

ROUNDTABLE REGULAR MEETING PACKET

Meeting No. 293

Wednesday, December 3, 2014 - 7:00 p.m.

David Chetcuti Community Room – Millbrae City Hall
450 Popular Avenue – Millbrae, CA 94030

Note: To arrange an accommodation under the Americans with Disabilities Act to participate in this public meeting, please call (650) 363-1853 at least 2 days before the meeting date.

AGENDA

- 1. Call to Order / Roll Call / Declaration of a Quorum Present** ACTION
Cliff Lentz, Roundtable Chairperson / James A. Castaneda, AICP, Roundtable Coordinator
- 2. Public Comments on Items NOT on the Agenda** INFORMATION
Speakers are limited to two minutes. Roundtable members cannot discuss or take action on any matter raised under this item.
- 3. Adoption of Resolutions in recognition of Naomi Patridge** ACTION
Cliff Lentz, Roundtable Chairperson

CONSENT AGENDA ITEMS

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.

- 4. Review of Airport Director's Reports for:** ACTION
September 2014 pg. 13
October 2014 pg. 21
- 5. Review of Roundtable Regular Meeting Overview for June 4, 2014 and October 1, 2014** ACTION
pg. 29

REGULAR AGENDA

- 6. Review of SFO FlyQuiet Report for Q3 2014** ACTION
Bert Ganoung, Manager - Aircraft Noise Abatement Office pg. 43



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| 7. Airport Director's Comments
John Martin, Director – San Francisco International Airport | INFORMATION |
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| 8. Follow-up, SFO PART 150 – INFORMATION
Bert Ganoung, Manager - Aircraft Noise Abatement Office | |
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| 9. Follow-up, Request from City of Palo Alto for Roundtable Membership
Cliff Lentz, Roundtable Chairperson | ACTION
pg. 71 |

REGULAR AGENDA – WORK PROGRAM ITEMS

- | | |
|---|-----------------------|
| 10. Update, FAA's PORTE Departure Analysis
Bert Ganoung, Manager - Aircraft Noise Abatement Office
Cliff Lentz, Roundtable Chairperson | INFORMATION |
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| 11. Update, Oceanic Arrivals Over the Woodside VOR
Bert Ganoung, Manager - Aircraft Noise Abatement Office
Cliff Lentz, Roundtable Chairperson | INFORMATION |
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| 12. Update, Metroplex
Cindy Gibbs, Roundtable Aviation Technical Consultant | INFORMATION
pg. 75 |
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| 13. Letter to FAA Director, Congressional Support for Lower DNL Standard
Cindy Gibbs, Roundtable Aviation Technical Consultant | ACTION
pg. 83 |
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| 14. Discussion of Possible North and South County Subcommittees
Cliff Lentz, Roundtable Chairperson | INFORMATION |

OTHER MATTERS

- | | |
|---|-------------|
| 15. Upcoming 2015 Noise 101
Cindy Gibbs, Roundtable Aviation Technical Consultant | INFORMATION |
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| 16. Airport Noise Briefing
Cindy Gibbs, Roundtable Aviation Technical Consultant | INFORMATION |
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| 17. Member Communications / Announcements
Roundtable Members and Staff | INFORMATION |
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| 18. Adjourn
Cliff Lentz, Roundtable Chairperson | ACTION |

Airport Noise Industry News

pg. 87

Glossary of Common Acoustic & Air Traffic Control Terms

pg. 97

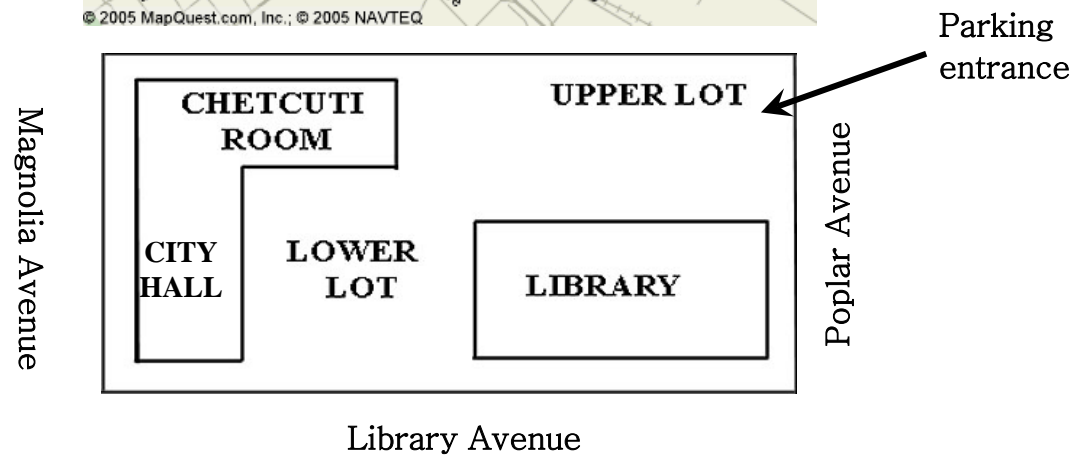
Next Regular Roundtable Meeting Date: Wednesday, February 4, 2015

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.

ROUNDTABLE REGULAR MEETING LOCATION

**David Chetcuti Community Room
450 Poplar Avenue - Millbrae, CA 94030**

Access through Millbrae Library parking lot on Poplar Avenue





ABOUT THE AIRPORT/COMMUNITY ROUNDTABLE

OVERVIEW

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. The Roundtable is scheduled to meet on the first Wednesday of the following months: February, April, June, September and November. **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. 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) 363-1853.**

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.” (49 U.S.C. A. Section 1302(a)(1)).

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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, Agenda 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.

AIRPORT/COMMUNITY ROUNDTABLE OFFICERS & STAFF

Chairperson:

CLIFF LENTZ

Representative, City of Brisbane
cliff Lentz@ci.brisbane.ca.us

Vice-Chairperson:

DAVE PINE

Representative, County of San Mateo
dpine@smcgov.org

Roundtable Coordinator:

JAMES A. CASTAÑEDA, AICP

County of San Mateo
Planning & Building Department
jcastaneda@sforoundtable.org





MEMBERSHIP ROSTER DECEMBER 2014 REGULAR MEMBERS

CITY AND COUNTY OF SAN FRANCISCO

BOARD OF SUPERVISORS

Representative: Vacant

Alternate: Vacant

CITY AND COUNTY OF SAN FRANCISCO

MAYOR'S OFFICE

Julian C. L. Chang, (Appointed)

Alternate: Edwin Lee, Mayor

CITY AND COUNTY OF SAN FRANCISCO

AIRPORT COMMISSION REPRESENTATIVE

John L. Martin, Airport Director (Appointed)

Alternate: Doug Yakel, Acting Airport Spokesperson

COUNTY OF SAN MATEO BOARD OF SUPERVISORS

Dave Pine, Supervisor/Roundtable Vice-Chairperson

Alternate: Don Horsley, Supervisor

CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY (C/CAG)

AIRPORT LAND USE COMMITTEE (ALUC)

Richard Newman, ALUC Chairperson (Appointed)

Alternate: Carol Ford, Aviation Representative (Appointed)

TOWN OF ATHERTON

Elizabeth Lewis, Council Member

Alternate: Bill Widmer, Council Member

CITY OF BELMONT

Representative: Vacant

Alternate: Vacant

CITY OF BRISBANE

Cliff Lentz, Council Member/Roundtable Chairperson

Alternate: Lori Liu, Council Member

CITY OF BURLINGAME

Ricardo Ortiz, Council Member

Alternate: Vacant

MEMBERSHIP ROSTER DECEMBER 2014

Page 2 of 3

CITY OF DALY CITY

Raymond Buenaventura, Mayor

Alternate: Carol Klatt, Council Member

CITY OF FOSTER CITY

Steve Okamoto, Council Member

Alternate: Vacant

CITY OF HALF MOON BAY

Naomi Patridge, Council Member

Alternate: Allan Alifano, Council Member

TOWN OF HILLSBOROUGH

Alvin Royse, Council Member

Alternate: Shawn Christianson, Council Member

CITY OF MENLO PARK

Richard Cline, Council Member

Alternate: Peter Ohtaki, Council Member

CITY OF MILLBRAE

Robert Gottschalk, Council Member

Alternate: Marge Colapietro, Council Member

CITY OF PACIFICA

Sue Digre, Council Member

Alternate: Vacant

TOWN OF PORTOLA VALLEY

Ann Wengert, Council Member

Alternate: Maryann Derwin, Council Member

CITY OF REDWOOD CITY

Rosanne Foust, Council Member

Alternate: Vacant

CITY OF SAN BRUNO

Ken Ibarra, Council Member

Alternate: Rico Medina, Council Member

CITY OF SAN CARLOS

Bob Grassilli, Council Member

Alternate: Ron Collins, Council Member

MEMBERSHIP ROSTER DECEMBER 2014

Page 3 of 3

CITY OF SAN MATEO

David Lim, Council Member

Alternate: Vacant

CITY OF SOUTH SAN FRANCISCO

Mark Addiego, Council Member

Alternate: Pradeep Gupta, Council Member

TOWN OF WOODSIDE

David Burow, Council Member

Alternate: Thomas Shanahan, Council Member

ROUNDTABLE ADVISORY MEMBERS

AIRLINES/FLIGHT OPERATIONS

Captain Andy Allen, United Airlines

Glen Morse, United Airlines

Michael Jones, United Airlines

FEDERAL AVIATION ADMINISTRATION

Elisha Novak, Airports District Office, Burlingame

Greg Kingery, SFO Air Traffic Control Tower

Don Kirby, Northern California Terminal Radar Approach Control (NORCAL TRACON)

ROUNDTABLE STAFF/CONSULTANTS

James A. Castañeda, AICP, Roundtable Coordinator

Cynthia Gibbs, Roundtable Aviation Technical Consultant (BridgeNet International)

Harvey Hartman, Roundtable Aviation Technical Consultant (Hartman & Associates)

SAN FRANCISCO INTERNATIONAL AIRPORT NOISE ABATEMENT STAFF

Bert Ganoung, Noise Abatement Manager

David Ong, Noise Abatement Systems Manager

Ara Balian, Noise Abatement Specialist

Barbara Lawson, Noise Abatement Specialist

John Hampel, Noise Abatement Specialist

Joyce Satow, Noise Abatement Office Administration Secretary

CONSENT AGENDA

Regular Meeting # 293
December 3, 2014

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Airport Director's Report

**Presented at the December 3, 2014
Airport Community Roundtable Meeting
SFO Aircraft Noise Abatement Office
September 2014**



Monthly Noise Exceedance Report

San Francisco International Airport -- Director's Report

Period: September 2014



Airline	Noise Exceedances				Noise Exceedance Quality Rating
	Total Noise Exceedances	Total Operations per Month	Exceedances per 1,000 Operations	Score	
SKW	16	7,525	2	9.99	
CPZ	8	1,093	7	9.98	
AAL	15	1,845	8	9.98	
ASA	9	993	9	9.97	
FFT	3	276	11	9.97	
SWA	28	2,462	11	9.97	
VRD	33	2,800	12	9.97	
ASH	2	147	14	9.96	
DAL	22	1,535	14	9.96	
ANA	1	60	17	9.95	
WJA	2	120	17	9.95	
TRS	1	59	17	9.95	
BAW	3	120	25	9.93	
AWE	23	916	25	9.93	
JBU	16	626	26	9.92	
UAL	260	9,955	26	9.92	
ACA	17	614	28	9.92	
DLH	6	120	50	9.85	
AMX	9	157	57	9.83	
HAL	5	60	83	9.75	
TAI	10	85	118	9.65	
ANZ	11	60	183	9.46	
FDX	12	65	185	9.45	
ABX	21	84	250	9.26	
PAL	25	68	368	8.91	
NCA	19	50	380	8.87	
SIA	50	120	417	8.77	
EVA	61	137	445	8.68	
CPA	54	120	450	8.67	
KAL	71	116	612	8.19	
AAR	69	84	821	7.57	
CAL	148	98	1,510	5.53	
CKS	81	24	3,375	0.00	
TOTAL	1,111	32,594	9,573		

Source: SFO Noise Abatement Office

Historical Significant Exceedances Report
San Francisco International Airport -- Director's Report
Period: **September 2014**



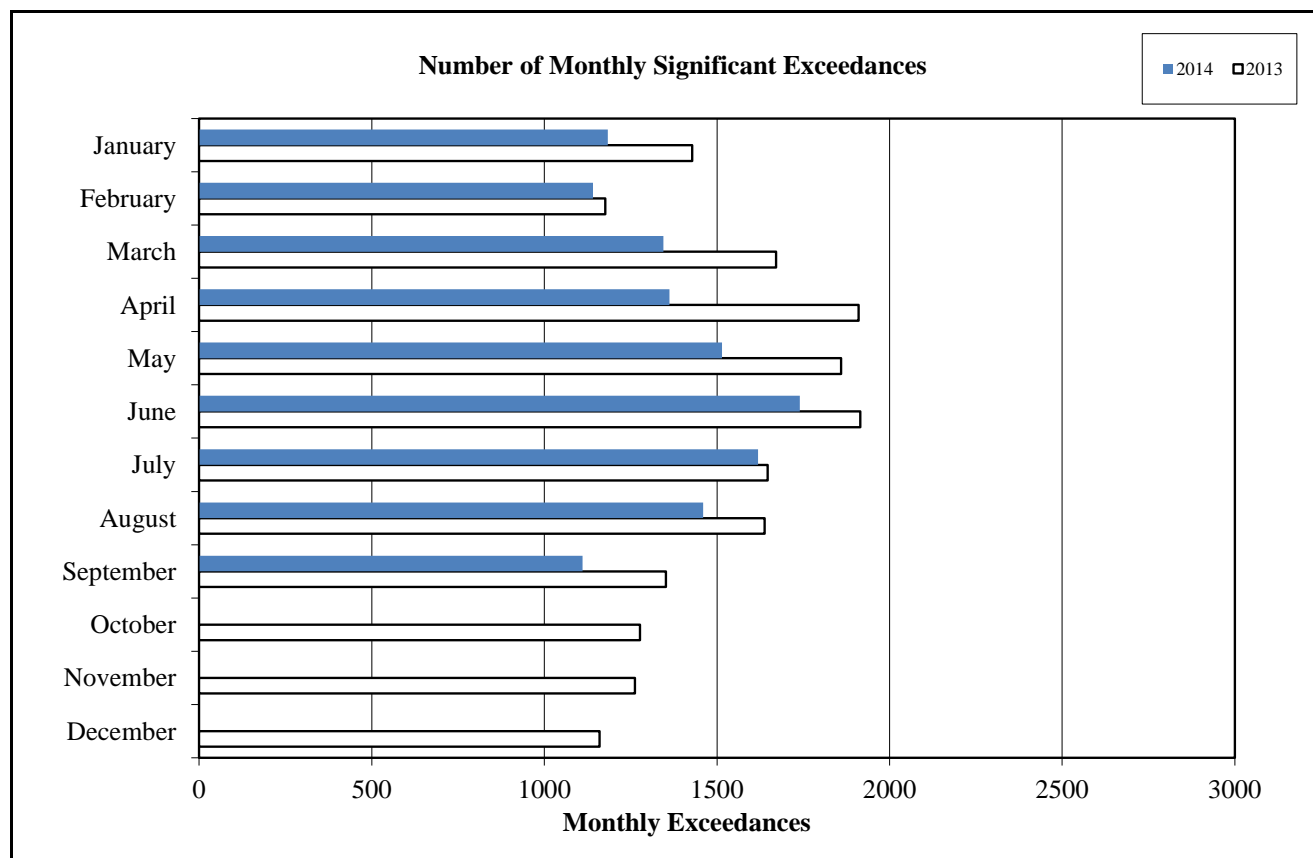
San Francisco International Airport

Month	Number of Monthly Significant Exceedances					Change from Last Year
	2010	2011	2012	2013	2014	
January	1312*	1580	1378	1428	1184	-244
February	1297*	1429	1581	1176	1141	-35
March	1778	1681	1703	1671	1345	-326
April	1449	1900	1870	1910**	1362	-548
May	2042	2024	1912	1859**	1515	-344
June	2177	1947	2355	1915	1740	-175
July	1743	2017	2621	1647	1619	-28
August	2090	1847	1823	1638***	1460	-178
September	1636	1609	1464	1352	1111	-241
October	1537	1572	1689	1277		0
November	1599	1575	1421	1262		0
December	1411	1447	1439	1160		0
Annual Total	20071	20628	21256	18295	12477	
Year to Date Trend	20071	20628	21256	18295	12477	-2119

* Revised with correct amount of exceedance - 4/30/10

** Revised with correct amount of exceedance - 8/5/13

*** No data available from Site 7, August 1-26



Monthly Noise Complaint Summary

San Francisco International Airport -- Director's Report

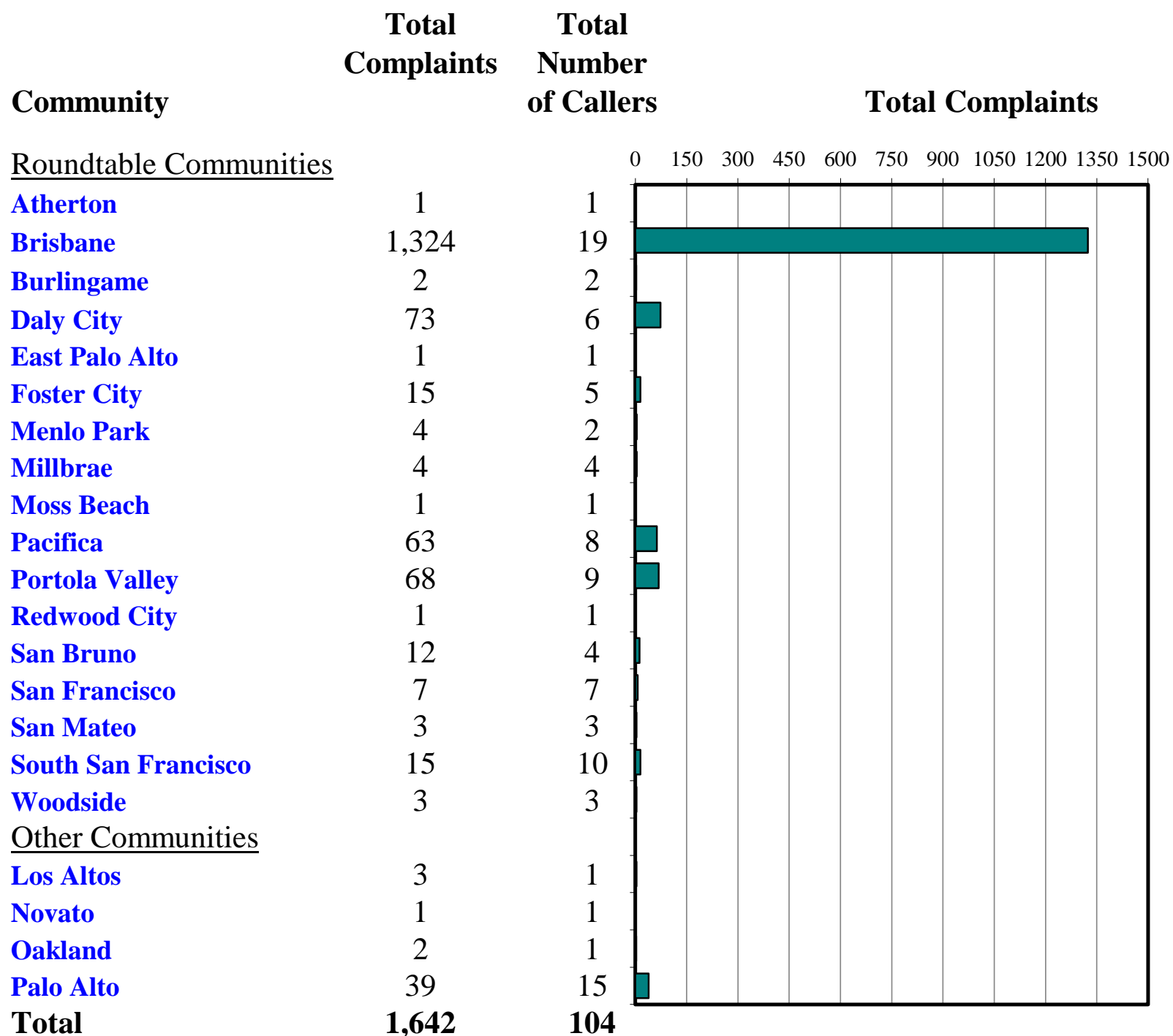
Period: **September 2014**



San Francisco International Airport

Monthly Calls by Community

Source: Airport Noise Monitoring System



This map illustrates the geographic distribution of 1000+ data points (yellow dots) across the San Francisco Bay Area. The dots are heavily clustered in the San Francisco Peninsula, particularly in the cities of San Francisco, San Bruno, and San Mateo. Other significant clusters are found in the East Bay, including Oakland and Berkeley, and in the South Bay, near San Jose. The map also shows major highways (I-80, I-880, I-580, I-680, I-85, I-205, I-405, I-101, I-105, I-108, I-107, I-106, I-104, I-103, I-102, I-101, I-100, I-99, I-98, I-97, I-96, I-95, I-94, I-93, I-92, I-91, I-90, I-89, I-88, I-87, I-86, I-85, I-84, I-83, I-82, I-81, I-80, I-79, I-78, I-77, I-76, I-75, I-74, I-73, I-72, I-71, I-70, I-69, I-68, I-67, I-66, I-65, I-64, I-63, I-62, I-61, I-60, I-59, I-58, I-57, I-56, I-55, I-54, I-53, I-52, I-51, I-50, I-49, I-48, I-47, I-46, I-45, I-44, I-43, I-42, I-41, I-40, I-39, I-38, I-37, I-36, I-35, I-34, I-33, I-32, I-31, I-30, I-29, I-28, I-27, I-26, I-25, I-24, I-23, I-22, I-21, I-20, I-19, I-18, I-17, I-16, I-15, I-14, I-13, I-12, I-11, I-10, I-9, I-8, I-7, I-6, I-5, I-4, I-3, I-2, I-1) and major geographical features like San Francisco Bay, San Pablo Bay, and Suisun Bay. The map is color-coded to show different counties and cities, with labels for major cities and towns throughout the region.

Page 4


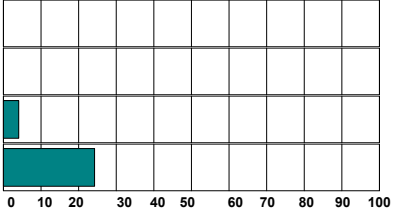



Monthly Nighttime Power Runups Report (85-06-AOB)

San Francisco International Airport -- Director's Report

Period : **September 2014**

Time of Day : From 10 pm through 7 am



Airline Code		Number of Runups	Runups Per 1,000 Departures	Percentage of Runups	
	DAL	1	1.3	3%	
	VRD	1	0.7	3%	
	UAL	5	1.0	16%	
	AAL	25	26.6	78%	
Total		32			

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 power settings tested range from idle to full power and may vary in duration.



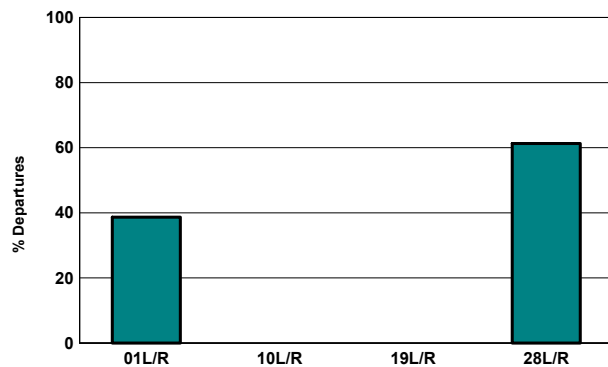
San Francisco International Airport

Runway Utilization (1 am to 6 am)

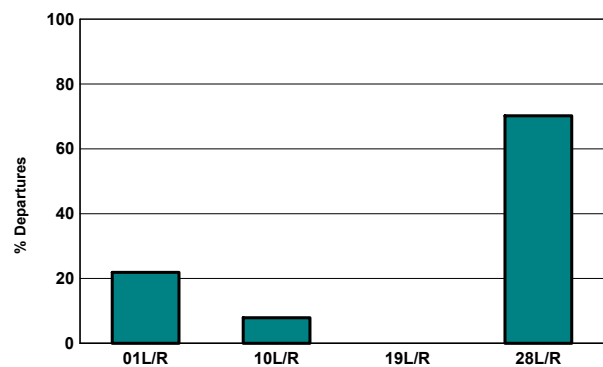
Monthly Jet Departures

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
01L/R	110	51	92	72	47	-	-	88	130	-	-	-	590
10L/R	45	68	57	28	8	5	-	2	-	-	-	-	213
19L/R	-	-	-	-	-	-	-	-	-	-	-	-	0
28L/R	40	60	121	196	258	357	381	275	206	-	-	-	1,894
Total	195	179	270	296	313	362	381	365	336	-	-	-	2,697
01L/R	56%	28%	34%	24%	15%	0%	0%	24%	39%	0%	0%	0%	22%
10L/R	23%	38%	21%	9%	3%	1%	0%	1%	0%	0%	0%	0%	8%
19L/R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
28L/R	21%	34%	45%	66%	82%	99%	100%	75%	61%	0%	0%	0%	70%

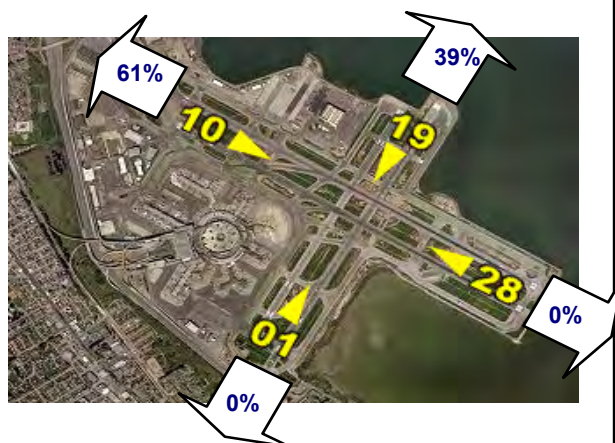
Current Month (1 am to 6 am)



Year-to-Date (1am to 6 am)

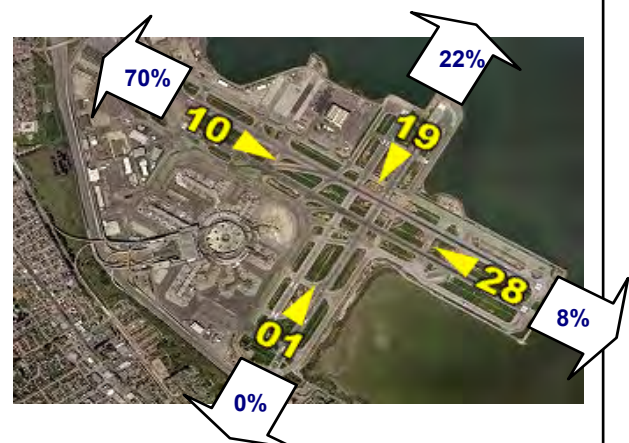


Current Month (1 am to 6 am)



