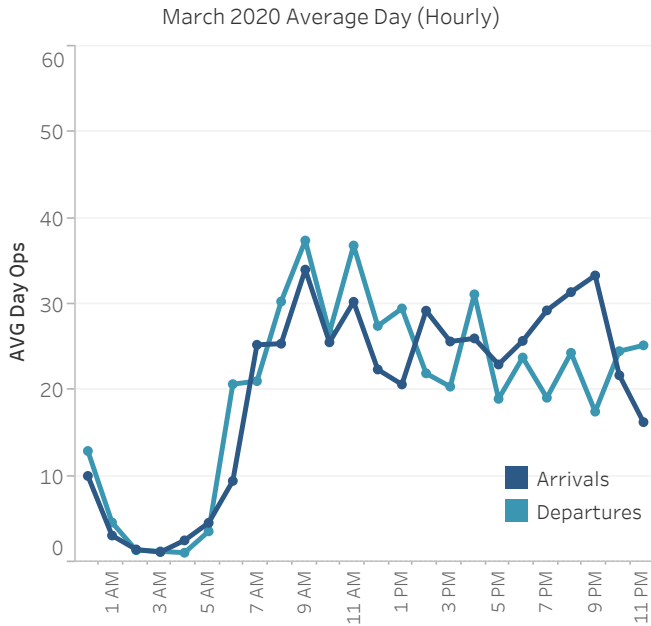
29,674	957	34,898	-391%
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Major Arrival and Departure Routes (West Flow)



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

West Flow
100%



Top Destinations

Seattle	Los Angeles
4%	8%

Down the Bay vs Peninsula

1.1 BDEGA East	26%
1.2 BDEGA West	74%

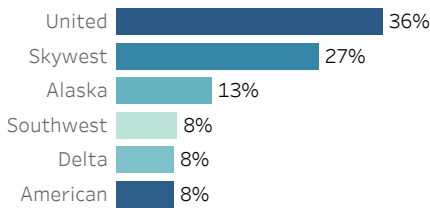
Arrival Route

1. BDEGA	28%
2. DYAMD	38%
3. SERFR	29%
4. PIRAT	6%

Departure Route

A. GAP	18%
B. SSTIK	32%
C. NIITE	10%
D. TRUKN RWY 01	36%
D. TRUKN RWY 28	5%

Airlines with the Most Operations



Non Airline

6%



Narrow Body

80%

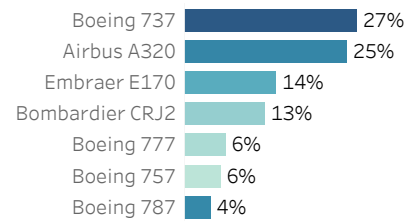


Wide Body

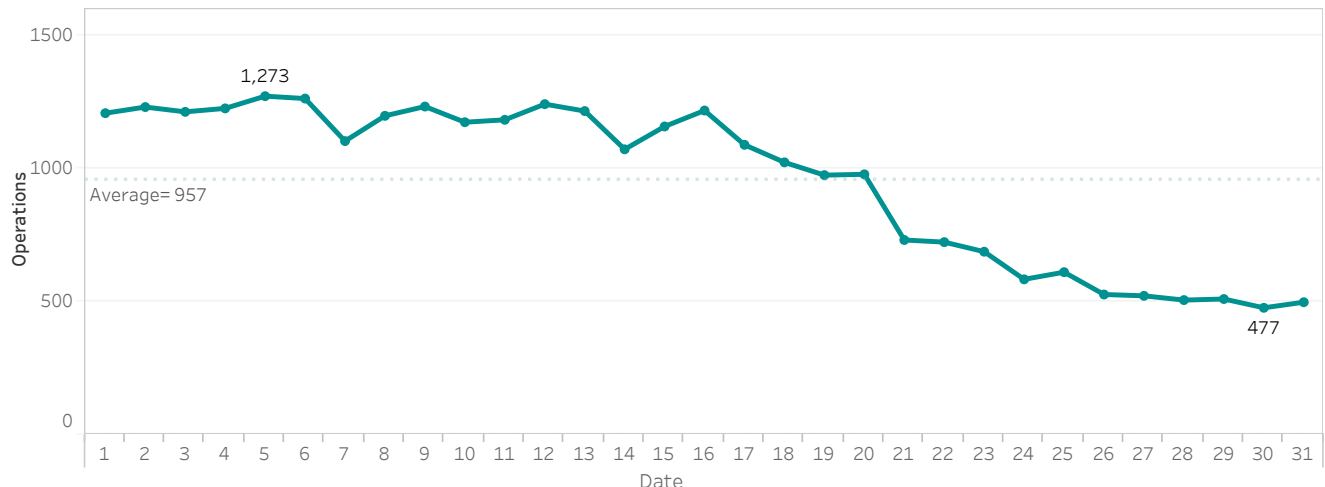
14%



Most Utilized Aircraft Types



Daily Aircraft Operations



Runway Usage and Nighttime Operations

Monthly Runway usage is shown for arrivals and departures, further categorized by all hours and nighttime hours. Graph at the bottom of the page shows hourly nighttime operations for each day. Power Runup locations are depicted on the airport map with airlines nighttime power runup counts shown below. Percent [%] is rounded to the nearest whole number.

Runway Utilization

	Arrivals	Departures
01 L/R		79% 11,192
10 L/R		0% 2
28 L/R	100% 14,100	21% 2,892

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

	Departures
01 L/R	49% 127
28 L/R	51% 134

Runway Utilization

Arrivals	
28L	28R
44%	56%

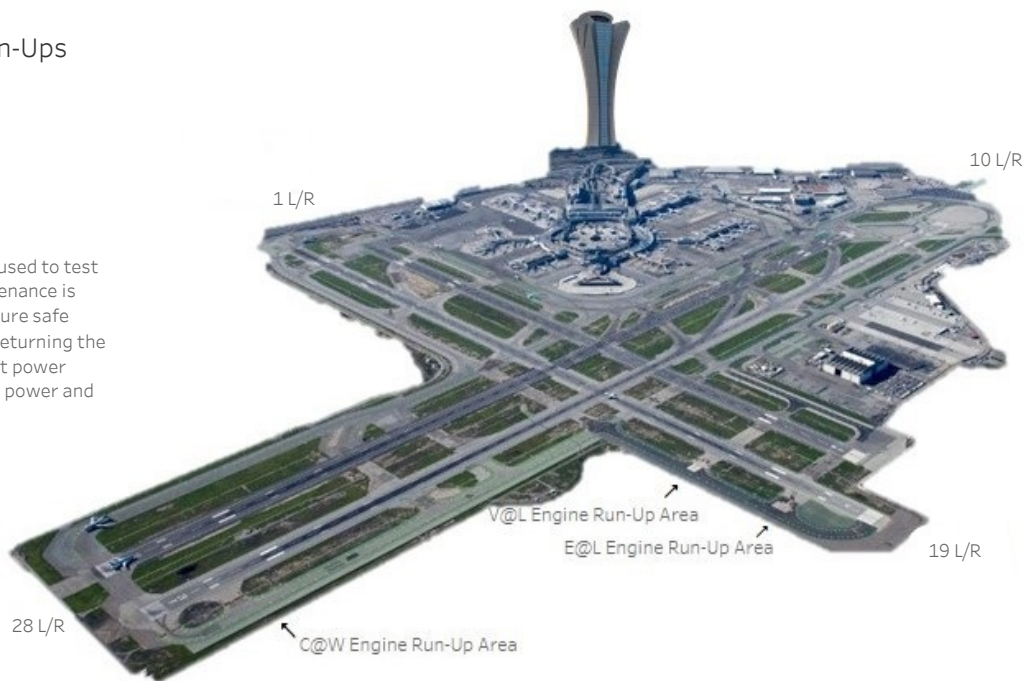
Night (10pm-7am)	
27%	73%

Nighttime Power Run-Ups

10pm-7am

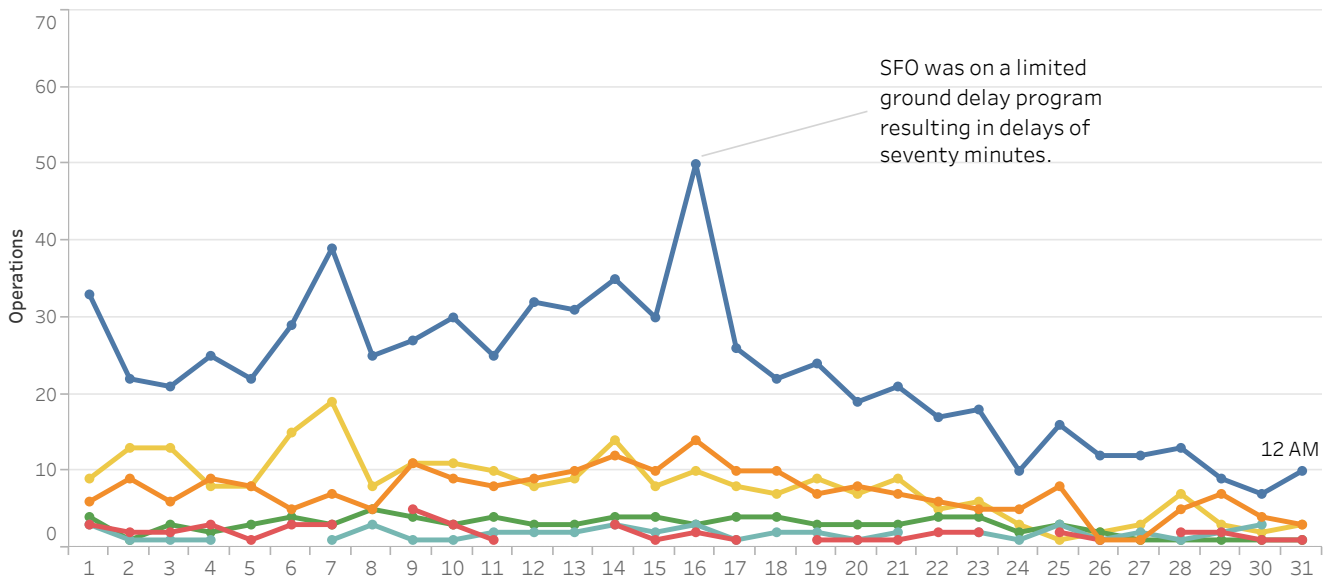
Air Canada	1
Alaska Airlines	5
American Airlines	6
Delta Airlines	1
United Airlines	12

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.



Hourly Nighttime Operations

Hour 12 AM 1 AM 2 AM 3 AM 4 AM 5 AM



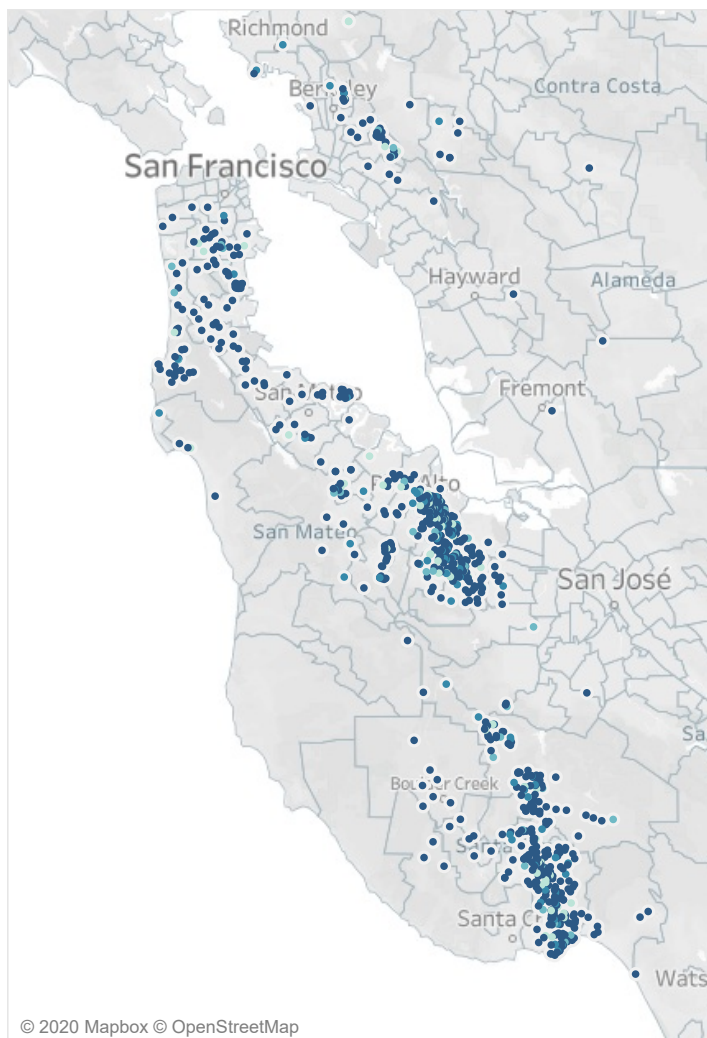
Noise Reports

Noise Reporters / Noise Reports

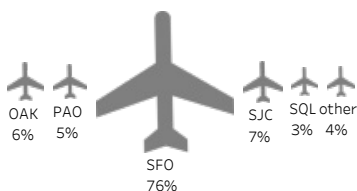
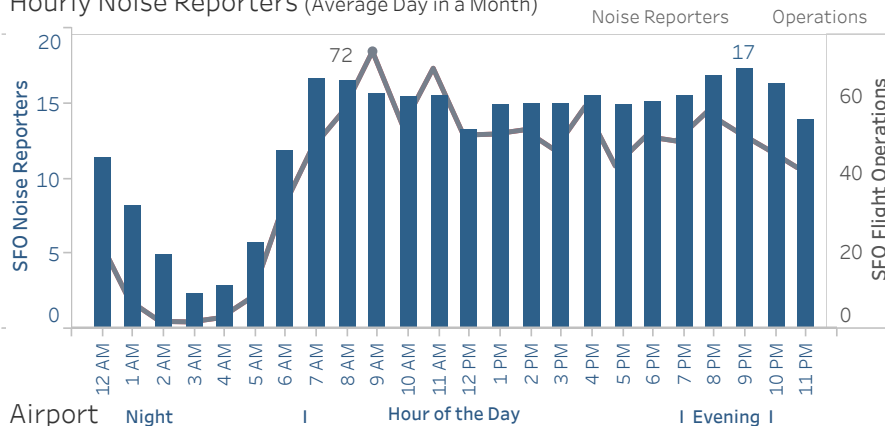
	Reporters	Annual AVG
Roundtable		
Atherton	5	1,960
Belmont	4	302
Brisbane	19	918
Burlingame	4	54
Daly City	9	1,337
El Granada	2	1,098
Foster City	11	447
Half Moon Bay	2	6
Hillsborough	2	2
Menlo Park	17	2,825
Millbrae	4	60
Montara	1	477
Pacifica	24	2,792
Portola Valley	31	19,100
Redwood City	11	2,164
San Bruno	7	338
San Carlos	1	140
San Francisco	27	6,664
San Mateo	9	1,273
South San Francisco	8	87
Woodside	8	1,486
Other		
Aptos	6	222
Ben Lomond	4	71
Berkeley	12	2,483
Bonny Doon	2	36
Boulder Creek	6	131
Brookdale	1	1
Capitola	15	1,875
Carmel Valley	2	102
Cupertino	1	637
Danville	1	1
East Palo Alto	1	1
Emerald Hills	8	3,831
Felton	7	721
Fremont	1	47
Hayward	1	148
La Honda	1	1
La Selva Beach	1	4
Lafayette	1	1
Los Altos	99	17,544
Los Altos Hills	19	9,886
Los Gatos	84	14,873
Moraga	5	1,001
Morgan Hill	2	7
Mountain View	27	4,187
Oakland	23	6,708
Orinda	1	66
Palo Alto	157	37,442
Penngrove	1	27
Richmond	5	3,561
Santa Cruz	101	22,680
Saratoga	4	693
Scotts Valley	61	9,567
Sonoma	1	1
Soquel	58	9,347
Stanford	3	867
Sunnyvale	8	451
Sunol	1	1
Watsonville	1	231
Grand Total	938	192,983

Reporters Annual AVG	1,077
Reports Annual AVG	178,432
New Reporters	19
New Reporters Top City	Menlo Park Redwood City San Bruno Sunnyvale
Furthest Report	88 miles
Reports per SFO Operation	7
Top Aircraft Types	B737 A320 E75L
Top Flight Numbers	KAL214 AAL892 UAL820

Noise Reporters Location Map



Hourly Noise Reporters (Average Day in a Month)



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

Source: SFO Intl Airport Noise Monitoring System

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



Airport Director's Report

Presented at the August 5, 2020
Airport Community Roundtable Meeting

Aircraft Noise Abatement Office
April 2020



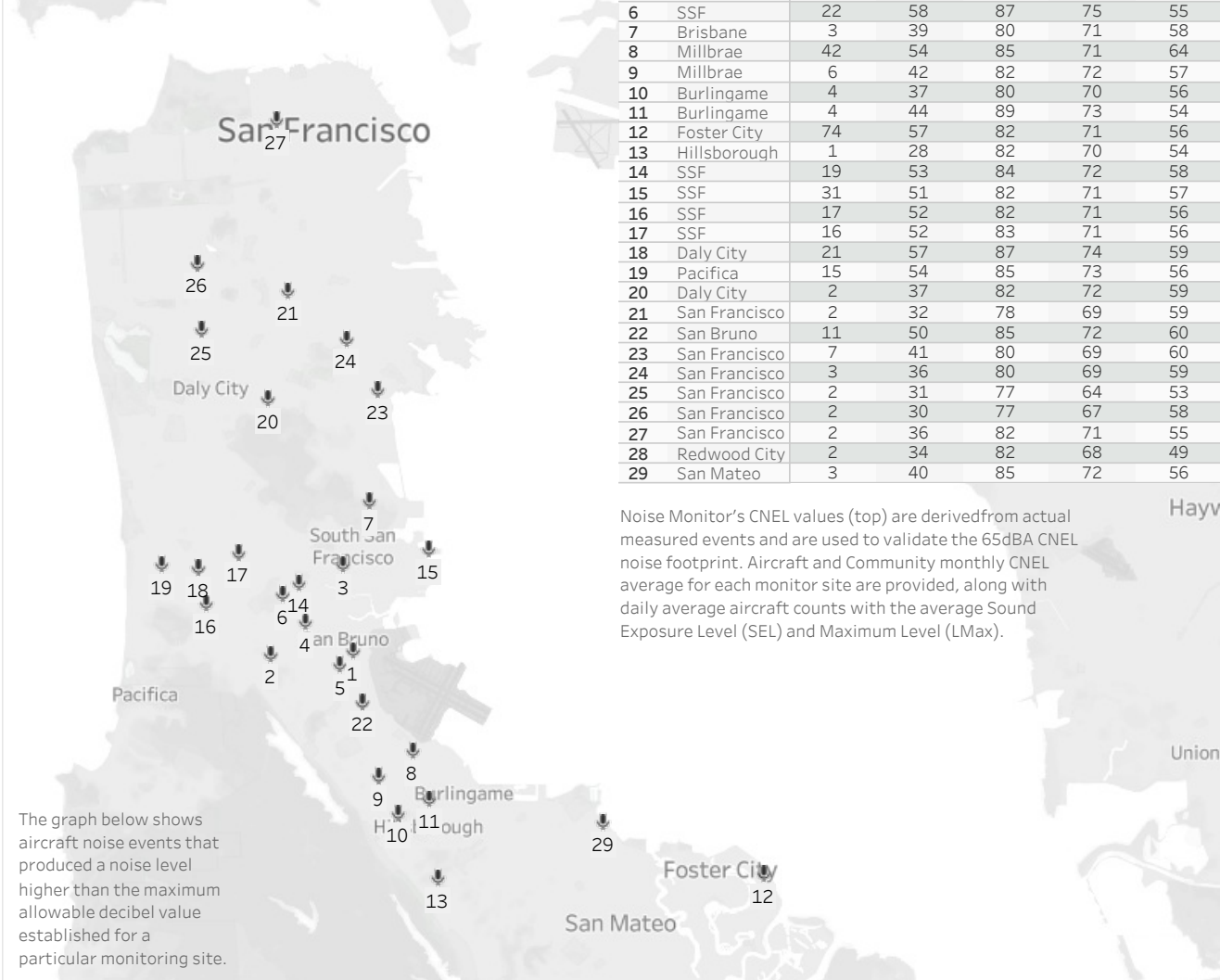
San Francisco
International
Airport

Aircraft Noise Levels

April 2020

The map shows 29 aircraft noise monitoring locations that keep track of noise levels in the communities around the airport. Image centered on SFO airport shows quarterly aircraft noise levels (dBA) exposure. The green zone marks 65dBA Community Noise Exposure Level (CNEL). The CNEL metric is used to assess and regulate aircraft noise exposure in communities surrounding the airport.