Numbers rounded to nearest whole percentages

Year-to-Date (1am to 6am)



Numbers rounded to nearest whole percentages

Air Carrier Runway Use Summary Report

San Francisco International Airport -- Director's Report

Period: September 2014

Time of Day : All Hours



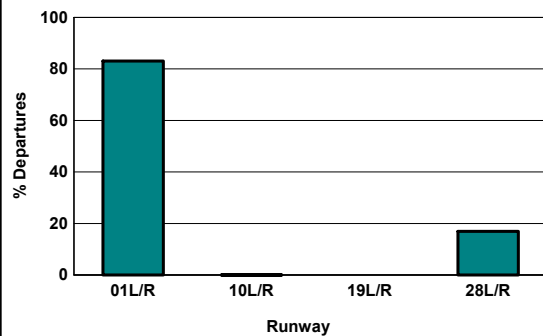
San Francisco International Airport

Runway Utilization (All Hours)

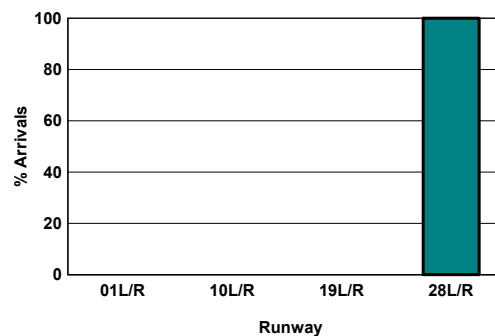
Source: Airport Noise Monitoring System

	Runway Utilization				Total
	01L/R	10L/R	19L/R	28L/R	
Total Monthly Operations					
Departures	14,139	1	0	2,887	17,027
Arrivals	0	0	0	16,561	16,561
Percentage Utilization					
Departures	83.0%	0.0%	0.0%	17.0%	100%
Arrivals	0.0%	0.0%	0.0%	100.0%	100%

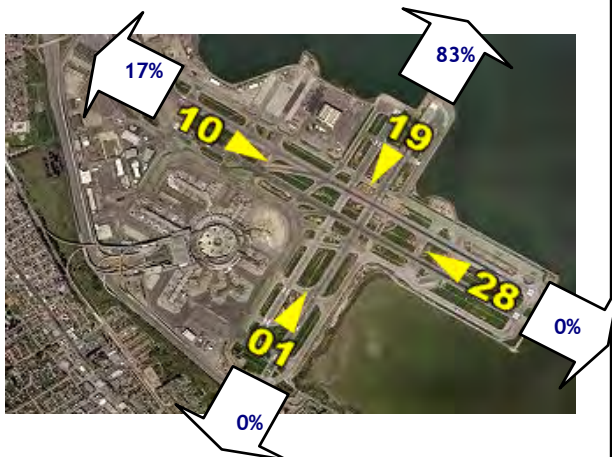
Departures (All Hours)



Arrivals (All Hours)



Percentage Departure Utilization



Numbers rounded to nearest whole percentages

Percentage Arrival Utilization



Numbers rounded to nearest whole percentages

Airport Director's Report

**Presented at the December 3, 2014
Airport Community Roundtable Meeting
SFO Aircraft Noise Abatement Office
October 2014**



Monthly Noise Exceedance Report

San Francisco International Airport -- Director's Report

Period: **October 2014**



Airline	Noise Exceedances				Noise Exceedance Quality Rating
	Total Noise Exceedances	Total Operations per Month	Exceedances per 1,000 Operations	Score	
SKW	11	7,693	1	9.99	
FFT	1	246	4	9.98	
SWA	16	2,515	6	9.97	
SCX	1	128	8	9.97	
AAL	17	1,876	9	9.96	
ASA	10	993	10	9.96	
DAL	16	1,570	10	9.96	
VRD	29	2,741	11	9.96	
CPZ	14	1,220	11	9.95	
ASH	2	147	14	9.94	
JAL	1	60	17	9.93	
AMX	3	163	18	9.92	
WJA	2	101	20	9.92	
ACA	11	530	21	9.91	
JBU	15	628	24	9.90	
UAL	252	10,056	25	9.89	
TRS	2	61	33	9.86	
DLH	4	116	34	9.86	
AWE	33	954	35	9.85	
BAW	8	120	67	9.72	
TAI	6	86	70	9.71	
VIR	5	62	81	9.66	
ABX	10	88	114	9.52	
FDX	10	72	139	9.42	
HAL	9	60	150	9.37	
NCA	16	46	348	8.54	
CPA	47	120	392	8.36	
EVA	57	138	413	8.27	
KAL	64	120	533	7.76	
SIA	65	120	542	7.73	
PAL	41	60	683	7.13	
AAR	73	90	811	6.60	
CAL	142	98	1,449	3.92	
CKS	62	26	2,385	0.00	
TOTAL	1,055	33,104	8,486		

Source: SFO Noise Abatement Office

Historical Significant Exceedances Report
San Francisco International Airport -- Director's Report
Period: **October 2014**



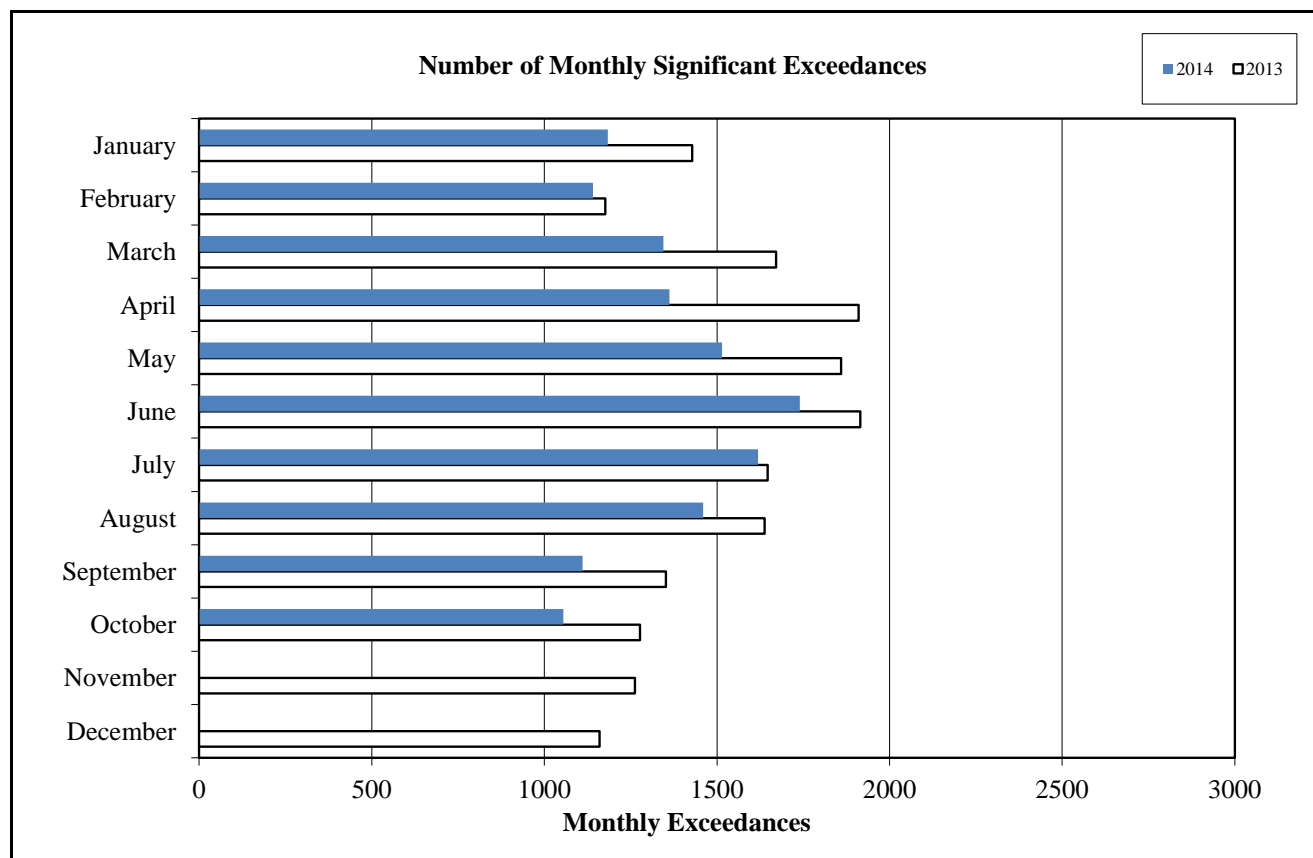
San Francisco International Airport

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July	1743	2017	2621	1647	1619	-28
August	2090	1847	1823	1638***	1460	-178
September	1636	1609	1464	1352	1111	-241
October	1537	1572	1689	1277	1055	-222
November	1599	1575	1421	1262		0
December	1411	1447	1439	1160		0
Annual Total	20071	20628	21256	18295	13532	
Year to Date Trend	20071	20628	21256	18295	13532	-2341

* Revised with correct amount of exceedance - 4/30/10

** Revised with correct amount of exceedance - 8/5/13

*** No data available from Site 7, August 1-26



Monthly Noise Complaint Summary

San Francisco International Airport -- Director's Report

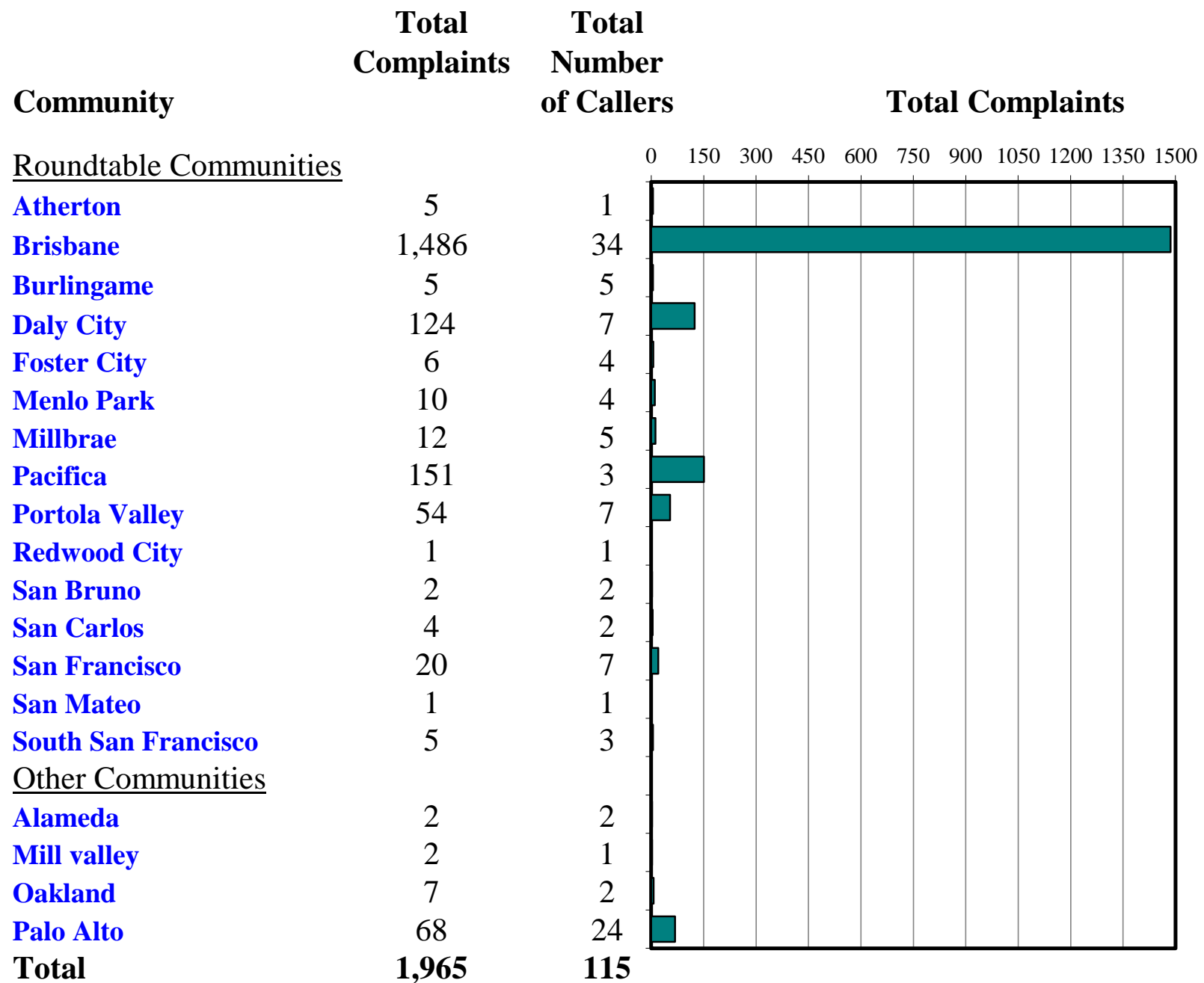
Period: **October 2014**



San Francisco International Airport

Monthly Calls by Community

Source: Airport Noise Monitoring System



Monthly Noise Complaint Summary Map October 2014



● Caller Location and Amount of Complaints





Monthly Nighttime Power Runups Report (85-06-AOB)

San Francisco International Airport -- Director's Report

Period : **October 2014**

Time of Day : From 10 pm through 7 am



Airline Code		Number of Runups	Runups Per 1,000 Departures	Percentage of Runups	
 UNITED	UAL	8	1.5	31%	
 American Airlines	AAL	18	18.5	69%	
Total		26			

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 power settings tested range from idle to full power and may vary in duration.



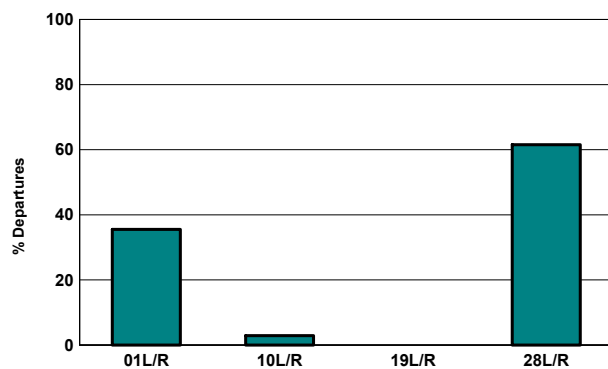
San Francisco International Airport

Runway Utilization (1 am to 6 am)

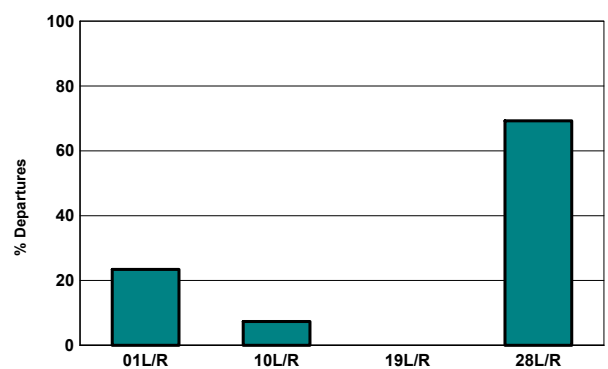
Monthly Jet Departures

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
01L/R	110	51	92	72	47	-	-	88	130	123	-	-	713
10L/R	45	68	57	28	8	5	-	2	-	10	-	-	223
19L/R	-	-	-	-	-	-	-	-	-	-	-	-	0
28L/R	40	60	121	196	258	357	381	275	206	213	-	-	2,107
Total	195	179	270	296	313	362	381	365	336	346	-	-	3,043
01L/R	56%	28%	34%	24%	15%	0%	0%	24%	39%	36%	0%	0%	23%
10L/R	23%	38%	21%	9%	3%	1%	0%	1%	0%	3%	0%	0%	7%
19L/R	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
28L/R	21%	34%	45%	66%	82%	99%	100%	75%	61%	62%	0%	0%	69%

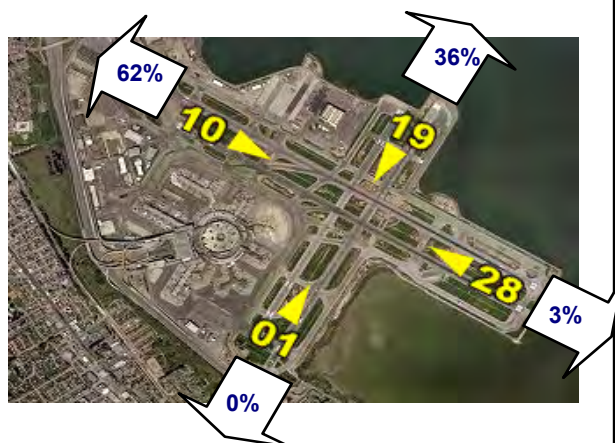
Current Month (1 am to 6 am)



Year-to-Date (1am to 6 am)

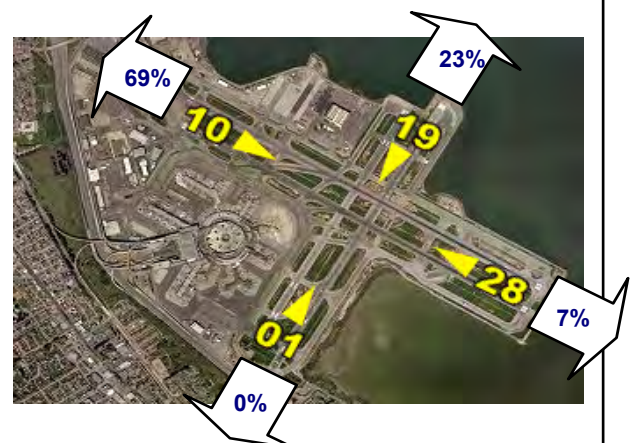


Current Month (1 am to 6 am)



Numbers rounded to nearest whole percentages

Year-to-Date (1am to 6am)



Numbers rounded to nearest whole percentages

Air Carrier Runway Use Summary Report

San Francisco International Airport -- Director's Report

Period: October 2014

Time of Day : All Hours



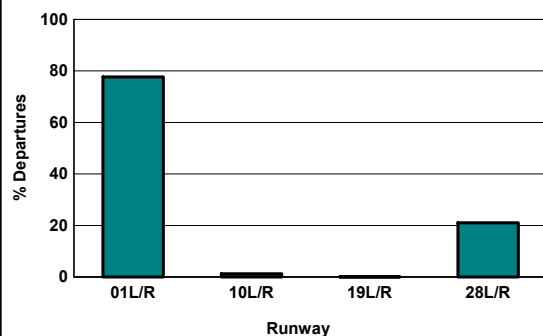
San Francisco International Airport

Runway Utilization (All Hours)

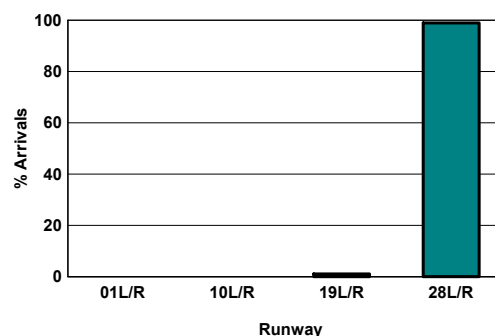
Source: Airport Noise Monitoring System

	Runway Utilization				Total
	01L/R	10L/R	19L/R	28L/R	
Total Monthly Operations					
Departures	13,833	224	7	3,747	17,811
Arrivals	0	0	182	17,049	17,231
Percentage Utilization					
Departures	77.7%	1.3%	0.0%	21.0%	100%
Arrivals	0.0%	0.0%	1.1%	98.9%	100%

Departures (All Hours)



Arrivals (All Hours)

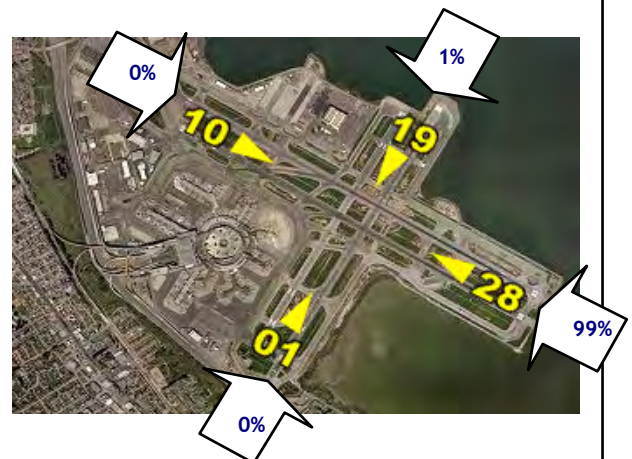


Percentage Departure Utilization



Numbers rounded to nearest whole percentages

Percentage Arrival Utilization



Numbers rounded to nearest whole percentages

SFO Airport/Community Roundtable

Meeting No. 291 Overview
Wednesday, June 4, 2014

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

Roundtable Chairperson, Cliff Lentz, called the Regular Meeting of the SFO Airport/Community Roundtable to order, at approximately 7:04 p.m., in the David Chetcuti Community Room at the Millbrae City Hall. James A. Castañeda, AICP, Roundtable Coordinator, called the roll. A quorum (at least 12 Regular Members) was present as follows:

REGULAR MEMBERS PRESENT

Julian Chang – City and County of San Francisco Mayor's Office
John Martin – City and County of San Francisco Airport Commission
Dave Pine – County of San Mateo Board of Supervisors
Richard Newman – C/CAG Airport Land Use Committee (ALUC)
Elizabeth Lewis – Town of Atherton
Cliff Lentz – City of Brisbane
Ricardo Ortiz – City of Burlingame
Steve Okamoto – City of Foster City
Naomi Patridge – City of Half Moon Bay
Alvin Royse – Town of Hillsborough
Robert Gottschalk – City of Millbrae
Sue Digre – City of Pacifica
Rosanne Foust – City of Redwood City
Ken Ibarra – City of San Bruno
Mark Addiego – City of South San Francisco

REGULAR MEMBERS ABSENT

City and County of San Francisco Board of Supervisors (Vacant)
City of Belmont (Vacant)
City of Daly City
City of Menlo Park
Town of Portola Valley
City of San Carlos
City of San Mateo
Town of Woodside

ADVISORY MEMBERS PRESENT

Don Kerby – Northern California TRACON
Glenn Morris – United Airlines

ROUNDTABLE STAFF

James A. Castañeda, AICP – Roundtable Coordinator
Cindy Gibbs – Roundtable Technical Support (Consultant)
Harvey Hartmann – Roundtable Technical Support (Consultant)

SAN FRANCISCO INTERNATIONAL AIRPORT STAFF

Bert Ganoung, Noise Abatement Manager
Ara Balian, Noise Abatement Specialist
David Ong, Noise Abatement Specialist

2. Public Comments on Items Not on the Agenda

South San Francisco residents Dorain Gotelli and Michael Harris discussed concerns with the noise insulation upkeep and retrofitting of homes at present. Noise Abatement Manager Bert Ganoung explained the warranty situation with any prior retrofit work as part of the noise insulation program, as well as why some houses were not included in the program. He offered to follow up with both residents after the meeting.

Tom Carney, also a South San Francisco resident, raised issues regarding some noise monitors in the area that are not working, and requested additional data and deployment of additional temporary noise monitors.

3. Announcement of Start of SFO FAR Part 150 Noise Exposure Map Update

Noise Abatement Manager Bert Ganoung provided a brief overview of the Part 150 Noise Exposure Map update process, as well as the workshop held prior to the meeting.

CONSENT AGENDA

4. Review of Airport Director's Reports for March 2014 and April 2014

5. Review of Roundtable Regular Meeting Overview for April 2, 2014

DISCUSSION: None.

ACTION: Naomi Patridge **MOVED** the approval of the Consent Agenda. The motion was seconded by Julian Chang and **CARRIED**, unanimously.

REGULAR AGENDA

A request was made to move item 8 (Request from the City of Palo Alto for Roundtable Membership) up to be first on the regular agenda. Rosanne Foust **MOVED** to move item 8 before item 5 for discussion. The motion was seconded by Naomi Patridge and **CARRIED**, unanimously.

8. Request from the City of Palo Alto for Roundtable Membership

Roundtable Coordinator James Castañeda introduced a memorandum received from the City of Palo Alto requesting membership on the Roundtable. He explained the process of amending the Roundtable's regulatory documents to allow Palo Alto's membership if the Roundtable considers the request.

DISCUSSION: Half Moon Bay representative Naomi Patridge expressed her concern regarding opening up membership to cities in Santa Clara County, and mentioned the history of earlier requests from the City of Palo Alto for membership. Airport Director John Martin indicated that this request is a significant issue and should be carefully considered. It was suggested that a

subcommittee be formed to look at the history, precedence and make recommendations to the Roundtable regarding the request.

Palo Alto Mayor Nancy Shepherd provided a few remarks about the request, and encouraged the Roundtable to allow Palo Alto to participate as a member given the shared noise concerns with south county communities.

ACTION: Chairperson Lentz asked for members to volunteer to participate on the subcommittee. Richard Newman, Elizabeth Lewis, Sue Digre, Rosanne Foust, and Julian Chang agreed to be a part of the subcommittee.

6. Review of SFO FlyQuiet Report for Q1 2014

Bert Ganoung, Noise Abatement Manager, provided an overview of the SFO FlyQuiet report for the first quarter of 2014.

ACTION: Dave Pine **MOVED** the approval of the SFO FlyQuiet Report for Q1 2014. The motion was seconded by Naomi Patridge and **CARRIED**, unanimously.

7. Airport Director's Comments

Airport Director John Martin provided a brief update of current trends and operations at SFO. It was indicated that traffic is up 7%, and deployment of portable noise monitors is ongoing.

REGULAR AGENDA – WORK PROGRAM ITEMS

9. SFO Construction Update and Departure/Arrival Affects

Bert Ganoung, Noise Abatement Manager, gave a brief update of the latest development regarding the runway closures happening during the summer for the federally mandated safety improvements, and the expected noise impacts. It was anticipated that the construction will be completed early September.

10. Update on FAA's PORTE Departure Analysis

Noise Abatement Manager Bert Ganoung explained that due to the runway closures, Brisbane is experiencing some relief from overflights, but some complaints are still being received.

11. Update, Oceanic Arrivals Over the Woodside VOR

Noise Abatement Manager Bert Ganoung indicated that the Roundtable could expect a final quarterly monitoring report soon, but initial numbers are low and consistent.

12. Update, Optimization of Airspace and Procedures in the Metroplex (OAPM) Environmental Review

Roundtable Aviation Technical Consultant Cindy Gibbs provided a brief status update of the OAPM Environmental Review, and indicated a record of decision can be expected in July.

DISCUSSION: Chairperson Lentz discussed the feedback received and the efforts of the Roundtable through the comments submitted. San Francisco Mayor's Office representative Julian Chang complimented staff and fellow Roundtable members for their efforts.

OTHER MATTERS

13. Airport Noise Briefing

Roundtable Aviation Technical Consultants Cindy Gibbs and Harvey Hartmann gave a brief industry update, including a discussion of possible forthcoming regulations regarding Unmanned Aerial Vehicles.

14. Member Communications/Announcements

Noise Abatement Manager Bert Ganoung announced the retirement of Barbara Lawson, Senior Information Systems Operator for the Noise Abatement Office.