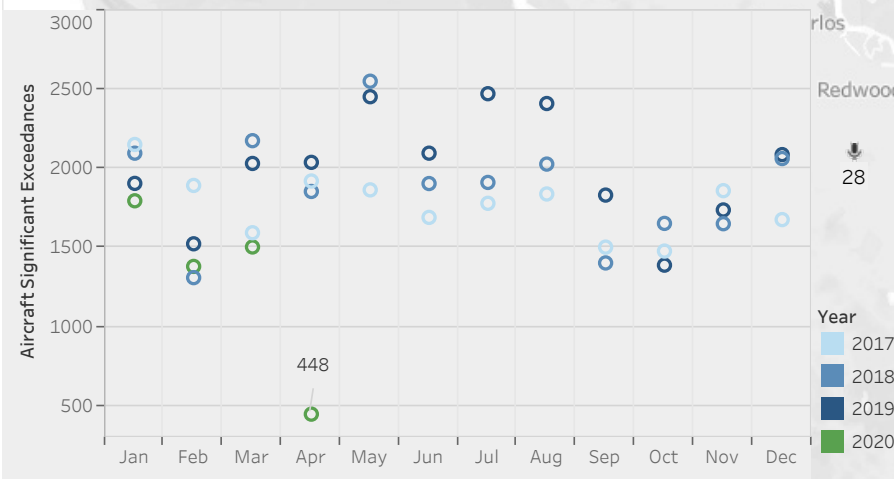
Site	City	Noise Events (AVG Day)	Aircraft		Community	
			CNEL (dBA)	SEL (dBA)	LMax (dBA)	CNEL (dBA)
1	San Bruno	39	65	92	79	65
2	San Bruno	4	43	82	71	60
3	SSF	7	46	83	71	58
4	SSF	25	61	89	77	58
5	San Bruno	29	59	87	76	59
6	SSF	22	58	87	75	55
7	Brisbane	3	39	80	71	58
8	Millbrae	42	54	85	71	64
9	Millbrae	6	42	82	72	57
10	Burlingame	4	37	80	70	56
11	Burlingame	4	44	89	73	54
12	Foster City	74	57	82	71	56
13	Hillsborough	1	28	82	70	54
14	SSF	19	53	84	72	58
15	SSF	31	51	82	71	57
16	SSF	17	52	82	71	56
17	SSF	16	52	83	71	56
18	Daly City	21	57	87	74	59
19	Pacifica	15	54	85	73	56
20	Daly City	2	37	82	72	59
21	San Francisco	2	32	78	69	59
22	San Bruno	11	50	85	72	60
23	San Francisco	7	41	80	69	60
24	San Francisco	3	36	80	69	59
25	San Francisco	2	31	77	64	53
26	San Francisco	2	30	77	67	58
27	San Francisco	2	36	82	71	55
28	Redwood City	2	34	82	68	49
29	San Mateo	3	40	85	72	56



Noise Monitor's CNEL values (top) are derived from actual measured events and are used to validate the 65dBA CNEL noise footprint. Aircraft and Community monthly CNEL average for each monitor site are provided, along with daily average aircraft counts with the average Sound Exposure Level (SEL) and Maximum Level (LMax).

The graph below shows aircraft noise events that produced a noise level higher than the maximum allowable decibel value established for a particular monitoring site.

Significant Exceedances



Note: Site 2 online starting 11/20/2019

Operations

April 2020

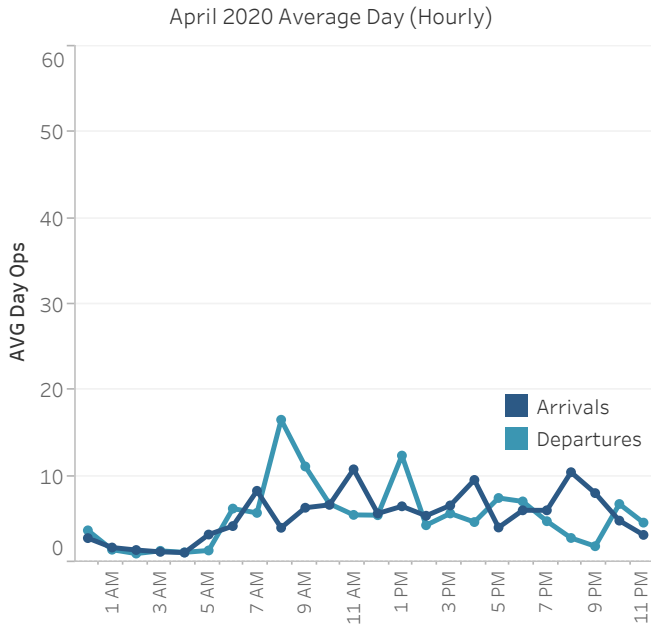
Monthly Ops AVG Daily Ops 12 Month AVG YOY Growth

7,576	252.5	34,898	-391%
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Major Arrival and Departure Routes (West Flow)



West Flow is depicted in the above image and is a predominate flow at SFO. West Flow 99%



Top Destinations

Seattle	Denver	San Diego
5%	5%	4%

Down the Bay vs Peninsula

1.1 BDEGA East	28%
1.2 BDEGA West	72%

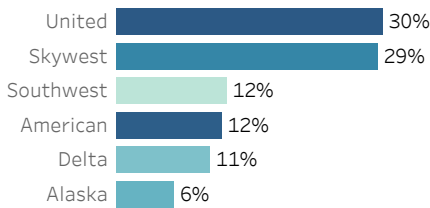
Arrival Route

1. BDEGA	25%
2. DYAMD	39%
3. SERFR	31%
4. PIRAT	5%

Departure Route

A. GAP	22%
B. SSTIK	30%
C. NIITE	8%
D. TRUKN RWY 01	32%
D. TRUKN RWY 28	9%

Airlines with the Most Operations



Non Airline

7%



Narrow Body

74%

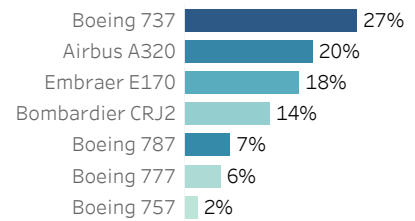


Wide Body

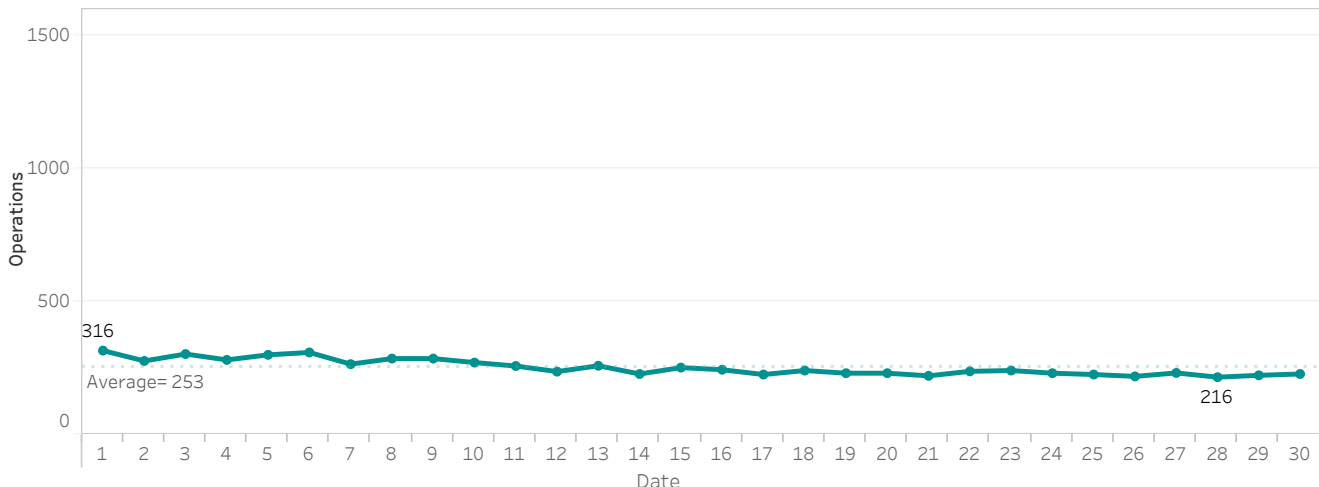
18%



Most Utilized Aircraft Types



Daily Aircraft Operations



Runway Usage and Nighttime Operations

Monthly Runway usage is shown for arrivals and departures, further categorized by all hours and nighttime hours. Graph at the bottom of the page shows hourly nighttime operations for each day. Power Runup locations are depicted on the airport map with airlines nighttime power runup counts shown below. Percent [%] is rounded to the nearest whole number.

Runway Utilization

	Arrivals	Departures
01 L/R		71% 2,556
10 L/R		2% 55
19 L/R	1% 46	
28 L/R	99% 3,573	28% 1,010

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

	Departures
10 L/R	4% 3
01 L/R	27% 23
28 L/R	69% 59

Runway Utilization

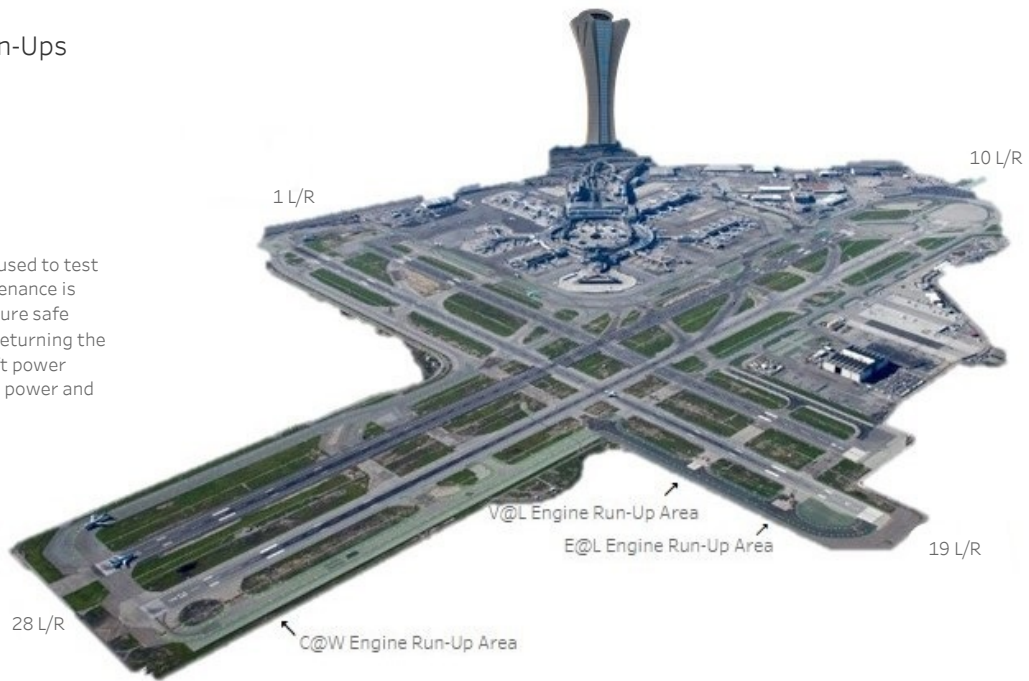
Arrivals	
28L	28R
48%	52%
Night (10pm-7am)	
38%	62%

Nighttime Power Run-Ups

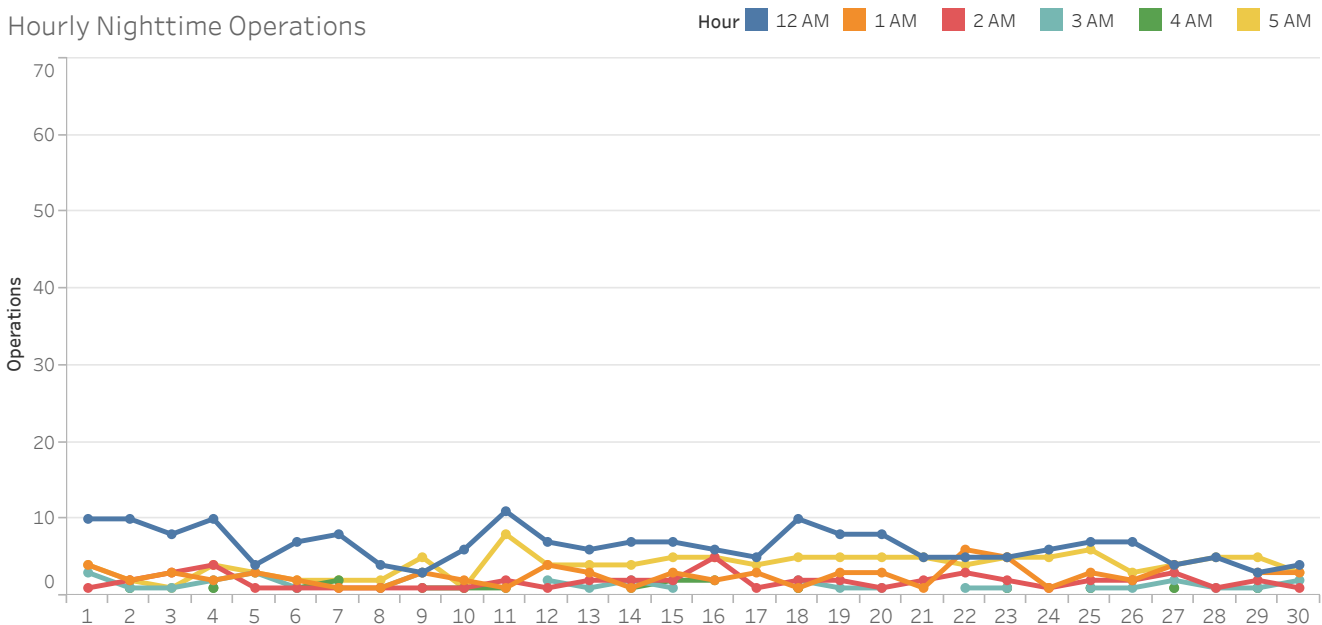
10pm-7am

Alaska Airlines	2
American Airlines	7
Delta Airlines	1
United Airlines	13

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.



Hourly Nighttime Operations



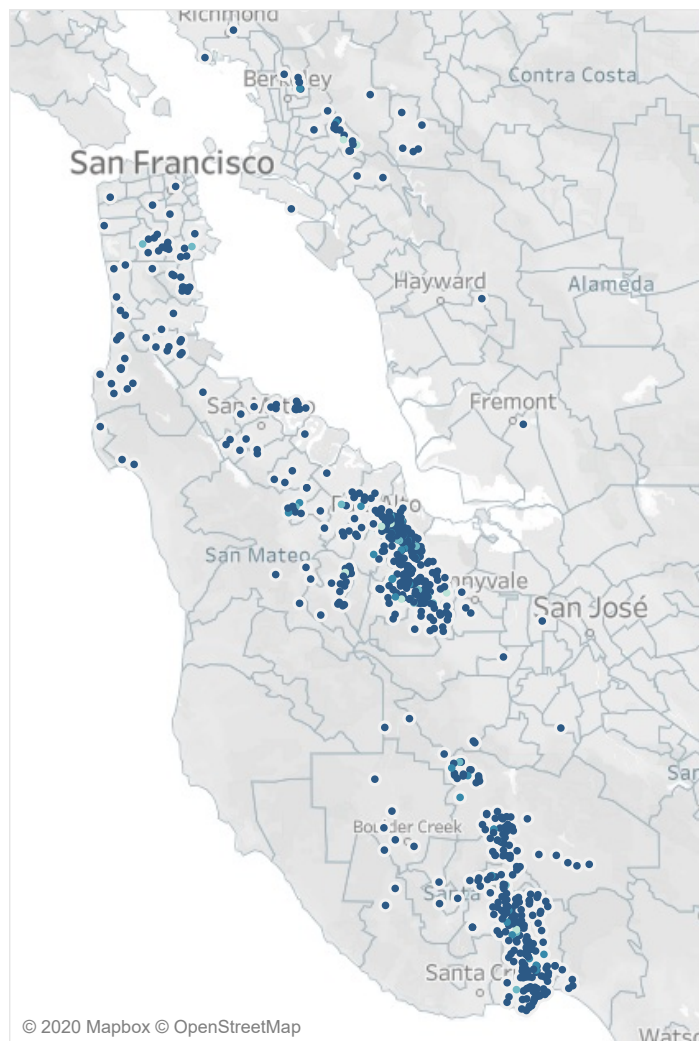
Noise Reports

Noise Reporters / Noise Reports

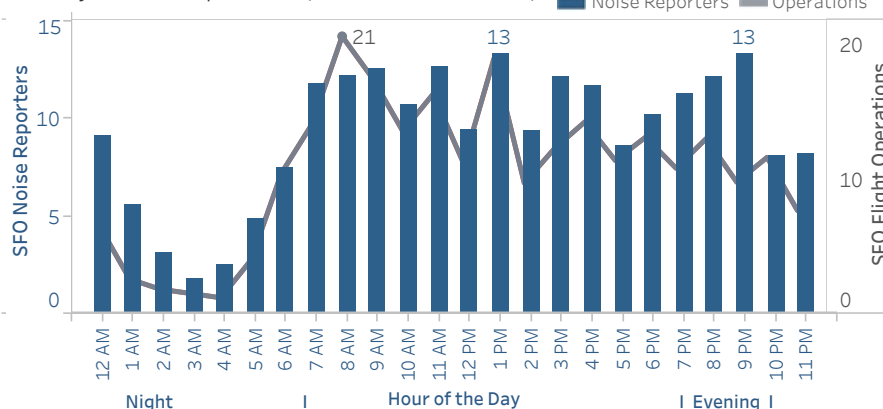
	Reporters	Noise Reports
Roundtable		
Atherton	4	358
Belmont	2	74
Brisbane	10	235
Burlingame	1	17
Daly City	4	361
El Granada	2	214
Foster City	7	31
Menlo Park	20	1,112
Montara	1	130
Pacifica	14	489
Portola Valley	26	17,057
Redwood City	8	537
San Bruno	8	103
San Carlos	3	35
San Francisco	22	1,803
San Mateo	10	348
South San Francisco	2	5
Woodside	6	627
Other		
Alameda	1	1
Aptos	4	83
Ben Lomond	1	10
Berkeley	7	617
Bonny Doon	2	2
Boulder Creek	5	13
Capitola	14	524
Carmel Valley	2	16
Cupertino	1	116
East Palo Alto	2	15
Emerald Hills	7	1,086
Felton	7	259
Fremont	1	39
Hayward	1	90
Los Altos	94	6,706
Los Altos Hills	22	3,138
Los Gatos	70	5,710
Moraga	5	218
Mountain View	18	1,770
Oakland	17	3,033
Orinda	1	17
Palo Alto	142	15,525
Penngrove	1	15
Richmond	4	1,251
Santa Clara	1	1
Santa Cruz	83	6,632
Saratoga	2	216
Scotts Valley	54	3,059
Soquel	47	2,692
Stanford	3	314
Sunnyvale	3	37
Watsonville	1	173
Grand Total	773	76,914

Reporters Annual AVG	1,039
Reports Annual AVG	166,756
New Reporters	8
New Reporters Top City	San Bruno
Furthest Report	88 miles
Reports per SFO Operation	10
Top Aircraft Types	B737 A320 E75L
Top Flight Numbers	DAL2207 UAL2080 CAL5107

Noise Reporters Location Map

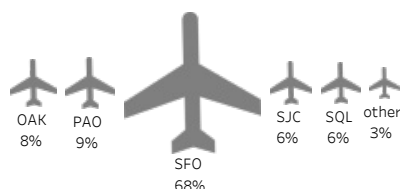


Hourly Noise Reporters (Average Day in a Month)



97% of noise reports correlate to a flight origin/destination airport.

Airport



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

Source: SFO Intl Airport Noise Monitoring System

SFO Airport/Community Roundtable

Meeting No. 325 Minutes

Wednesday, June 3, 2020

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

Roundtable Chairperson, Ricardo Ortiz, called the Regular Meeting of the SFO Airport/Community Roundtable to order, at approximately 7:00 p.m., via teleconference pursuant to the shelter in place order due to San Mateo County Health Officer, the Governor's office and the CDC social distancing guidelines which discourage large public gatherings.