15. Adjourn

The meeting was adjourned at approximately 8:39 p.m.

* NOTE: Roundtable meeting overviews are considered draft until approved by the Roundtable at a regular meeting.

SFO Airport/Community Roundtable

Meeting No. 292 Overview
Wednesday, October 1, 2014

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

Roundtable Chairperson, Cliff Lentz, called the Regular Meeting of the SFO Airport / Community Roundtable to order, at approximately 7:08 p.m., in the David Chetcuti Community Room at the Millbrae City Hall. James A. Castañeda, AICP, Roundtable Coordinator, called the roll. A quorum (at least 12 Regular Members) was present as follows:

REGULAR MEMBERS PRESENT

Doug Yakel – City and County of San Francisco Airport Commission
Dave Pine – County of San Mateo Board of Supervisors
Richard Newman – C/CAG Airport Land Use Committee (ALUC)
Elizabeth Lewis – Town of Atherton
Cliff Lentz – City of Brisbane
Ricardo Ortiz – City of Burlingame
Steve Okamoto – City of Foster City
Naomi Patridge – City of Half Moon Bay
Robert Gottschalk – City of Millbrae
Sue Digre – City of Pacifica
Maryann Moise Derwin – Town of Portola Valley
Rosanne Foust – City of Redwood City
Ken Ibarra – City of San Bruno
David Burrow – Town of Woodside

REGULAR MEMBERS ABSENT

City and County of San Francisco Board of Supervisors (Vacant)
City and County of San Francisco Mayor's Office
City of Belmont (Vacant)
City of Daly City
Town of Hillsborough
City of Menlo Park
City of San Carlos
City of San Mateo
City of South San Francisco

ADVISORY MEMBERS PRESENT

Joe Grysbeck – Northern California TRACON
Dave Foyle – Federal Aviation Administration, Sierra-Pacific District
Kevin Coon – United Airlines

ROUNDTABLE STAFF

James A. Castañeda, AICP – Roundtable Coordinator
Cindy Gibbs – Roundtable Technical Support (Consultant)
Harvey Hartmann – Roundtable Technical Support (Consultant)

SAN FRANCISCO INTERNATIONAL AIRPORT STAFF

Bert Ganoung, Noise Abatement Manager
Ara Balian, Noise Abatement Specialist
David Ong, Noise Abatement Specialist

2. Public Comments on Items Not on the Agenda

Four members of the public wished to speak on items that were not on the agenda. First, Woodside resident Jim Lyons addressed the Roundtable urging to support the following three initiatives to bring relief from aircraft noise in the south county, 1) support the request from 26 congressional representatives asking the FAA to adopt a 55 dB noise threshold, 2) support a petition signed by 1,100 individuals asking the FAA to take immediate steps to reduce vectored traffic over their communities, required all arrival traffic to adhere to 8,000 feet over the Woodside VOR and 5,000 feet over the Menlo intersection, and not to implement the Norcal OAPM (Metroplex) until additional ground noise studies are conducted, and 3) publically supporting a filed petition with the United States Court of Appeals 9th Circuit challenging the FAA's Finding of No Significant Impact for Metroplex.

Daly City resident Michael Leonhardt expressed noise disturbances he expressed during the runway construction period as well as in the middle of the night. San Bruno resident Bobbie Shay shared her concerns with experienced noise impacts. And finally, William Faber encouraged the Roundtable and the public to be more active and do something about the aircraft noise from SFO.

CONSENT AGENDA

3. **Review of Airport Director's Reports for August 2013, September 2013, October 2013, November 2013, and December 2013**
4. **Review of Roundtable Regular Meeting Overview for June 6, 2014** (continued)

DISCUSSION: None.

ACTION: Elizabeth Lewis **MOVED** the approval of the Consent Agenda (minus the minutes to the June 6, 2014 Regular Meeting). The motion was seconded by Richard Newman and **CARRIED**, unanimously.

REGULAR AGENDA

5. Request from the City of Palo Alto for Roundtable Membership

Rosanne Foust, City of Redwood City Representative, and Rich Newman, C/CAG Representative, noted they agreed with the memo in the agenda packet regarding the Palo Alto membership request subcommittee's recommendations. Both representatives were on that subcommittee. Rich Newman then **MOVED** adoption of the four bullet point recommendations

by the subcommittee. Dave Burrow, Town of Portola Valley Representative, noted he did not see a reason why the Roundtable would stay just within San Mateo County. Chairperson Lentz mentioned that it is financial and logistical concerns. Dave Burrow noted that the City of Palo Alto would be willing to pay membership dues. Chairperson Lentz further explained the financial implications of bringing in another city into the Roundtable's membership. Rosanne Foust noted that changing the Roundtable's Memorandum of Understanding (MOU) would be an issue, requiring adoption of resolutions from each existing member city to change it. Dave Burrow indicated that the Roundtable has changed the MOU before, and having more representatives on the Roundtable would give it greater influence and voice. He also noted that County boundaries are historic and arbitrary, and would be limiting influence by not allowing Palo Alto to join.

Richard Newman recalls that the original Roundtable MOU has grown within the County of San Mateo and is not intended to be a regional body that addresses noise concerns. The Regional Airport Planning Committee (RAPC) is the regional/Bay Area group for noise concerns outside of San Mateo County, and the Roundtable should express to RAPC to get active again in such concerns.

Sue Dirge, City of Pacifica Representative and Palo Alto Membership Request Subcommittee Member, noted that the memo is a summary of what was discussed by the subcommittee for the group to consider. Expanding the Roundtable's boundaries could bring strength but can bring dilution by expanding further south. She indicated that the Roundtable should take care of outstanding issues before allowing additional members to join, and encourage RAPC to be active regarding noise, as it will benefit everyone, not just one area.

Dave Burrow surmised that noise is biggest closer to the airport, and therefore adding people farther away would dilute the Roundtable because it should focus on closer areas, and inclusion of areas further away is not consistent with that logic. Mr. Burrow asked if that was a better way of stating what the subcommittee intended to say.

Elizabeth Lewis, Town of Atherton Representative, stated that Palo Alto experiences a lot of air traffic noise from SFO operations, is very close to Menlo Park, and does not have impacts from San Jose International Airport. She expressed that their membership would not dilute the Roundtable.

Andrew Swanson, Palo Alto Airport Manager, stated that he discussed this issue with the Palo Alto mayor, who underscored that Palo Alto's aircraft noise impacts are from SFO. He noted that the Menlo intersection is actually over Palo Alto, and not Menlo Park.

Palo Alto resident Jim Harriet indicated that Palo Alto is the convergent point for three different paths into SFO. Over 200 flights went over Palo Alto last week with readings of over 80 dB on his noise meter. Tina Nguyen, Portola Valley resident, noted she spoke with Palo Alto residents. She questioned why Palo Alto cannot be a member of the Roundtable considering Congresswoman Eshoo's office is in Palo Alto, the existence of the agreement that aircrafts should fly at 5,000 feet above the Menlo intersection (but actually fly at 3,800 feet), and that SFO Noise Abatement Office staff attends council meetings in Palo Alto.

Bert Ganoung, SFO Airport Noise Abatement Office Manager, clarified that an altitude adjustment at the Menlo intersection is for two visual approaches only during clear weather

(such as the “Tip-Toe” visual approach and the “Quiet Bridge” visual approach). The altitude for instrument approaches during non-visual conditions is 4,000 feet. Woodside resident Jim Lyons interrupted out of order in disagreement, and Chairperson Lentz called a five minute recess.

After Chairman Lentz called the meeting back to order, San Mateo County Board of Supervisor Dave Pine questioned what could be an established standard if Palo Alto was allowed to join. Richard Newman responded by noting that there was not any way to define a boundary that “didn’t strike us at the subcommittee level as being arbitrary.” Bordering on county boundary was one way, but it became impossible to allow in just the next city without subsequent cities. He noted the city of Bolinas and Tiburon wanted to join in the past, and that it was “brought back to us through historical record” that the Roundtable was intended to be a San Mateo County body, hence the recommendation.

Rosanne Foust noted the subcommittee went back to why the Roundtable was created to look at why it was formed the way it was. She noted that the Roundtable should be a partner with Palo Alto and help it form a Roundtable that can be effective in that area. She also indicated that the subcommittee wanted to find something that was amenable, and that having 20 cities amend the charter would be a minimum of 2 years. Dave Burrows responded that the MOU has been amended in the past in a short amount of time.

Sue Dirge noted that the dilution issue was having the RAPC part “as strengthening all of our positions; that it is better to have a strong voice here and a strong voice there that are in concert with each other for the same goal. That it would bring more power to Palo Alto and to who we are here.” The intent was to be proactive and to suggest that people can still participate with the Roundtable. The focus was on the Roundtable’s strength for Work Program goals, to discuss the 65 dB noise level, and have ongoing dialogs with aircraft companies and how aircrafts operate.

Elizabeth Lewis noted she understands the Roundtable being a San Mateo County body and it has grown to include more cities, but expressed that the name of the group is the “San Francisco Airport Community/Roundtable,” not say “San Mateo County Community Roundtable.” She believes that people impacted by aircraft operations from SFO should have a voice on the Roundtable, and does not see any dilution with Palo Alto joining or as an issue different from other cities in the south county.

Richard Newman discussed when the City of Atherton joined, it did not happen on the first request. He noted at the subcommittee there was some concern that cities in the north part of the county would be likely to not support a move that would dilute their position. Southern cities would want to support inclusion.

Naomi Patridge, City of Half Moon Bay Representative, indicated that Rosanne Foust’s history was correct in that the Roundtable was originally a small group that started as a regional commission that developed into the Roundtable. She further discussed the history of when the Roundtable was organized and issues with bringing stakeholders together. She also indicated that this is her last meeting and will not run for reelection for the City of Half Moon Bay city council. She expressed that taking on more issues will not help take care of existing issues that the Roundtable is attempting to address.

Richard Newman **MOVED** adoption of the subcommittee recommendations. Ken Ibarra, City of San Bruno Representative, encouraged Palo Alto to stay in contact with the Roundtable and voice issues at the Roundtable. Dave Burrow commented that the Roundtable does two things: In the short-term, we try to get the airlines to minimize noise and adjust routes, and in the long-term, to have larger impacts in influencing programs like OAPM, NextGen, and randomized or focused aircraft flight paths. He expressed there is strength in numbers, and with our congressional representatives and having more people will be more valuable. It was questioned if RAPC would be more comfortable having one Roundtable body instead of two to work with. The objective of reducing noise involves working with the FAA and continuing with what the Roundtable does, and this should be an objective reason to allow an additional city in to the Roundtable.

Ricardo Ortiz, City of Burlingame Representative, noted he did not understand the “dilution issue” and is not convinced that Palo Alto should be excluded. Chairperson Lentz mentioned resources as an issue and there is a finite amount of resources. Sue Dirge noted that the dilution issue point was to not take away from what the Roundtable already has, and believes having two separate groups would be more effective.

ACTION: Richard Newman **MOVED** to adopt the subcommittee’s recommendations. The motion was seconded by Rosanne Foust and **CARRIED** with nine in favor, five opposed.

6. Review of SFO FlyQuiet Report for Q2 2014

Bert Ganoung, Noise Abatement Manager, provided an overview of the SFO FlyQuiet report for the fourth quarter of 2013 included in the meeting packet.

DISCUSSION: Town of Woodside Representative David Burrow requested that the presentation used by the Noise Abatement Office be posted online.

7. Airport Director’s Comments

Airport Public Information Officer Doug Yakel reported that the Runway Safety Area improvement project is now concluded, and that the construction during the summer months was completed a month early. He also reported the continuing trend of airlines retiring older aircrafts out of SFO, specifically the Boeing 747. It was indicated that as airlines retired old aircrafts for economic reasons, there is noise reduction benefits with the adoption of newer and efficient aircrafts. It was noted that Air New Zealand recently retired the Boeing 747 from their SFO route and, that next summer, British Airways will start operating an Airbus A380 in substitution of their Boeing 747. Bert Ganoung, Noise Abatement Manager, presented some slides showing an overview of the trend of the phase out of the Boeing 747.

REGULAR AGENDA – WORK PROGRAM ITEMS

8. SFO Construction Follow-up

Bert Ganoung, Noise Abatement Manager, briefly reiterated Mr. Yakel's remarks on the construction, and indicated that Shoreline departure was successful during the construction closure of runways 1L and 1R.

9. Update on FAA's PORTE Departure Analysis

Bert Ganoung, Noise Abatement Manager, explained that the Noise Abatement Office is currently in the process of analyzing the data but, at current, it appears that the PORTE departures are progressing better, with some indications from residents that departures have been quieter, however still receiving some complaints.

10. Update, Oceanic Arrivals over the Woodside VOR

Bert Ganoung, Noise Abatement Manager, briefly reported that oceanic arrivals have been doing exceptionally well, including during the nighttime hours, and continue to monitor the improved trend.

11. Update, Optimization of Airspace and Procedures in the Metroplex (Metroplex) Environmental Review

Roundtable Technical Consultant Cindy Gibbs provided a brief update regarding the Environmental Review of the Norcal Optimization of Airspace and Procedures in the Metroplex (now officially referred to as "Metroplex"). It was indicated that the FAA filed a Finding of No Significant Impact/Record of Decision for the Environmental Review. Monitoring of the new procedures, expected to occur in mid-November, will commence once the procedures go online.

DISCUSSION: Portola Valley Alternate Representative Maryann Moise Derwin brought to the Roundtable's attention a letter submitted from the Town of Portola Valley to the FAA regarding the Environmental Review and urging to pursue an Environmental Impact Report. Portola Valley resident Tina Nguyen mentioned that after reading all 300 pages, none of the requests were answered and were not consistent.

12. Work Program FY 2014-2015

Roundtable Technical Consultant Cindy Gibbs provided a brief overview of the draft Work Program for Fiscal Year 2014-2015.

DISCUSSION: Ricardo Ortiz, City of Burlingame representative, asked if there will be a new member orientation. Ms. Gibbs indicated that an electronic version of the former new member packet was now available online, as are the Noise 101 presentations. Bert Ganoung, Noise Abatement Manager, explained the history of the Noise 101 overviews over the years. Ms. Gibbs also indicated the opportunities for visits to the Norcal TRACON facilities, and trying to create convenient ways for Roundtable members to participate. Half Moon Bay

Representative Naomi Patridge provided an endorsement for visits to TRACON, and encouraged all members, who have not been to TRACON, to visit.

ACTION: Elizabeth Lewis **MOVED** the adoption of the FY 2014-2015 Work Program. The motion was seconded by Ken Ibarra and **CARRIED**, unanimously.

13. Budget for FY 2014-2015

Roundtable Coordinator James Castañeda provided an overview of the proposed budget for fiscal year 2014-2015.

DISCUSSION: Town of Atherton Representative Elizabeth Lewis asked for more information regarding the N.O.I.S.E. (National Organization to Insure a Sound Controlled Environment), and the fee associated with joining. Ms. Gibbs provided an overview of the group and explained their fee structure as advertised on their website. ALUC Representative Richard Newman suggested looking into requesting a reduction in cost. Ms. Lewis expressed concern in buying into something that would not be utilized, and indicated that the Roundtable will need to be engaged with the group to benefit from being a member.

ACTION: Richard Newman **MOVED** the adoption of the budget for FY 2014-2015 asking staff to look into reduced cost options with joining N.O.I.S.E. and to report back to allow the Roundtable to act on that expenditure. The motion was seconded by Robert Gottschalk and **CARRIED**, unanimously.

14. Airport Noise Briefing

Roundtable Aviation Technical Consultant Cindy Gibbs gave a brief industry update.

15. Member Communications / Announcements

ALUC Representative Rich Newman acknowledged Half Moon Bay Representative Naomi Patridge for her years of service and dedication to the Roundtable.

16. Adjourn

The meeting was adjourned at approximately 9:27 p.m.

* NOTE: Roundtable meeting overviews are considered draft until approved by the Roundtable at a regular meeting.

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REGULAR AGENDA

Regular Meeting # 293
December 3, 2014

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San Francisco International Airport

Fly Quiet Report

**Presented at the December 3, 2014
Airport Community Roundtable Meeting
SFO Aircraft Noise Abatement Office
Third Quarter 2014**



Fly Quiet Program

San Francisco International Airport's Fly Quiet Program is an Airport Community Roundtable initiative implemented by the Aircraft Noise Abatement Office. Its purpose is to encourage individual airlines to operate as quietly as possible at SFO. The program promotes a participatory approach in complying with noise abatement procedures and objectives by grading an airline's performance and by making the scores available to the public via newsletters, publications, and public meetings.

Fly Quiet offers a dynamic venue for implementing new noise abatement initiatives by praising and publicizing active participation rather than a system that admonishes violations from essentially voluntary procedures.

Program Goals

The overall goal of the Fly Quiet Program is to influence airlines to operate as quietly as possible in the San Francisco Bay Area. A successful Fly Quiet Program can be expected to reduce both single event and total noise levels around the airport.

Program Reports

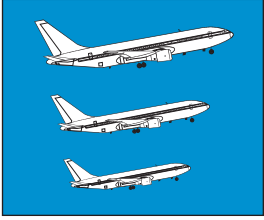
Fly Quiet reports communicate results in a clear, understandable format on a scale of 0-10, zero being poor and ten being good. This allows for an easy comparison between airlines over time. Individual airline scores are computed and reports are generated each quarter. These quantitative scores allow airline management and flight personnel to measure exactly how they stand compared to other operators and how their proactive involvement can positively reduce noise in the Bay Area.

Program Elements

Currently the Fly Quiet Program rates jets and regional jets on six elements: the overall noise quality of each airline's fleet operating at SFO, an evaluation of single overflight noise level exceedences, a measure of how well each airline complies with the preferred nighttime noise abatement runways, assessment of airline performance to the Gap and Shoreline Departures, and over the bay approaches to runways 28L and 28R.



SFO's Fly Quiet Ratings



Fleet Noise Quality

The Fly Quiet Program Fleet Noise Quality Rating evaluates the noise contribution of each airline's fleet as it actually operates at SFO. Airlines generally own a variety of aircraft types and schedule them according to both operational and marketing considerations. Fly Quiet assigns a higher rating or grade to airlines operating quieter, new generation aircraft, while airlines operating older, louder technology aircraft would rate lower. The goal of this measurement is to fairly compare airlines—not just by the fleet they own, but by the frequency that they schedule and fly particular aircraft into SFO.



Noise Exceedance

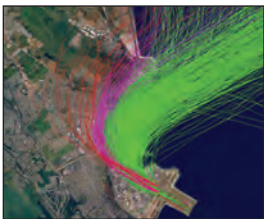
Eliminating high-level noise events is a long-standing goal of the Airport and the Airport Community Roundtable. As a result the Airport has established single event maximum noise level limits at each noise-monitoring site. These thresholds were set to identify aircraft producing noise levels higher than are typical for the majority of the operations.

Whenever an aircraft overflight produces a noise level higher than the maximum decibel value established for a particular monitoring site, the noise threshold is surpassed and a noise exceedance occurs. An exceedance may take place during approach, takeoff, or possibly during departure ground roll before lifting off. Noise exceedances are logged by the exact operation along with the aircraft type and airline name.



Nighttime Preferential Runway Use

SFO's Nighttime Preferential Runway Use program was developed in 1988. Although the program cannot be used 100% of the time because of winds, weather, and other operational factors, the Airport, the Community Roundtable, the FAA, and the Airlines have all worked together to maximize its use when conditions permit. The program is voluntary; compliance is at the discretion of the pilot in command. The main focus of this program is to maximize flights over water and minimize flights over land and populated areas between 1:00 a.m. and 6:00 a.m. Fortunately, because airport activity levels are lower late at night, it is feasible to use over-water departure procedures more frequently than would be possible during the day. Reducing nighttime noise—especially sleep disturbance—is a key goal of SFO's aircraft noise abatement program.



Shoreline Departure Quality

Aircraft departing SFO using Runways 28L and 28R are also considered by the Fly Quiet grading system whenever they use the Shoreline Departure Procedure. This predominately VFR (visual flight rules) departure steers aircraft to the northeast shortly after takeoff in an attempt to keep aircraft and aircraft noise away from the residential communities located to the northwest of SFO. By keeping aircraft east of Highway 101 the majority of the overflights will be experienced by industrial and business parks instead of residential areas.

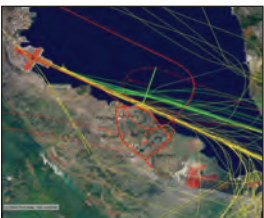
In order to evaluate each airline's performance when flying a Shoreline Departure, a corridor was established using Interstate 101 (green colored flight tracks) as a reference point. The corridor runs north along 101, beginning approximately one-mile north-northwest of the end of Runways 28L and 28R and continuing up into the City of Brisbane. Departures west of 101 are scored marginal or poor depending on their location.



Gap Departure Quality

Aircraft departing SFO using Runways 28L and 28R frequently depart straight out using a procedure known as the Gap Departure. This procedure directs air traffic to fly a route that takes them over the area northwest of the airport over the cities of South San Francisco, San Bruno, Daly City, and Pacifica. In an attempt to mitigate noise in this specific area, the Gap Departure Quality Rating has been included as a category in the Fly Quiet Program.

Since "higher is quieter", aircraft altitudes are recorded along the departure route. Scores are assigned at specified points or gates set approximately one mile apart, with the higher aircraft receiving higher scores.









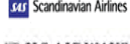
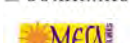

























Foster City Arrival Quality

The Arrival Quality Rating is the latest addition to the Fly Quiet Program. In an effort to further reduce nighttime noise in neighboring communities, this rating is designed to maximize over-bay approaches to Runways 28 between 11:00 p.m. and 6:00 a.m. Airlines arriving to Runways 28 during these hours are assessed based on which approach flight path was used. Over-the-bay approaches are rated good (green colored flight tracks), versus over-the-communities which are rated poor.







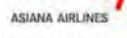






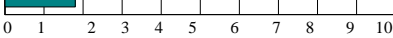
Airline Fly Quiet Summary Report - 3rd Quarter 2014

July 1 to September 30, 2014

Airline		Fleet Noise Quality	Noise Exceedance	Nighttime Runway Use	Departures		Arrivals	Final Score	Airline Fly Quiet Rating			
					Shoreline	Gap	Foster City					
	JAL	10.00	10.00	-	-	6.66	-	8.89	<div><div></div></div>			
	DLH	9.09	9.94	-	9.17	4.16	-	8.09	<div><div></div></div>			
	CCA	7.15	9.98	-	-	6.30	-	7.81	<div><div></div></div>			
	SKW	10.00	9.99	6.67	9.52	4.19	5.69	7.68	<div><div></div></div>			
	ANA	7.15	9.98	-	-	5.87	-	7.67	<div><div></div></div>			
	SWR	8.17	9.95	-	-	4.65	-	7.59	<div><div></div></div>			
	ACA	5.69	9.91	6.67	9.75	4.90	7.70	7.44	<div><div></div></div>			
	VRD	5.27	9.97	-	9.80	4.19	7.22	7.29	<div><div></div></div>			
	DAL	6.34	9.93	4.83	8.97	4.69	7.89	7.11	<div><div></div></div>			
	SAS	8.17	10.00	-	5.00	5.18	-	7.09	<div><div></div></div>			
	AWE	4.76	9.91	5.83	8.76	5.06	8.13	7.08	<div><div></div></div>			
	ASH	10.00	9.96	3.33	-	6.25	5.65	7.04	<div><div></div></div>			
	FFT	5.88	9.98	4.67	10.00	2.71	8.97	7.03	<div><div></div></div>			
	ABX	4.86	9.28	6.67	8.64	6.17	6.29	6.98	<div><div></div></div>			
	SCX	5.82	10.00	6.67	9.91	1.25	7.50	6.86	<div><div></div></div>			
	XLF	4.24	9.65	-	7.50	5.91	-	6.82	<div><div></div></div>			
	NCA	9.58	8.93	-	-	3.54	5.00	6.76	<div><div></div></div>			
	TRS	5.82	9.86	5.56	8.64	1.25	9.38	6.75	<div><div></div></div>			
	FDX	3.38	9.46	-	9.33	5.58	5.83	6.72	<div><div></div></div>			
	JBU	4.85	9.90	4.67	8.55	3.77	8.53	6.71	<div><div></div></div>			
	UAL	5.83	9.91	4.48	9.18	3.08	7.35	6.64	<div><div></div></div>			
	EIN	4.05	10.00	-	9.17	3.08	-	6.57	<div><div></div></div>			
	ASA	5.31	9.95	6.67	9.78	2.00	5.10	6.47	<div><div></div></div>			
	UAE	7.15	10.00	-	-	2.24	-	6.46	<div><div></div></div>			
	AAL	5.70	9.93	4.83	8.90	1.20	8.03	6.43	<div><div></div></div>			
	ANZ	5.20	7.90	-	-	6.14	-	6.41	<div><div></div></div>			
	CPZ	10.00	9.98	0.00	9.74	3.25	5.30	6.38	<div><div></div></div>			
								6.35	SFO AVERAGE			
	VIR	3.43	9.95	-	-	5.64	-	6.34	<div><div></div></div>			
	WJA	5.82	9.90	-	9.17	1.59	5.00	6.30	<div><div></div></div>			
	KLM	3.43	9.95	-	7.07	4.24	-	6.17	<div><div></div></div>			
	SWA	5.77	9.95	0.00	9.62	3.85	7.58	6.13	<div><div></div></div>			
	AMX	5.82	9.79	2.41	9.00	3.38	6.17	6.10	<div><div></div></div>			
	CES	4.05	9.98	-	-	4.18	-	6.07	<div><div></div></div>			
	TAI	5.49	9.71	2.54	9.55	2.94	6.15	6.06	<div><div></div></div>			
	AFR	8.30	9.93	0.00	5.00	4.48	-	5.54	<div><div></div></div>			
	PAL	5.66	7.26	0.00	10.00	4.53	-	5.49	<div><div></div></div>			
	HAL	4.04	9.75	3.33	-	3.84	5.00	5.19	<div><div></div></div>			
	BAW	3.43	9.77	-	-	2.35	-	5.18	<div><div></div></div>			












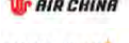

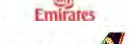




















Airline Fly Quiet Summary Report - 3rd Quarter 2014











July 1 to September 30, 2014

Airline		Fleet Noise Quality	Noise Exceedance	Nighttime Runway Use	Departures Shoreline Gap	Arrivals Foster City	Final Score	Airline Fly Quiet Rating												
	CPA	5.89	8.34	0.00	-	6.07	5.00	5.06												
	EVA	6.65	8.49	0.00	-	3.41	6.43	5.00												
	KAL	8.36	7.96	0.11	-	3.08	5.06	4.91												
	AAR	4.77	7.31	0.00	-	6.79	5.67	4.91												
	SIA	7.15	8.77	0.00	-	2.93	5.00	4.77												
	CAL	3.43	5.66	0.00	-	6.51	-	3.90												
	CKS	3.43	0.00	0.29	0.00	1.25	5.83	1.80												
SFO Average		6.10	9.26	2.97	8.51	4.10	6.52	6.35												

Fleet Noise Quality - 3rd Quarter 2014
































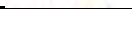
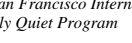