Linda Wolin, Acting Roundtable Coordinator, called the roll. A quorum (at least 12 Regular Members) was present as follows:

REGULAR MEMBERS PRESENT

Ivar Satero – City and County of San Francisco Airport Commission
Dave Pine – County of San Mateo Board of Supervisors
Carol Ford - C/CAG Airport Land Use Committee (ALUC)
Elizabeth Lewis – Town of Atherton
Davina Hurt – City of Belmont
Terry O'Connell – City of Brisbane
Ricardo Ortiz – City of Burlingame
Pamela DiGiovanni – City of Daly City
Sam Hindi – City of Foster City
Al Royse – Town of Hillsborough
Cecilia Taylor – City of Menlo Park
Ann Schneider – City of Millbrae
Mike O'Neill – City of Pacifica
Ann Wengert – Town of Portola Valley
Janet Borgens – City of Redwood City
Adam Rak – City of San Carlos
Mark Addiego – City of South San Francisco
Tom Livermore – Town of Woodside

REGULAR MEMBERS ABSENT

City and County of San Francisco Board of Supervisors
City and County of San Francisco Mayor's Office
City of San Mateo
City of Half Moon Bay
City of San Bruno

ROUNDTABLE STAFF

Linda Wolin – Acting Roundtable Coordinator
Angela Montes Cardenas – Administrative Secretary
Justin Cook – Roundtable Technical Consultant (HMMH)

SAN FRANCISCO INTERNATIONAL AIRPORT STAFF

Bert Ganoung, Noise Abatement Manager
David Ong, Noise Abatement Systems Manager
Lauren Torrissi, Public Service Aide
Anneliese Taing, Noise Abatement Specialist
Anthony Carpeneti, Noise Abatement Specialist

Public Comments for Items NOT on the Agenda

A total of 1 member submitted written comment and 3 members of the public spoke during public comments.

Written comment:

Rebecca Ward- Spoken into record by Ms. Montes.

Spoken comments:

Mark Shull from Palo Alto

Jennifer Landesmann from Palo Alto

Darlene Yaplee from Palo Alto

ACTION: Janet Borgens **MOVED** to set agenda and approve consent items. The motion was seconded by Davina Hurt and **CARRIED**, roll call vote passed unanimously.

1. Chairman's Report

Roundtable Chairman, Ricardo Ortiz, began his verbal report by thanking Linda Wolin and Angela Montes for their efforts on working through staff turnover and COVID. Mr. Ortiz thanked Roundtable members for their patience due to cancellation of April 2020 meeting. He affirmed we will continue to fulfill our mission as a Roundtable. He assured community members from the Palo Alto community, that a discussion of Roundtable membership will be placed on the agenda for the August meeting.. He announced that some initiatives are being worked on and will be announced to public at next meeting. Lastly, Chair Ortiz shared that the Roundtable is in the process of selecting a new vendor for the Roundtable website because it's a priority to have a robust website.

2. Introduction of FAA Representative(s)

Chairman Ortiz introduced FAA representatives present at the meeting. Raquel Girvin FAA Regional Administrator for the Western Pacific Region shared background on the region and her role for new members of the Roundtable. She shared comments that FAA Administrator has made to members of Congress that are relevant to FAA engagements with the Roundtable. Ms. Girvin began by stating the statutory mission of FAA is to manage airspace safely and carry out moderation of national airspace including the deployment of satellite-based navigation procedures consistent with congressional direction. She stated that aircraft noise is an issue of responsibility with the aviation industry and it's not solely an FAA issue. Ms. Girvin stated that the FAA has embraced community Roundtables in participation as the appropriate place to engage with stakeholders on noise concerns. She introduced Faviola Garcia, Senior Advisor, who will be representing her office at Roundtable meetings. She also introduced Sky Laron, Community Engagement Officer. Mr. Laron agreed to provide a presentation and share details and recommendations to the Roundtable's Technical Working Group while addressing the NIITE/HUSSH procedure.

Public Comment:

Jennifer Landesmann from Palo Alto

Robert Holbrook from Brisbane

Darlene Yaplee from Palo Alto

Yvonne McHugh from Richmond

3. Report from San Francisco Airport Commission

Airport Director, Ivar Satero, shared that through the COVID crisis the airport remained opened as an in essential infrastructure. He continued to share that traffic is down to 3% of where it was last year. Airport saw a little bit of increase in last few weeks still down about 95%; what used to be 13,000 aircraft operations per day are down to about 250-300. Mr. Satero announced the restoration of international routes, but operations continue to be down 85% from last year. Employment at SFO has been impacted: of 46,000 employees 75% are furloughed and employment office is working with tenants and concessioners to prepare for return to work with hopes of seeing air service re-bound in next several months. He shared the work done on recovery framework document "From Recovery to Resilience," and how it will guide efforts as SFO returns to normalized traffic. Mr. Satero considers return successful if they are at 50% of traffic by end of year. He also shared an anticipated 2-3 year recovery. He continued by stating that face coverings and physical distance markers will be noticeable at SFO. Hundreds of hand sanitizers placed throughout facility. Plastic barriers and sanitizing of high-touch facility areas are custodians' main focus. Mr. Satero stated that boarding area A is shut down and will continue to be closed so they can focus resources on operations that are still in-use. In regard to GBAS, he shared that SFO is investing \$10 million, delays with contracting Honeywell but have achieved a breakthrough.

Mr. Satero also provided an update on the Second Chance Replacement noise insulation program. Going forward, a new process will allow for 10-day period for airport to reach out to potentially qualified residents; if no response is received, SFO will engage the city's mayor for assistance in contacting the resident for another 10 days. SFO's approach is to make this happen with 20-30 days so SFO can move on from non-responsive resident to residents that are interested and want to take advantage.

Mr. Satero then provided an update about noise monitoring. As was mentioned in the letter to FAA about permanent noise monitoring, there has been progress in terms of what revenue could potentially be used for permanent noise monitoring locations and a more definitive answer is expected. SFO's proposal includes three locations outside the 65 CNEL. Noise portal introduction functioned to the benefit of the community and the airport and allowed for improved communication and engagement with each other. New portal that team has develop for community to go for information education and answer, \$4 million investment to this system.

4. Presentation on SFO Noise Portal

Greg Bracci from Envirosuite and Bert Ganoung provided an oral presentation with visual representation of new noise monitoring portal for SFO. Mr. Bracci shared that SFO's new portal is the first of its kind being launched at any airport in US. The new web portal provides personalized data based on residency and other variables.

Mr. Ganoung added that this tool was developed to accommodate the public's interest in viewing accurate up-to-date information that staff uses on daily basis. Mr. Ganoung shared that SFO noise portal is dynamic and can be updated monthly and allows the user to go back in time and compare information. The noise portal is completely designable and new features may be added in the future. Mr. Ganoung shared that the SFO Noise Office will collaborate with SFO Roundtable to bring changes to the site, and to ensure that the public can access noise office data in a concise and meaningful and transparent way.

Public Comment:

Jennifer Landesmann from Palo Alto
Mark Shull from Palo Alto
Peter Grace from Brisbane
Darlene Yaplee from Palo Alto

5. Update on FAA IFP Gateway Review

Justin Cook, Roundtable technical consultant, presented FAA IFP Gateway Review that HMMH conducts monthly.

6. Airport Directors Report for November 2019

7. Action Minutes from February 5, 2020 Regular Meeting

Items approved during approval of Consent Agenda

8. Legislative Subcommittee – Approval of Letter: Notice of Proposed Rulemaking – Noise Certification of Supersonic Airplanes

Janet Borgens, Subcommittee Chair, presented draft letter and referred to memo on packet Page 29.

Public Comment:

Peter Grace from Brisbane
Darlene Yaplee from Palo Alto
Jennifer Landesmann from Palo Alto
Robert Holbrook from Brisbane

Chair Borgens agreed to make suggested edits to letter and submit prior to July 13th.

ACTION: Ann Wengert **MOVED** approval of Supersonic letter Notice of Proposed Rulemaking, Noise Certification of Supersonic Airplanes, as drafted to be amended by Janet Borgens. The motion was seconded by Terry O'Connell and **CARRIED**, roll call vote passed unanimously.

9. Portable Noise Monitor Placement Subcommittee-Recommendations Regarding PNMP Terminals

Subcommittee Chair Terry O'Connell gave verbal presentation and referred to memo in packet Page 40. Ms. O'Connell clarified that subcommittee is only charged with deploying temporary noise monitors not permanent.

Written Comment:

Rebecca Ward
Mike Shull from Palo Alto

Spoken Comment:

Darlene Yaplee from Palo Alto

ACTION: Elizabeth Lewis **MOVED** approval for Recommendations Regarding PNMP Terminals. The motion was seconded by Janet Borgens and **CARRIED**, unanimously.

10. Ground Based Noise Subcommittee Report

Subcommittee Chair, Ann Schneider presented oral report to Roundtable. Ms. Schneider shared that HMMH will conduct a spectral analysis study – analyzing impact of vegetation on soundwaves under various flight scenarios, data collected would give us better understand on how to mitigate.

11. HMMH Contract Amendment

Chair Ortiz gave a verbal update to Roundtable members regarding extension of the contract with HMMH for technical consultant services for FY20-21. Chair Ortiz explained that due to staff turnover and COVID, the Roundtable was not able to conduct a Request For Proposal (RFP) process., However Chair Ortiz committed to such a process for any subsequent consultant work.

12. Update on other Bay Area Roundtables

Vice Chair Ann Wengert summarized the evolution of non-formal coordination with adjacent Roundtables on matters that are concern for all. The Santa Clara/Santa Cruz Roundtable (SCSC) has expressed interest in collaborating on issues such as supersonic, and that has been a good example of how the various roundtables can work together on specific issues. FAA has expressed willingness to work with a formal or informal regional body, but has requested that it be on an issue specific basis. As the Roundtable moves on to other discussions, there will be opportunity for further collaboration.

Spoken Public Comment:
Jennifer Landesmann from Palo Alto

13. Report from Aviation and Emission Symposium 2020

Linda Wolin and Vice Mayor Ann Schneider summarized their participation in the UC Davis Aviation and Emission Symposium 2020. Ms. Wolin found it an impactful opportunity to meet and interact with Roundtables across the Country as there is opportunity to collaborate with other communities to address aviation noise. She stated difference between noise impact and noise annoyance.

Ms. Schneider summarized the FAA and environmental review process. In an environmental review, one of the few things that give communities more say in what kind of noise is whether the affected neighborhood appears on the online registry of historic places. She noted that several airports and airlines are greening themselves with enhanced sustainability programs. She shared that SFO is using sustainable fuels. Ms. Schneider extended her support to Mr. Satero with anything that Millbrae can do to help electrify operations. She stated that electrification of aircraft was a big topic discussed. Ms. Schneider also mentioned the discussion of drones at the symposium. Lastly, she shared the ability to discuss emissions, and the discovery that there are far more particulates coming out of jets than they thought.

Spoken Public Comment
Jennifer Landesmann from Palo Alto
Mike Shull from Palo Alto
Robert Holbrook from Brisbane

14. Member Communications / Announcements

NONE

15. Adjourn

Chairperson Ortiz adjourned the meeting at approximately 9:45 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's website.

AGREEMENT BETWEEN THE COUNTY OF SAN MATEO AND HARRIS MILLER MILLER & HANSON INC

This Agreement is entered into this 30th day of June, 2020 by and between the County of San Mateo, a political subdivision of the state of California, hereinafter called "County," and Harris Miller Miller & Hanson Inc. (HMMH), hereinafter called "Contractor."

* * *

Whereas, pursuant to Section 31000 of the California Government Code, County may contract with independent contractors for the furnishing of such services to or for County or any Department thereof; and

Whereas, it is necessary and desirable that Contractor be retained for the purpose of provide technical support services to the San Francisco Airport/Community Roundtable.

Now, therefore, it is agreed by the parties to this Agreement as follows:

1. Exhibits and Attachments

The following exhibits and attachments are attached to this Agreement and incorporated into this Agreement by this reference:

- Exhibit A—Services
- Exhibit B—Payments and Rates

2. Services to be performed by Contractor

In consideration of the payments set forth in this Agreement and in Exhibit B, Contractor shall perform services for County in accordance with the terms, conditions, and specifications set forth in this Agreement and in Exhibit A.

3. Payments

In consideration of the services provided by Contractor in accordance with all terms, conditions, and specifications set forth in this Agreement and in Exhibit A, County shall make payment to Contractor based on the rates and in the manner specified in Exhibit B. County reserves the right to withhold payment if County determines that the quantity or quality of the work performed is unacceptable. In no event shall County's total fiscal obligation under this Agreement exceed Ninety Thousand Dollars (\$90,000). In the event that the County makes any advance payments, Contractor agrees to refund any amounts in excess of the amount owed by the County at the time of contract termination or expiration. Contractor is not entitled to payment for work not performed as required by this agreement.

4. Term

Subject to compliance with all terms and conditions, the term of this Agreement shall be from July 1, 2020, through June 30, 2021.

5. Termination

This Agreement may be terminated by Contractor or by the Community Development Director or his/her designee at any time without a requirement of good cause upon thirty (30) days' advance written notice to the other party. Subject to availability of funding, Contractor shall be entitled to receive payment for work/services provided prior to termination of the Agreement. Such payment shall be that prorated portion of the full payment determined by comparing the work/services actually completed to the work/services required by the Agreement.

County may terminate this Agreement or a portion of the services referenced in the Attachments and Exhibits based upon the unavailability of Federal, State, or County funds by providing written notice to Contractor as soon as is reasonably possible after County learns of said unavailability of outside funding.

County may terminate this Agreement for cause. In order to terminate for cause, County must first give Contractor notice of the alleged breach. Contractor shall have five business days after receipt of such notice to respond and a total of ten calendar days after receipt of such notice to cure the alleged breach. If Contractor fails to cure the breach within this period, County may immediately terminate this Agreement without further action. The option available in this paragraph is separate from the ability to terminate without cause with appropriate notice described above. In the event that County provides notice of an alleged breach pursuant to this section, County may, in extreme circumstances, immediately suspend performance of services and payment under this Agreement pending the resolution of the process described in this paragraph. County has sole discretion to determine what constitutes an extreme circumstance for purposes of this paragraph, and County shall use reasonable judgment in making that determination.

6. Contract Materials

At the end of this Agreement, or in the event of termination, all finished or unfinished documents, data, studies, maps, photographs, reports, and other written materials (collectively referred to as "contract materials") prepared by Contractor under this Agreement shall become the property of County and shall be promptly delivered to County. Upon termination, Contractor may make and retain a copy of such contract materials if permitted by law.

7. Relationship of Parties

Contractor agrees and understands that the work/services performed under this Agreement are performed as an independent contractor and not as an employee of County and that neither Contractor nor its employees acquire any of the rights, privileges, powers, or advantages of County employees.

8. Hold Harmless

a. General Hold Harmless

Contractor shall indemnify and save harmless County and its officers, agents, employees, and servants from all claims, suits, or actions of every name, kind, and description resulting from this Agreement, the performance of any work or services required of Contractor under this Agreement, or payments made pursuant to this Agreement brought for, or on account of, any of the following:

- (A) injuries to or death of any person, including Contractor or its employees/officers/agents;
- (B) damage to any property of any kind whatsoever and to whomsoever belonging;
- (C) any sanctions, penalties, or claims of damages resulting from Contractor's failure to comply, if applicable, with the requirements set forth in the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and all Federal regulations promulgated thereunder, as amended; or
- (D) any other loss or cost, including but not limited to that caused by the concurrent active or passive negligence of County and/or its officers, agents, employees, or servants. However, Contractor's duty to indemnify and save harmless under this Section shall not apply to injuries or damage for which County has been found in a court of competent jurisdiction to be solely liable by reason of its own negligence or willful misconduct.

The duty of Contractor to indemnify and save harmless as set forth by this Section shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

9. Assignability and Subcontracting

Contractor shall not assign this Agreement or any portion of it to a third party or subcontract with a third party to provide services required by Contractor under this Agreement without the prior written consent of County. Any such assignment or subcontract without County's prior written consent shall give County the right to automatically and immediately terminate this Agreement without penalty or advance notice.

10. Insurance

a. General Requirements

Contractor shall not commence work or be required to commence work under this Agreement unless and until all insurance required under this Section has been obtained and such insurance has been approved by County's Risk Management, and Contractor shall use diligence to obtain such insurance and to obtain such approval. Contractor shall furnish County with certificates of insurance evidencing the required coverage, and there shall be a specific contractual liability endorsement extending Contractor's coverage to include the contractual liability assumed by Contractor pursuant to this Agreement. These certificates shall specify or be endorsed to provide that thirty (30) days' notice must be given, in writing, to County of any pending change in the limits of liability or of any cancellation or modification of the policy.

b. Workers' Compensation and Employer's Liability Insurance

Contractor shall have in effect during the entire term of this Agreement workers' compensation and employer's liability insurance providing full statutory coverage. In signing this Agreement, Contractor certifies, as required by Section 1861 of the California Labor Code, that (a) it is aware of the provisions of Section 3700 of the California Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code, and (b) it will comply with such provisions before commencing the performance of work under this Agreement.

c. Liability Insurance

Contractor shall take out and maintain during the term of this Agreement such bodily injury liability and property damage liability insurance as shall protect Contractor and all of its employees/officers/agents while performing work covered by this Agreement from any and all claims for damages for bodily injury,

including accidental death, as well as any and all claims for property damage which may arise from Contractor's operations under this Agreement, whether such operations be by Contractor, any subcontractor, anyone directly or indirectly employed by either of them, or an agent of either of them. Such insurance shall be combined single limit bodily injury and property damage for each occurrence and shall not be less than the amounts specified below:

- (a) Comprehensive General Liability... \$1,000,000
- (b) Motor Vehicle Liability Insurance... \$1,000,000
- (c) Professional Liability..... \$1,000,000

County and its officers, agents, employees, and servants shall be named as additional insured on any such policies of insurance, which shall also contain a provision that (a) the insurance afforded thereby to County and its officers, agents, employees, and servants shall be primary insurance to the full limits of liability of the policy and (b) if the County or its officers, agents, employees, and servants have other insurance against the loss covered by such a policy, such other insurance shall be excess insurance only.

In the event of the breach of any provision of this Section, or in the event any notice is received which indicates any required insurance coverage will be diminished or canceled, County, at its option, may, notwithstanding any other provision of this Agreement to the contrary, immediately declare a material breach of this Agreement and suspend all further work and payment pursuant to this Agreement.

11. Compliance With Laws

All services to be performed by Contractor pursuant to this Agreement shall be performed in accordance with all applicable Federal, State, County, and municipal laws, ordinances, and regulations, including but not limited to the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Federal Regulations promulgated thereunder, as amended (if applicable), the Business Associate requirements set forth in Attachment H (if attached), the Americans with Disabilities Act of 1990, as amended, and Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of disability in programs and activities receiving any Federal or County financial assistance. Such services shall also be performed in accordance with all applicable ordinances and regulations, including but not limited to appropriate licensure, certification regulations, provisions pertaining to confidentiality of records, and applicable quality assurance regulations. In the event of a conflict between the terms of this Agreement and any applicable State, Federal, County, or municipal law or regulation, the requirements of the applicable law or regulation will take precedence over the requirements set forth in this Agreement.

12. Non-Discrimination and Other Requirements

a. General Non-discrimination

No person shall be denied any services provided pursuant to this Agreement (except as limited by the scope of services) on the grounds of race, color, national origin, ancestry, age, disability (physical or mental), sex, sexual orientation, gender identity, marital or domestic partner status, religion, political beliefs or affiliation, familial or parental status (including pregnancy), medical condition (cancer-related), military service, or genetic information.

b. Equal Employment Opportunity

Contractor shall ensure equal employment opportunity based on objective standards of recruitment, classification, selection, promotion, compensation, performance evaluation, and management relations for all employees under this Agreement. Contractor's equal employment policies shall be made available to County upon request.

c. Section 504 of the Rehabilitation Act of 1973

Contractor shall comply with Section 504 of the Rehabilitation Act of 1973, as amended, which provides that no otherwise qualified individual with a disability shall, solely by reason of a disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination in the performance of any services this Agreement. This Section applies only to contractors who are providing services to members of the public under this Agreement.

d. Compliance with County's Equal Benefits Ordinance

Contractor shall comply with all laws relating to the provision of benefits to its employees and their spouses or domestic partners, including, but not limited to, such laws prohibiting discrimination in the provision of such benefits on the basis that the spouse or domestic partner of the Contractor's employee is of the same or opposite sex as the employee.

e. Discrimination Against Individuals with Disabilities

The nondiscrimination requirements of 41 C.F.R. 60-741.5(a) are incorporated into this Agreement as if fully set forth here, and Contractor and any subcontractor shall abide by the requirements of 41 C.F.R. 60-741.5(a). This regulation prohibits discrimination against qualified individuals on the basis of disability and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified individuals with disabilities.

f. History of Discrimination

Contractor certifies that no finding of discrimination has been issued in the past 365 days against Contractor by the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or any other investigative entity. If any finding(s) of discrimination have been issued against Contractor within the past 365 days by the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or other investigative entity, Contractor shall provide County with a written explanation of the outcome(s) or remedy for the discrimination prior to execution of this Agreement. Failure to comply with this Section shall constitute a material breach of this Agreement and subjects the Agreement to immediate termination at the sole option of the County.

g. Reporting; Violation of Non-discrimination Provisions

Contractor shall report to the County Manager the filing in any court or with any administrative agency of any complaint or allegation of discrimination on any of the bases prohibited by this Section of the Agreement or the Section titled "Compliance with Laws". Such duty shall include reporting of the filing of any and all charges with the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or any other entity charged with the investigation or adjudication of allegations covered by this subsection within 30 days of such filing, provided that within such 30 days such entity has not notified Contractor that such charges are dismissed or otherwise unfounded. Such notification shall include a general description of the circumstances involved and a general description of

the kind of discrimination alleged (for example, gender-, sexual orientation-, religion-, or race-based discrimination).

Violation of the non-discrimination provisions of this Agreement shall be considered a breach of this Agreement and subject the Contractor to penalties, to be determined by the County Manager, including but not limited to the following:

- i. termination of this Agreement;
- ii. disqualification of the Contractor from being considered for or being awarded a County contract for a period of up to 3 years;
- iii. liquidated damages of \$2,500 per violation; and/or
- iv. imposition of other appropriate contractual and civil remedies and sanctions, as determined by the County Manager.

To effectuate the provisions of this Section, the County Manager shall have the authority to offset all or any portion of the amount described in this Section against amounts due to Contractor under this Agreement or any other agreement between Contractor and County.

h. Compliance with Living Wage Ordinance

As required by Chapter 2.88 of the San Mateo County Ordinance Code, Contractor certifies all contractor(s) and subcontractor(s) obligated under this contract shall fully comply with the provisions of the County of San Mateo Living Wage Ordinance, including, but not limited to, paying all Covered Employees the current Living Wage and providing notice to all Covered Employees and Subcontractors as required under the Ordinance.

13. Compliance with County Employee Jury Service Ordinance

Contractor shall comply with Chapter 2.85 of the County's Ordinance Code, which states that Contractor shall have and adhere to a written policy providing that its employees, to the extent they are full-time employees and live in San Mateo County, shall receive from the Contractor, on an annual basis, no fewer than five days of regular pay for jury service in San Mateo County, with jury pay being provided only for each day of actual jury service. The policy may provide that such employees deposit any fees received for such jury service with Contractor or that the Contractor may deduct from an employee's regular pay the fees received for jury service in San Mateo County. By signing this Agreement, Contractor certifies that it has and adheres to a policy consistent with Chapter 2.85. For purposes of this Section, if Contractor has no employees in San Mateo County, it is sufficient for Contractor to provide the following written statement to County: "For purposes of San Mateo County's jury service ordinance, Contractor certifies that it has no full-time employees who live in San Mateo County. To the extent that it hires any such employees during the term of its Agreement with San Mateo County, Contractor shall adopt a policy that complies with Chapter 2.85 of the County's Ordinance Code." The requirements of Chapter 2.85 do not apply if this Agreement's total value listed in the Section titled "Payments", is less than one-hundred thousand dollars (\$100,000), but Contractor acknowledges that Chapter 2.85's requirements will apply if this Agreement is amended such that its total value meets or exceeds that threshold amount.

14. Retention of Records; Right to Monitor and Audit

(a) Contractor shall maintain all required records relating to services provided under this Agreement for three (3) years after County makes final payment and all other pending matters are closed, and

Contractor shall be subject to the examination and/or audit by County, a Federal grantor agency, and the State of California.

(b) Contractor shall comply with all program and fiscal reporting requirements set forth by applicable Federal, State, and local agencies and as required by County.

(c) Contractor agrees upon reasonable notice to provide to County, to any Federal or State department having monitoring or review authority, to County's authorized representative, and/or to any of their respective audit agencies access to and the right to examine all records and documents necessary to determine compliance with relevant Federal, State, and local statutes, rules, and regulations, to determine compliance with this Agreement, and to evaluate the quality, appropriateness, and timeliness of services performed.

15. Merger Clause: Amendments

This Agreement, including the Exhibits and Attachments attached to this Agreement and incorporated by reference, constitutes the sole Agreement of the parties to this Agreement and correctly states the rights, duties, and obligations of each party as of this document's date. In the event that any term, condition, provision, requirement, or specification set forth in the body of this Agreement conflicts with or is inconsistent with any term, condition, provision, requirement, or specification in any Exhibit and/or Attachment to this Agreement, the provisions of the body of the Agreement shall prevail. Any prior agreement, promises, negotiations, or representations between the parties not expressly stated in this document are not binding. All subsequent modifications or amendments shall be in writing and signed by the parties.

16. Controlling Law: Venue

The validity of this Agreement and of its terms, the rights and duties of the parties under this Agreement, the interpretation of this Agreement, the performance of this Agreement, and any other dispute of any nature arising out of this Agreement shall be governed by the laws of the State of California without regard to its choice of law or conflict of law rules. Any dispute arising out of this Agreement shall be venued either in the San Mateo County Superior Court or in the United States District Court for the Northern District of California.

17. Notices

Any notice, request, demand, or other communication required or permitted under this Agreement shall be deemed to be properly given when both: (1) transmitted via facsimile to the telephone number listed below or transmitted via email to the email address listed below; and (2) sent to the physical address listed below by either being deposited in the United States mail, postage prepaid, or deposited for overnight delivery, charges prepaid, with an established overnight courier that provides a tracking number showing confirmation of receipt.

In the case of County, to:

Name/Title: Joe LaClair, Planning Services Manager
Address: 455 County Center, 2nd Floor, Redwood City, CA 94063
Telephone: 650-363-1865

Facsimile: 650/363/4849
Email: jlaclair@smcgov.org

In the case of Contractor, to:

Name/Title: Eugene Reindel, Vice-President
Address: 2250 Douglas Boulevard, Suite 240, Roseville, CA 95661
Telephone: 916/368-0707
Email: ereindel@hmmh.com


18. Electronic Signature

Both County and Contractor wish to permit this Agreement and future documents relating to this Agreement to be digitally signed in accordance with California law and County's Electronic Signature Administrative Memo. Any party to this Agreement may revoke such agreement to permit electronic signatures at any time in relation to all future documents by providing notice pursuant to this Agreement.

* * *

THIS CONTRACT IS NOT VALID UNTIL SIGNED BY ALL PARTIES. NO WORK WILL COMMENCE UNTIL THIS DOCUMENT HAS BEEN SIGNED BY THE COUNTY PURCHASING AGENT OR AUTHORIZED DESIGNEE.

For Contractor:



Contractor Signature


July 20, 2020

Date

Mary Ellen Eagan, President and CEO

Contractor Name (please print)

For County:



Purchasing Agent Signature
(Department Head or
Authorized Designee)
County of San Mateo

July 21, 2020

Date

Steve Monowitz

Purchasing Agent Name (please print)
(Department Head or **Authorized** Designee)
County of San Mateo

Community Development Director

Purchasing Agent or **Authorized** Designee
Job Title (please print)
County of San Mateo

Exhibit A

In consideration of the payments set forth in Exhibit B, Contractor shall provide the following services:

1. Under the supervision of the Roundtable Coordinator, provide technical support to the Roundtable. These responsibilities include, but are not limited to, the following:
 - a. Research, investigate, analyze and summarize past and current aviation noise impacts to be presented to the Roundtable members for discussion.
 - b. Strategize, develop and advise on potential plausible solutions and means to reduce noise impacts using technical tools, such as Aviation Environmental Design Tool (AEDT), Geographical Informational Systems (GIS), Terminal Area Route Generation, Evaluation and Traffic Simulation (TARGETS), and/or other tools to assist in developing solutions).
 - c. Prepare technical staff reports, memos, letters, emails, and other written material and graphics to communicate research findings, analyses, and recommendations related to Roundtable Work Program items and other relevant topics/issues the Roundtable is currently focused on, such as the Roundtable's 2016 response to the FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties. Materials will be utilized for Roundtable regular meetings, special meetings, workshops, and subcommittee meetings; follow-up, as needed, on requests for information about Roundtable activities as requested by the Roundtable Coordinator.
 - d. Attend and be prepared to present any findings, analyses and/or recommendations at all Roundtable regular meetings, special meetings, subcommittee meetings, and workshops.
 - e. Assist staff in the development of the Roundtable's annual Work Program.
2. As requested by the Roundtable Coordinator, represent the Roundtable in meetings and interactions with (1) CalTrans Division of Aeronautics staff, (2) FAA staff, (3) key staff at San Francisco International Airport, (4) elected officials, (5) the public, and (6) all other interested persons or agencies.
3. Develop and maintain an effective working relationship with (1) local elected officials, (2) FAA staff, (3) CalTrans Division of Aeronautics staff, (4) San Francisco International Airport staff, (5) local city planning staff, and (6) others, regarding noise issues related to aircraft operations at San Francisco International Airport.
4. Coordinate Roundtable technical issues with FAA staff, San Francisco International Airport staff, CalTrans Division of Aeronautics staff, the Roundtable Program Coordinator, and others, as necessary.
5. Complete additional relevant assignments/activities, as directed by the Roundtable Coordinator.

Exhibit B

In consideration of the services provided by Contractor described in Exhibit A and subject to the terms of the Agreement, County shall pay Contractor based on the following fee schedule and terms:

County will pay Contractor within thirty (30) calendar days of receipt of a monthly invoice from Contractor itemizing the work done and using the billing rates indicated in this Exhibit B. Contractor shall submit an invoice each month; the invoice shall indicate in detail the work performed, including hours and rates for work completed, and services and deliverables provided. In the event that County staff determines that the invoice is inadequate or fails to provide enough information for County staff to assess Contractor's compliance with the terms and timing of services under this Agreement, the County will return the invoice to Contractor with an explanation and request for missing information. The County shall not be obligated to pay Contractor until Contractor submits a corrected invoice, demonstrating satisfactory compliance with the terms of this Agreement. In no case shall the total amount payable under this Agreement for the work indicated in attached Exhibit A exceed \$90,000 without prior written consent of County in the form of an amendment to this Agreement.

Contractor will provide services on a time and materials basis. The following hourly billable rates will apply for the duration of this Agreement.

Labor Category	Hourly Rate
Executive Consultant	\$295
Supervisory Consultant	\$280
Principal Consultant I	\$275
Principal Consultant II	\$210
Senior Consultant I	\$165
Senior Consultant II	\$160
Senior Consultant III	\$145
Consultant I	\$130
Consultant II	\$125
Consultant III	\$115
Sr. Project Support	\$190
Project Support I	\$135
Project Support II	\$100
Programmer/Software Support	\$190

Reimbursable Travel Expenses

To the extent that this Agreement authorizes reimbursements to Contractor for travel, lodging, and other related expenses as defined in this section, the Contractor must comply with all the terms of this section in order to be reimbursed for travel.

1. Estimated travel expenses must be submitted to authorized County personnel for advanced written authorization before such expenses are incurred. Significant differences between

estimated and actual travel expenses may be grounds for denial of full reimbursement of actual travel expenses.

2. Itemized receipts (copies accepted) for all reimbursable travel expenses are required to be provided as supporting documentation with all invoices submitted to the County.

3. Unless otherwise specified in this section, the County will reimburse Contractor for reimbursable travel expenses for days when services were provided to the County. Contractor must substantiate in writing to the County the actual services rendered and the specific dates. The County will reimburse for travel at 75% of the maximum reimbursement amount for the actual costs of meals and incidental expenses on the day preceding and/or the day following days when services were provided to the County, provided that such reimbursement is reasonable, in light of travel time and other relevant factors, and is approved in writing by authorized County personnel.

4. Unless otherwise specified within the contract, reimbursable travel expenses shall not include Local Travel. "Local Travel" means travel entirely within a fifty-mile radius of the Contractor's office and travel entirely within a fifty-mile radius of San Mateo County. Any mileage reimbursements for a Contractor's use of a personal car for reimbursable travel shall be reimbursed based on the Federal mileage reimbursement rate.

5. The maximum reimbursement amount for the actual lodging, meal and incidental expenses is limited to the then-current Continental United States ("CONUS") rate for the location of the work being done (i.e., Redwood City for work done in Redwood City, San Mateo for work done at San Mateo Medical Center) as set forth in the Code of Federal Regulations and as listed by the website of the U.S. General Services Administration (available online at <http://www.gsa.gov/portal/content/104877> or by searching www.gsa.gov for the term 'CONUS'). County policy limits the reimbursement of lodging in designated high cost of living metropolitan areas to a maximum of double the then-current CONUS rate; for work being done outside of a designated high cost of living metropolitan area, the maximum reimbursement amount for lodging is the then-current CONUS rate.

6. The maximum reimbursement amount for the actual cost of airfare shall be limited to fares for Economy Class or below. Air travel fares will not be reimbursed for first class, business class, "economy-plus," or other such classes. Reimbursable car rental rates are restricted to the mid-level size range or below (i.e. standard size, intermediate, compact, or subcompact); costs for specialty, luxury, premium, SUV, or similar category vehicles are not reimbursable. Reimbursable ride-shares are restricted to standard or basic size vehicles (i.e., non-premium vehicles unless it results in a cost-saving to the County). Exceptions may be allowed under certain circumstances, such as unavailability of the foregoing options, with written approval from authorized County personnel. Other related travel expenses such as taxi fares, ride-shares, parking costs, train or subway costs, etc. shall be reimbursable on an actual-cost basis. Reimbursement of tips for taxi fare, or ride-share are limited to no more than 15% of the fare amount.

7. Travel-related expenses are limited to: airfare, lodging, car rental, taxi/ride-share plus tips, tolls, incidentals (e.g. porters, baggage carriers or hotel staff), breakfast, lunch, dinner, mileage reimbursement based on Federal reimbursement rate. The County will not reimburse for alcohol.

8. Reimbursement of tips are limited to no more than 15 percent. Non-reimbursement items (i.e., alcohol) shall be excluded when calculating the amount of the tip that is reimbursable.



TO: SFO Roundtable Members
FROM: Linda Wolin, Acting Roundtable Coordinator
RE: Process for Amending Roundtable Membership
DATE: July 31, 2020

The San Francisco Airport Community Roundtable (“Roundtable”) is governed by a Memorandum of Understanding (MOU) signed by participating jurisdictions in 1981, and amended over time, as well as organizational Bylaws, also amended over time and last ratified in 2015. Below is a summary of the membership addition/withdrawal process as outlined in these two governing documents. [Links to these documents can be found here: [Roundtable MOU](#) and [Roundtable Bylaws](#).]

Request for Voting Membership: Jurisdictions Located *Within* San Mateo County

As provided in Article III of the Roundtable MOU, incorporated towns and/or cities located within San Mateo County may request voting membership on the Roundtable by adopting a resolution:

- Authorizing two members of the city/town council (A Representative and Alternate) to represent the city/town on the Roundtable;
- Agreeing to comply with the MOU and all related amendments and any bylaws approved in accordance with the MOU; and
- Agreeing to contribute annual funding to the Roundtable in the same amount as current city/town members contribute, at the time of membership request or such annual funding as approved by the Roundtable for new members.

Withdrawal of a Voting Member

Any voting member may withdraw from the Roundtable by:

- Filing a written *Notice of Intent to Withdraw from the Roundtable*, with the Roundtable Chairperson, at least thirty (30) days in advance of the effective date of withdrawal.

Requesting Voting Membership: Jurisdictions Located *Outside* San Mateo County

The MOU does not allow membership for jurisdictions located outside of San Mateo County. The only way to allow for this type of expanded membership would be to amend the MOU. Article V sets for the process for amending the MOU, which is described below in the context of expanding membership beyond jurisdiction in San Mateo County.

In order for a jurisdiction outside San Mateo County to be recommended for voting membership, the following steps must occur:

- At a Regular Roundtable Meeting, a current voting member must make a motion to amend the MOU’s membership provisions to allow jurisdictions outside San Mateo County to be members and to set forth a process for doing so.
- The motion must receive a second from another voting member.
- At least two-thirds of the Roundtable’s voting members must approve the motion.

Process for Amending Roundtable Membership Memo

July 31, 2020

Page 2 of 2

If the motion passes (receives at least the necessary two-thirds votes for approval), then the following additional steps must occur:

- The amendment to the MOU shall be forwarded to the respective councils/boards of the existing voting Roundtable member agencies/bodies for consideration/action.
- Two-thirds of the existing Roundtable member agencies/bodies must approve the MOU amendment by a majority vote.

If less than two-thirds of the member agencies/bodies approve the proposed MOU amendment, the proposal fails.



**SAN FRANCISCO
INTERNATIONAL
AIRPORT/COMMUNITY
ROUNDTABLE**

**MEMORANDUM OF
UNDERSTANDING
(MOU)**

**PROVIDING FOR THE CONTINUING OPERATION OF
THE
SAN FRANCISCO INTERNATIONAL
AIRPORT/COMMUNITY ROUNDTABLE**

Working together for quieter skies 

Approved by the Roundtable: April 6, 2005
Effective Date: October 5, 2005

MEMORANDUM OF UNDERSTANDING (MOU)

Approved by the Roundtable on April 6, 2005
Effective Date: October 5, 2005

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MEMORANDUM OF UNDERSTANDING (MOU)

PROVIDING FOR THE CONTINUING OPERATION OF THE SAN FRANCISCO INTERNATIONAL AIRPORT/COMMUNITY ROUNDTABLE

Preamble

San Francisco International Airport is owned and operated by the City and County of San Francisco but is located entirely within neighboring San Mateo County. Because of the shared impacts that result from airport operations, the two counties entered into a Joint Powers Agreement (JPA) in 1978 to quantify the impacts and to identify possible mitigation actions. The implementation of the mitigations noted by the Joint Powers Board, in its *Joint Action Plan*, called for the formation of a formal structure and process to oversee the implementation of the numerous mitigation actions outlined in the *Plan*.

In May 1981, the County of San Mateo, the County Airport Land Use Committee (ALUC), and the governing bodies of 11 cities/towns located in San Mateo County near the Airport¹ entered into a Memorandum of Understanding (MOU) with the City and County of San Francisco to create a public body known as the San Francisco International Airport/Community Roundtable (Roundtable). Under this agreement, the Roundtable became a committee formed to work cooperatively to oversee the implementation of the recommendations contained in the *Joint Action Plan* adopted by the Joint Powers Board in 1980. Those recommendations addressed various community impacts from the operation of San Francisco International Airport, including aircraft noise, vehicular ground access, and air quality. Since its first meeting on June 3, 1981, the Roundtable has focused its efforts on reducing aircraft noise impacts in affected neighborhoods and communities. Vehicular airport ground access and airport-related air quality issues have been and continue to be addressed by other Bay Area public agencies.

In October 1992, the original MOU was amended for the first time, in response to the Airport Commission's adoption and implementation of a San Francisco International Airport Master Plan. The Master Plan provided for the expansion, consolidation, and remodeling of airport landside facilities, through the year 2006. MOU Amendment No.1 also provided for the development of a Roundtable Joint Work Plan, for which the Airport Commission agreed to provide funding to the Roundtable, in the amount of \$100,000 per year, from 1993 through 2000. Under that amendment, the Airport Commission also agreed to spend up to \$120 million to fund aircraft noise insulation projects in eligible cities.

¹ The original 1981 Roundtable MOU signatory cities/towns within San Mateo County included the following: City of Brisbane, City of Burlingame, Town of Colma, City of Daly City, City of Foster City, Town of Hillsborough, City of Millbrae, City of Pacifica, City of San Bruno, City of San Mateo, and the City of South San Francisco. The Town of Colma and the City of San Mateo withdrew their membership shortly after the Roundtable began meeting in 1981. Nine cities in San Mateo County remained members until additional cities joined in 1997.

MEMORANDUM OF UNDERSTANDING (MOU) PROVIDING FOR THE CONTINUING OPERATION OF THE SAN FRANCISCO INTERNATIONAL AIRPORT/COMMUNITY ROUNDTABLE

Page 2 of 7

Preamble - continued

In June 1997, the 1981 MOU, as amended, was amended a second time, to allow non-member cities and towns in San Mateo County to join the Roundtable. MOU Amendment No. 2 specified the procedures for joining the Roundtable and established an annual financial contribution requirement for new member jurisdictions. As a result of that amendment, the Roundtable membership increased from 13 to 23 members.

In 2004, the Roundtable Chairperson appointed a Roundtable subcommittee to review the 1981 MOU, as amended, and update the document to provide for improved operation and efficiency of the Roundtable as a public body. The following language is a consolidation of the previous MOU and Amendments Nos.1 and 2, in a more organized and comprehensive format. Also included is additional language to reflect the continuing status of the Roundtable and to provide for more efficient operation of the organization, as a whole.