July 1 to September 30, 2014

Airline		Nationwide	San Francisco		Fleet Noise Quality Rating
		Fleet Noise Quality Rating	Average Daily Jet Operations	Score	
 JAL	JAL	4.20	1	10.00	<div><div></div></div>
 ASH	ASH	10.00	1	10.00	<div><div></div></div>
 SKW	SKW	10.00	82	10.00	<div><div></div></div>
 CPZ	CPZ	10.00	19	10.00	<div><div></div></div>
 NCA	NCA	3.90	1	9.58	<div><div></div></div>
 DLH	DLH	6.09	2	9.09	<div><div></div></div>
 KAL	KAL	4.05	2	8.36	<div><div></div></div>
 AFR	AFR	5.49	2	8.30	<div><div></div></div>
 SAS	SAS	4.96	1	8.17	<div><div></div></div>
 SWR	SWR	5.17	1	8.17	<div><div></div></div>
 ANA	ANA	5.43	1	7.15	<div><div></div></div>
 CCA	CCA	3.46	1	7.15	<div><div></div></div>
 SIA	SIA	5.93	2	7.15	<div><div></div></div>
 UAE	UAE	7.89	1	7.15	<div><div></div></div>
 EVA	EVA	5.05	2	6.65	<div><div></div></div>
 DAL	DAL	4.92	28	6.34	<div><div></div></div>
				6.10	<div><div>SFO AVERAGE</div></div>
 CPA	CPA	4.18	2	5.89	<div><div></div></div>
 FFT	FFT	6.41	4	5.88	<div><div></div></div>
 UAL	UAL	5.83	174	5.83	<div><div></div></div>
 AMX	AMX	5.54	3	5.82	<div><div></div></div>
 SCX	SCX	5.82	2	5.82	<div><div></div></div>
 TRS	TRS	6.97	1	5.82	<div><div></div></div>
 WJA	WJA	5.82	2	5.82	<div><div></div></div>
 SWA	SWA	5.70	41	5.77	<div><div></div></div>
 AAL	AAL	3.94	31	5.70	<div><div></div></div>
 ACA	ACA	6.75	11	5.69	<div><div></div></div>
 PAL	PAL	5.09	1	5.66	<div><div></div></div>
 TAI	TAI	5.18	1	5.49	<div><div></div></div>
 ASA	ASA	5.10	17	5.31	<div><div></div></div>
 VRD	VRD	5.31	48	5.27	<div><div></div></div>
 ANZ	ANZ	4.00	1	5.20	<div><div></div></div>
 ABX	ABX	1.52	1	4.86	<div><div></div></div>
 JBU	JBU	6.13	11	4.85	<div><div></div></div>
 AAR	AAR	3.93	2	4.77	<div><div></div></div>
AWE	AWE	5.67	16	4.76	<div><div></div></div>

Airline	Nationwide		San Francisco		Fleet Noise Quality Rating
	Fleet Noise Quality Rating		Average Daily Jet Operations	Score	
 XLF		4.05	0	4.24	
 CES		4.63	1	4.05	
 EIN		4.05	1	4.05	
 HAL		6.21	1	4.04	
 CAL		3.62	2	3.43	
 BAW		4.34	2	3.43	
 CKS		0.60	0	3.43	
 KLM		4.67	1	3.43	
 VIR		5.84	1	3.43	
 FDX		2.80	1	3.38	
AVERAGE		5.25	12	6.10	


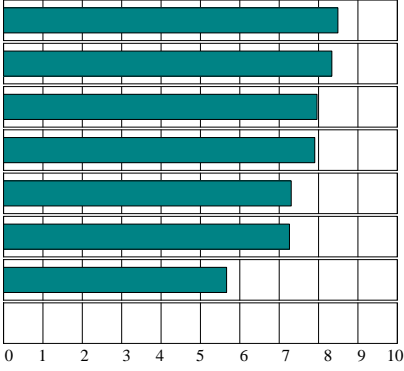



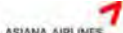
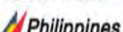


Noise Exceedance Rating Report - 3rd Quarter 2014

July 1 to September 30, 2014

Airline		Noise Exceedances				Noise Exceedance Quality Rating
		Total Noise Exceedances	Total Quarterly Operations	Exceedances per 1000 Operations	Score	
	EIN	0	129	0	10.00	<div></div>
	JAL	0	184	0	10.00	<div></div>
	SAS	0	184	0	10.00	<div></div>
	SCX	0	447	0	10.00	<div></div>
	UAE	0	184	0	10.00	<div></div>
	SKW	44	15,118	3	9.99	<div></div>
	ANA	1	187	5	9.98	<div></div>
	CCA	1	185	5	9.98	<div></div>
	CES	1	184	5	9.98	<div></div>
	CPZ	26	3,486	7	9.98	<div></div>
	FFT	7	827	8	9.98	<div></div>
	VRD	90	8,890	10	9.97	<div></div>
	ASH	2	147	14	9.96	<div></div>
	SWA	119	7,578	16	9.95	<div></div>
	KLM	3	184	16	9.95	<div></div>
	SWR	3	184	16	9.95	<div></div>
	VIR	3	184	16	9.95	<div></div>
	ASA	55	3,196	17	9.95	<div></div>
	DLH	8	368	22	9.94	<div></div>
	AAL	125	5,642	22	9.93	<div></div>
	DAL	119	5,151	23	9.93	<div></div>
	AFR	7	287	24	9.93	<div></div>
	ACA	60	2,055	29	9.91	<div></div>
	UAL	954	31,996	30	9.91	<div></div>
	AWE	94	2,973	32	9.91	<div></div>
	WJA	12	370	32	9.90	<div></div>
	JBU	66	1,955	34	9.90	<div></div>
	TRS	10	216	46	9.86	<div></div>
	AMX	40	557	72	9.79	<div></div>
	BAW	29	368	79	9.77	<div></div>
	HAL	16	188	85	9.75	<div></div>
	TAI	26	265	98	9.71	<div></div>
	XLF	4	34	118	9.65	<div></div>
	FDX	38	206	184	9.46	<div></div>
	ABX	63	258	244	9.28	<div></div>
					9.26	<div></div>
						SFO AVERAGE
	NCA	57	156	365	8.93	<div></div>
	SIA	154	369	417	8.77	<div></div>




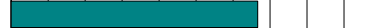



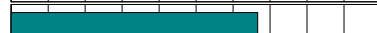



















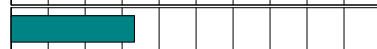
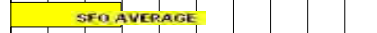















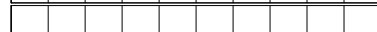

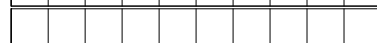








Noise Exceedance Rating Report - 3rd Quarter 2014

July 1 to September 30, 2014

Airline	Noise Exceedances				Noise Exceedance Quality Rating
	Total Noise Exceedances	Total Quarterly Operations	Exceedances per 1000 Operations	Score	
 EVA	217	423	513	8.49	
 CPA	208	368	565	8.34	
 KAL	251	362	693	7.96	
 ANZ	124	174	713	7.90	
 AAR	272	297	916	7.31	
 PAL	189	203	931	7.26	
 CAL	485	329	1474	5.66	
 CKS	170	50	3400	0.00	
TOTAL	4,153	97,098			
SFO AVERAGE			251	9.26	




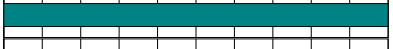

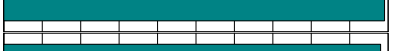





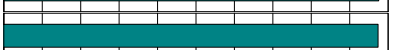



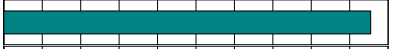

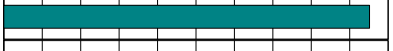

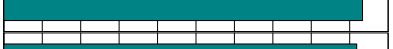





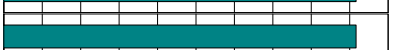

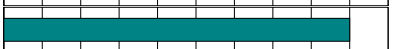



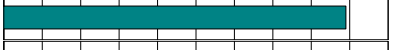







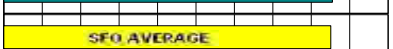



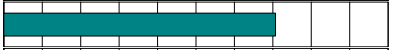




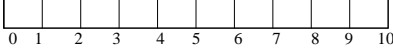
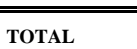
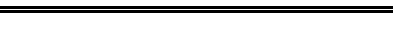




Nighttime Preferential Runway Use - 3rd Quarter 2014

July 1 to September 30, 2014

Airline		Nighttime Departures (1:00 am to 6:00 am)						Nighttime Runway Use Rating
		Total	10L/R	28L/R Shoreline	01L/R	28L/R Straight	Score	
 ABX	ABX	1	0%	100%	0%	0%	6.67	
 ACA	ACA	1	0%	100%	0%	0%	6.67	
 ASA	ASA	1	0%	100%	0%	0%	6.67	
 SCX	SCX	1	0%	100%	0%	0%	6.67	
 SKW	SKW	5	0%	100%	0%	0%	6.67	
 AWE	AWE	8	0%	75%	25%	0%	5.83	
 TRS	TRS	3	0%	67%	33%	0%	5.56	
 AAL	AAL	20	0%	50%	45%	5%	4.83	
 DAL	DAL	29	0%	48%	48%	3%	4.83	
 FFT	FFT	20	0%	40%	60%	0%	4.67	
 JBU	JBU	10	0%	60%	20%	20%	4.67	
 UAL	UAL	174	0%	45%	45%	10%	4.48	
 ASH	ASH	1	0%	0%	100%	0%	3.33	
 HAL	HAL	1	0%	0%	100%	0%	3.33	
							2.97	
 TAI	TAI	93	0%	12%	53%	35%	2.54	
 AMX	AMX	87	0%	10%	52%	38%	2.41	
 CKS	CKS	23	0%	4%	0%	96%	0.29	
 KAL	KAL	87	1%	0%	0%	99%	0.11	
 AAR	AAR	51	0%	0%	0%	100%	0.00	
 AFR	AFR	2	0%	0%	0%	100%	0.00	
 CAL	CAL	90	0%	0%	0%	100%	0.00	
 CPA	CPA	93	0%	0%	0%	100%	0.00	
 CPZ	CPZ	1	0%	0%	0%	100%	0.00	
 EVA	EVA	139	0%	0%	0%	100%	0.00	
 PAL	PAL	4	0%	0%	0%	100%	0.00	
 SIA	SIA	91	0%	0%	0%	100%	0.00	
 SWA	SWA	1	0%	0%	0%	100%	0.00	
TOTAL		1,037						
SFO AVERAGE			0%	34%	22%	45%	2.97	

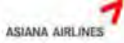





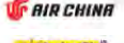





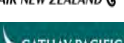




























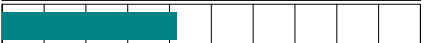
















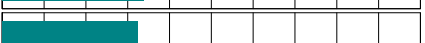








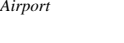

Shoreline Departure Rating - 3rd Quarter 2014

July 1 to September 30, 2014

Airline	Shoreline Departures					Shoreline Departure Rating
	Total	Successful	Marginal	Poor	Score	
 FFT	183	100%	0%	0%	10.00	
 PAL	2	100%	0%	0%	10.00	
 SCX	108	98%	2%	0%	9.91	
 VRD	1,179	97%	3%	1%	9.80	
 ASA	455	96%	4%	0%	9.78	
 ACA	428	96%	4%	1%	9.75	
 CPZ	287	95%	5%	0%	9.74	
 SWA	474	93%	7%	0%	9.62	
 TAI	11	91%	9%	0%	9.55	
 SKW	1,975	91%	7%	1%	9.52	
 FDX	45	87%	13%	0%	9.33	
 UAL	4,490	85%	13%	2%	9.18	
 EIN	6	83%	17%	0%	9.17	
 DLH	18	89%	6%	6%	9.17	
 WJA	66	86%	11%	3%	9.17	
 AMX	10	80%	20%	0%	9.00	
 DAL	1,153	81%	18%	2%	8.97	
 AAL	978	80%	18%	2%	8.90	
 AWE	457	77%	21%	2%	8.76	
 ABX	33	79%	15%	6%	8.64	
 TRS	44	73%	27%	0%	8.64	
 JBU	286	71%	28%	0%	8.55	
					8.51	
 XLF	4	50%	50%	0%	7.50	
 KLM	29	52%	38%	10%	7.07	
 AFR	3	33%	33%	33%	5.00	
 SAS	1	0%	100%	0%	5.00	
 CKS	1	0%	0%	100%	0.00	
TOTAL 12,726						
SFO AVERAGE		76%	17%	6%	8.51	


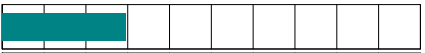



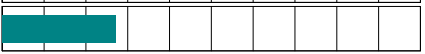

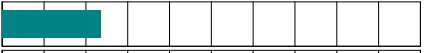

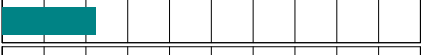





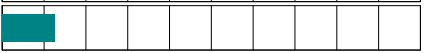





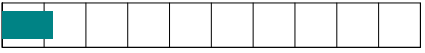
Gap Departure Climb Rating - 3rd Quarter 2014

July 1 to September 30, 2014

Airline	Gap Departures		Gap Departure Quality Rating
	Total	Score	
 ASIANA AIRLINES AAR	147	6.79	
 JAPAN AIRLINES JAL	61	6.66	
 CHINA AIRLINES CAL	165	6.51	
 AIR CHINA CCA	92	6.30	
 MCA ASH	6	6.25	
 ABX AIR ABX	45	6.17	
 AIR NEW ZEALAND ANZ	87	6.14	
 CATHAY PACIFIC CPA	184	6.07	
 XL Airways XLF	11	5.91	
 ANA ANA	88	5.87	
 virgin atlantic VIR	86	5.64	
 FedEx FDX	15	5.58	
 SAS Scandinavian Airlines SAS	90	5.18	
 U.S AIRWAYS AWE	292	5.06	
 AIR CANADA ACA	60	4.90	
 DELTA DAL	139	4.69	
 SWISS SWR	92	4.65	
 Philippines PAL	95	4.53	
 AIRFRANCE AFR	125	4.48	
 KLM Royal Dutch Airlines KLM	36	4.24	
 SkyWest SKW	1518	4.19	
 virgin america VRD	1019	4.19	
 中國東方航空 CHINA EASTERN CES	90	4.18	
 Lufthansa DLH	165	4.16	
		4.10	
 Southwest SWA	1388	3.85	
 HAWAIIAN AIRLINES HAL	44	3.84	
 jetBlue JBU	190	3.77	
 NCA Nippon Cargo Airlines NCA	78	3.54	
 EVA AIR EVA	211	3.41	
 AEROMEXICO AMX	136	3.38	
 Compass Airlines CPZ	595	3.25	
 UNITED UAL	4675	3.08	
 Aer Lingus EIN	56	3.08	
 KOREAN AIR KAL	180	3.08	


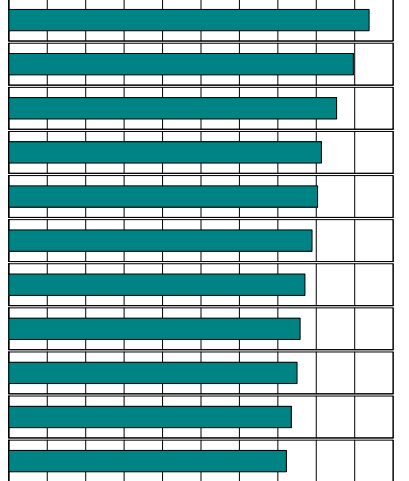


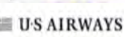







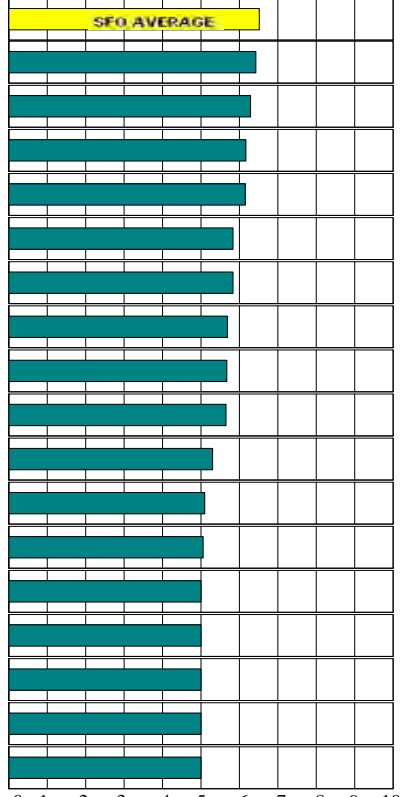












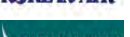




Gap Departure Climb Rating - 3rd Quarter 2014

July 1 to September 30, 2014

Airline	Gap Departures		Gap Departure Quality Rating
	Total	Score	
 TAI	51	2.94	
 SIA	183	2.93	
 FFT	6	2.71	
 BAW	179	2.35	
 UAE	92	2.24	
 ASA	305	2.00	
 WJA	22	1.59	
 CKS	24	1.25	
 SCX	2	1.25	
 TRS	2	1.25	
 AAL	429	1.20	
TOTAL	13556		
SFO Average	4.10		

Foster City Arrival Rating - 3rd Quarter 2014

July 1 to September 30, 2014

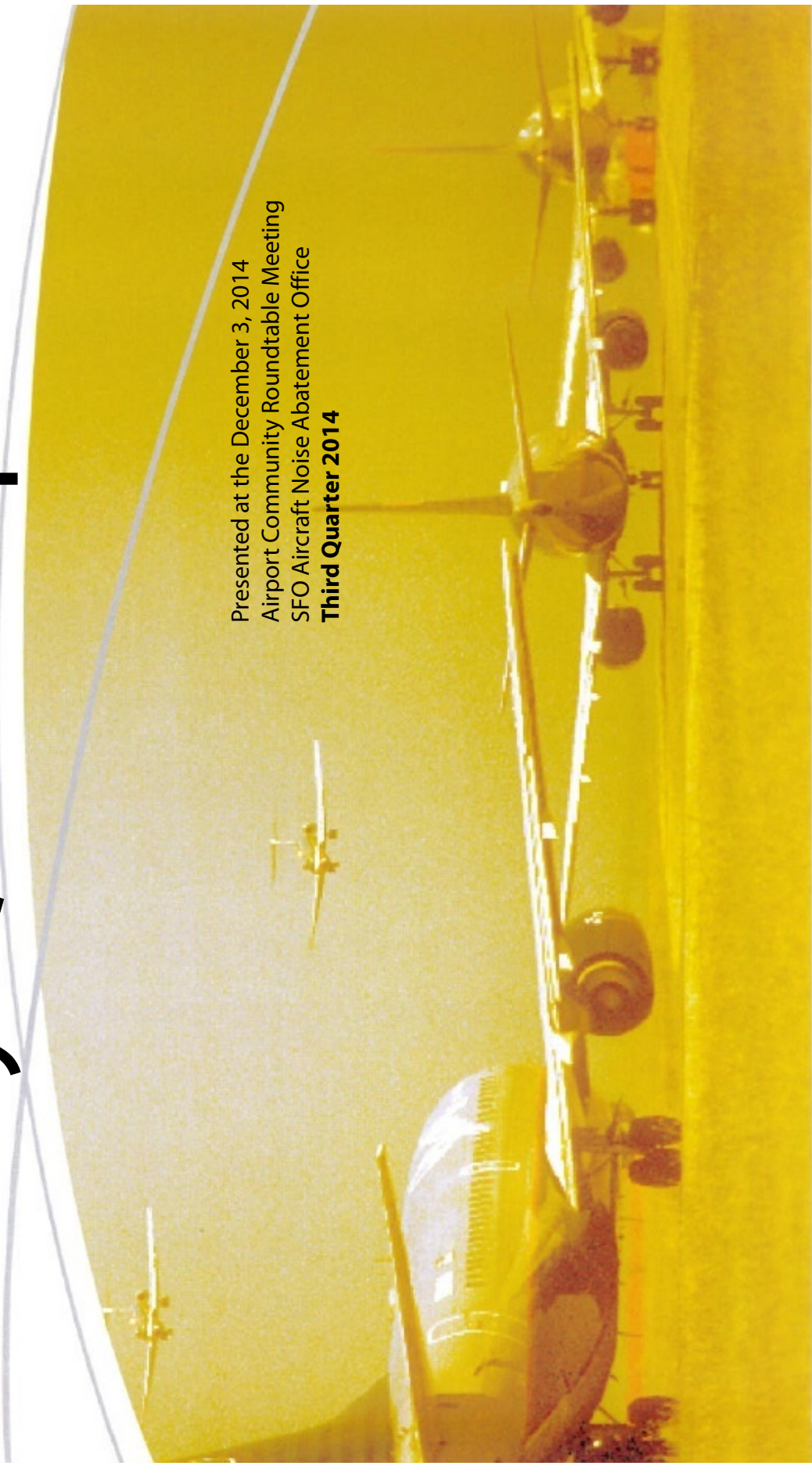
Airline	Foster City Arrivals					Foster City Arrival Rating
	Total	Successful	Marginal	Poor	Score	
 TRS	32	88%	13%	0%	9.38	
 FFT	29	79%	21%	0%	8.97	
 JBU	221	71%	29%	0%	8.53	
 AWE	142	63%	37%	0%	8.13	
 AAL	234	61%	38%	0%	8.03	
 DAL	218	58%	42%	0%	7.89	
 ACA	61	54%	46%	0%	7.70	
 SWA	250	52%	48%	0%	7.58	
 SCX	4	50%	50%	0%	7.50	
 UAL	1,023	48%	52%	0%	7.35	
 VRD	72	46%	53%	1%	7.22	
 EVA	7	29%	71%	0%	6.43	
 ABX	31	26%	74%	0%	6.29	
 AMX	77	27%	69%	4%	6.17	
 TAI	91	24%	75%	1%	6.15	
 CKS	24	21%	75%	4%	5.83	
 FDX	60	17%	83%	0%	5.83	
 SKW	109	14%	86%	0%	5.69	
 AAR	52	13%	87%	0%	5.67	
 ASH	23	13%	87%	0%	5.65	
 CPZ	33	6%	94%	0%	5.30	
 ASA	51	4%	94%	2%	5.10	
 KAL	87	1%	99%	0%	5.06	
 CPA	15	0%	100%	0%	5.00	
 HAL	3	0%	100%	0%	5.00	
 NCA	3	0%	100%	0%	5.00	
 SIA	1	0%	100%	0%	5.00	
 WJA	4	0%	100%	0%	5.00	
TOTAL						2,957
SFO AVERAGE		31%	69%	1%	6.52	

The SFO logo is a blue rectangle with the letters "SFO" in white, sans-serif font. It is positioned in the top left corner of the page.

SFO

San Francisco International Airport

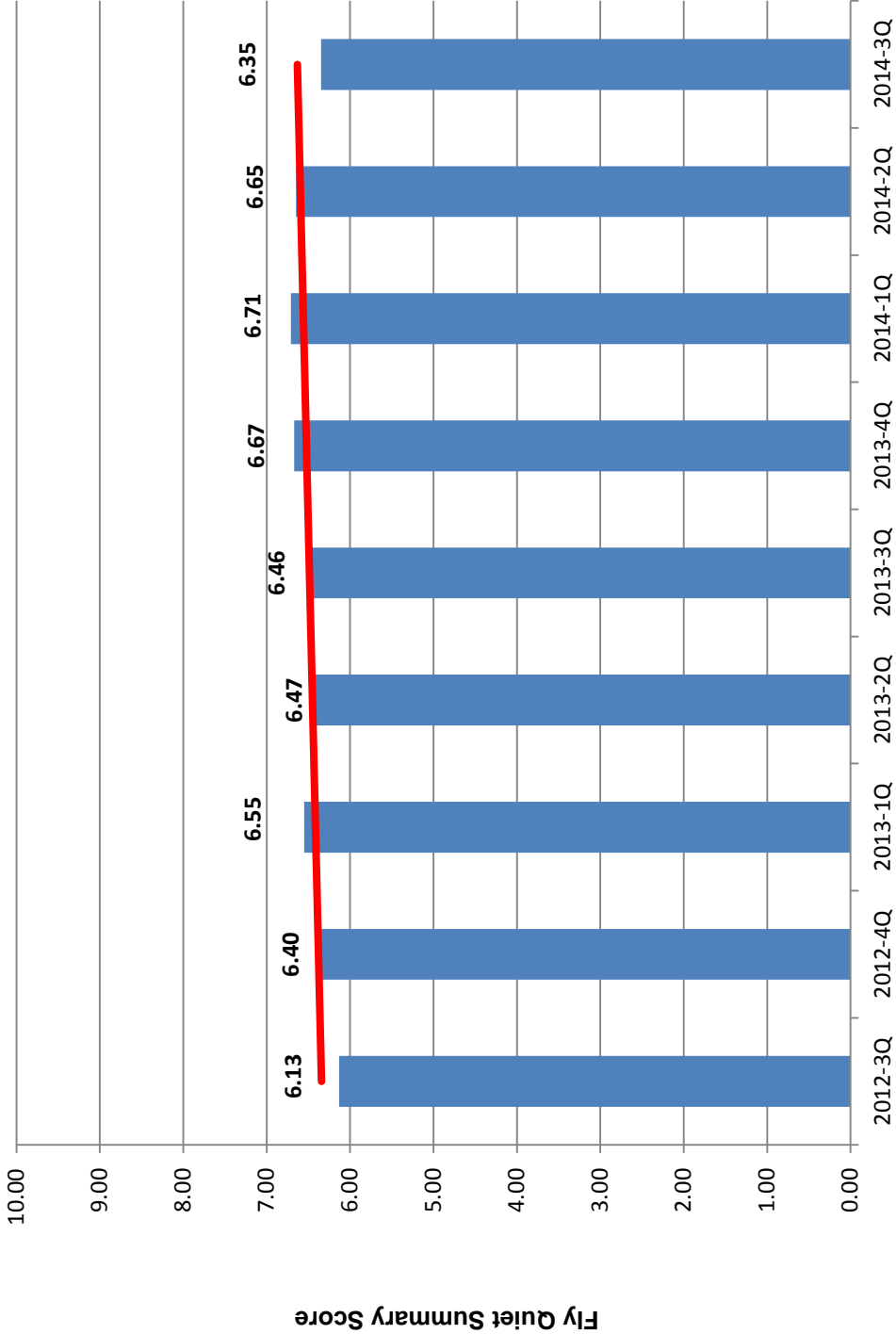
Fly Quiet Report

The background of the page is a high-angle, yellow-tinted photograph of an airport runway and taxiway. Several commercial aircraft are visible, including a large jet in the foreground and several smaller propeller planes further down the runway. The perspective is from above, looking down at the tarmac.

Presented at the December 3, 2014
Airport Community Roundtable Meeting
SFO Aircraft Noise Abatement Office
Third Quarter 2014

Fly Quiet Summary Averages

San Francisco International Airport



Top 5



Bottom 5

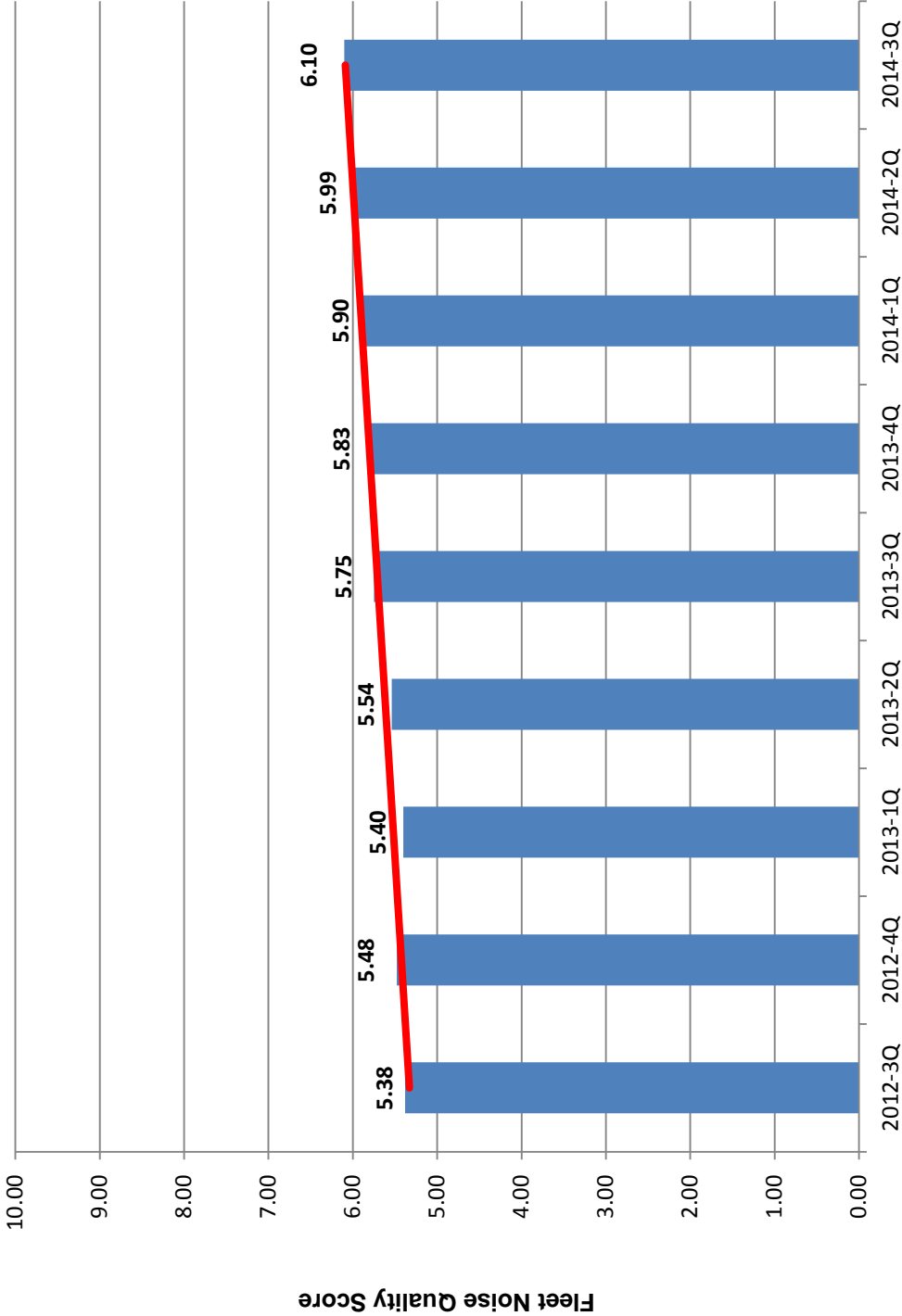


Year & Quarter

Average of Quarterly Averages, Airline Rankings are for top 5 and bottom 5 performers for this category for current quarter, new airlines to top and bottom 5

Fleet Noise Quality Averages

San Francisco International Airport



Top 5



Bottom 5

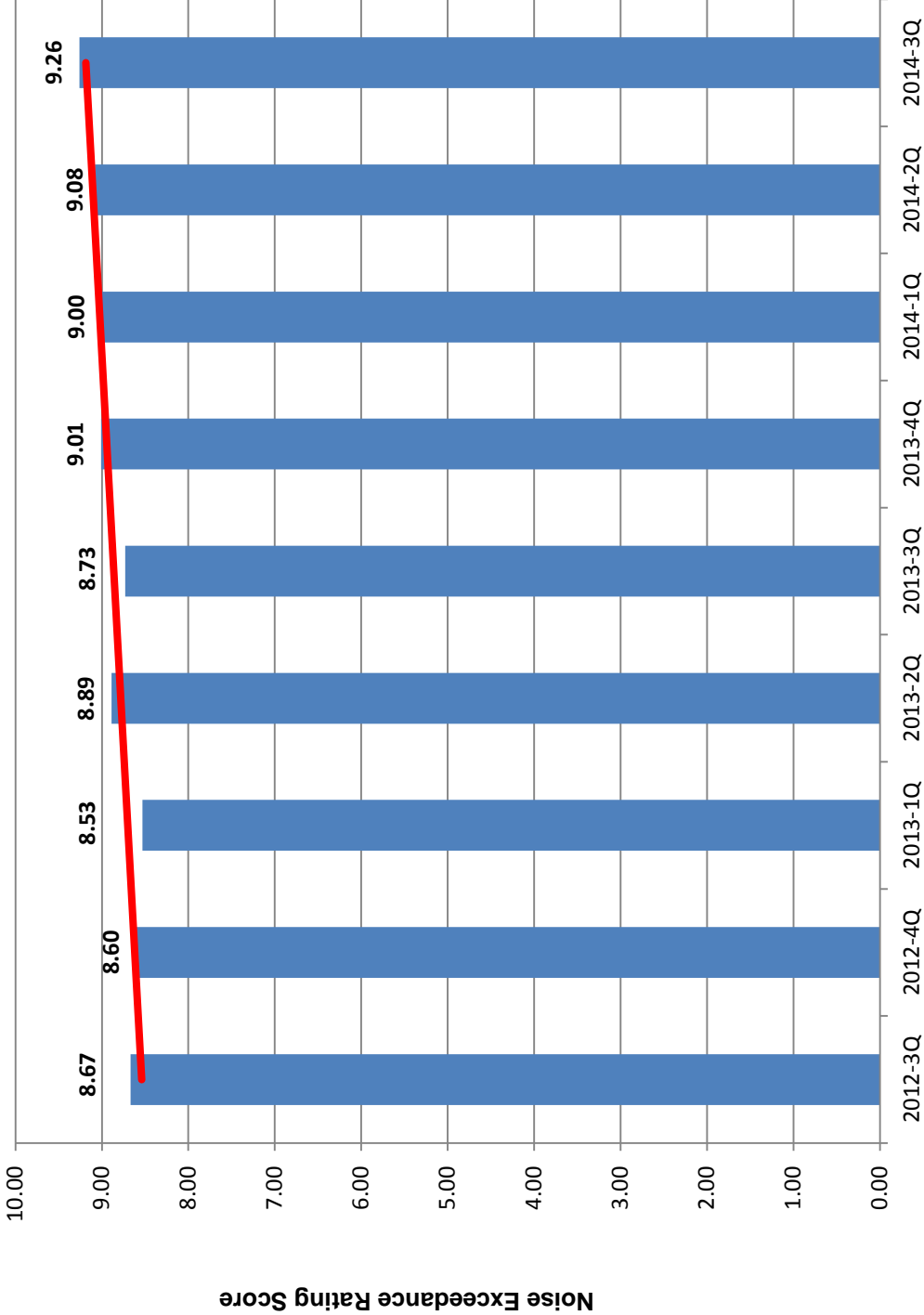


Year & Quarter

Average of Quarterly Averages, Airline Rankings are for top 5 and bottom 5 performers for this category for current quarter, ☐ new airlines to top and bottom 5

Noise Exceedance Rating Averages

San Francisco International Airport



Top 5



Bottom 5



Year & Quarter

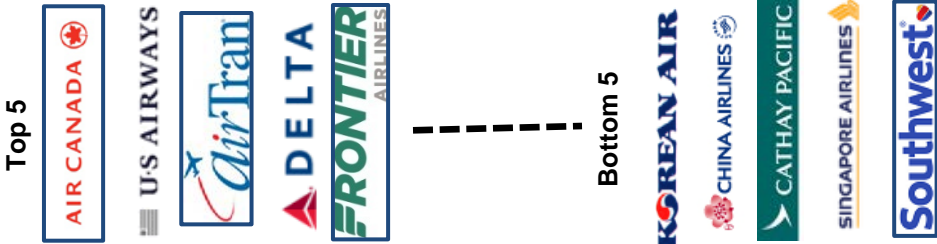
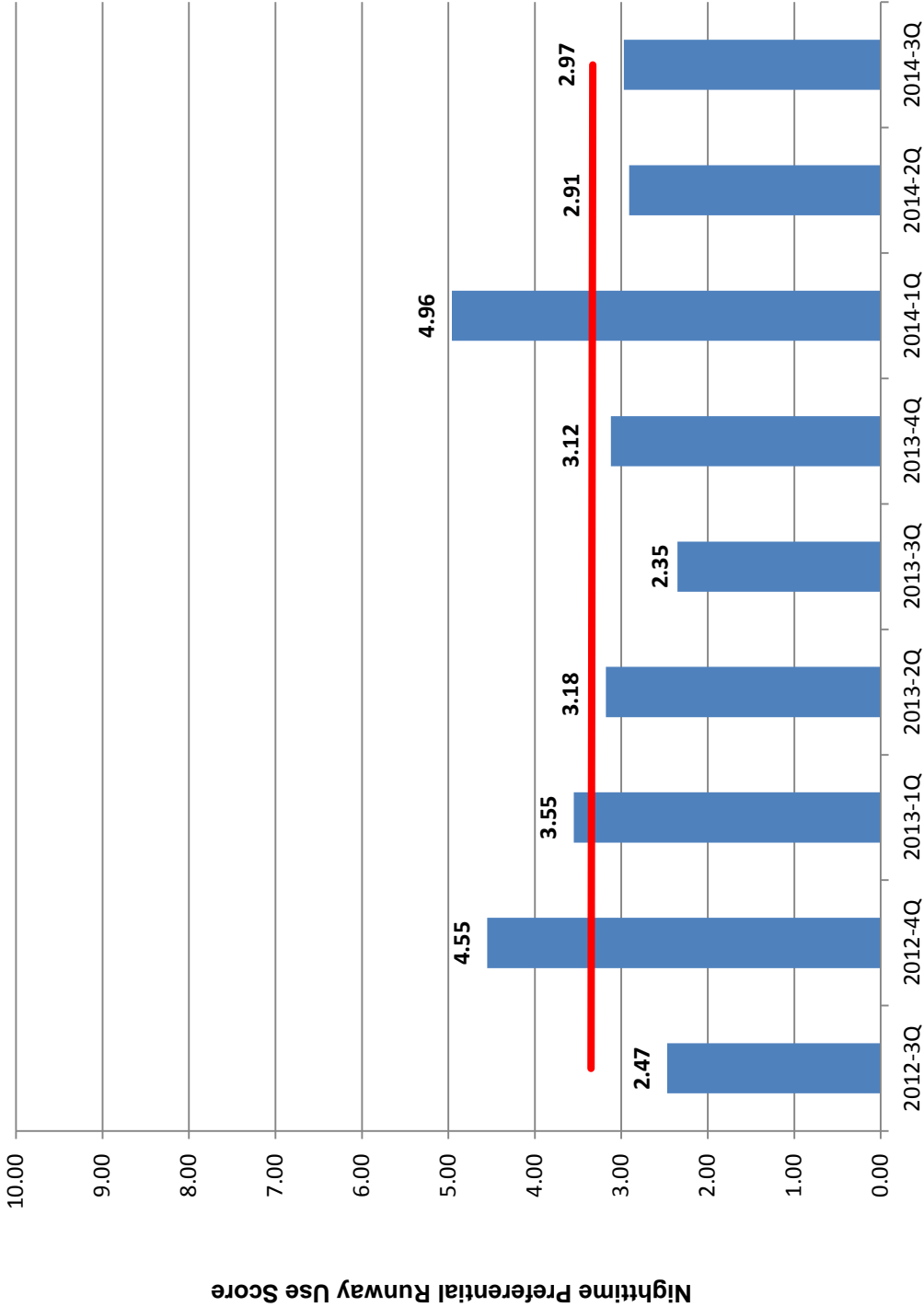
Average of Quarterly Averages, Airline Rankings are for top 5 and bottom 5 performers for this category for current quarter,



new airlines to top and bottom 5

Nighttime Preferential Runway Use Averages

San Francisco International Airport

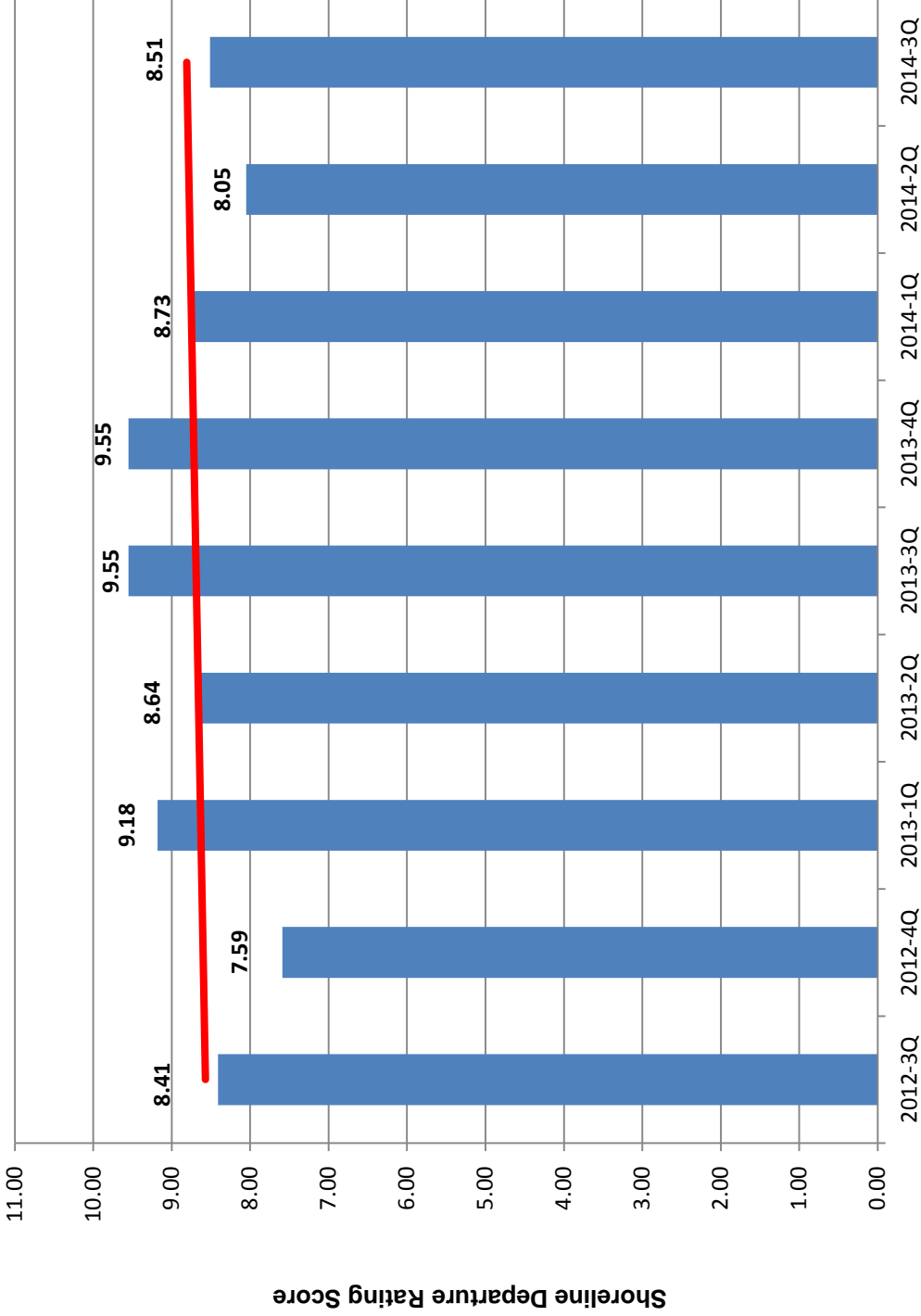


Year & Quarter

Average of Quarterly Averages, Airline Rankings are for top 5 and bottom 5 performers for this category for current quarter, new airlines to top and bottom 5

Shoreline Departure Rating Averages

San Francisco International Airport



Top 5



...

Bottom 5



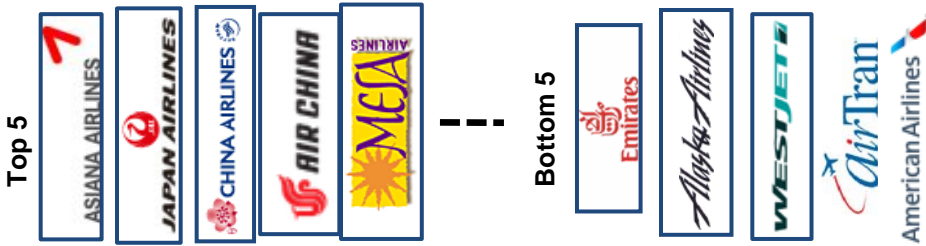
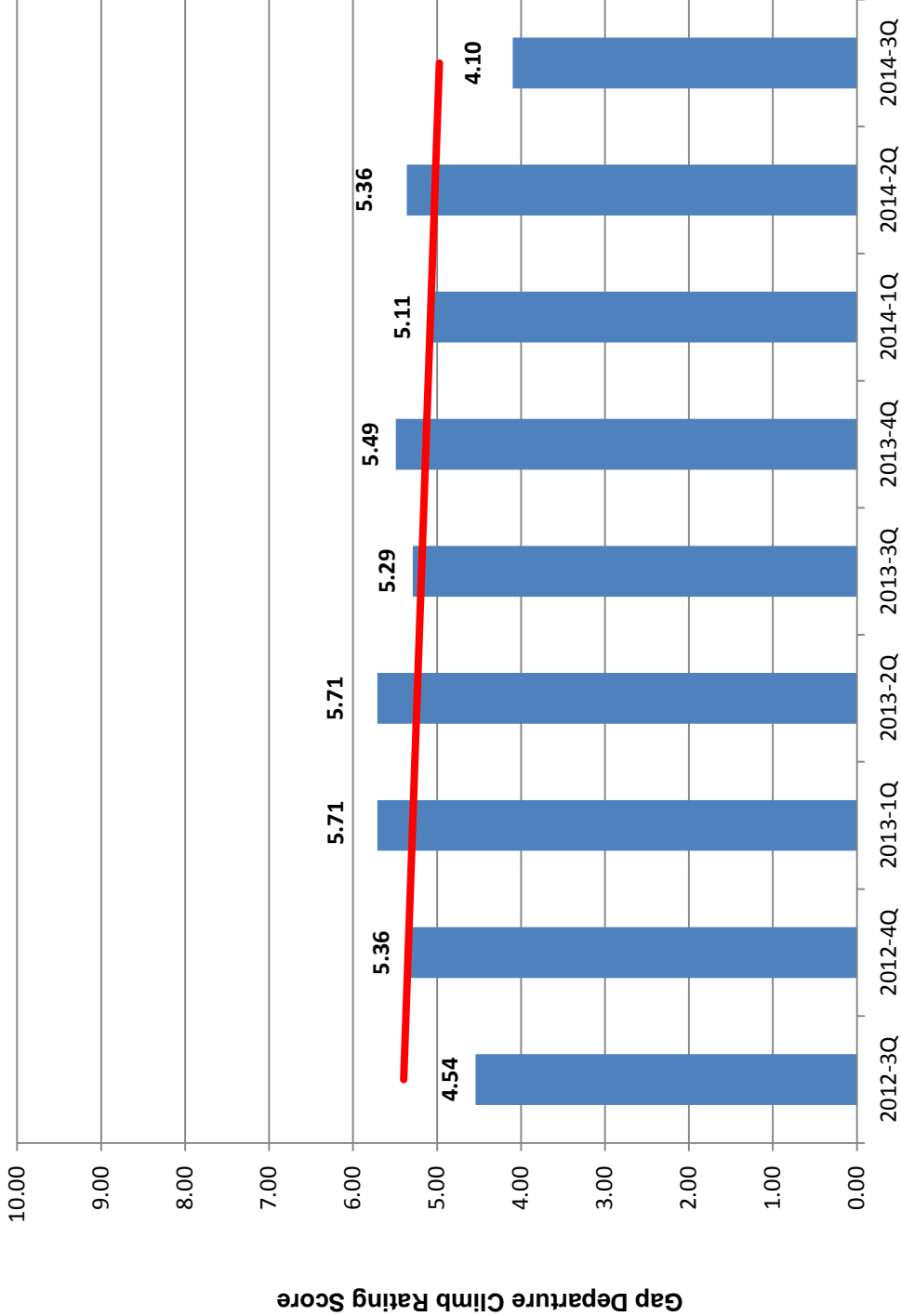
Year & Quarter

Average of Quarterly Averages, Airline Rankings are for top 5 and bottom 5 performers for this category for current quarter,

new airlines to top and bottom 5

Gap Departure Climb Rating Averages

San Francisco International Airport



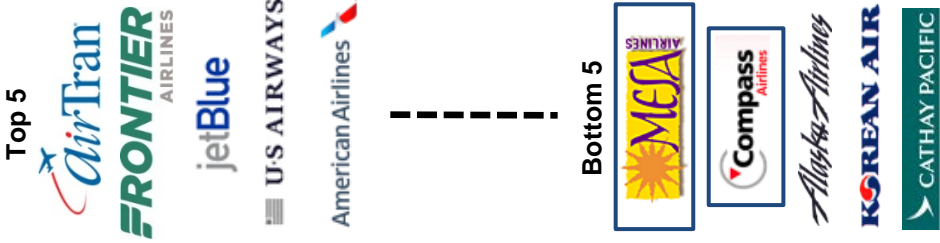
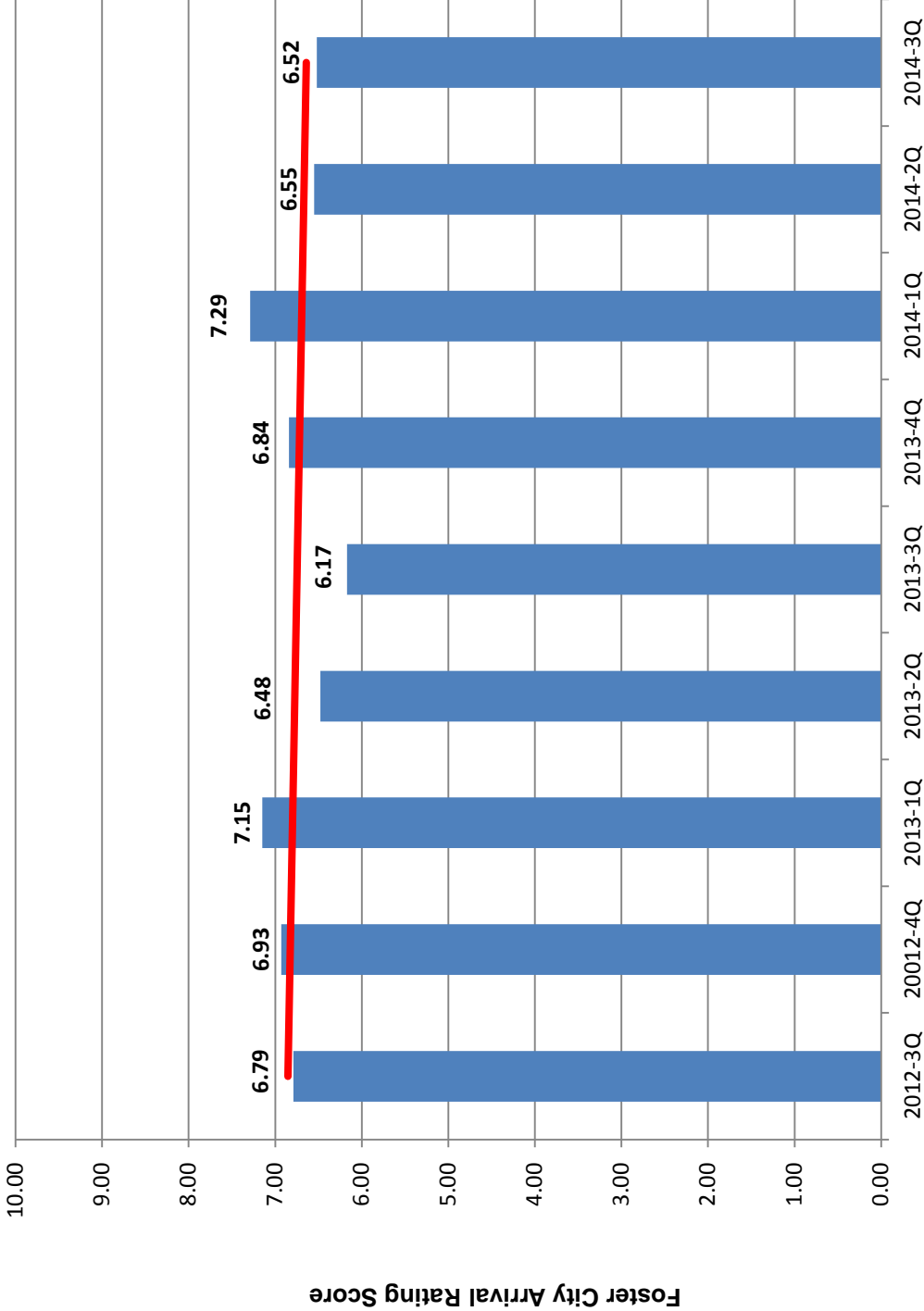
Year & Quarter