ARTICLE I: Statement of Purpose and Objectives

1. Purpose

As a result of more than twenty-four years of cooperation between the San Francisco Airport Commission, noise-impacted communities, the federal government, and the airlines operating at San Francisco International Airport, the Roundtable has facilitated numerous aircraft noise mitigation achievements to improve the quality of life in communities near the Airport. The overall purpose of the Roundtable is to continue to foster and enhance this cooperative relationship to develop, evaluate, and implement reasonable and feasible policies, procedures, and mitigation actions that will further reduce the impacts of aircraft noise in neighborhoods and communities in San Francisco and San Mateo Counties.

2. Objectives

- Objective 1: Continue to organize, administer, and operate the San Francisco International Airport/Community Roundtable as a public forum for discussion, study, analysis, and evaluation of policies, procedures and mitigation actions that will minimize aircraft noise impacts to help improve the quality of life of residents in San Mateo and San Francisco Counties.
- Objective 2: Provide a framework of understanding as to the history and operation of the San Francisco International Airport/Community Roundtable.
- Objective 3: Maintain the San Francisco International Airport/Community Roundtable as a focal point of information and discussion between local, state, and federal legislators and policy makers, as it applies to noise impacts from airport/aircraft operations in local communities.

MEMORANDUM OF UNDERSTANDING (MOU) PROVIDING FOR THE CONTINUING OPERATION OF THE SAN FRANCISCO INTERNATIONAL AIRPORT/COMMUNITY ROUNDTABLE

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Objectives – continued

- Objective 4: Develop and implement an annual Roundtable Work Program to analyze and evaluate the impacts of aircraft noise in affected communities and to make recommendations to appropriate agencies, regarding implementation of effective noise mitigation actions.
- Objective 5: Maintain communication and cooperation between Airport management and local governments, regarding: (1) local agency land use and zoning decisions within noise-sensitive and/or overflight areas, while recognizing local government autonomy to make those decisions and (2) decisions/actions that affect current and future on-airport development, while recognizing the Airport Commission's autonomy to make those decisions.

ARTICLE II: Agreement

Signatory agencies/bodies to this Memorandum of Understanding (MOU) agree as follows:

1. Accept in concept and spirit the continuing operation of the San Francisco International Airport/Community Roundtable as described in the "Statement of Purpose and Objectives," as stated in Article I.
2. Work cooperatively to reduce the impacts of noise, from aircraft operations at San Francisco International Airport, in affected neighborhoods and communities.
3. Provide the necessary means (i.e., funding, staff support, supplies, etc.) to enable the Roundtable to achieve a reduction and mitigation of aircraft noise impacts, as addressed in this agreement.
4. Represent and inform the respective constituencies of the San Francisco International Airport/Community Roundtable members of the Roundtable's activities and actions to reduce aircraft noise impacts.
5. Support and abide by Roundtable Resolution No. 93-01, which states, in part, that the Roundtable members, as a group, will not take any action(s) that would result in the "shifting" of noise from one community to another, related to aircraft operations at San Francisco International Airport.

MEMORANDUM OF UNDERSTANDING (MOU) PROVIDING FOR THE CONTINUING OPERATION OF THE SAN FRANCISCO INTERNATIONAL AIRPORT/COMMUNITY ROUNDTABLE

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ARTICLE III: Roundtable Membership

1. Existing voting membership – The existing Roundtable voting membership (March 2005) consists of one designated Representative and one designated Alternate from the following agencies/bodies:

City and County of San Francisco Board of Supervisors
City and County of San Francisco Mayor’s Office
City and County of San Francisco Airport Commission
County of San Mateo Board of Supervisors
City/County Association of Governments of San Mateo County (CCAG)
 Airport Land Use Committee (ALUC)
Town of Atherton
City of Belmont
City of Brisbane
City of Burlingame
City of Daly City
City of Foster City
City of Half Moon Bay
Town of Hillsborough
City of Menlo Park
City of Millbrae
City of Pacifica
Town of Portola Valley
City of Redwood City
City of San Bruno
City of San Carlos
City of San Mateo
City of South San Francisco
Town of Woodside

2. Elected/Appointed Membership - All Representatives and Alternates who serve on the Roundtable shall be elected officials (i.e., Council Members, Supervisors, etc.) from the agencies/bodies they represent and serve at the pleasure of their appointing agency/body, except Representatives and Alternates from the following, who shall be appointed by and serve at the pleasure of their appointing entity:

City and County of San Francisco Mayor’s Office
City and County of San Francisco Airport Commission
C/CAG Airport Land Use Committee (ALUC)

MEMORANDUM OF UNDERSTANDING (MOU) PROVIDING FOR THE CONTINUING OPERATION OF THE SAN FRANCISCO INTERNATIONAL AIRPORT/COMMUNITY ROUNDTABLE

Page 5 of 7

ARTICLE III: Roundtable Membership - continued

3. Non-Voting Membership - Roundtable non-voting membership shall consist of Advisory Members who represent the following:
 - a. Chief Pilots from airlines operating at San Francisco International Airport
 - b. Federal Aviation Administration (FAA) staff
4. Additional Voting Membership - Other incorporated towns and/or cities located within San Mateo County may request voting membership on the San Francisco International Airport/Community Roundtable by adopting a resolution:
 - a. Authorizing two members of the city/town council (a Representative and Alternate) to represent the city/town on the Roundtable.
 - b. Agreeing to comply with this Memorandum of Understanding (MOU) and all related amendments and any bylaws approved in accordance with this MOU.
 - c. Agreeing to contribute annual funding to the Roundtable in the same amount as current city/town members contribute, at the time of the membership request, or such annual funding as approved by the Roundtable for new members.
5. Withdrawal of a Voting Member - Any voting member may withdraw from the Roundtable by filing a written *Notice of Intent to Withdraw from the Roundtable*, with the Roundtable Chairperson, at least thirty (30) days in advance of the effective date of the withdrawal.

ARTICLE IV: Roundtable Operations and Support

1. Roundtable operations shall be guided by a set of comprehensive bylaws that govern the operation, administration, funding, and management of the Roundtable and its activities.
2. Roundtable staff support shall be provided by the San Francisco Airport Commission and the County of San Mateo. Additional technical staff support may be provided by consultant(s), as needed, in accordance with the relevant provisions in the adopted Roundtable Bylaws.

MEMORANDUM OF UNDERSTANDING (MOU) PROVIDING FOR THE CONTINUING OPERATION OF THE SAN FRANCISCO INTERNATIONAL AIRPORT/COMMUNITY ROUNDTABLE

Page 6 of 7

ARTICLE V: Amending This Memorandum of Understanding (MOU)

1. This Memorandum of Understanding (MOU) may be amended as follows:

Step 1: *Roundtable consideration of a proposed MOU amendment*

Any voting member of the Roundtable may propose an amendment to this MOU. The proposal shall be made at a Roundtable Regular Meeting. Once proposed and seconded by another voting member, at least two-thirds of the voting membership must approve the proposed amendment. If the proposed amendment receives at least the necessary two-thirds votes for approval, the amendment shall then be forwarded to the respective councils/boards of the Roundtable membership agencies/bodies for consideration/action.

Step 2: *Roundtable member agency/body consideration of a proposed MOU amendment*

The proposed MOU amendment must be approved by at least two-thirds of the respective councils/boards of the Roundtable member agencies/bodies by a majority vote of each of those bodies. If at least two-thirds of the member agencies/bodies approve the proposed amendment, the amendment becomes effective. If less than two-thirds of the member agencies/bodies approve the proposed MOU amendment, the proposal fails.

2. This MOU may not be amended more than once in a calendar year.

ARTICLE VI: Status of Prior Memorandums of Understanding (MOU) and Related Amendments

Adoption of this Memorandum of Understanding (MOU) shall supercede and replace all prior MOU agreements and related amendments.

ARTICLE VII: Memorandum of Understanding (MOU) Adoption and Effective Date

1. This Memorandum of Understanding (MOU) shall be deemed adopted and effective upon adoption by at least two thirds of the jurisdictions listed in Article III.
2. The effective date of this Memorandum of Understanding (MOU) shall be the date of approval by at least two-thirds of the member agencies/bodies.

MEMORANDUM OF UNDERSTANDING (MOU) PROVIDING FOR THE CONTINUING OPERATION OF THE SAN FRANCISCO INTERNATIONAL AIRPORT/COMMUNITY ROUNDTABLE

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ARTICLE VII: Memorandum of Understanding (MOU) Adoption and Effective Date - continued

3. This MOU shall remain in effect so long as all of the voting following membership conditions are met: (1) at least five of the following cities – Brisbane, Burlingame, Daly City, Foster City, Hillsborough, Millbrae, Pacifica, San Bruno, and South San Francisco – remain members of the Roundtable, (2) the City and County of San Francisco remains a member of the Roundtable, and (3) the County of San Mateo remains a member of the Roundtable.
 4. This Memorandum of Understanding (MOU) and any subsequent amendments to this document shall remain in effect indefinitely, (1) as long as the membership conditions of Item No. 3 of this Article are met, (2) until it is replaced or superceded by another Memorandum of Understanding (MOU), or (3) until the Roundtable is disbanded.
-

SAN FRANCISCO INTERNATIONAL AIRPORT/COMMUNITY ROUNDTABLE PURPOSE AND BYLAWS

Adopted on June 5, 2005 (Ver. 1)

Amended on December 2, 2009 (Ver. 2)

Amended on December 1, 2010 (Ver. 3)

Amended on April 3, 2013 (Ver. 4)

Amended on February 4, 2015 (Ver. 5)

A. PURPOSE

B. BYLAWS

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SAN FRANCISCO INTERNATIONAL AIRPORT/COMMUNITY ROUNDTABLE PURPOSE AND BYLAWS

A. PURPOSE

The San Francisco International Airport/Community Roundtable was established in 1981 to address community concerns related to noise from aircraft operating to and from San Francisco International Airport (SFO). This voluntary committee of local elected and appointed officials provides a forum for public officials, airport management, FAA staff, and airline representatives to address issues regarding aircraft noise, with public input. The Roundtable monitors a performance-based aircraft noise mitigation program, as implemented by airport staff, considers community concerns regarding relevant aircraft noise issues, 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 elected officials.

B. BYLAWS

Article I. Organization Name

The name of the independent public body established by a 1981 Memorandum of Understanding (MOU), as amended, to carry out the purpose stated above, is the “San Francisco International Airport/Community Roundtable” and may be commonly referred to as the “Roundtable.”

Article II. Current Roundtable Memorandum of Understanding (MOU)

The purpose and objectives of the Roundtable are stated in an adopted document entitled, “Memorandum of Understanding (MOU) Providing for the Continuing Operation of the San Francisco International Airport/Community Roundtable,” as amended. The MOU is the Roundtable creation document and provides the foundation for its focus and activities.

Article III. Membership/Representation

1. As of the adoption date of this version of the Bylaws, the following agencies/bodies are Roundtable Regular Members:

City and County of San Francisco Board of Supervisors
City and County of San Francisco Mayor's Office
City and County of San Francisco Airport Commission
County of San Mateo Board of Supervisors
C/CAG* Airport Land Use Committee (ALUC)
Town of Atherton
City of Belmont
City of Brisbane
City of Burlingame
City of Daly City
City of Foster City
City of Half Moon Bay
Town of Hillsborough
City of Menlo Park
City of Millbrae
City of Pacifica
Town of Portola Valley
City of Redwood City
City of San Bruno
City of San Carlos
City of San Mateo
City of South San Francisco
Town of Woodside

2. Roundtable Representatives and their Alternates are voting members who serve on the Roundtable and are designated by each of the members listed in Article III. Section 1 above.
3. All Representatives and their Alternates shall be elected officials from the agencies/bodies they represent, except those from the following:

City and County of San Francisco Mayor's Office
City and County of San Francisco Airport Commission
City/County Association of Governments of San Mateo County (C/CAG) Airport Land Use Committee (ALUC)

*City/County Association of Governments of San Mateo County

4. Roundtable Advisory Members are non-voting members that provide technical expertise and information to the Roundtable and may consist of representatives from the following:

Chief pilots of airlines operating at San Francisco International Airport
Federal Aviation Administration (FAA) Staff
5. All Representatives and Alternates who serve on the Roundtable shall serve at the pleasure of their parent bodies.
6. All appointed and elected officials who serve on the Roundtable can be removed/ replaced from the Roundtable at any time by their parent bodies. However, the Roundtable encourages and recommends at least two years of service for Representatives and Alternates who serve on the Roundtable.
7. The Alternates of all Roundtable member agency/bodies shall represent their parent body at all Roundtable meetings when the designated Representative is absent.
8. If both the Representative and his/her Alternate will be absent for a Roundtable meeting, the Chair/Mayor of the member agency/body may designate a voting representative of that agency/body as a substitute for that meeting only and shall notify the Roundtable, preferably in writing, at least two days before the meeting, of that designation.
9. Any city or town in San Mateo County that is not a member of the Roundtable may request membership on the Roundtable in accordance with the membership procedure contained in the most current version of the MOU.
10. Any member may withdraw from the Roundtable by filing a written notice of *Intent to Withdraw from the Roundtable* with the Roundtable Chairperson at least thirty (30) days in advance of the effective date of the withdrawal.
11. No Representative or Alternate shall receive compensation or reimbursement from the Roundtable for expenses incurred for attending any Roundtable meeting or other Roundtable functions.
12. A former member that has withdrawn its Roundtable membership must follow the same process that a new city or town in San Mateo County must follow to request membership in the Roundtable as described in Article III. Section 9 above.

Article IV. Officers/Elections

1. The officers of the Roundtable shall consist of a Chairperson and a Vice-Chairperson.
2. The Chairperson and Vice-Chairperson shall be elected by a majority of the members present at the February Meeting or the first Regular Meeting held thereafter. The term of the Chairperson and Vice-Chairperson shall not exceed twelve (12) months from the date of the election.
3. Nominations for officers of the Roundtable shall be made from the floor.
4. The Chairperson shall preside at all Regular and Special Roundtable Meetings and may call Special Meetings when necessary.
5. The Vice-Chairperson shall perform the duties of the Chairperson in the absence of the Chairperson.
6. A special election shall be called if the Chairperson and/or Vice-Chairperson are unable to serve a full term of office.
7. The Chairperson or Vice-Chairperson may be removed from office at any time by a majority vote of the members present at the meeting that such action is to be taken.

Article V. Staff Support

1. Roundtable staff support shall be provided by the County of San Mateo and by the San Francisco Airport Commission. Staff support provided by the County of San Mateo may include County staff and consultants.
2. The duties of the Roundtable Staff and consultants provided by the County of San Mateo shall be specified and approved as part of the Roundtable's annual budget process.

Article VI. Meetings

1. The Roundtable membership shall establish, by adopted resolution, the date, time and place for Regular Roundtable Meetings. Such resolution shall be adopted at the February Regular Meeting or at the first Regular Meeting held thereafter.
2. A majority of the voting members of the Roundtable must be present to constitute a quorum for holding a Regular or Special Roundtable Meeting. Regular or Special Meetings cannot be held if a quorum is not present.

3. If a quorum is not present at a Regular or Special Roundtable Meeting as determined by the roll call, the Chairperson may decide to:
 - a. terminate the proceedings by declaring a quorum has not been achieved and therefore an official meeting cannot be convened,
 - or
 - b. delay the start of the official meeting as a means to achieve a quorum, if possible,
 - and
 - c. if the Chairperson chooses to delay the meeting the Chair may ask for a consensus from the Representatives/Alternates present to hear the informational items only as noted on the meeting agenda.
4. All agendas and meeting notices for each Regular Meeting, Special Meeting, and certain Subcommittee Meetings, as defined in Article VII, shall be posted, as prescribed by law (Brown Act, California Government Code Section 5490 et seq.).
5. Each Roundtable Meeting Agenda packet shall be posted on the Roundtable Web site as soon as possible before a meeting.
6. A paper copy of the Meeting Agenda packet shall be provided at no charge to anyone who requests a copy.

Article VII. Subcommittees

1. Subcommittees shall either be a Standing Subcommittee or an Ad Hoc Subcommittee. The number of members appointed to a subcommittee of the Roundtable shall consist of less than a quorum of its total membership (see Article VI. Section 2, re: quorum).
 - a. Standing Subcommittees shall include, but not be limited to the following:
 1. Work Program Subcommittee
 2. Operations and Efficiency Subcommittee
 3. Legislative Subcommittee
 4. Departures Technical Working Group
 5. Arrivals Technical Working Group
 - b. Ad Hoc Subcommittee(s) may be created, as needed, to address specific issues.
2. Creation of a Standing Subcommittee or an Ad Hoc Subcommittee may be created by a majority vote of the Representative/Alternates present at a Regular Meeting. The Chairperson shall have the discretion to propose the formation of a subcommittee.

3. Standing Subcommittee or Ad Hoc Subcommittee membership and number of meetings shall be based on the following:
 - a. The Chairperson, at his or her discretion, may appoint any Roundtable Representative or Alternate to serve on a Standing Subcommittee or on an Ad Hoc Subcommittee.
 - b. The Roundtable Chairperson and Vice-Chairperson may serve on a Sub-committee or appoint a current member of the Roundtable to serve as the Subcommittee Chairperson. The Roundtable Chairperson shall serve or appoint a Chair of the Subcommittee, and the Subcommittee shall elect the Vice-Chair. When the Chair of the Subcommittee cannot attend a Subcommittee meeting, the Subcommittee Vice-Chair may serve as the Chair for that meeting.
 - c. Each Subcommittee shall meet as many times as necessary to study the issues identified by the Roundtable as a whole and develop and submit final recommendations regarding such issues to the full Roundtable for review/action.
 - d. After the date on which the Roundtable has heard and taken action on an Ad Hoc Subcommittee's final recommendation(s), the Ad Hoc Subcommittee shall cease to exist, unless the Roundtable determines that the Subcommittee must reconvene for the purposes described in this paragraph. In its action on the Ad Hoc Subcommittee recommendation(s), the Roundtable may direct the Subcommittee to reconvene, as necessary to review, refine, and/or revise all or a portion of its recommendation(s). If such action occurs, the Ad Hoc Subcommittee shall be charged with preparing and submitting a subsequent recommendation(s) to the full Roundtable for review/action. After the date on which the Roundtable has received the subsequent Ad Hoc Subcommittee recommendation(s), the Subcommittee shall cease to exist.
4. The duties of a chairperson of a Roundtable Subcommittee may include, but are not limited to, presiding over Subcommittee meetings and submitting recommendations to the full Roundtable, regarding the topics/issues addressed by the Subcommittee.

Article VIII. Funding/Budget

1. The Roundtable shall be funded by its voting member agencies. The County of San Mateo shall establish a Roundtable Trust Fund that contains the funds from the member agencies and shall be the keeper of the Trust Fund. All Roundtable expenses shall be paid from the Roundtable Trust Fund.
2. The amount of the annual funding contribution for the various categories of membership may be revised by the Roundtable at a Regular or Special Meeting by a majority vote of those members present at that meeting.

3. The Roundtable fiscal year shall be from July 1st to June 30th.
4. Roundtable Staff, in consultation with the Roundtable Chairperson, will recommend an annual funding amount for each Roundtable member at least 60 days prior to the anticipated date of adoption of the annual Roundtable Budget.
5. The Roundtable shall adopt an annual budget at a Regular Meeting or at a Special Meeting held between May 31 and October 31 of each calendar year. The budget must be approved by a majority of the Representatives/Alternates who are present at that meeting.
6. The adopted Roundtable Budget may be amended at any time during the fiscal year, as needed. Such action shall occur at a Regular Roundtable Meeting and be approved by a majority of the Roundtable Representatives present at that meeting.
7. The City and County of San Francisco shall provide an annual funding contribution for representation on the Roundtable by the representatives from the San Francisco Board of Supervisors, the San Francisco Mayor's Office, and the San Francisco Airport Commission. The Airport Commission, being a department of the City and County of San Francisco, shall provide one funding source for all three of these representatives. The amount of the annual contribution may be determined at the discretion of the Airport Director, with approval by the Airport Commission and shall be the subject of an agreement between the City and County of San Francisco and the County of San Mateo.
8. If a member withdraws from the Roundtable, per the provisions of Article III. Section 9, the remainder of that member's annual Roundtable funding contribution shall be forfeited, since the annual Roundtable Budget and Work Program are based on revenue provided by all Roundtable members.

Article IX. Conduct of Business/Voting


1. All Roundtable Regular Meetings and Special Meetings shall be conducted per the relevant provisions in the Brown Act, California Government Code Section 54950 et seq.
2. All Roundtable Standing Subcommittees, as identified in Article VII., are considered legislative bodies, per Government Code Section 54952 (b) (Brown Act) and therefore, the conduct of Standing Subcommittee meetings shall be guided by the relevant provisions of the Brown Act, Government Code Section 54950 et seq.
3. All Ad Hoc Subcommittees are not legislative bodies, as defined by law, and therefore the conduct of those Subcommittee meetings are not subject to the relevant provisions of the Brown Act, Government Code Section 54950 et seq.