Average of Quarterly Averages, Airline Rankings are for top 5 and bottom 5 performers for this category for current quarter,

new airlines to top and bottom 5

Foster City Arrival Rating Averages

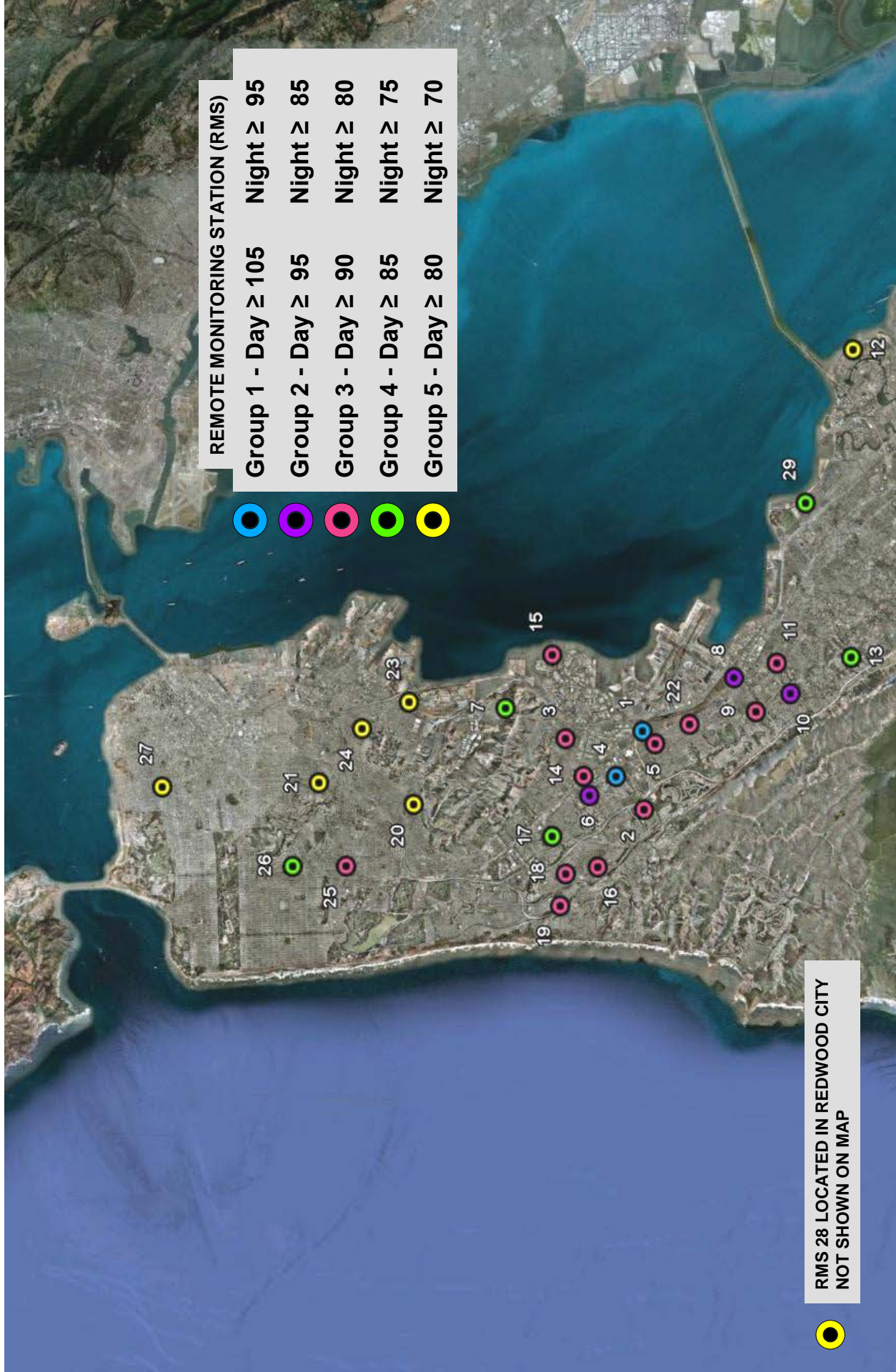
San Francisco International Airport



Year & Quarter

Average of Quarterly Averages, Airline Rankings are for top 5 and bottom 5 performers for this category for current quarter,

new airlines to top and bottom 5



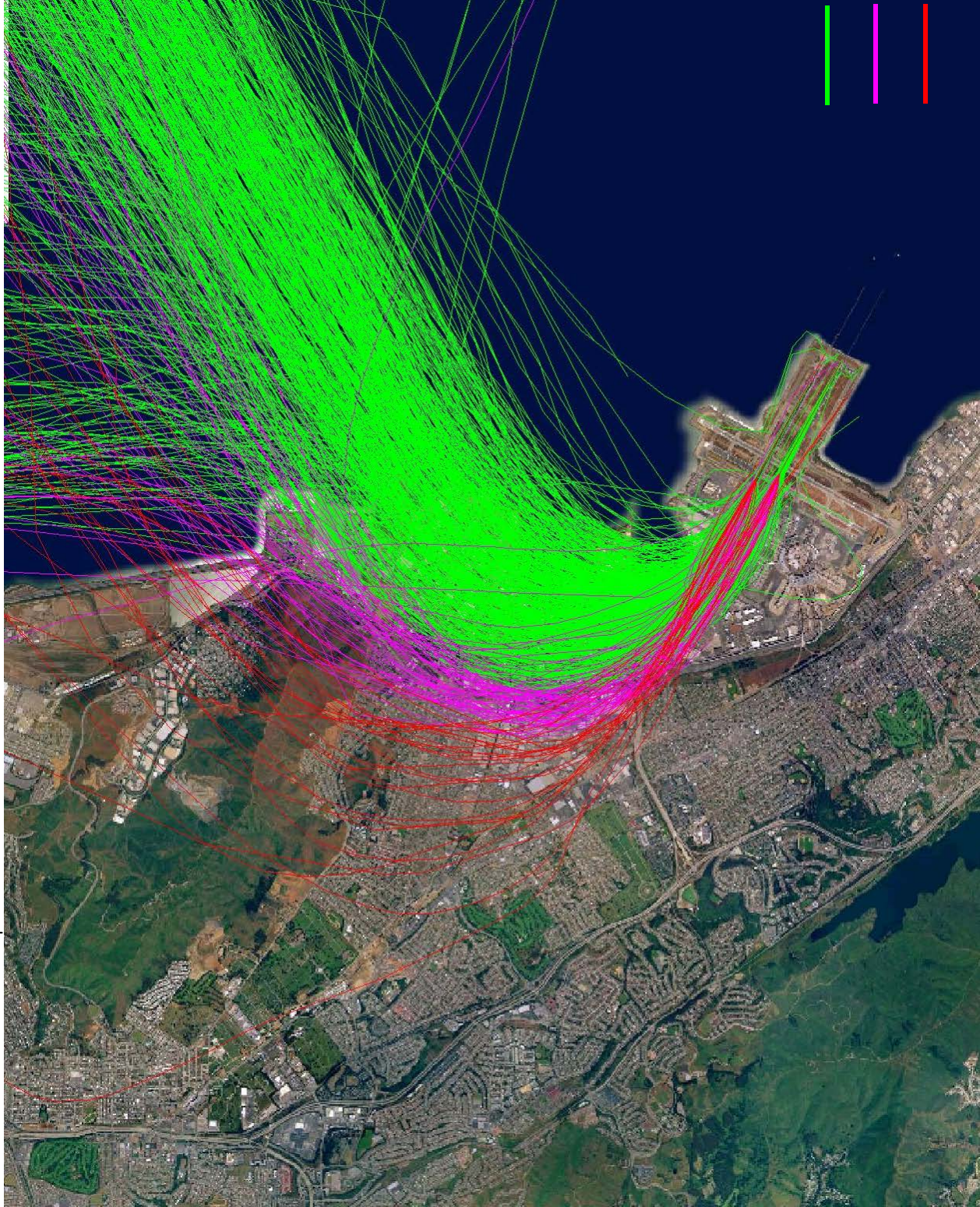
Nighttime Preferential Runway Use

San Francisco International Airport



Shoreline Departure Rating

San Francisco International Airport



Good (+2 points)
Marginal (+1 points)
Poor (0 points)

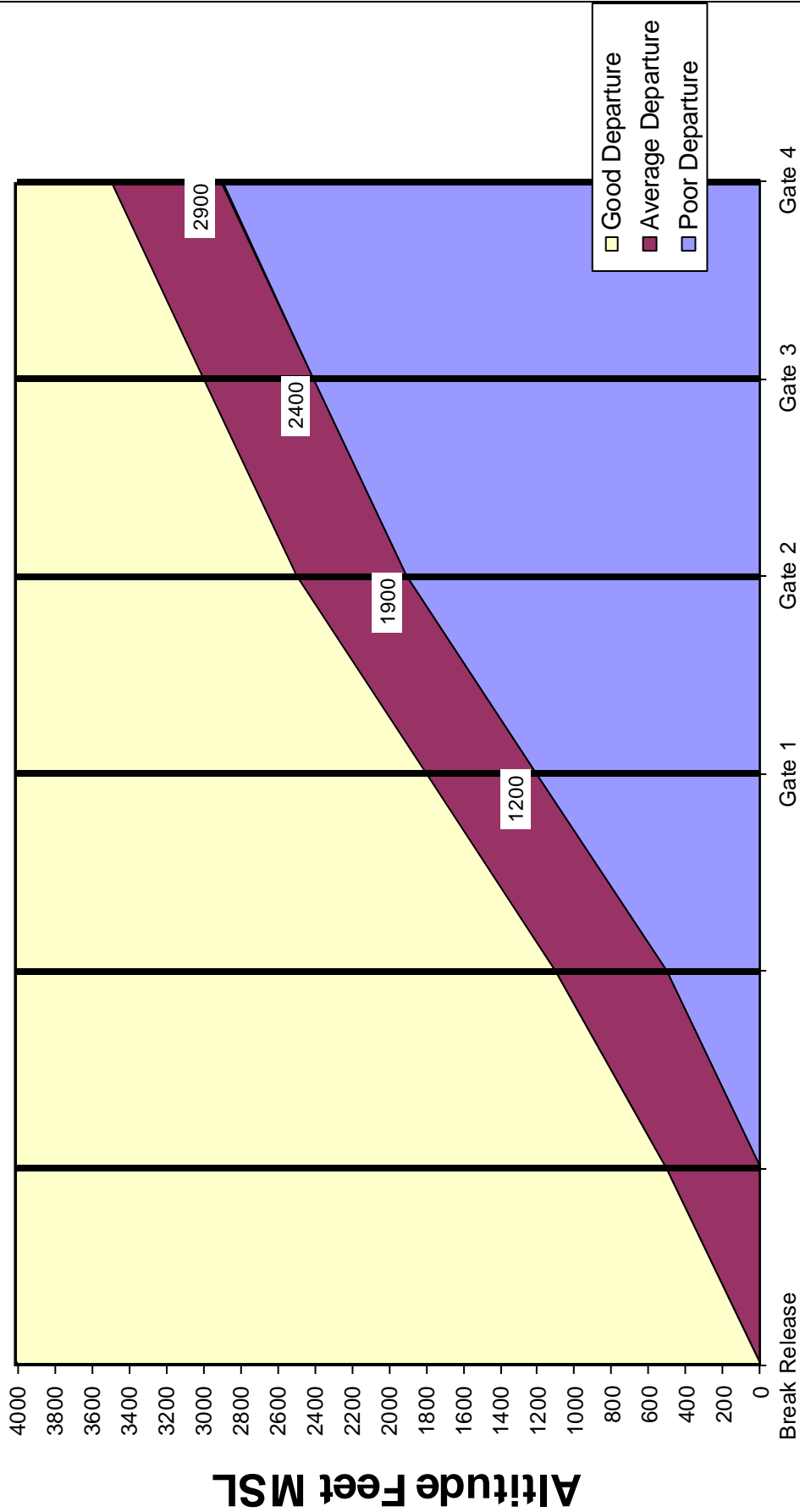
Gap Departure Rating

San Francisco International Airport



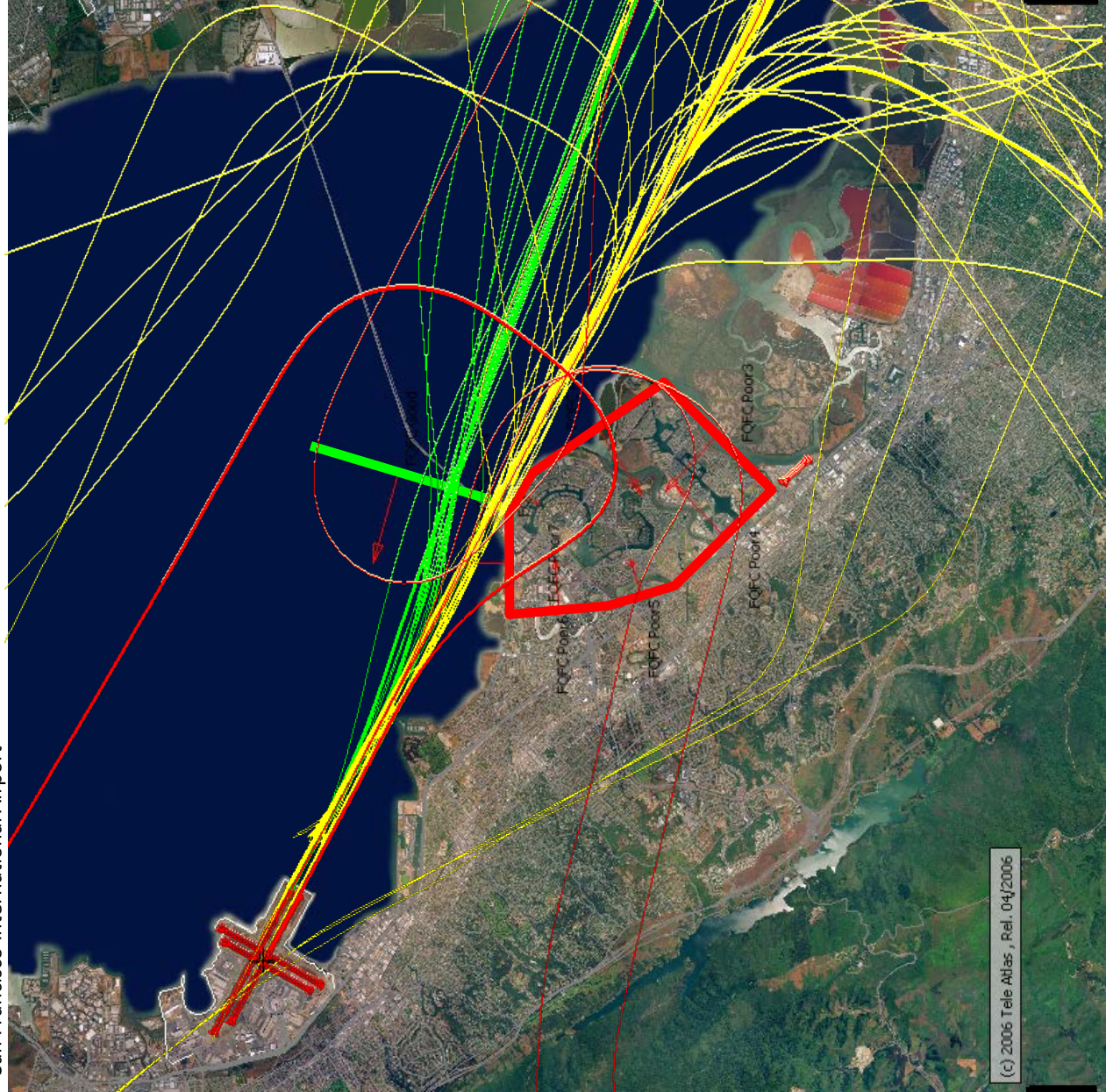
San Francisco International Airport

Altitude Depiction of Gap Departure Criteria Boeing 747-400 Domestic



Foster City Arrival Rating

San Francisco International Airport



(c) 2006 Tele Atlas, Rel. 04/2006

- Good (+2 points)
- Marginal (+1 points)
- Poor (0 points)

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December 3, 2014

TO: Roundtable Representatives and Alternates

FROM: James A. Castañeda, AICP, Roundtable Coordinator

SUBJECT: City of Palo Alto request to join the Roundtable Subcommittee and Regular Roundtable Meeting Summary

The Roundtable held a Subcommittee meeting on July 22, 2014 to discuss the City of Palo Alto's request to join the San Francisco International Airport/Community Roundtable. The Subcommittee meeting was scheduled after the Roundtable's June 4, 2014 Regular Meeting in which the City of Palo Alto asked to be included as a voting member of the Roundtable and the Roundtable sent the matter to the Subcommittee. The Subcommittee made four recommendations.

At the Roundtable's regular meeting on October 1, 2014, the Roundtable membership voted on Item 5, Request from the City of Palo Alto for Roundtable Membership. The membership voted 9 – 5 in favor of the subcommittee's recommendations as show here:

- Encouraged the City of Palo Alto to continue attending Roundtable meetings to voice their concerns; SFO Noise Abatement Office staff noted they currently work with the City of Palo Alto citizens and staff on overflight questions and data requests.
- Participate on a regional level through the Association of Bay Area Government's Regional Airport Planning Committee (RAPC). RAPC is "*...representative of a broad range of stakeholders in the region - it serves as an investigative panel and advisory body to its governing boards as well as a forum for public discussion on regional aviation issues.*" RAPC meets at the Association of Bay Area Governments (ABAG) offices in downtown Oakland; the RAPC board is made up of elected officials from ABAG, San Francisco Bay Conservation, and Metropolitan Transportation Commission as well as staff from the region's airports.
- Draft a letter to RAPC to encourage the group to hold regular meetings and address noise issues in the Bay Area. RAPC cancelled its last two meetings in April and July 2014; it has not met since October 2013. The last year RAPC met on a regular basis was 2011. It is recommended the Roundtable draft a letter for the Chairman's signature encouraging RAPC to start meeting at regular intervals again to serve as the regions group to address noise issues for all three major airports.

- Assist the City of Palo Alto and County of Santa Clara in creating a County of Santa Clara Roundtable organization. The County of Santa Clara does not currently have a group focused on aircraft noise issues from general aviation or commercial activity in the County or from the region's other airports. They are the only county with a major commercial service airport in the Bay Area that does not have an airport-sanctioned noise organization.

At the October 1, 2014 regular meeting, a motion was put forward to adopt the Subcommittee's four recommendations. After a motion was put on the table, discussion ensued; the discussion included specific rationale used by the Subcommittee on recommending the four items. Subcommittee members made the following comments regarding their rationale in the four items being recommended:

- The Roundtable's charter would need to be changed to allow a city from Santa Clara County to join and this process could take a few years for all 21 members to agree and sign the charter.
- The Roundtable has grown within its charter but that it is not intended to be a regional body. The regional body they would like to address issues is RAPC.
- Expanding the Roundtable could dilute its mission and want to ensure current issues within San Mateo County are addressed and mitigated.
- It was difficult for the subcommittee to define a boundary that was not arbitrary; used historical record of cities outside of the Roundtable (Bollinas and Tiburon) to create context for the decision.
- The Subcommittee recommends the Roundtable become more active through RAPC and supports the County of Santa Clara's formation of its own Roundtable group.
- Believe there is strength having multiple strong voices, including RAPC and the Roundtable which would bring more power to Palo Alto and the Roundtable.

Attached:

Draft Letter to the Association of Bay Area Government's Regional Airport Planning Committee (RAPC)



December 4, 2014

Julie Pierce
President
Association of Bay Area Governments
101 8th St
Oakland, California 94607

Re: Association of Bay Area Government Regional Airport Planning Committee

Dear Ms. Pierce:

Since 1981, The San Francisco International Airport/Community Roundtable's (Roundtable) has provided a forum for citizens in San Mateo County and the City and County of San Francisco to voice concerns regarding aircraft noise from operations at San Francisco International Airport. The Roundtable consists of elected representatives from 21 cities within San Mateo County and the City and County of San Francisco. Over the past 33 years, the Roundtable has worked with stakeholders at a regional, state, and national level to address aircraft and airport noise related issues, through this community and citizen focused organization.

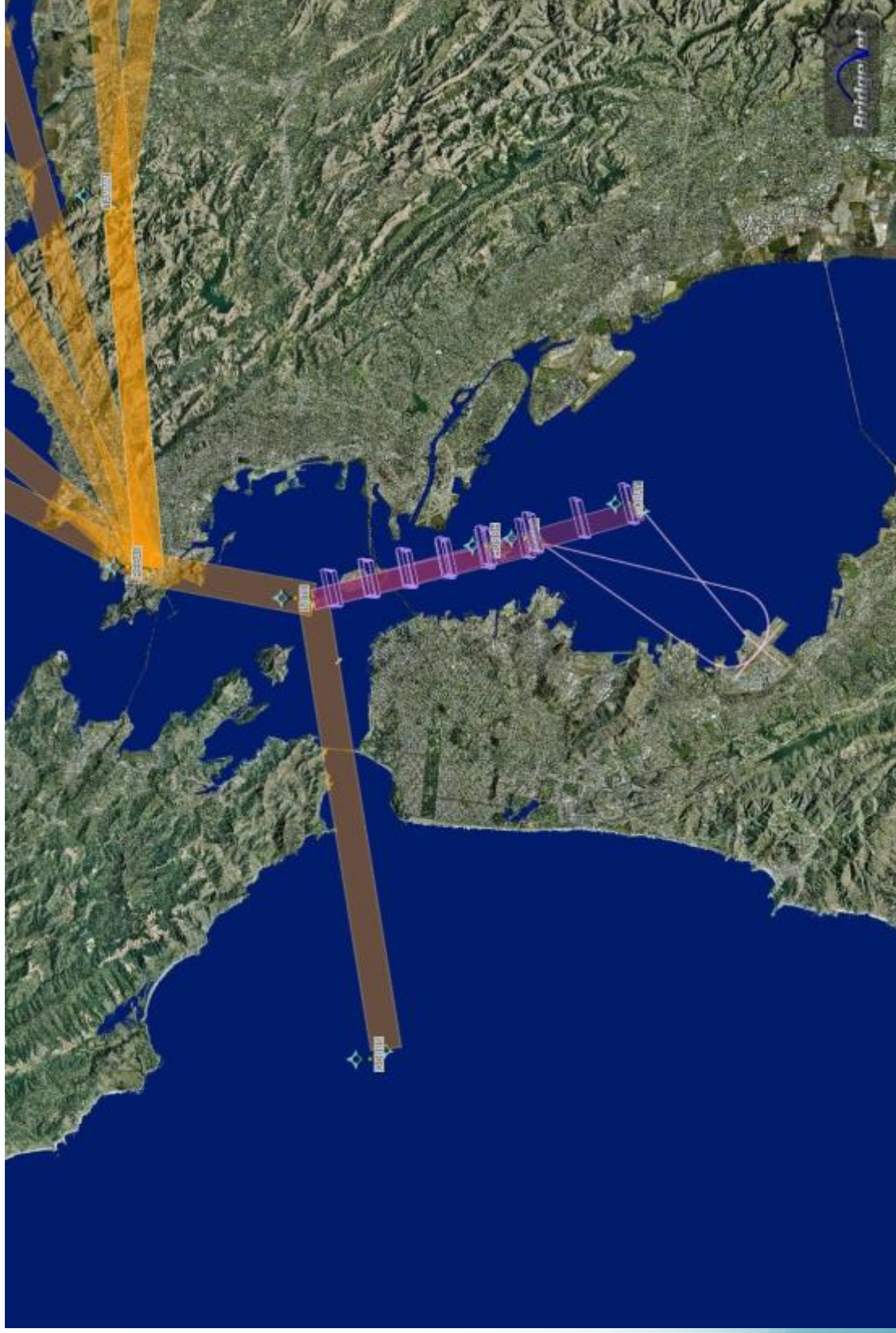
With three major hub airports within close geographical proximity, airspace congestion within the bay area has continued to increase over time. This is evident now more than ever with the recent Northern California Optimization of Airspace and Procedures (Metroplex) Environmental Assessment and subsequent FONSI-ROD. Airspace issues from one airport affect adjacent counties and municipalities, and concerns from these overflights cross county and city lines. Due to the airspace interdependencies in the bay area and related noise concerns from citizens, we encourage RAPC to re-capture its role as the region's forum to address noise issues on a regional level, and suggest reconvening bi-annual meetings in order to regain its position as a regional body. While the FAA remains focused on the development of the Metroplex from a regional perspective, RAPC's role providing regional community representation is key to the citizens and communities potentially impacted by this critical ongoing airspace re-design.