4. All action items listed on the Meeting Agenda shall be acted on by a motion and a second, followed by discussion/comments from Roundtable Representatives and the public, in accordance with *Robert's Rules of Order*. Approval of an action item shall require a majority of the membership present.
5. Except as described in Section 6 below, each agency/body represented on the Roundtable shall have one vote on all voting matters that come before the Roundtable.
6. The City and County of San Francisco has three (3) representatives on the Roundtable (Board of Supervisor's Representative, Mayor's Office Representative, and Airport Commission Representative). In the event all three are present at a Roundtable Regular or Special Meeting, only two of the three may vote on any action item on the meeting agenda.
7. To ensure efficient communications and the appropriate use of Roundtable Staff and Airport Noise Abatement Office Staff resources outside of noticed Roundtable meetings, other than those requests deemed to be minor by the Chairperson, Roundtable Members shall submit all requests for assistance/information/analysis to the Chairperson. The Chairperson will determine the appropriate course of action to respond to the request and shall, if necessary, forward the request to Roundtable and/or Airport staff for action. The Chairperson shall inform the Roundtable Member of the disposition of the request in a timely manner. For requests that are outside of the Roundtable's purview or approved Work Program, the Chairperson shall notify the Member that the request cannot be fulfilled at that time. The Vice Chairperson shall have similar authority in the Chairperson's absence.

Article X. Amendments/Effective Date

1. The Bylaws shall be adopted at a Regular or Special Roundtable Meeting by a majority of the Roundtable Representatives/Alternates present at that meeting.
2. The adopted Bylaws may be amended at any Roundtable Regular or Special Meeting by a majority of the Roundtable Representatives/Alternates present at that meeting.
3. The effective date of these Bylaws and any future amended Bylaws shall be the first day after the Roundtable action to (1) adopt these Bylaws and (2) adopt all subsequent amendments to the Bylaws.

* * * * *

Signed By: 

Date: 4/1/15

Cliff Lentz
Roundtable Chairperson
Councilmember
City of Brisbane



Date: 4/1/15

Elizabeth Lewis
Roundtable Vice-Chairperson
Councilmember
Town of Atherton



San Francisco International
Airport/Community Roundtable

455 County Center, 2nd Floor
Redwood City, CA 94063
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TO: SFO Roundtable Members
FROM: Angela Montes, Administrative Secretary II
RE: Technical Working Group Materials
DATE: July 31, 2020

Attached are the materials from the July 29, 2020 Technical Working Group held via Zoom, including:

- a. Letter from Chair Ortiz to FAA on June 15, 2020
- b. FAA Presentation to TWG on NIITE/HUSSH (7/29/20)

June 15, 2020

Raquel Girvin, Regional Administrator – Western Pacific Region
Federal Aviation Administration (FAA)
777 Aviation Boulevard
El Segundo, CA 90245

Re: Information Request for the FAA for the July 2020 SFO Airport/Community Roundtable Technical Working Group (TWG) Meeting

Dear Ms. Girvin,

Per the agreement to provide your agency with information requests 45 days in advance, the SFO Airport/Community Roundtable hereby requests response to the items listed in Attachments A and B for the Federal Aviation Administration (FAA) to discuss at the next Technical Working Group (TWG) meeting, to be scheduled for the week of July 27, 2020. In order to have appropriate time to review the agency response and to lead a productive public conversation about these items at the meeting, we request that the specific visuals/maps outlined in Attachment B be provided at least two days in advance of the meeting.

That said, the major focus of our inquiry is to better understand the FAA's proposal to route nighttime SFO southbound aircraft by using a portion of the NIITE Departure procedure combined with ATC vectoring. Please provide all known information for this proposed procedure, including the hours of operation and proposed paths for aircraft after the GOBBS waypoint. We would also like to understand the FAA's proposed timing and process for the implementation of these changes

In addition to providing technical responses to the specific questions and requests in the attachments, we also hope that FAA staff will come to the meeting prepared to discuss possible alternative solutions should suggestions emerge.

We appreciate your willingness to respond to this request for information so that we may better understand the proposal. If you have any questions, or require additional follow up, please direct inquiries to Angela Montes, SFO Airport/Community Roundtable Administrative Secretary, who can determine who from our team is best able to help you. She can be reached at amontescardenas@smcgov.org.

Regards,



Ricardo Ortiz, Chairperson
San Francisco International Airport/Community Roundtable

cc: Faviola Garcia, FAA
Sky Laron, FAA

Attachments: A: Detailed Technical Questions and B: Request for Visuals

Attachment A: Detailed Technical Questions

1. NIITE/HUSSH Departure Procedures, Part 1 (Technical):

Please articulate the FAA's proposal for routing nighttime SFO southbound aircraft by using a portion of the NIITE Departure procedure along with ATC vectoring.

 - a. Using the visuals requested in Attachment B, please point out the NIITE Departure path and the SSTIK departure with all transitions. Explain the difference between the requested published NIITE Southbound transition and the FAA's substitute proposed southbound ATC vectors for these procedures. Will the ATC vector plan be applied to HUSSH as well as NIITE for southbound aircraft?
 - b. Using the visuals requested in Attachment B, please demonstrate the possible paths/vectors for a southbound NIITE aircraft after GOBBS intersection.
 - i. Please indicate the direction of turn and their approximate path.
 - ii. Will aircraft will be given a heading to intersect a fix on one of the SSTIK transitions or will they be given a heading to intercept a course to a fix?
 - iii. Is there any fix or point on any of the SSTIK transition paths that will not be used for an aircraft to be vectored to?
 - c. What options have been discussed for providing vectors for NIITE southbound aircraft before reaching GOBBS intersection? Where is the estimated location for the start of such early turns before GOBBS intersection.
 - d. Using the visuals requested in Attachment B, please point out the over ocean southbound paths of other departures such as the OFFSHORE, COAST and NUEVO.
 - e. What are the current maximum hours of operation for the NIITE/HUSSH departure procedures for aircraft northbound and eastbound?
 - f. What are the planned maximum allowable hours of operation for southbound aircraft flying the the NIITE departure procedure with the FAA substitute proposal of new southbound ATC vectors? Would the maximum hours be any different if the FAA were to design a published southbound transition for NIITE?
 - g. What noise modeling assumptions were used in proposing this substitute ATC vectoring in place of a NIITE Southbound Transition?:
 - i. What geographical areas (eg Marin County, San Francisco County, San Mateo County, or other) will be assessed for potential noise impacts from the proposed changes?
 - ii. What other modeling inputs beside geographic area are being considered?
 - iii. Please provide the noise modeling files.
2. Special Use Airspace (SUA)
 - a. What are the operational and other requirements with regard to SUA?
 - b. How far laterally and vertically must an aircraft remain from the limits of the SUA when it is active?
 - c. How does SUA affect the airspace available for a NIITE Southbound Transition? Using the visuals requested in Attachment B, please point out what airspace is available for such a South Transition
3. NIITE/HUSSH Procedures, Part 2 (Process):
 - a. Please explain the rationale for proposing changes to utilization of an existing procedure

rather than the FAA's traditional path of proposing revisions through the IFP Gateway process.

- i. Does the current proposal allow opportunity for public comment other than post-design comment during the environmental process?
 - ii. How does this proposal respond to the recommendations of the San Francisco Airport/Community Roundtable and the Select Committee on South Bay Arrivals to create a NIITE Southbound transition? (The FAA has stated that it will not implement a published transition from GOBBS, but rather vector aircraft from the vicinity of GOBBS to the plane's filed route using existing SSTIK transitions)
- b. What is the process for the environmental review being conducted for proposed new ATC vectoring after GOBBS? What assumptions are being used?
- i. If altitude, include altitude at NIITE intersection, eastern entry to the Golden Gate, mid-way through the Golden Gate, exit from the Golden Gate, 5NM east of GOBBS intersection, and GOBBS intersection.
 - ii. What is the range of aircraft type and other unique features (payload, engine type) and impact on presumed altitudes. Is the assumption that aircraft will routinely climb unrestricted to at least 10,000' before being required to level off? Where do you assume a 10,000' altitude will be attained by ~75% of the aircraft?

Attachment B: Request for Visuals

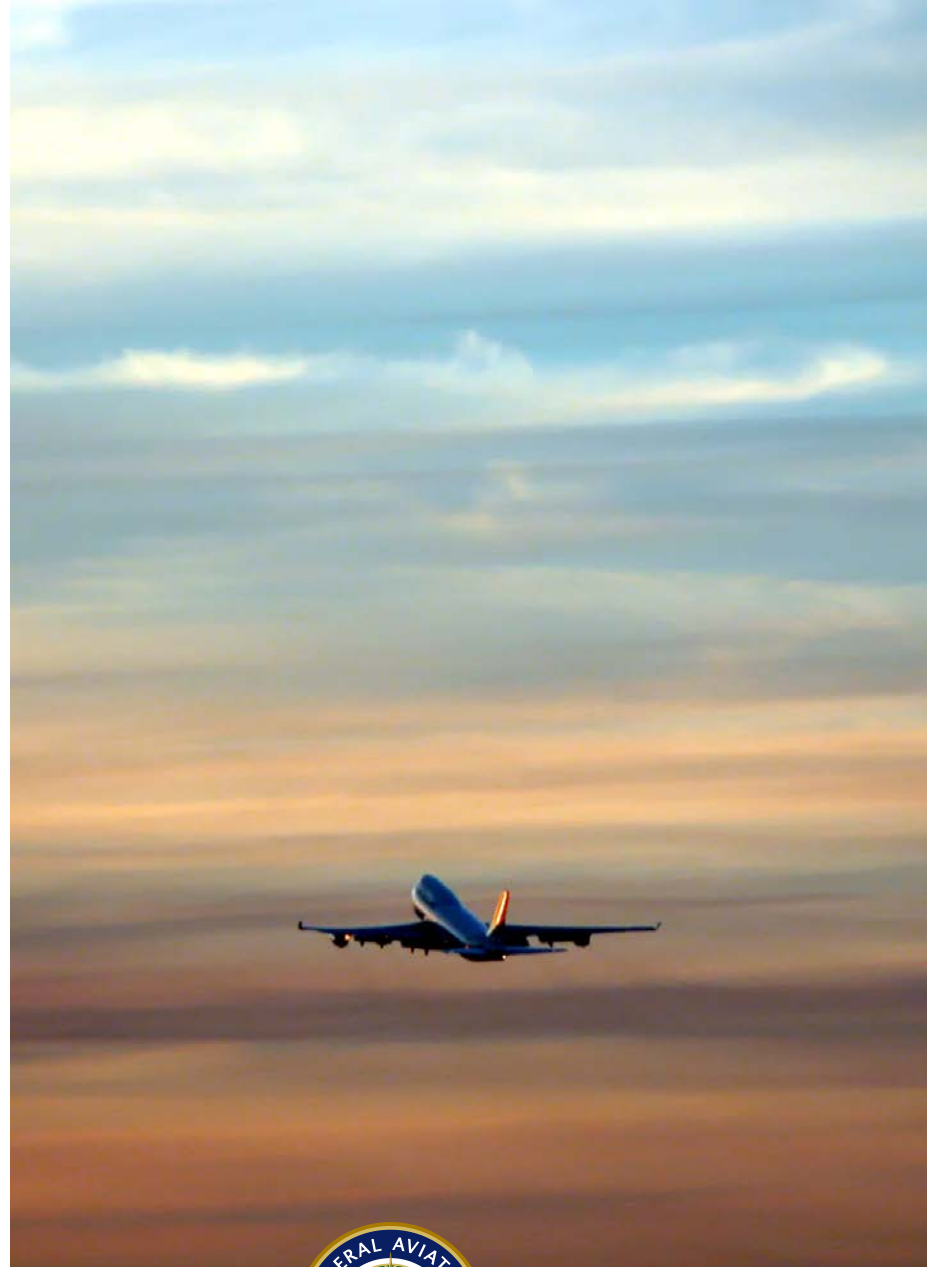
The Roundtable requests the FAA to create a dynamic visual depiction of the airspace with flexible viewing layers for presentation at the July 2020 Technical Working Group meeting to enable productive discussion of the proposal. Specifically, we request the creation of a Google map that can be downloaded and edited (KML file), whereby each layer can be individually toggled on or off for display and editing and new map layers can be added (map images are unlocked for editing).

The map image should be scalable using normal Google Map/Google Earth controls. When all map layers are displayed simultaneously, the combination map should display:

1. LAYER: base map of Google Satellite image
 - a. Include distance scale (note nautical miles or statute miles)
2. LAYER: All Special Use Airspace (SUA) along the coastline and for 20NM west of the coastline from vicinity PYE to vicinity KMRY to include altitudes from the surface to FL240.
 - a. If space allows on the layer, annotate map with information on altitudes and hours of scheduled use for each SUA and whether unscheduled use is also possible. (if this information cannot be added to map, please attach a document with relevant information).
3. LAYER: All published SSTIK transitions to include (FFOIL) YYUNG, CISKO, EBAYE, LOSHN, NTELL, along with PORTE and all fixes on these transitions.
 - a. Are all of these transitions available to use today for SSTIK?
 - b. Any planned modifications to any of the SSTIK transitions?
4. LAYER: NIITE Departure to include GOBBS
 - a. Also include a point indicating the earliest point east of GOBBS where aircraft may be vectored to their route of flight.
 - b. Also include any notation as to the lowest altitude at which an aircraft can be turned to on-course at the earliest point east of GOBBS.
5. LAYER: areas of maximum altitude based on airspace constraints (for example, but not limited to, arriving BDEGA and BRIXX)
6. LAYER: Display all FAA planned paths from GOBBS and from the vicinity 5NM east of GOBBS to intercept all possible published SSTIK transitions.
7. LAYER: display the fixes and tracks used in the OFFSHORE Departure
8. LAYER: display the fixes and tracks used in the COAST (OAK) Departure
9. LAYER: displaying the fixes and tracks used in the NUEVO (OAK) Departure

FAA Briefing to SFO International Airport/Community Roundtable Technical Working Group