Best Regards,

Cliff Lentz, Councilmember
City of Brisbane
Chair, San Francisco Airport/Community Roundtable

Cc: Rich Garbarino, Vice Chair, RAPC
Brad Paul, ABAG Deputy Executive Director
Benny Lee, Co-Chair, Oakland Community Noise Forum
Walt Jacobs, Co-Chair, Oakland Community Noise Forum

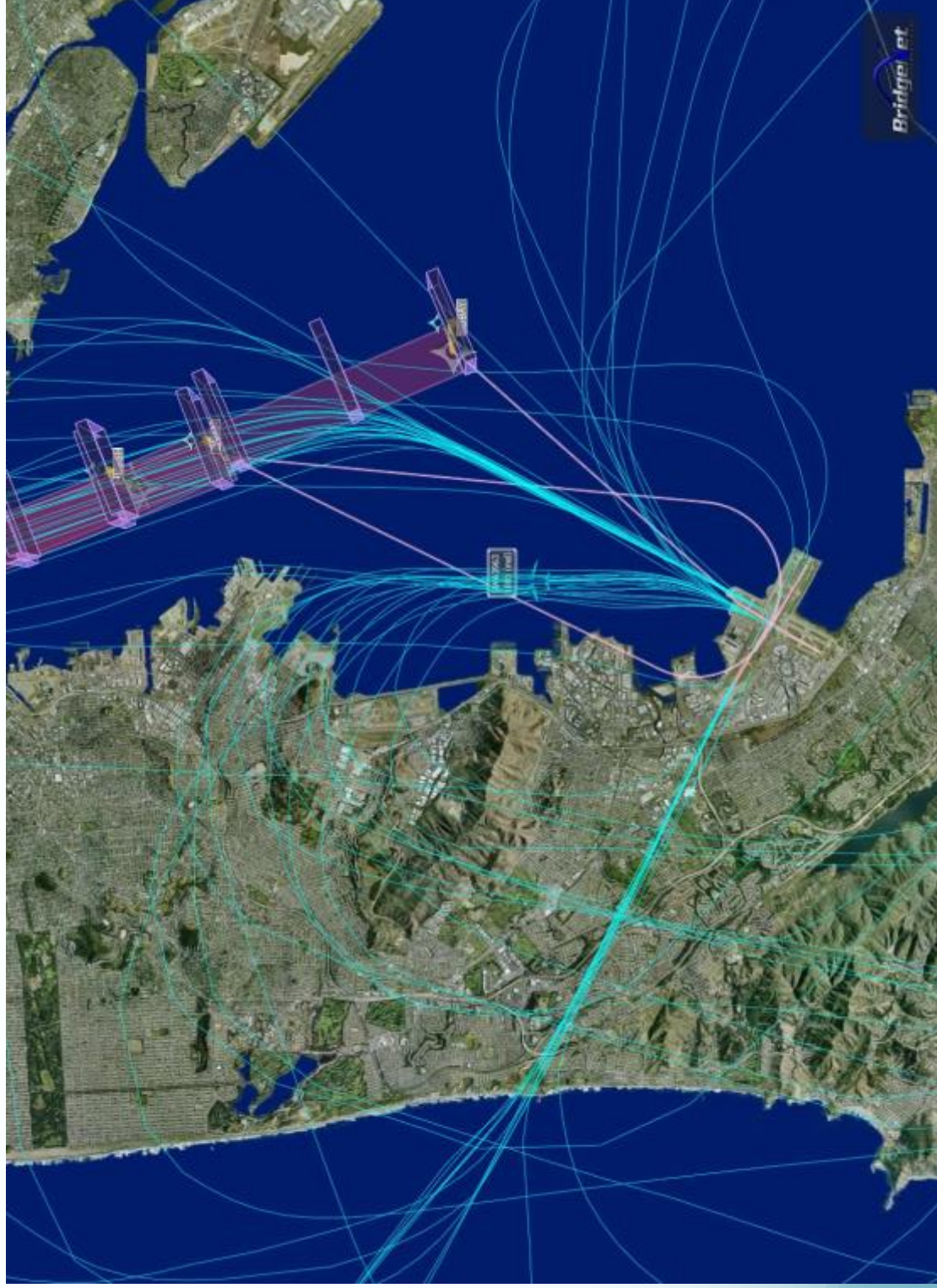
Metroplex – NIITE Procedure



Metroplex - NIITE - Close-In

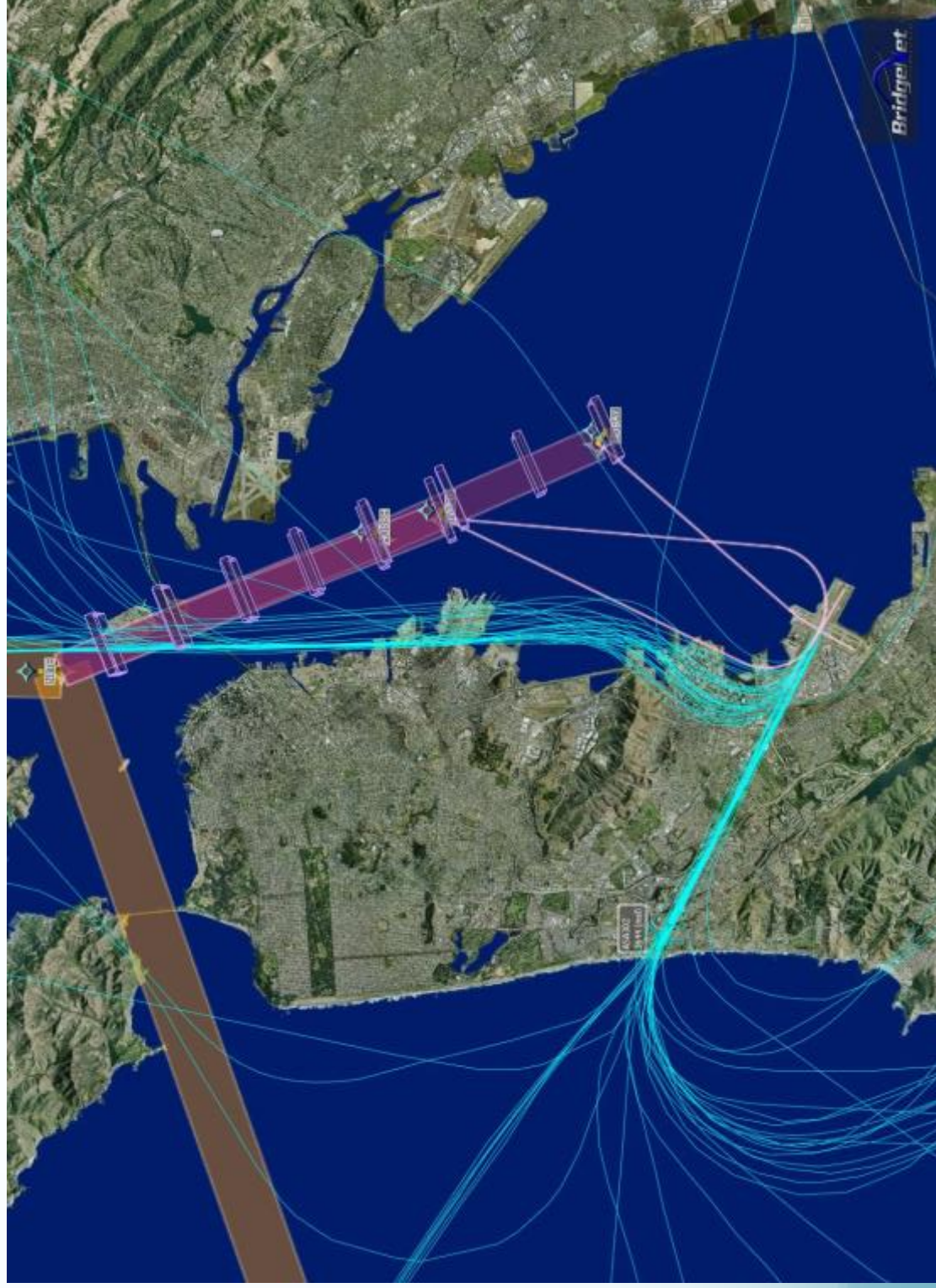


Nighttime SFO Flights – April 3 -4, 2014 10:00 pm – 6:00 am

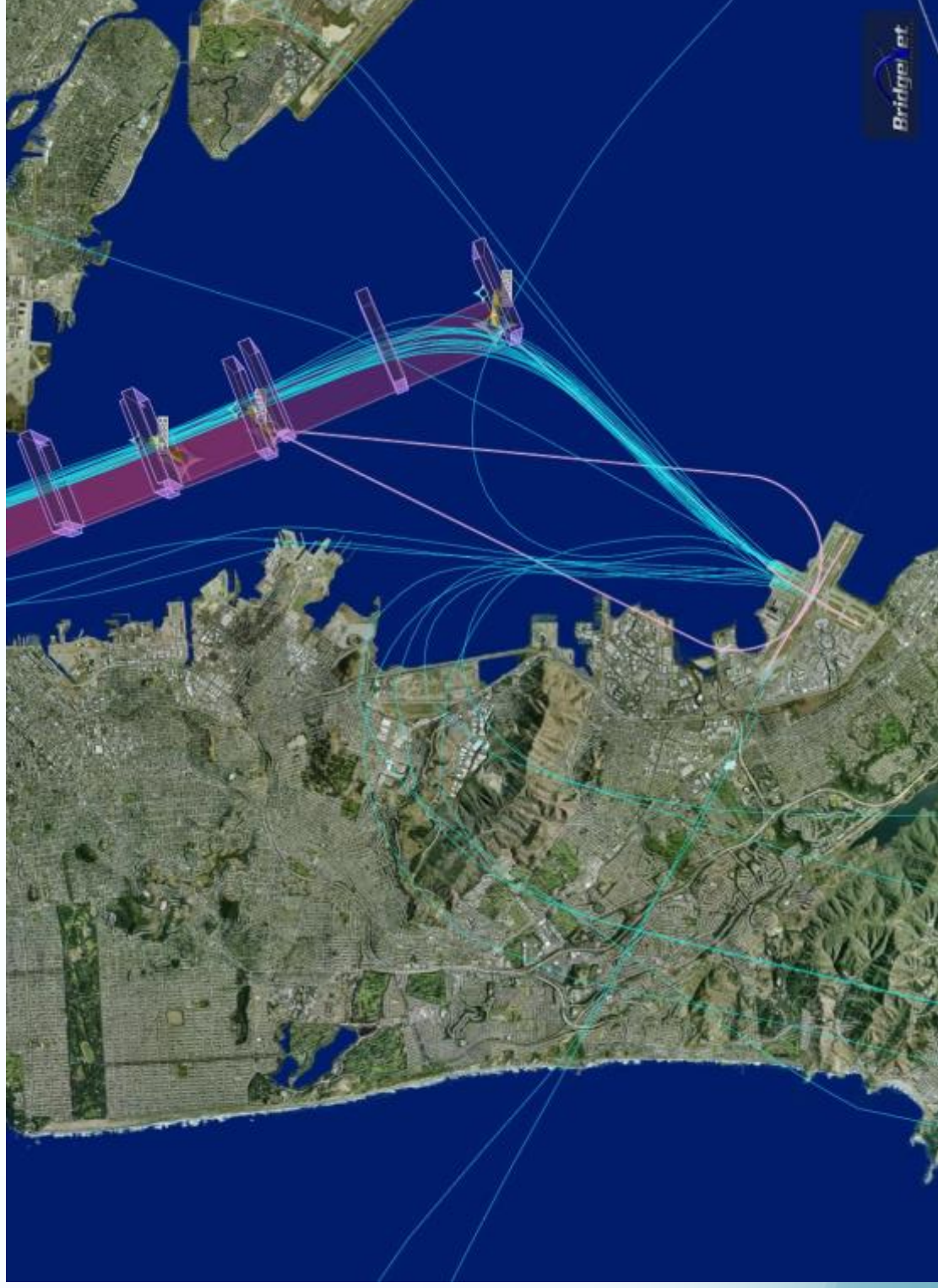


Nighttime SFO Flights – July 17 -18, 2014

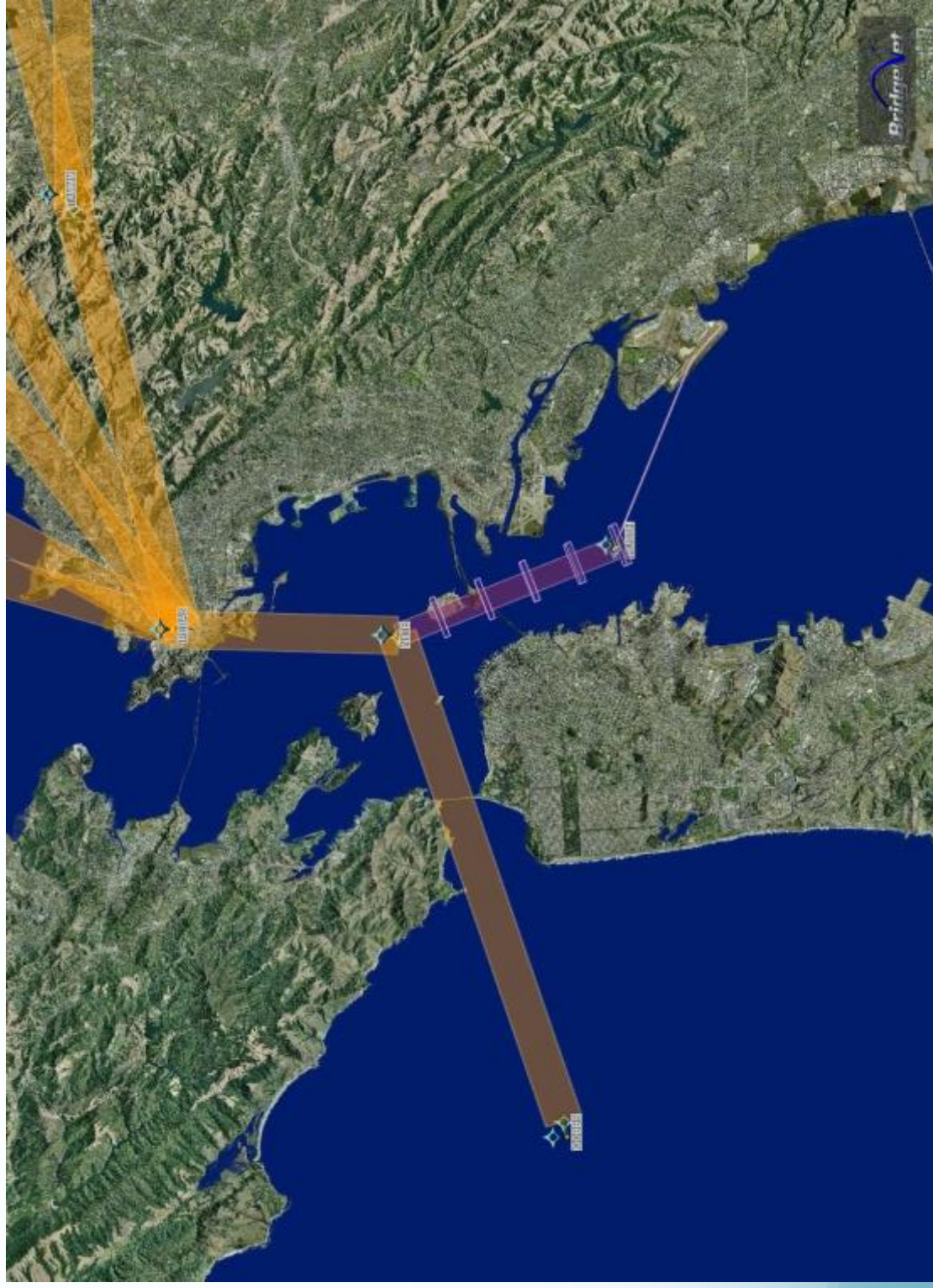
10:00 pm – 6:00 am



Nighttime SFO Flights – Nov 15 - 16, 2014 10:00 pm – 6:00 am

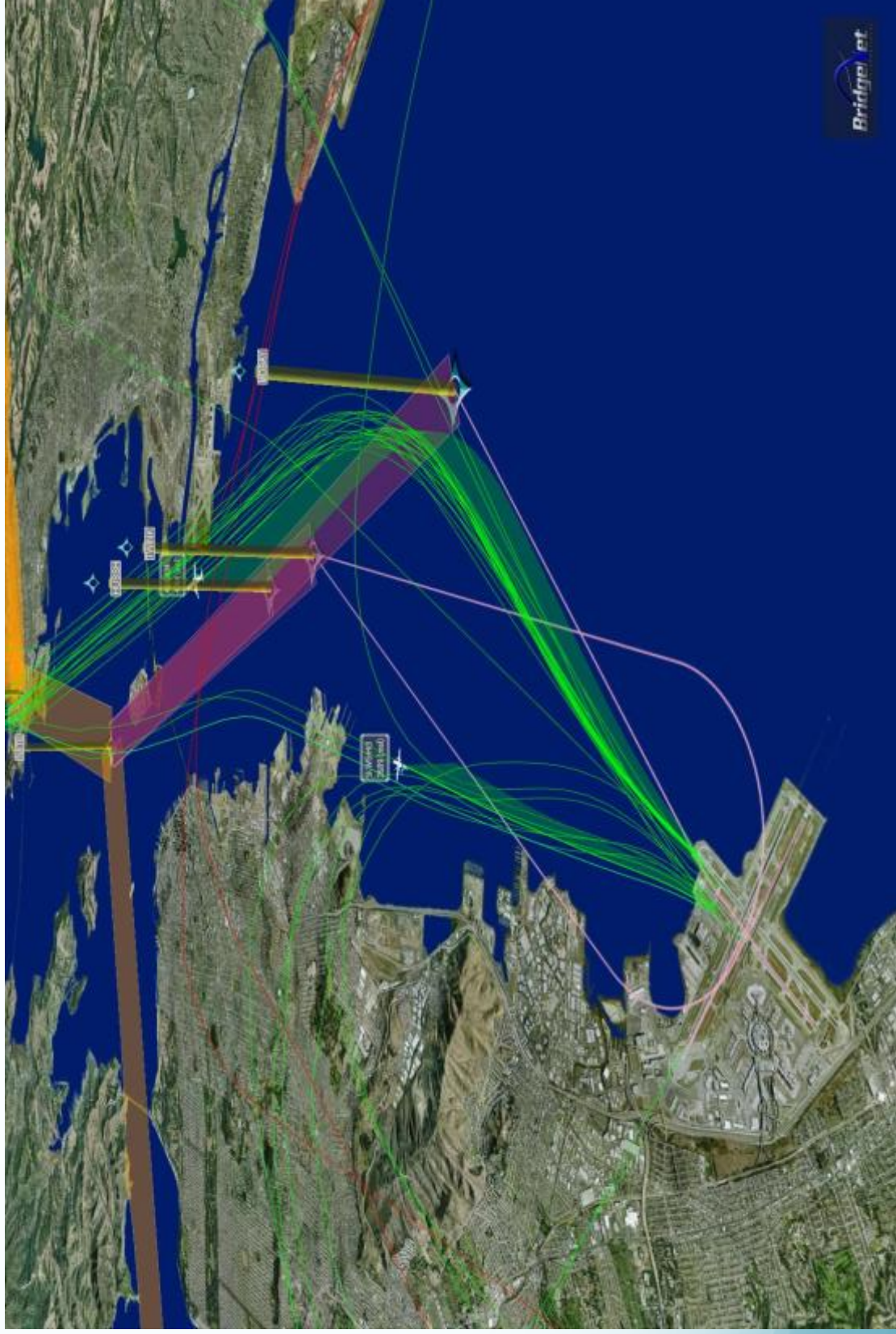


HUUSH – OAK Departure





HUUSH & NIITE Procedures Nov 15 -16, 2014





December 3, 2014

TO: Roundtable Representatives and Alternates

FROM: Cindy Gibbs, Roundtable Technical Advisor

SUBJECT: September 2014 Congressional Letter to FAA Administrator Huerta

The Roundtable received a copy of a letter dated September 12, 2014, signed by 26 congressional representatives, to FAA Administrator Michael Huerta regarding a lowering of the FAA noise threshold from 65 DNL (CNEL in California) to 55 DNL. Below is a timeline of hearings and correspondence leading up to the September 12, 2014 letter.

- October 7, 2014 – Letter sent to FAA Administrator Michael Huerta by Representative Michael Quigley (D-IL) requesting the FAA to expedite noise metrics used to determine aircraft annoyance.
- October 2, 2014 – Representative Quigley forms the Quiet Skies Caucus to address aircraft noise issues. Representative Anna Eshoo is a member.
- September 12, 2014 – Letter sent to Administrator Huerta by 26 democratic congressional representatives asking the FAA to lower the noise standard to 55 DNL. The signed letter included local congressional representatives Anna Eshoo and Jackie Speier.
- April 3, 2014 – Appropriations Subcommittee Hearing lead by Representative Quigley with Administrator Huerta addressed progress on validity of the 65 DNL threshold as an appropriate metric to measure noise effects.

The attached letter is a draft letter to FAA Administrator Michael Huerta, expressing the Roundtable's long-standing work with local congressional representatives and future opportunities for noise mitigation and support.



San Francisco International
Airport/Community Roundtable

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December 4, 2014

Mr. Michael P. Huerta
Administrator
Federal Aviation Administration
800 Independence Avenue SW
Washington, DC 20591

Re: Congressional Letter to FAA Administrator Michael Huerta dated September 12, 2014

Dear Mr. Huerta:

Since 1981, the San Francisco International Airport/Community Roundtable (Roundtable) has provided a forum for citizens and communities within San Mateo County and the City and County of San Francisco to voice concerns regarding aircraft noise from operations at San Francisco International Airport. The Roundtable consists of elected representatives from 21 cities within San Mateo County and the City and County of San Francisco. Over the past 33 years, the Roundtable has worked with stakeholders at a regional, state, and national level to address aircraft and airport noise related issues for its citizens and communities, including Representatives Jackie Speier and Anna Eshoo. Their support of the Roundtable member entities has been critical for national support of implementing new procedures that address noise issues in San Mateo County and the City and County of San Francisco.

We support the efforts of Representatives Speier and Eshoo to address the 65 DNL benchmark, as we too have requested that the FAA evaluate lowering its 65 DNL standard and we eagerly await the FAA review of the 65 DNL metric.

During the comment period for the NOR CAL OAPM Environmental Assessment, the SFO Roundtable repeatedly called for the NextGen system to incorporate airplane noise reduction as part of its efficiency strategy. We believe that reductions in fuel emissions and airplane noise can be compatible with each, and urge the FAA to consider noise impacts when it evaluates the newly implemented RNAV procedures.

The Roundtable supports the recently-created Quiet Skies Caucus. This congressional caucus, with representatives from communities throughout the country, has the capacity to work with leading stakeholders to ensure: new satellite-based procedures reduce noise for communities around airports, don't result in a shift of noise, and verify the FAA is using the most appropriate metrics to define noise thresholds related to aircraft operations.

Best Regards,

Cliff Lentz, Councilmember
City of Brisbane
Chair, San Francisco Airport/Community Roundtable

Cc: The Honorable Jackie Speier, United States House of Representatives
 The Honorable Anna Eshoo, United States House of Representatives
 Benny Lee, Co-Chair, Oakland Community Noise Forum
 Walt Jacobs, Co-Chair, Oakland Community Noise Forum
 Denny Schneider, Chairman, LAX Community Roundtable

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AIRPORT NOISE NEWS

Regular Meeting # 293
December 3, 2014

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Airport Noise Report



A weekly update on litigation, regulations, and technological developments

Volume 26, Number 39

November 21, 2014

Technology

BOEING 787 ECO-DEMONSTRATOR BEGINS FLIGHT-TESTING NEW GREEN TECHNOLOGIES

Boeing said Nov. 17 that its ecoDemonstrator 787 aircraft has begun flight-testing more than 25 new technologies aimed at improving aviation's environmental performance through every phase of flight.

The Boeing ecoDemonstrator Program accelerates the testing, refinement, and use of new technologies and methods that can improve aircraft efficiency and reduce noise.

This new round of testing, using 787 Dreamliner ZA004, will evaluate software and connectivity technologies related to operational efficiency; remote sensors to reduce wiring; aerodynamic and flight control improvements for greater fuel efficiency, and icephobic wing coatings to reduce ice accumulation.

"The ecoDemonstrator is focused on technologies that can improve airlines' gate-to-gate efficiency and reduce fuel consumption, emissions, and noise," said Boeing Commercial Airplanes President and CEO Ray Conner.

"Through the ecoDemonstrator Program, Boeing continues to invest in innova-

(Continued on p. 156)

Legislation

BILLS IN KENTUCKY, ILLINOIS WOULD GIVE TAX CUTS TO HOMEOWNERS NEAR AIRPORTS

Legislation has been introduced in the Illinois State House and prefiled in the Kentucky State House that would provide property tax breaks to homeowners living in high noise areas around airports.

Illinois Rep. Martin Moylan (D), who represents suburban areas near Chicago O'Hare International Airport, introduced HB 6294 in the Illinois House on Sept. 2. The bill had its first reading on Nov. 6 and was referred to the Rules Committee.

The bill has one co-sponsor, Rep. Kathleen Willis (D).

HB 6294 would amend the Illinois Property Tax Code to double the homestead exemption amount for property that is "negatively affected" by aircraft noise from O'Hare "if the property routinely experiences aircraft noise of 65 decibels or more, and that aircraft noise is directly attributable to flight patterns at Chicago O'Hare International Airport."

The tax assessor or chief country assessment officer would determine the homeowner's eligibility to receive the double homestead exemption under the legislation "by application, visual inspection, questionnaire, or other reasonable methods."

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tion that benefits the environment and our customers.”

The ecoDemonstrator 787 tests include:

- NASA Airborne Spacing for Terminal Arrival Routes (ASTAR) to improve landing efficiency;
- New greenhouse gas sensors evaluated in collaboration with Japan Airlines and others;
- Real-time turbulence reports generated in collaboration with Delta Air Lines to mitigate moderate or greater turbulence events, resulting in improved flight efficiency and passenger comfort;
- Instrument landing systems for new and older aircraft to optimize landings and reduce fuel use;
- On-Board Wireless Sensor Network and Micro Electro Mechanical Systems microphones to reduce wiring and weight; and
- Outer wing access doors made from recycled 787 carbon fiber to reduce material costs and factory waste.

The ecoDemonstrator 787 completed flight tests in July for an acoustic ceramic matrix composite nozzle designed by Boeing to reduce weight and noise. These tests were part of the FAA Continuous Lower Energy, Emissions and Noise (CLEEN) Program, a competitively bid five-year program with costs shared by participants.

“The 787 Dreamliner provides airlines with unmatched fuel efficiency and exceptional environmental performance, reducing fuel use and carbon emissions by 20 percent compared with today’s similarly sized airplanes,” Boeing said.

In 2011, with an American Airlines Next-Generation 737, the ecoDemonstrator Program tested 15 technologies including aspects of the Advanced Technology Winglet that will improve fuel efficiency by up to 1.8 percent on the new 737 MAX.

In 2015, the ecoDemonstrator Program will test more technologies on a 757 in collaboration with TUI Travel Group and NASA.

Supplier partners for ecoDemonstrator 787 technologies and flight tests also include Rolls Royce, Honeywell, Rockwell Collins, General Electric, and Panasonic.

Boise Airport

HNTB SELECTED TO CONDUCT 150 STUDY FOR BOISE AIRPORT

The City of Boise has selected HNTB Corporation to conduct a Part 150 airport noise compatibility study for Boise Airport and surrounding areas.

The study is a follow-on to similar work HNTB completed in 2005 and will provide the basis for future noise reduction and land-use decisions, the firm said Nov. 17.

Building on HNTB’s experience at the airport and findings of the previous study, the project will proceed on an accelerated schedule, taking 18 months to complete.

It will include analysis of current noise conditions as well as estimates of noise five years in the future. Additional analysis will include potential land-use options for properties previously and potentially purchased to mitigate aviation noise impacts.

Uniquely, the study also will examine potential effects of future military aircraft operations on the communities surrounding the airport as the future mission of the Idaho Air National Guard – which currently operates a training program for A-10 aircraft at Boise Airport – is contemplated at a national level.

Affectionately called the “Warthog” for its aggressive look, the A-10 Thunderbolt II is the U.S. Air Force’s primary low-altitude close air support aircraft.

“We are honored that the City of Boise has selected our team to conduct this study,” said Kim Hughes, PE, HNTB aviation environmental planning practice leader. “The result will be an in-depth study that benefits the city and the airport and provides guidance for future noise mitigation and land-use decisions.”

A public outreach program will solicit feedback from communities around the airport during development of the study. Additionally, follow-up meetings will be held after the report has been drafted to share the results and provide insight to the communities on land use.

Technology

FAA CERTIFIES FLIGHT MGMNT. SYSTEM FOR BOEING 737 CLASSIC

Exton, PA-based international avionics supplier Innovative Solutions & Support (IS&S) has received a Federal Aviation Administration Supplemental Type Certification (STC) for its Flight Management System for Boeing 737 Classic aircraft.

As a result, IS&S now offers the most advanced Boeing 737-300/-400/-500 NextGen retrofit, including Required Navigational Performance/Radius to Fix (RNP/RF), Required Time of Arrival (RTA), Localizer Performance with Vertical guidance (LPV) and Wide Area Augmentation System / Global Positioning System (WAAS/GPS) capabilities, the company said Nov. 17.

“The IS&S cockpit upgrade opens a major new aircraft retrofit market worldwide, providing legacy air transport aircraft with navigational capability and performance equivalent to that of the newest production aircraft.”

This latest certification is the culmination of a multi-year program to upgrade (2) 737-400 aircraft to full CNS/ATM compliance standards in which IS&S served as the systems integrator. This program included installation of new transponders, cockpit printers, ACARS and SATCOM systems. Relocation of the center console facilitated installation of this new equipment.

The IS&S B737 Classic cockpit upgrade is the first Air

Transport retrofit to integrate RNP/RF, LPV and WAAS/GPS approaches supporting a worldwide navigational database, greatly increasing the utility of these aircraft and firmly establishing IS&S as a leader in this market. The RNP and WAAS/GPS capabilities will enable aircraft to fly shorter flight paths and optimum idle-thrust descents, thereby reducing fuel consumption, carbon emissions, and noise levels. LPV capability significantly improves access, with thousands of airports now benefitting from published WAAS LPV procedures.

Europe

EUROCONTROL COLLABORATIVE ENV. MANAGEMENT SPEC ISSUED

EUROCONTROL said Nov. 5 that it has officially launched a Collaborative Environmental Management Specification (CEM), which sets out a unique collaborative approach to managing environmental impacts at and around airports.

The Specification supports all stakeholders in airport operations in their quest to reduce their gaseous and noise emissions as well as to improve local air quality.