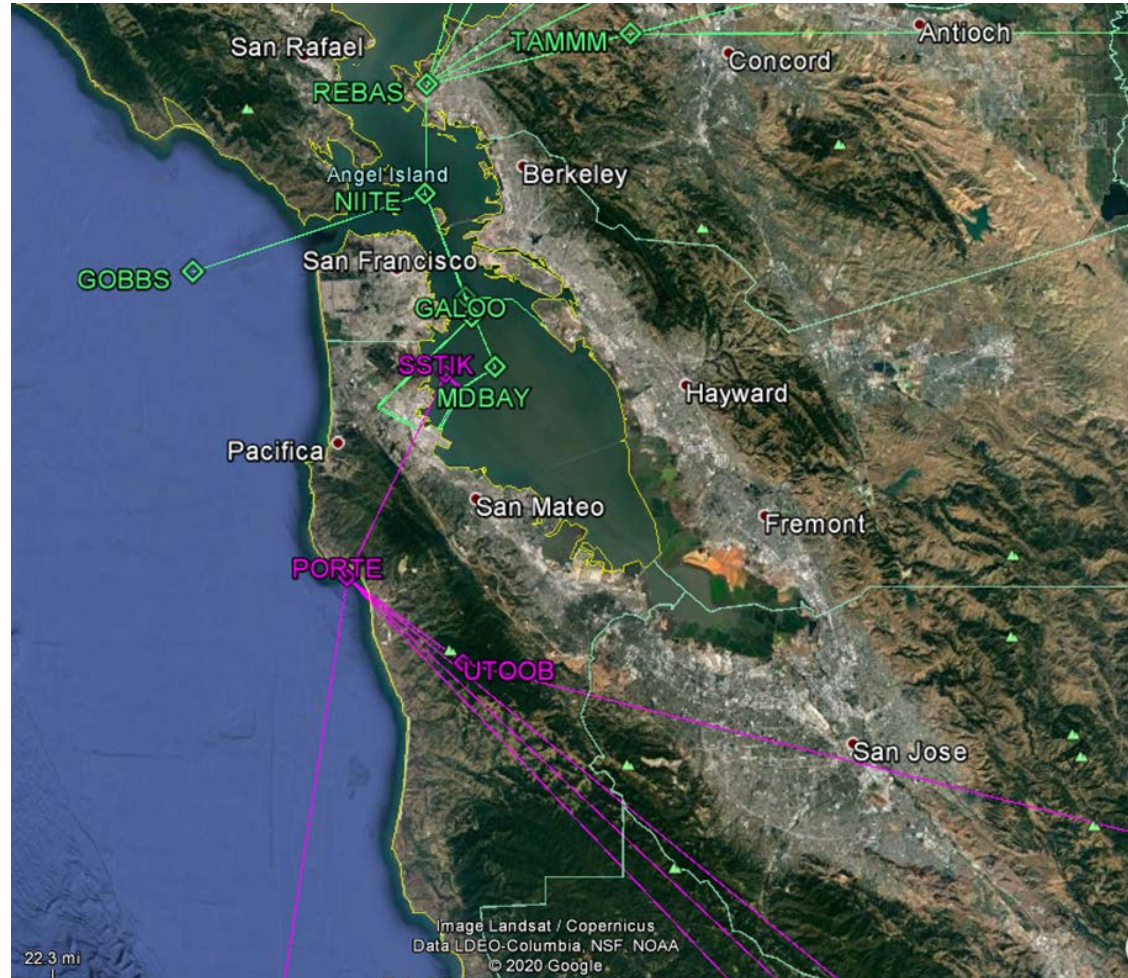
July 29, 2020



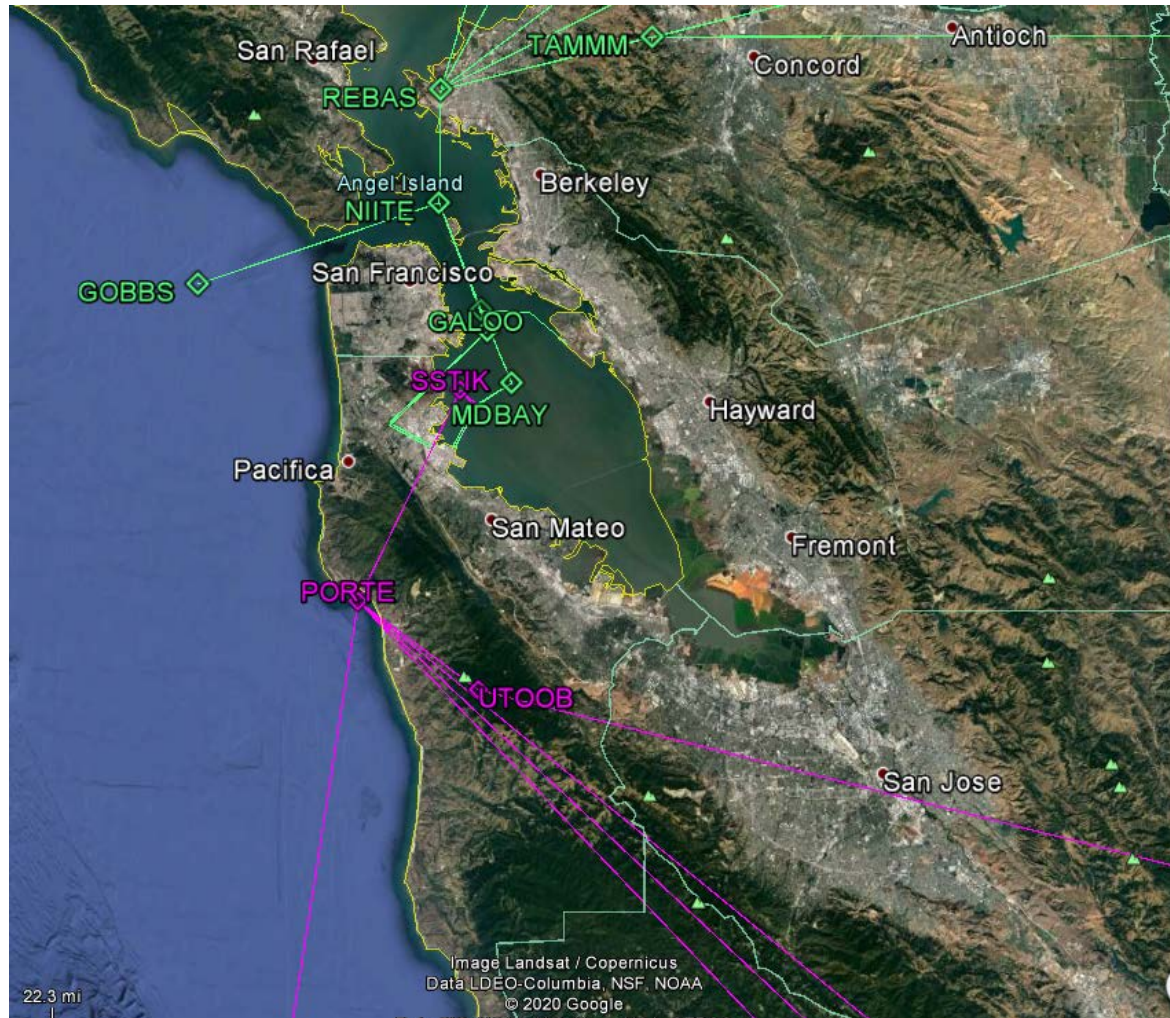
Purpose of this Briefing



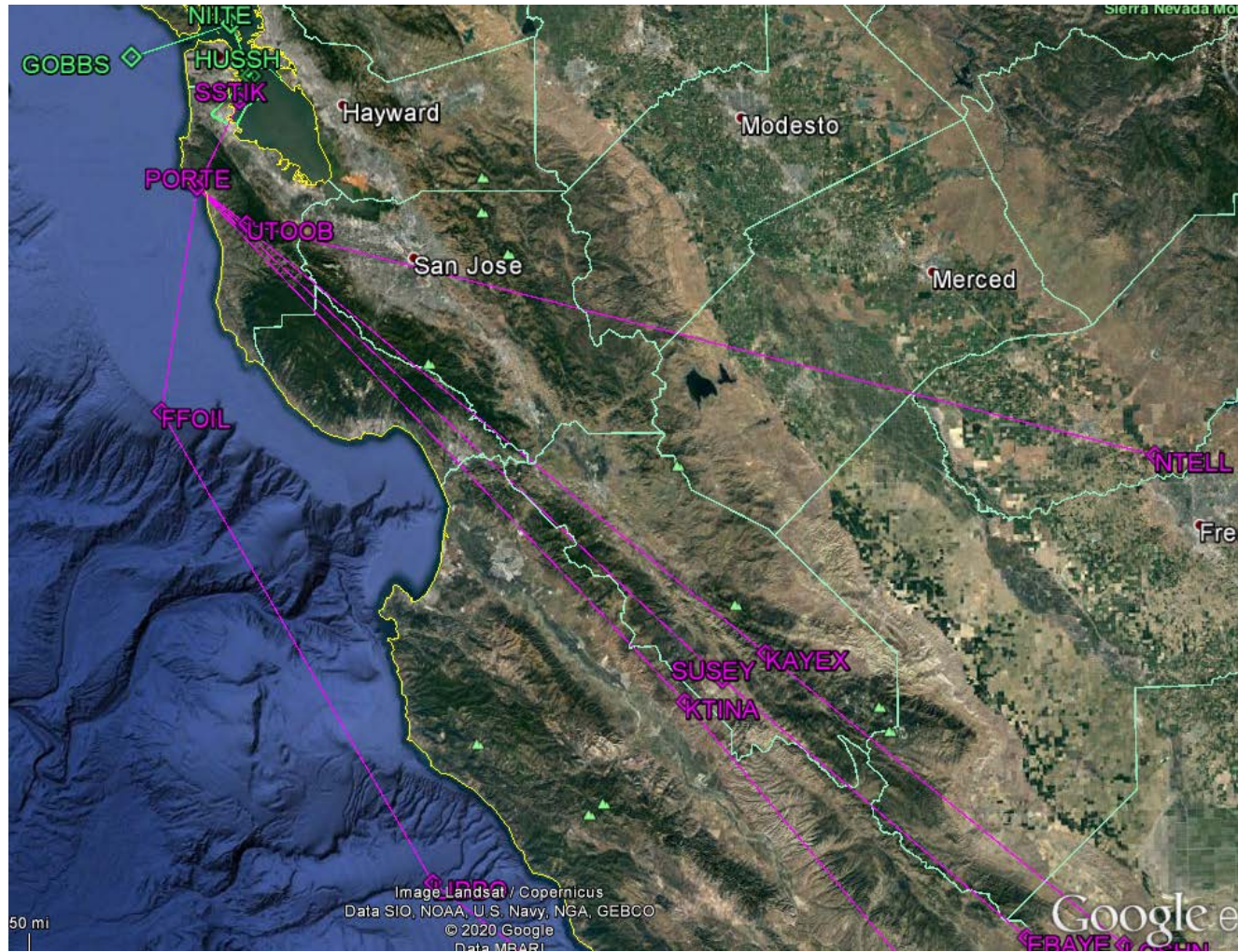
NIITE/HUSSH Departure Procedure



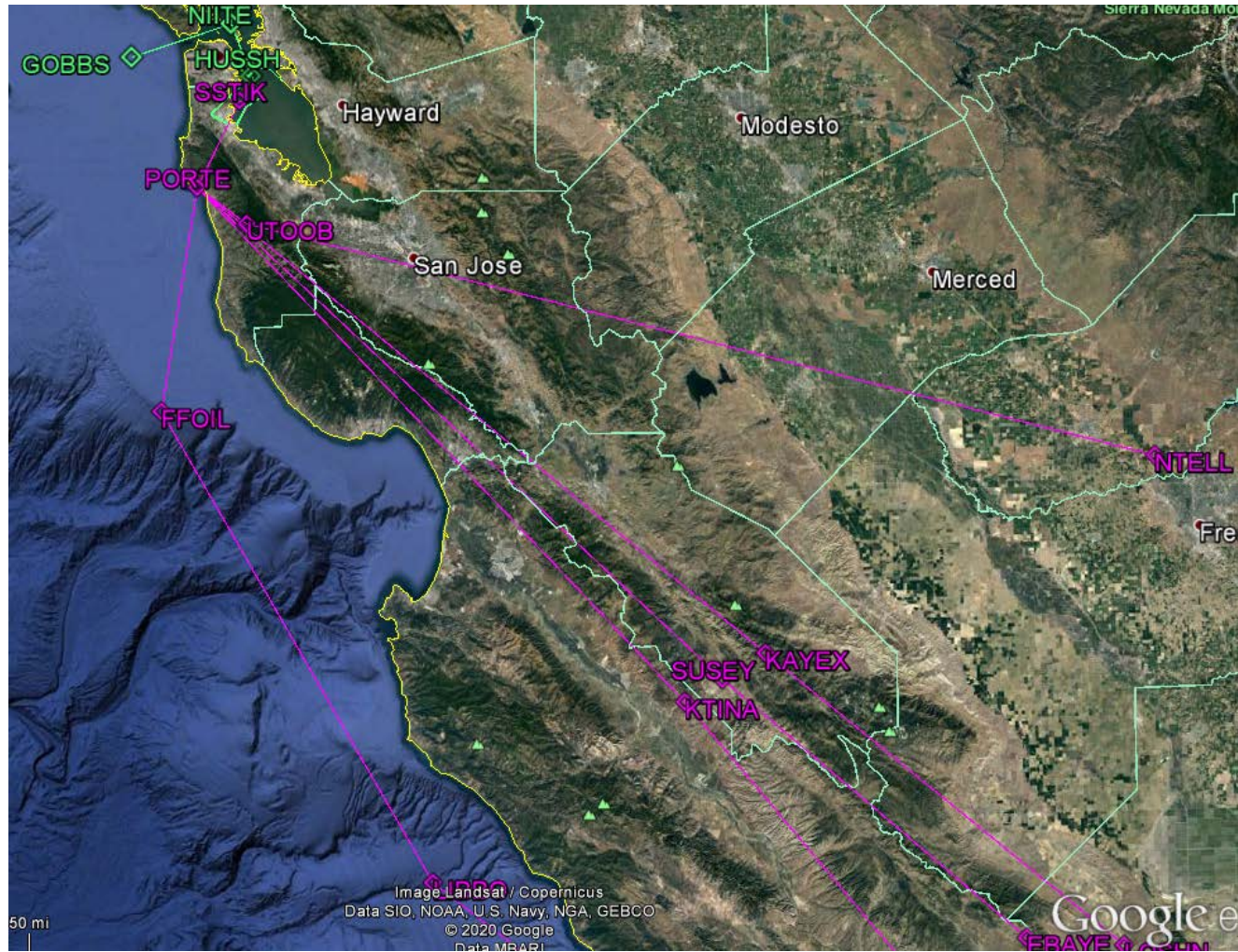
NIITE/HUSSH Departure Procedure



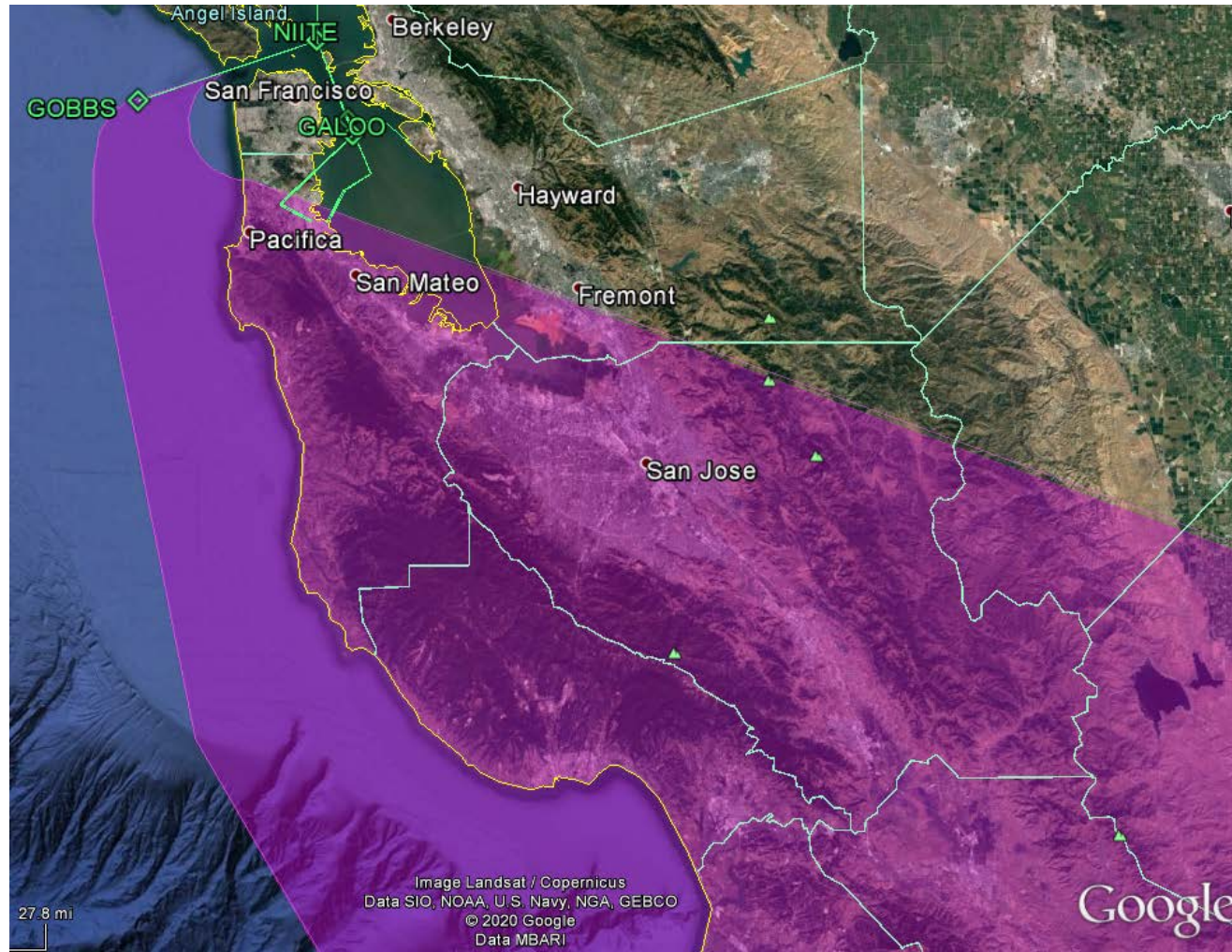
NIITE/HUSSH Departure Procedure



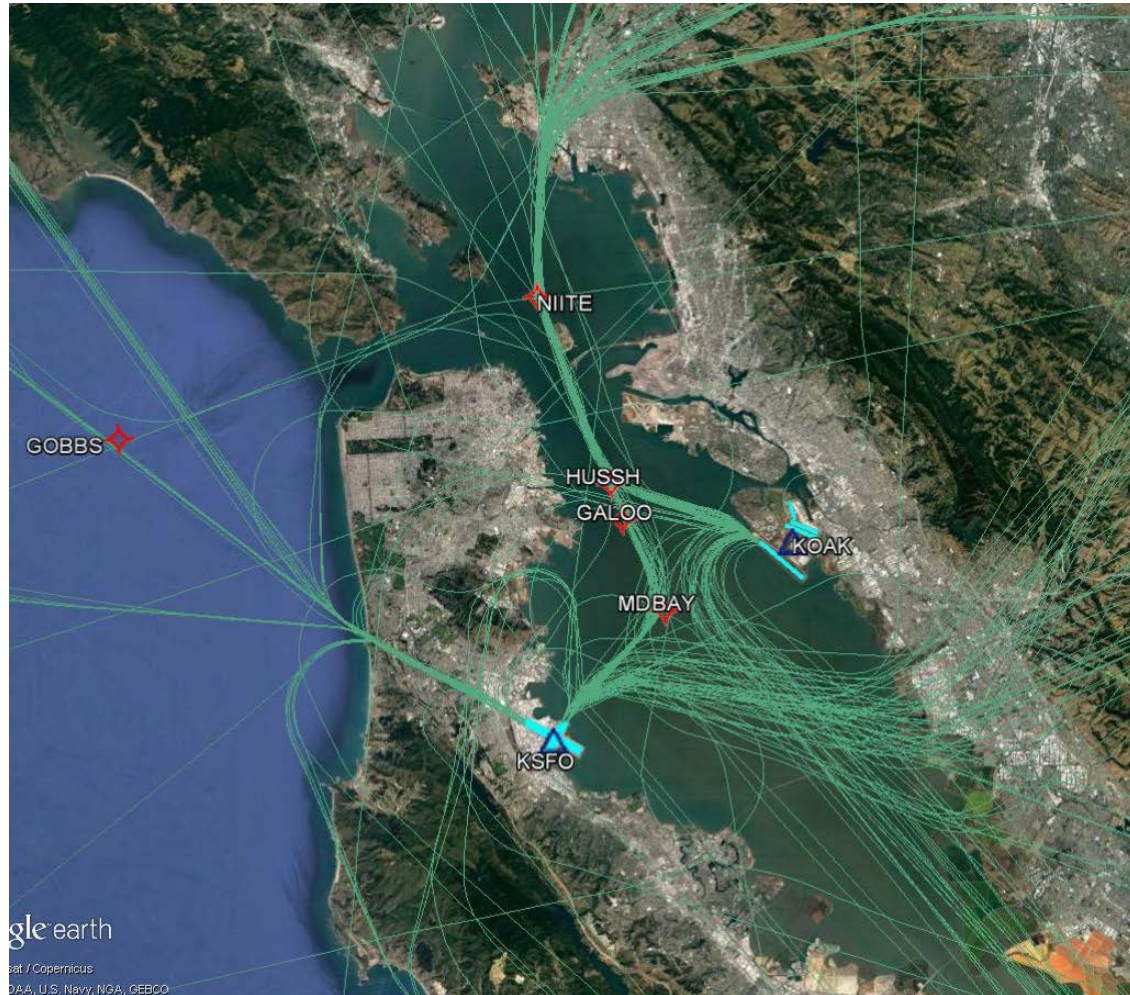
NIITE/HUSSH Departure Procedure



NIITE/HUSSH Departure Transition



NIITE/HUSSH Departure Procedure



NIITE/HUSSH Departure Procedure Environmental Review

- **The Environmental Review process is currently being conducted to include:**
 - Noise Screening
 - Fuel Burn
 - CO2 Emissions
 - Section 106 Consultation



Special Use Airspace

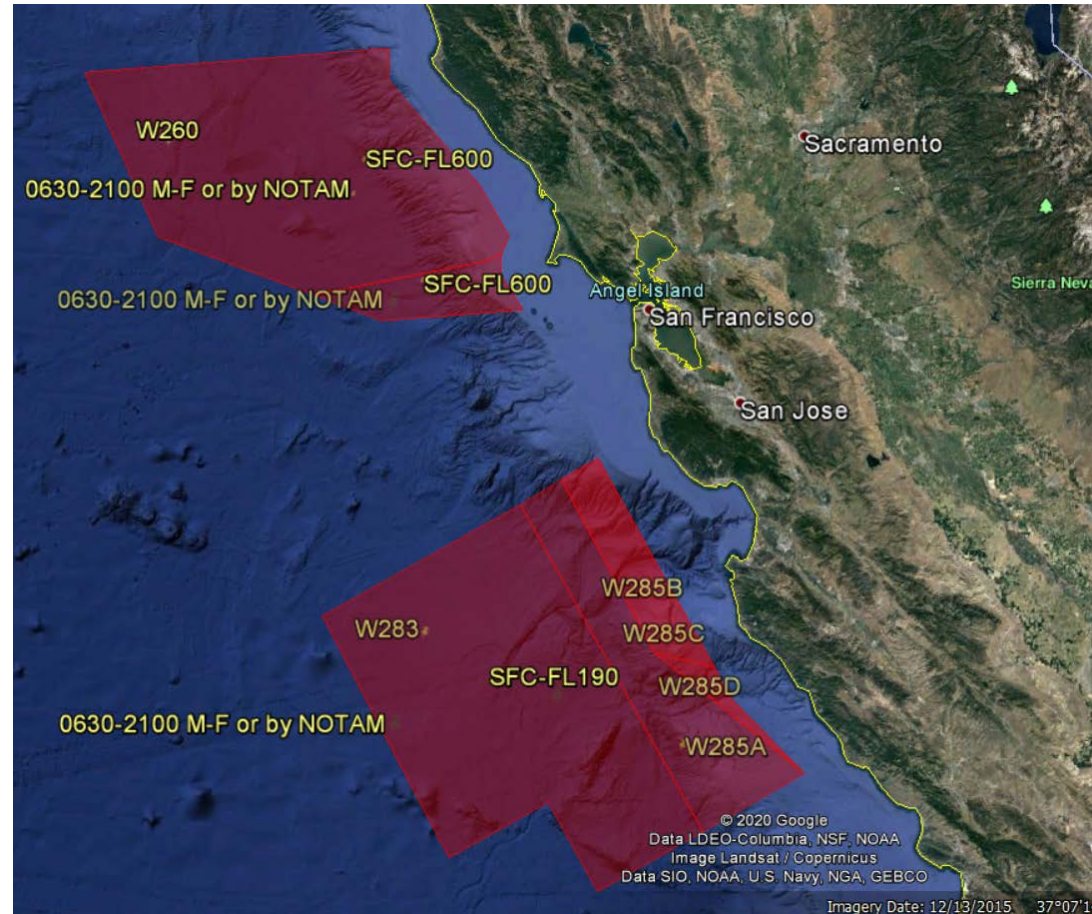
Separation from active SUA is 1,000 feet vertically and 3 NM laterally, unless above 41,000 feet then vertical separation increases to 2,000 feet.

Hours of operation are 0630L to 2100L or other times by NOTAM.

Altitudes are as follows:

- W-260: SFC to 60,000 feet
- W-283 & W-285 A/B/C/D: SFC to 19,000 feet

Activation of SUA is not anticipated to impact any of the aircraft on the NIITE/HUSSH nighttime procedure.



Conclusions



Conclusions

NIITE/HUSSH → GOBBS:

- **Dependent upon consistent operational levels from SFO and OAK.**
- **External effort is being made to sync the operations at SFO and OAK airports.**
- **From 0100L to 0500L, the FAA can continue to operate the SFO and OAK departure routes as a single stream that will not exceed the 30 aircraft per hour capacity, absent unforeseen meteorological or other noteworthy events.**
- **Aircraft volume and the combining of SFO and OAK departure streams are the major factors in determining the usable hours.**
- **Maximum hours would not change with the additional waypoints south of GOBBS or a new departure procedure similar to NIITE/HUSSH.**

Conclusions (cont.)

- **Using the GOBBS transition for nighttime operations can be implemented in a much shorter timeframe than developing and implementing a new procedure.**
 - **Public comments could be submitted to the SFO RT if allowed by the RT.**
 - **Once the environmental review is completed, the SFO RT would coordinate with the FAA to determine the next steps.**





June 8, 2020

Stephen Dickson, Administrator
Federal Aviation Administration
500 Independence Avenue, S.W.
Washington, DC 20591

Re: Notice of Proposed Rulemaking (NPRM) – Noise Certification of Supersonic Airplanes
Docket No.: FAA-2020-0316; Notice No. 20-06

Dear Mr. Dickson,

As part of the 2018 reauthorization, the FAA was directed to take leadership of the creation of policies, regulations, and standards associated to the certification and safe/efficient operation of new supersonic aircraft by March 31, 2020. The FAA published the draft NPRM on its website to meet this legislative target and the official NPRM was posted on the U.S. Federal Register on April 13, 2020.

It is our understanding that the NPRM would:

1. Amend the applicability of part 36 to include new supersonic airplanes for which type certification is requested after a final rule takes effect;
2. Revise the definition of supersonic airplane to include newly certificated airplanes but exclude the Concorde;
3. Provide noise certification reference procedures to be used for all supersonic airplanes; and
4. Establish noise limits for takeoff and landing that would apply to Supersonic Level 1 (SSL1) airplanes, as defined in the proposed regulation. The proposed standards include noise limits that are quieter than the Stage 4 limits at which most of the current subsonic jet fleet operates, though louder than the current certification level of Stage 5 for the same aircraft weights.

The FAA has a statutory mandate to protect the public health and welfare from aircraft noise and sonic booms. It is imperative that the FAA continues to set progressively more stringent noise certification levels that continue to reduce aircraft noise over time. The FAA's proposed supersonic aircraft noise certification levels are a regression in noise stringency and represent a step backwards that would be unwelcome by the communities that we represent.

The NPRM process provides 90 days for public comment prior to the FAA finalizing a ruling. Therefore, the SFO Airport/Community Roundtable submits the following four (4) recommendations regarding the proposed FAA rulemaking to establish noise certification standards for new supersonic aircraft.

1. The FAA should follow its long-standing position of requiring new supersonic aircraft to meet the same noise certification levels as subsonic aircraft; and
2. Supersonic aircraft should meet or exceed Stage 5 requirements, which would remain consistent with subsonic aircraft and not create a new category that falls between Stage 4 and 5.

Notice of Proposed Rulemaking (NPRM) – Noise Certification of Supersonic Airplanes

June 8, 2020

Page 2 of 2

3. That if a supersonic aircraft uses a Variable Noise Reduction System (VNRS) and/or a Programmed Lapse Rate (PLR) system during the noise certification process, then that supersonic aircraft with the relevant system(s) enabled shall be shown to produce noise levels on level terrain under the aircraft that decrease with the aircraft's altitude at the same or greater rate than would occur if the relevant system(s) were not enabled, until the aircraft has reached the floor of Class A airspace (i.e., 18,000' MSL). Further, if a VNRS or a PLR system is used during the noise certification process, the relevant systems shall be required to remain activated at altitudes below 18,000' MSL unless required for safety by rare and exceptional conditions.
4. Residents that are further away than the noise measurement points that are part of the noise certification process should continue to expect that noise from supersonic aircraft using these newly permitted technologies be consistent with aircraft that do not use these technologies. Generally speaking, the further away from the airport a resident is, the less landing/takeoff noise they should experience, just as today.

Regards,



Ricardo Ortiz, Chairperson
San Francisco International Airport/Community Roundtable

cc:

Members, SFO Roundtable

Congresswoman Jackie Speier

Congresswoman Anna Eshoo

Hon. Speaker of the House Nancy Pelosi

Raquel Girvin, Regional Administrator – Western Pacific Region, Federal Aviation Administration



July 28, 2020

TO: Roundtable Members and Interested Parties

FROM: Sarah C. Yenson, Senior Consultant
Justin W. Cook, Principal Consultant
Roundtable Technical Consultant - HMMH

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

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 one update for OAK during this cycle of low importance. The next publication is expected on August 13, 2020.

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

HMMH FAA IFP Information Gateway Review

July 28, 2020

Page 2 of 2

- IAP: Instrument Approach procedure
- STAR: Standard Terminal Arrival Route
- SID: Standard Instrument Departure
- GPS: Global Positioning System
- ILS: Instrument Landing System
- LOC: Localizer

Low Importance:

- July 28, 2020
 - QUAKE TWO at OAK UPDATED TO Awaiting Publication
 - Estimated chart date now 11/5/2020

High Importance:

- None

Open Comment Periods:

- None

Next Publication:

We expect no updates in the August 13, 2020 publication.



✂ Noise News

August 2020

Prepared for the SFO Airport/Community Roundtable

FAA Report to Congress on Alternative Noise Metrics

In a report published on April 14, 2020, the Federal Aviation Administration (FAA) responded to the requirement outlined in the FAA Reauthorization Act of 2018, Pub. L. 115254, § 188, Congress required the Federal Aviation Administration (“FAA”) that they “evaluate alternative noise metrics to current average day-night level standard, such as the use of actual noise sampling to address community airplane noise concerns.” The report gave an overview of the history and purpose of noise evaluation and provided detail on the alternative metrics considered.

The conclusion of the FAA’s report was to continue recommending the use of DNL for FAA decision-making regarding noise compatibility. This is a continuation of the decision reached in 1992, in the Federal Interagency Committee on Noise (FICON) report that was reaffirmed in 2018 with the successor to FICON, the Federal Interagency Committee on Aviation Noise (FICAN).

Source: FAA

FAA Notice of Proposed Rulemaking for Supersonic Aircraft Standards for Certification

In a press release dated March 30, 2020, the FAA stated that a major step was taken toward

What's Inside

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- FAA Notice of Proposed Rulemaking for Supersonic Aircraft Standards for Certification 1**
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 - Increased Speed of Airport Renovations 3
 - Public Responses to Decline in Air Traffic 4
- Electric and Hybrid-Electric Aviation 4**
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 - Aircraft Development and Testing 5
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reintroducing supersonic commercial jet travel by way of a proposed rulemaking for noise certification standards for new supersonic aircraft. The Notice of Proposed Rulemaking (NPRM) serves the purpose of adding landing and takeoff noise standards for a certain class of new supersonic airplanes. It is available for public comment for 90 days after publication in the Federal Register (April 13, 2020). The public comment period closes on July 13, 2020.

The NPRM is based on a 2019 FAA proposed rule to update the requirements to apply for a special flight authorization for flying above Mach 1 in the United States, which was initiated for manufacturers interested in developing supersonic aircraft.

The press release also notes that the proposed rule accounts for the many advancements in aviation technology, including improved engine design and aircraft materials, since supersonic commercial air transportation was introduced in the 1970s.

The lack of noise standards for certification of supersonic aircraft up to this point has been a key obstacle to bringing these aircraft to market for manufacturers. Regulations require that aircraft meet standards for certification, so the absence of such standards prevents supersonic aircraft from receiving approval.

The NPRM establishes subsonic landing and takeoff cycle standards, including a maximum takeoff weight no greater than 150,000 pounds and a maximum operating cruise speed of Mach 1.8. Aircraft meeting this requirement would be certified under “Supersonic Level 1.” This would accommodate most current development activity by manufacturers, though the FAA has stated that they envision future rulemaking for designs that advance beyond that category.

According to studies done by NASA, the proposed takeoff and landing cycle limits would exceed the current Stage 4 standards. However, they differ from the Stage 5 standards due to “unique technological and design requirements for supersonic aircraft to maintain long-distance supersonic flight,” according to the FAA. These

design requirements include fuselage, wing shape, and variations in engine characteristics.

FAA stated that the NPRM is designed to “to allow the maximum latitude for these designs while they are still in their infancy.” The proposal provides a way to certify these aircraft, but only for noise produced by subsonic operation in the U.S. It does not address the noise produced from flights at cruise altitudes or at supersonic speeds nor does it alter the current ban on the creation of sonic booms over land. This is because FAA lacks sufficient data for developing those standards for supersonic aircraft and instead, the agency states that more research is required for rulemaking.

The Supersonic Level 1 proposed standard would serve as a baseline for developing and adopting standards for future classes of supersonic aircraft, like those with maximum takeoff weights over 150,000 pounds.

The FAA developed this proposed rule due to manufacturer request as well as a congressional directive for the FAA to take a leadership role in supersonic policy. Publication of the NPRM in the Federal Register, as well as the 90-day public comment period, are necessary steps in developing a regulatory basis for certification of supersonic aircraft.

Sources: FAA and AIN Online

COVID-19 Impacts

Noise Benefits of Optimizing Flight Paths

As expected, European air traffic volumes are down considerably due to the coronavirus pandemic. Airlines and air navigation service providers (ANSPs) have taken this opportunity to launch an environmental initiative. This initiative facilitates ‘perfect flights’ by optimizing flight paths. This is being led by Civil Air Navigation Services Organization (CANSO) in association with International Air Transport Association (IATA), Airlines for Europe (A4E), European Regional Airline Association (ERA), Airlines International

Representation in Europe (AIRE), International Federation of Air Traffic Controllers' Associations (IFATCA) and the Eurocontrol Network Manager.

ANSPs normally apply airspace restrictions to maximize capacity, reduce complexity, and organize aircraft into specific flows to manage traffic safely and efficiently into and out of busy airspace. According to Eurocontrol, flights are down about 87.0% from 2019 levels. As a result, most airspace restrictions can be lifted, enabling more direct routes and use of optimal vertical profiles. The optimization of flight paths reduces fuel burn, emissions, noise, and fuel costs therefore provides environmental and economic benefits.

Source: Greenaironline.com

Increased Speed of Airport Renovations

Across the U.S., the temporary lull in air traffic due to COVID-19 has resulted in several airports increasing the tempo of airport renovations. Boston Logan International Airport (BOS), New York's Westchester County Airport (HPN), and Kentucky's Owensboro-Daviess County Regional Airport (OWB) have all sped up construction in recent months.

Boston Logan International Airport

Massport has chosen to begin a runway rehabilitation project on Runway 9/27 which was originally set to start at the end of August, after what would normally be a busy summer travel season. Due to the slowdown, Runway 9/27, a 7,001-foot runway and the fourth longest at BOS, will undergo a full closure for several weeks to accommodate the rehabilitation work. This began on May 26, 2020

The project will include:

- New pavement;
- New electrical infrastructure, including energy-efficient LED lighting;
- Drainage improvements to eliminate ponding of standing water; and,
- Realignment of Taxiway D1 at the Runway 27 end to conform with current FAA safety standards.

The rehabilitation is projected to be complete in 73 days, meaning Runway 9/27 will reopen in early August.

Kentucky's Owensboro-Daviess County Regional Airport

OWB is using the Covid-19-induced slowdown to up the tempo of infrastructure projects, including the rehabilitation of the airport's primary 8,000-foot Runway 18/36, which was completed in May as a part of the airport's 10-year master plan update.

After the conclusion of the Runway 18/36 rehabilitation, construction work at the airport quickly shifted to repair concrete and replace panels on the 5,000-foot crosswind Runway 06/24, resulting in a closure of about two weeks. The airport has shifted to a 24-hour a day work schedule, which saves 30 days off the construction.

OWB also has a project underway which will improve access for the airport's rescue and firefighting crews via the building of a new service road. Expediting construction during the slowdown will serve to make things easier and more convenient for airport tenants and users.

New York's Westchester County Airport

Management at HPN decided to accelerate the construction schedule for the rehabilitation of its primary runway (the 6,500-foot Runway 16/34), due to the reduction in traffic from the COVID-19 pandemic. Initial plans called for nightly closures of the runway but due to the slowdown, the runway was closed entirely for several periods, including a four-day period between April 21-25, 2020. There was also an extended closing between April 27 and May 21, 2020 to mill the existing pavement, install asphalt leveling course pavement and install final asphalt pavement wear course, along with other peripheral runway markings and equipment.

Additionally, the entire airport was closed to fixed-wing traffic from April 29 through May 5, when Runway 11/29 was also closed while work is conducted on the intersection.

While the airport did not take these runway closures lightly, the goal of expediting construction is to reduce impacts to operations when air traffic returns to the ‘new normal.’

Source: AIN Online

Public Responses to Decline in Air Traffic

As of July 2020, passenger volume at U.S. airlines nationwide remains 77% below last year’s levels according to the U.S. Transportation Security Administration. At Minneapolis-Saint Paul International Airport (MSP), this led to a decline of up to 75% in air traffic from 2019 levels during the spring of 2020. Noise complaints have trended in the same direction due to a reduction in noise; complaints declined to 80% of 2019 levels in May of 2020. When flights increased 18% from May to June of 2020, complaints again followed that trend, increasing by 23%

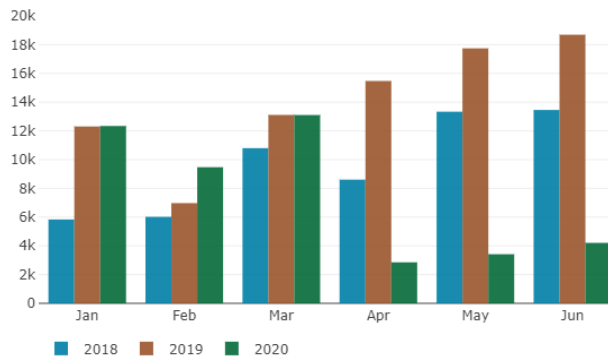


Figure 1: Noise complaints are down significantly in 2020 compared to 2018-2019 surrounding MSP

Source: MAC, 2020.

Complaints at Chicago O’Hare International Airport (ORD) have also been down due to the COVID-19 outbreak. In April 2020, complaints fell by 54% compared to April 2019, coinciding with a reduction of 68% to flights at night over that same time period.

Joseph Schwieterman, an aviation expert at DePaul University in Chicago, anticipates that as the aviation industry recovers, noise complaints will

increase again and that the reaction will likely be strong as the public has grown use to the quiet.

For some areas in the UK, this decline in traffic has led community members to call for permanent change to noise levels and a new approach to noise mitigation. This has coincided with the UK’s Independent Commission on Civil Aviation Noise (ICCAN) publication of a report that reviews how airports collect and analyze data on noise pollution. The report urges airports to clarify their monitoring and reporting practices while ICCAN works on best practice guidance for noise management. As the world looks toward recovery in the airline industry after COVID-19, ICCAN is pushing noise management as a key priority.

Sources: Chicago Daily Herald, Star Tribune, MAC, Clyde Bank Post, Airport Technology, and International Airport Review.

Electric and Hybrid-Electric Aviation

Research Insight

Riboldi et. al. published an article titled “Predicting the effect of electric and hybrid-electric aviation on acoustic pollution” in De Gruyter’s *Noise Mapping* journal on April 13, 2020. The research describes the promise of electric and hybrid-electric aircraft to provide a substantial contribution to the reduction of noise pollution and notes that there is a gap in demonstrating this promise. The goal of Riboldi, et. al.’s research is to address that gap by providing a methodology to quantify noise emissions from these novel powertrains. According to the researchers, this research is fundamental for assessing the potential for electric and hybrid-electric aircraft to reduce noise pollution.

The article provides a possible procedure for assessment, using a step-by-step conceptual and practical procedure. It is primarily focused on propeller-driven GA-aircraft, but easily scaled for heavier aircraft categories. The assessment procedure includes a noise prediction model that has been built that considers airframe (with sub-components), propeller, engine, electric motor and gearbox.

Following validation of the model based on real flights of conventionally propelled aircraft as well as the Pipistrel Panthera Hybrid, one of the few manufactured hybrid-electric aircraft currently, the researchers used their predictive model to demonstrate the noise reduction possible from electric and hybrid-electric aircraft.

Source: De Gruyter

EASA Certification of First Fully Electric Plane World-Wide

On June 10, 2020, the European Union Aviation Safety Agency announced the certification of the Pipistrel Velis Electro. This is the first certification in the world of a fully electric aircraft. It marks an exciting breakthrough in the pursuit of environmentally sustainable aviation as well as a step toward the promise of reduced noise pollution with this new technology.

The Velis Electro is a two-seater aircraft from the Slovenia-based Pipistrel, which specializes in energy-efficient and affordable high-performance aircraft. The Velis Electro is primarily intended for pilot training.

EASA and Pipistrel were able to collaborate to complete the certification process in less than three years, with the common goal of ensuring the aircraft met the high standard of safety needed for certification. The collaboration on this project provided important lessons that will serve future certifications of electrically powered engines and aircraft.

EASA certified the electrical engine, the E-811-268MVLC, that powers the aircraft on May 18, 2020, the first of its kind.

Source: EASA

Aircraft Development and Testing Cessna E-Caravan

On May 28, 2020 at 8:00 am Pacific Standard Time, magniX conducted the first flight test of the 750-horsepower magni500 all-electric propulsion system on a Cessna 208B Grand Caravan in Moses

Lake, Washington. In partnership with AeroTEC, magniX has been working to convert the Cessna 208B Grand Caravan to an all-electric, low operating cost, clean aircraft.

The Cessna 208B Grand Caravan is one of the world's most used middle-mile turboprop aircraft, so demonstrating the ability to convert it to an all-electric aircraft is another step toward environmentally sustainable aviation and noise reduction.

NASA's X-57 Maxwell

On June 8, 2020, NASA announced significant progress in preparation for NASA's first all-electric X-plane, the X-57 Maxwell.

Testing is underway and nearing completion for the X-57's functional ground testing as well as assembly and qualification testing for critical components, like the electric cruise motors and high-aspect ratio wing, as NASA progresses toward taxi testing and first flight.

The X-57 is modified from a Tecnam P2006T airplane. The modification is currently in its first of three configurations as an all-electric aircraft, before its final configuration which will include the high-aspect ratio wing. The current configuration replaces the standard combustion, 100-horsepower Rotax 912S engines with 60-kilowatt electric cruise motors. However, upcoming X-57 test flights in this phase will be flown using the vehicle's standard wing. The next phase will replace the standard wing with the high-aspect ratio wing. This will reduce overall vehicle area, and relocating the cruise motors out to the wingtips. The final configuration following the high-aspect ratio wing will be the addition of 12 smaller high-lift motors along the wing's leading edge to be activated during takeoff and landing.

Final steps in the airworthiness process will include endurance and high-power testing of the cruise motors and cruise motor controllers. This process includes small checks, low power checks, a variety of detail checks on the motor, and includes testing full mission profiles and beyond mission profiles to

push the limits of temperature and power in a controlled environment.

To this point, the motors have performed “exceedingly well” with room for improvement, according to NASA.

Additionally, NASA hopes to use lessons learned and information gathered during critical component testing to help set certification standards for electric aircraft of the future as the X-57 approaches its historic first flight.

Sources: EASA, magniX, and NASA

Other Noise News

- In a ruling filed on June 19, 2020, a Jefferson County District Judge ordered that Denver International Airport (DIA) pay 33.5M for noise violations occurring between 2014 and 2017. Adams County, along with Thornton, Aurora, and Brighton sued the airport in 2018.
- San Fernando Valley Task Force, made up of members representing U.S. Sens. Dianne Feinstein and Kamala Harris and U.S. Reps. Adam Schiff, Brad Sherman, Ted W. Lieu and Tony Cardenas, wrote to the FAA urging the agency to take steps to reduce aircraft noise around Hollywood Burbank and Van Nuys airports. The task force identified areas where stricter adherence to traffic management procedures could lead to a meaningful reduction in noise.
- National Business Aviation Association (NBAA), Aircraft Owners and Pilots Association (AOPA), Experimental Aircraft Association (EAA), and six other aviation groups representing the industry signed a letter opposing the Aircraft Noise Reduction Act, a bill introduced by U.S. Rep. Joe Neguse (D-Boulder) in December 2019. The primary reason for opposition is that this bill would “create a patchwork of conflicting local regulations, jeopardize safety and create an economic burden on the aviation community.”
- On June 30, the International EPD® System, an environmental declaration program based in Sweden, and Bombardier Aviation announced the first Environmental Product Declaration (EPD) in the business aviation industry for Bombardier’s Global 7500 jet. This discloses fully transparent environmental information about product life cycle, water consumption, and other key environmental impact indicators, including noise emissions.
- Boeing plans to conduct 787 ecoDemonstrator tests in August and September of 2020. Boeing launched the ecoDemonstrator program in 2010 to test new technologies on passenger and cargo jets in flight. Many of this year’s tests will be focused on aircraft noise and noise mitigation, including a partnership with NASA. Using sensors and microphones on the ground, the team plans to examine the 787’s noise during flight. Boeing will then test Safran Landing Systems’ low-noise landing gear fairings to determine their efficacy in mitigating noise.
- The newly formed Coastal Orange County Aircraft Mitigation Noise Task Force led by U.S. Rep. Harley Rouda (D - CA-48) held its first meeting on July 17, 2020. The Task Force includes local elected officials and representatives from the Federal Aviation Administration (FAA), SNA Airport, and major airlines. The intent of the task force is to decrease noise and improve collaboration with the community surrounding John Wayne Airport (SNA) in Orange County, CA.