"In practical terms, CEM is based on the formalization of local working arrangements between the airport, its airlines and air navigation services provider (ANSP) so as to jointly monitor key environmental parameters. This allows for a better identification of trade-offs between different environmental objectives, helping to resolve environmental and operational challenges based on informed decisions," EUROCONTROL and ACI-Europe explained in a joint statement.

ACI-Europe endorsed the CEM Specification as one of its Recommended Practices, making it an industry standard. EUROCONTROL and ACI-Europe said that adoption of the CEM marks a new chapter in the cooperation between the two organizations and builds on their joint efforts to promote airports' "license to grow." EUROCONTROL endorsed ACI-Europe's Airport Carbon Accreditation Program when it was launched in 2009.

"What EUROCONTROL, ACI-Europe's Environmental Strategy Committee, and the airports were aiming at when they first started collaborating on CEM in 2008, was to build a new approach through which all the partners could tackle, collectively, the common environmental issues they were facing. CEM provides a means to strategically deal with environmental issues at airports so that local regulators and communities can propose common solutions," said Frank Brenner, director general of EUROCONTROL.

ACI-Europe Director General Olivier Jankovec added, "Environmental management is a core issue for European airports, as it is a vital part of earning our license to grow. Over the years, we have been addressing critical priorities like carbon emissions, noise, and local air quality with tailored approaches. In the collaborative environment of an airport,

bringing these processes together is a natural next step.

"Working with EUROCONTROL to develop Collaborative Environmental Management has been very positive, and the result provides our members with a blueprint for an even more robust and transparent dialogue with their airlines and ANSPs aimed at identifying the best possible solutions to jointly address environmental impacts."

The EUROCONTROL CEM is at <http://www.eurocontrol.int/publications/eurocontrol-specification-collaborativeenvironmental-management-cem>

The ACI-Europe Recommended Practice is at <https://www.aci-europe.org/component/downloads/downloads/4059.html>

Legislation, from p. 155

Homeowners seeking the exemption would be required to submit their application "along with documentation establishing that the property is negatively affected by aircraft noise" from O'Hare.

Members of the Suburban O'Hare Commission, which represents municipalities around O'Hare, urged Rep. Moylan in a recent letter to withdraw HB 6294, which they contend will create "redline" districts through the suburbs in which homeowners would get small annual property tax savings while suffering greater reductions in their property values.

Some nine mayors (representing the suburban communities of Addison, Bensenville, Elk Grove Village, Hanover Park, Itasca, Roselle, Schaumburg, Schiller Park and Wood Dale and the supervisor of Elk Grove Township) told Moylan in their letter that homeowners could save an average of \$675 each year on their property taxes but lose 10 percent to 30 percent of their property value.

They also contended that local authorities might be forced to raise property taxes to cover the shortfall caused by the tax break provided in Moylan's bill.

But Moylan refuted these assertions, arguing that the mayors "got it backwards." He told the Arlington Heights *Daily Herald* that his legislation is "not going to create a redline district. These areas are already defined by the O'Hare noise contour. Property values are already declining. This bill offers some relief."

Moylan was reelected to a second term in the Illinois House by a slim margin on Nov. 4.

Kentucky Bill

Rep. Jim Wayne (D), who represents communities around Louisville International Airport, has pre-filed legislation for the 2015 session of the Kentucky Legislature that would provide a refundable tax credit for 100 percent of the costs of sound insulation paid for by homeowners in the 60 dB DNL and greater noise contours of airports in the state.

The legislation will mainly affect residents in the 60 DNL contour of Louisville International Airport who did not qualify for inclusion in the airports residential sound insulation program, which ends at the 65 DNL contour line.

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The legislation also would aid residents of Audubon Park, KY, where town officials have passed an ordinance prohibiting residents from signing avigation easements required for participation in the Louisville sound insulation program.

An earlier version of Wayne's bill, which would have provided a tax credit covering only 20 percent of the cost of sound insulation by homeowners with a \$1 million overall statewide cap, had support in the state House but was killed by Republicans in the State Senate, Wayne told ANR.

He said that ended up being a good thing because the revised bill now provides a refundable tax credit covering 100 percent of sound insulation costs up to an overall statewide cap of \$3 million per year.

Wayne said his bill was the brainchild two years ago of the Airport Neighbors Alliance, a coalition of communities impacted by noise from Louisville International.

The bill may not make it through the 2015 short session of the state Legislature because super majorities are required for revenue bills. If the bill fails to pass, Wayne plans to reintroduce it in the 2016 session.

Airport Sues Audubon Park

In related news, the Louisville Airport Authority filed suit against the City of Audubon Park after it fined the airport authority \$13,000 for 13 alleged violations of its ordinance designed to prevent the soliciting of easements.

Audubon Park leaders do not want city residents to have to give up an avigation easement as a condition of receiving sound insulation.

The city's ordinance, approved last December, requires anyone seeking an avigation easement to first obtain a city permit. The ordinance makes it unlawful to offer, solicit, or accept an easement that would allow noise emissions or other pollutants that would detract from the character of the city, which is listed on the National Register of Historic Places.

The airport authority asked in its lawsuit that the city's fine be dismissed, that the airport authority be declared immune from the ordinance, and that the ordinance be declared unconstitutional because its enforcement exceeds the police powers of the city.

In an Aug. 7 letter, Louisville Regional Airport Authority Executive Director C.T. "Skip" Miller told Audubon Park residents who had expressed interest in participating in the airport's SIP that the airport authority could no longer offer it to them because time had run out for the airport to complete insulation there by next September when FAA's more restrictive eligibility requirements for airport SIPs take effect.

The lawsuit is *Louisville Regional Airport Authority v. City of Audubon Park* (No. 14-C-09866) filed Sept. 19 in Jefferson District Court.

AIRPORT NOISE REPORT

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DuPage County updated: 11/13/2014 5:32 AM

New legislation could help with O'Hare plane noise

DuPage County panel identifies measures to support



Bensenville Village Manager Mike Cassady explains how noise from O'Hare International Airport is impacting neighborhoods in Bensenville. Cassady spoke during a Wednesday night meeting of the DuPage County Board's ad hoc committee on airport noise mitigation.

Robert Sanchez | Staff Photographer

**Robert Sanchez**

For more than two decades, Jeanne Otero enjoyed her Wood Dale home without the problem of jet noise from O'Hare International Airport.

The situation for Otero -- and thousands of other suburban residents -- changed in October 2013, when the opening of a new runway shifted air traffic from moving in multiple directions to an east/west flow.

Now Otero says a steady stream of airplanes can be heard inside her house even though it's been soundproofed. The deafening noise outside means she can't use her yard.

"You can't ever go out," she said. "It's horrible."

On Wednesday night, a group of DuPage County Board members learned the county could help residents like Otero by supporting a proposed state law change and lobbying Chicago to update O'Hare's noise compatibility plan.

"Any advocacy the county can provide would be greatly appreciated," Bensenville Village Manager Mike Cassady said to the county board's ad hoc committee on airport noise mitigation.

The panel has been directed to provide insight and direction on the issue of increased noise created by air traffic at O'Hare.

Speaking during the committee's inaugural meeting, Cassady said the key to addressing the problem is to collaborate and form coalitions.

"This can't just be a Bensenville issue," he said. "It can't just be a Wood Dale issue. This is a metropolitan issue that's impacting many residents throughout this area."

One way the county could assist is by supporting state legislation that would change the way airport noise is measured in Illinois.

Illinois measures airplane noise using the Day Night Average Sound Level, or DNL, metric. Cassady said the hope is that the state will adopt the Community Noise Equivalent Level, or CNEL, metric.

If the CNEL metric were used, noise occurring between 7 and 10 p.m. would be factored in more. That could lead to a larger noise contour.

"The upside -- besides recognizing a best practice for noise measurement -- is more residents throughout the metro area ... would be eligible to gain federal funds for soundproofing," Cassady said.

In addition to lobbying state lawmakers to adopt the CNEL metric, DuPage could help appeal to Chicago, which owns O'Hare.

Cassady said officials would like Chicago to formally ask the Federal Aviation Administration to update O'Hare's so-called "Part 150" noise compatibility plan. A Part 150 provides a comprehensive process to address airport noise impacts in the vicinity of the airport, officials said.

The last time that analysis was done for O'Hare was in 1989.

"The material in that (study) was really done in the mid-1980s," Cassady said. "The operation of the airport is significantly different from that time period."

Also, county board member Paul Fichtner, who is chairman of the ad hoc panel, said an expert could be hired to study airports around the country and see if they have noise mitigation plans that could be replicated here.

In the meantime, Cassady said Chicago is planning to put an additional noise monitor in Bensenville. Itasca also is expected to get another noise monitor.

Finally, a meeting between area mayors and FAA officials is scheduled to happen sometime in February.

As she left Wednesday's meeting, Otero said she's "encouraged" by what she heard. "This is the first meeting I've been to where there's actually a plan that's been identified," she said.



NTSB Upholds FAA Drone Authority

By [Mary Grady \(/authors/21.html\)](#) | November 18, 2014



image: FPV

The FAA does have the authority to apply its rule prohibiting careless and reckless flight to the operators of unmanned aircraft, the NTSB said on Tuesday. The safety board offered the opinion ([PDF \(/avwebflash/news/pirker_v_faa.php\)](#)) in its review of the case of Raphael Pirker, who was fined \$10,000 by the FAA for allegedly operating an unmanned aircraft in a "careless or reckless manner" in 2011. An NTSB administrative law judge had [dismissed \(/avwebflash/news/NTSB-Slaps-FAA-On-Drone-Regulation221562-1.html\)](#) the fine in March, agreeing with Pirker that the drone was essentially a model aircraft and not subject to the FAA rule. The FAA [appealed \(/avwebflash/news/FAA-To-UAS-Industry-Well-Keep-Enforcing222005-1.html\)](#) to the safety board. The board said it's now up to an administrative law judge to review the evidence and decide whether or not Pirker is guilty of a violation.

The case has been closely watched in the proliferating community of drone users and advocates who are eager to use the aircraft for aerial photography, farm inspections and other commercial uses. The FAA says Pirker, who was being paid to provide aerial photographs and video, piloted the unmanned aircraft -- a Ritewing Zephyr -- in a series of maneuvers around the University of Virginia campus in Charlottesville, Virginia, at altitudes from 10 feet AGL to 1,500 feet AGL, including flight "directly towards an individual standing on a . . . sidewalk causing the individual to take immediate evasive maneuvers ... through a . . . tunnel containing moving vehicles ... under a crane ... [and] within approximately 100 feet of an active heliport." A video that purports to be from the disputed flight is posted on [YouTube \(https://www.youtube.com/watch?v=OZnJeuAja-4\)](#).

In a statement released Tuesday, the FAA said it is "pleased" with the NTSB decision. "The FAA believes Mr. Pirker operated a UAS in a careless or reckless manner, and that the proposed civil penalty should stand," the FAA said. "The agency looks forward to a factual determination by the Administrative Law Judge on the 'careless or reckless' nature of the operation in question." A corrected version of the FAA [statement \(http://www.faa.gov/news/press_releases/news_story.cfm?newsId=17734\)](#), released later on Tuesday, deletes the "pleased" remark, and instead notes that the FAA "has a responsibility to protect the safety of the American people in the air and on the ground."

The Association for Unmanned Vehicle Systems International also responded to the NTSB decision. "Safety is an important consideration in the integration of UAS into the National Airspace System," AUVSI said in a statement. "However, the ruling still leaves unanswered important questions about whether the FAA can prohibit commercial operations in the absence of UAS rules. The FAA needs to immediately move forward with its small UAS rulemaking to provide clarity for all users of the technology."

Aircraft Noise Abatement Office

Glossary of common Acoustic and Air Traffic Control terms

A

ADS-B - Automatic Dependent Surveillance – Broadcast – ADS-B uses ground based antennas and in-aircraft displays to alert pilots to the position of other aircraft relative to their flight path. ADS-B is a key element of NextGen.

Air Carrier - A commercial airline with published schedules operating at least five round trips per week.

Air Taxi – An aircraft certificated for commercial service available for hire on demand.

ALP - Airport Layout Plan – The official, FAA approved map of an airport's facilities.

ALS – Approach Lighting System - Radiating light beams guiding pilots to the extended centerline of the runway on final approach and landing.

Ambient Noise Level – The existing background noise level characteristic of an environment.

Approach Lights – High intensity lights located along the approach path at the end of an instrument runway. Approach lights aid the pilot as he transitions from instrument flight conditions to visual conditions at the end of an instrument approach.

APU - Auxiliary Power Unit – A self-contained generator in an aircraft that produces power for ground operations of the electrical and ventilation systems and for starting the engines.

Arrival – The act of landing at an airport.

Arrival Procedure - A series of directions on a published approach plate or from air traffic control personnel, using fixes and procedures, to guide an aircraft from the en route environment to an airport for landing.

Arrival Stream – A flow of aircraft that are following similar arrival procedures.

ARTCC – Air Route Traffic Control Center - A facility providing air traffic control to aircraft on an IFR flight plan within controlled airspace and principally during the enroute phase of flight.

ATC - Air Traffic Control - The control of aircraft traffic, in the vicinity of airports from control towers, and in the airways between airports from control centers.

ATCT – Air Traffic Control Tower - A central operations tower in the terminal air traffic control system with an associated IFR room if radar equipped, using air/ground communications and/or radar, visual signaling and other devices to provide safe, expeditious movement of air traffic.

Avionics – Airborne navigation, communications, and data display equipment required for operation under specific air traffic control procedures.

Altitude MSL –Aircraft altitude measured in feet above mean sea level.

B

Backblast - Low frequency noise and high velocity air generated by jet engines on takeoff.

Base Leg – A flight path at right angles to the landing runway. The base leg normally extends from the downwind leg to the intersection of the extended runway centerline.

C

Center – See ARTCC.

CNEL – Community Noise Equivalent Level - A noise metric required by the California Airport Noise Standards for use by airport proprietors to measure aircraft noise levels. CNEL includes an additional weighting for each event occurring during the evening (7:00 PM – 9:59 PM) and nighttime (10 pm – 6:59 am) periods to account for increased sensitivity to noise during these periods. Evening events are treated as though there were three and nighttime events are treated as though there were ten. This results in a 4.77 and 10 decibel penalty

penalty for operations occurring in the evening and nighttime periods, respectively.

CNEL Contour - The "map" of noise exposure around an airport as expressed using the CNEL metric. A CNEL contour is computed using the FAA-approved Integrated Noise Model (INM), which calculates the aircraft noise exposure near an airport.

Commuter Airline – Operator of small aircraft (maximum size of 30 seats) performing scheduled (maximum size of 30 seats) performing service between two or more points.

D

Decibel (dB) - In sound, decibels measure a scale from the threshold of human hearing, 0 dB, upward towards the threshold of pain, about 120-140 dB. Because decibels are such a small measure, they are computed logarithmically and cannot be added arithmetically. An increase of ten dB is perceived by human ears as a doubling of noise.

dBA - A-weighted decibels adjust sound pressure towards the frequency range of human hearing.

dBc - C-weighted decibels adjust sound pressure towards the low frequency end of the spectrum. Although less consistent with human hearing than A-weighting, dBc can be used to consider the impacts of certain low frequency operations.

Decision Height – The height at which a decision must be made during an instrument approach either to continue the approach or to execute a missed approach.

Departure – The act of an aircraft taking off from an airport.

Departure Procedure – A published IFR departure procedure describing specific criteria for climb, routing, and communications for a specific runway at an airport.

Displaced Threshold - A threshold that is located at a point on the runway other than the physical beginning. Aircraft can begin departure roll before the threshold, but cannot land before it.

DME - Distance Measuring Equipment - Equipment (airborne and ground) used to measure, in nautical miles, a slant range distance of an aircraft from the DME navigational aid.

DNL - Day/Night Average Sound Level - The daily average noise metric in which that noise occurring between 10:00 p.m. and 7:00 a.m. is penalized by 10 dB. DNL is often expressed as the annual-average noise level.

DNL Contour - The "map" of noise exposure around an airport as expressed using the DNL metric. A DNL contour is computed using the FAA-approved Integrated Noise Model (INM), which calculates the aircraft noise exposure near an airport.

Downwind Leg – A flight path parallel to the landing runway in the direction opposite the landing direction.

Duration - The length of time in seconds that a noise event lasts. Duration is usually measured in time above a specific noise threshold.

E

En route – The portion of a flight between departure and arrival terminal areas.

Exceedance— Whenever an aircraft overflight produces a noise level higher than the maximum decibel value established for a particular monitoring site, the noise threshold is surpassed and a noise exceedance occurs. An exceedance may take place during approach, takeoff, or possibly during departure ground roll before lifting off.

F

FAA - The Federal Aviation Administration is the agency responsible for aircraft safety, movement and controls. FAA also administers grants for noise mitigation projects and approves certain aviation studies including FAR Part 150 studies, Environmental Assessments, Environmental studies, Environmental Assessments, Environmental Impact Statements, and Airport Layout Plans.

FAR – Federal Aviation Regulations are the rules and regulations, which govern the operation of aircraft, airways, and airmen.

FAR Part 36 – A Federal Aviation Regulation defining maximum noise emissions for aircraft.

FAR Part 91 – A Federal Aviation Regulation governing the phase out of Stage 1 and 2 aircraft as defined under FAR Part 36.

FAR Part 150 – A Federal Aviation Regulation governing noise and land use compatibility studies and programs.

FAR Part 161 – A Federal Aviation Regulation governing aircraft noise and access restrictions.

Fix – A geographical position determined by visual references to the surface, by reference to one or more NavAids, or by other navigational methods.

Fleet Mix – The mix or differing aircraft types operated at a particular airport or by an airline.

Flight Plan – Specific information related to the intended flight of an aircraft. A flight plan is filed with a Flight Service Station or Air Traffic Control facility.

FMS – Flight Management System - a specialized computer system in an aircraft that automates a number of in-flight tasks, which reduces flight crew workload and improves the precision of the procedures being flown.

G

GA - General Aviation – Civil aviation excluding air carriers, commercial operators and military aircraft.

GAP Departure – An aircraft departure via Runways 28 at San Francisco International Airport to the west over San Bruno, South San Francisco, Daly City, and Pacifica.

Glide Slope – Generally a 3-degree angle of approach to a runway established by means of airborne instruments during instrument approaches, or visual ground aids for the visual portion of an instrument approach and landing.

GPS - Global Positioning System – A satellite based radio positioning, navigation, and time-transfer system.

GPU - Ground Power Unit – A source of power, generally from the terminals, for aircraft to use while their engines are off to power the electrical and ventilation systems on the aircraft.

Ground Effect – The excess attenuation attributed to absorption or reflection of noise by manmade or natural features on the ground surface.

Ground Track – is the path an aircraft would follow on the ground if its airborne flight path were plotted on the ground the terrain.

H

High Speed Exit Taxiway – A taxiway designed and provided with lighting or marking to define the path of aircraft traveling at high speed from the runway center to a point on the center of the taxiway.

I

IDP - Instrument Departure Procedure - An aeronautical chart designed to expedite clearance delivery and to facilitate transition between takeoff and en route operations. IDPs were formerly known as SIDs or Standard Instrument Departure Procedures.

IFR - Instrument Flight Rules -Rules and regulations established by the FAA to govern flight under conditions in which flight by visual reference is not safe.

ILS - Instrument Landing System – A precision instrument approach system which normally consists of a localizer, glide slope, outer marker, middle marker, and approach lights.

IMC – Instrument Meteorological Conditions - Weather conditions expressed in terms of visibility, distance from clouds, and cloud ceilings during which all aircraft are required to operate using instrument flight rules.

Instrument Approach – A series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing, or to a point from which a landing may be made visually.

J

K

Knots – A measure of speed used in aerial navigation. One knot is equal to one nautical mile per hour (100 knots = 115 miles per hour).

L

Load Factor – The percentage of seats occupied in an aircraft.

Lmax – The peak noise level reached by a single aircraft event.

Localizer – A navigational aid that consists of a directional pattern of radio waves modulated by two signals which, when receding with equal intensity, are displayed by compatible airborne equipment as an “on-course” indication, and when received in unequal intensity are displayed as an “off-course” indication.

LDA – Localizer Type Directional Aid – A facility of comparable utility and accuracy to a localizer, but not part of a complete ILS and not aligned with the runway.

M

Middle Marker - A beacon that defines a point along the glide slope of an ILS, normally located at or near the point of decision height.

Missed Approach Procedure – A procedure used to redirect a landing aircraft back around to attempt another landing. This may be due to visual contact not established at authorized minimums or instructions from air traffic control, or for other reasons.

N

NAS – National Airspace System - The common network of U.S. airspace; air navigation facilities, equipment and services, airports or landing areas; aeronautical charts, information and services; rules, regulations and procedures, technical information, manpower and material.

Nautical Mile – A measure of distance used in air and sea navigation. One nautical mile is equal to the length of one minute of latitude along the earth's equator. The nautical mile was officially set as 6076.115 feet. (100 nautical miles = 115 statute miles)

Navaid – Navigational Aid.

NCT – Northern California TRACON – The air traffic control facility that guides aircraft into and out of San Francisco Bay Area airspace.

NDB – Non-Directional Beacon - Signal that can be read by pilots of aircraft with direction finding equipment. Used to determine bearing and can "home" in or track to or from the desired point.

NEM – Noise Exposure Map – A FAR Part 150 requirement prepared by airports to depict noise contours. NEMs also take into account potential land use changes around airports.

NextGen – The Next Generation of the national air transportation system. NextGen represents the movement from ground-based navigation aids to satellite-based navigation.

NMS – See RMS

Noise Contour – See CNEL and DNL Contour.

Non-Precision Approach Procedure – A standard instrument approach procedure in which no electronic glide slope is provided.

O

Offset ILS – Offset Parallel Runways – Staggered runways having centerlines that are parallel.

Operation – A take-off, departure or overflight of an aircraft. Every flight requires at least two operations, a take-off and landing.

Outer Marker – An ILS navigation facility in the terminal area navigation system located four to seven miles from the runways edge on the extended centerline indicating the beginning of final approach.

Overflight – Aircraft whose flights originate or terminate outside the metropolitan area that transit the airspace without landing.

P

PASSUR System – Passive Surveillance Receiver - A system capable of collecting and plotting radar tracks of individual aircraft in flight by passively receiving transponder signals.

PAPI – Precision Approach Path Indicator - An airport lighting facility in the terminal area used under VFR conditions. It is a single row of two to four lights, radiating high intensity red or white beams to indicate whether the pilot is above or below the required runway approach path.

PBN –Performance Based Navigation - Area navigation based on performance requirements for aircraft operating along an IFR route, on an instrument approach procedure or in a designated airspace.

Preferential Runways - The most desirable runways from a noise abatement perspective to be assigned whenever safety, weather, and operational efficiency permits.

Precision Approach Procedure – A standard instrument approach procedure in which an electronic glide slope is provided, such as an ILS. GPS precision approaches may be provided in the future.

PRM – Precision Runway Monitoring – A system of high-resolution monitors for air traffic controllers to use in landing aircraft on parallel runways separated by less than 4,300'.

Q

R

Radar Vectoring – Navigational guidance where air traffic controller issues a compass heading to a pilot.

Reliever Airport – An airport for general aviation and other aircraft that would otherwise use a larger and busier air carrier airport.

RMS – Remote Monitoring Site - A microphone placed in a community and recorded at San Francisco International Airport's Noise Monitoring Center. A network of 29 RMS's generate data used in preparation of the airport's Noise Exposure Map.

RNAV – Area Navigation - A method of IFR navigation that allows an aircraft to choose any course within a network of navigation beacons, rather than navigating directly to and from the beacons. This can conserve flight distance, reduce congestion, and allow flights into airports without beacons.

RNP – Required Navigation Performance - A type of performance-based navigation (PBN) that allows an aircraft to fly a specific path between two 3- dimensionally defined points in space. RNAV and RNP systems are fundamentally similar. The key difference between them is the requirement for on- board performance monitoring and alerting. A navigation specification that includes a requirement for on-board navigation performance monitoring and alerting is referred to as an RNP specification. One not having such a requirement is referred to as an RNAV specification.

Run-up – A procedure used to test aircraft engines after maintenance to ensure safe operation prior to returning the aircraft to service. The power settings tested range from idle to full power and may vary in duration.

Run-up Locations - Specified areas on the airfield where scheduled run-ups may occur. These locations are sited, so as to produce minimum noise impact in surrounding neighborhoods.

Runway – A long strip of land or water used by aircraft to land on or to take off from.

S

Sequencing Process – Procedure in which air traffic is merged into a single flow, and/or in which adequate separation is maintained between aircraft.

Shoreline Departure – Departure via Runways 28 that utilizes a right turn toward San Francisco Bay as soon as feasible. The Shoreline Departure is considered a noise abatement departure procedure.

SENEL – Single Event Noise Exposure Level - The noise exposure level of a single aircraft event measured over the time between the initial and final points when the noise level exceeds a predetermined threshold. It is important to distinguish single event noise levels from cumulative noise levels such as CNEL. Single event noise level numbers are generally higher than CNEL numbers, because CNEL represents an average noise level over a period of time, usually a year.

Single Event – Noise generated by a single aircraft over-flight.

SOIA – Simultaneous Offset Instrument Approach
Is an approach system permitting simultaneous Instrument Landing System approaches to airports having staggered but parallel runways. SOIA combines Offset ILS and regular ILS definitions.

STAR – Standard Terminal Arrival Route is a published IFR arrival procedure describing specific criteria for descent, routing, and communications for a specific runway at an airport.

T

Taxiway – A paved strip that connects runways and terminals providing the ability to move aircraft so they will not interfere with takeoffs or landings.

Terminal Airspace - The air space that is controlled by a TRACON.

Terminal Area – A general term used to describe airspace in which approach control service or airport traffic control service is provided.

Threshold – Specified boundary.

TRACON -Terminal Radar Approach Control – is an FAA air traffic control service to aircraft arriving and departing or transiting airspace controlled by the facility. TRACONS control IFR and participating VFR flights. TRACONS control the airspace from Center down to the ATCT.

U

V

Vector – A heading issued to a pilot to provide navigational guidance by radar. Vectors are assigned verbally by FAA air traffic controllers.

VFR – Visual Flight Rules are rules governing procedures for conducting flight under visual meteorological conditions, or weather conditions with a ceiling of 1,000 feet above ground level and visibility of three miles or greater. It is the pilot's responsibility to maintain visual separation, not the air traffic controller's, under VFR.

Visual Approach – Wherein an aircraft on an IFR flight plan, operating in VFR conditions under the control of an air traffic facility and having an air traffic control authorization, may proceed to destination airport under VFR.

VASI – Visual Approach Slope Indicator - An airport lighting facility in the terminal area navigation system used primarily under VFR conditions. It provides vertical visual guidance to aircraft during approach and landing, by radiating a pattern of high intensity red and white focused light beams, which indicate to the pilot that he/she is above, on, or below the glide path.

VMC – Visual Meteorological Conditions - weather conditions equal to or greater than those specified for aircraft operations under Visual Flight Rules (VFR).

VOR - Very High Frequency Omni-directional Range – A ground based electronic navigation aid transmitting navigation signals for 360 degrees oriented from magnetic north. VOR is the historic basis for navigation in the national airspace system.

W

X

Y

Z

how to reach us

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