

# MEETING PACKET

Meeting No. 298

**Wednesday, December 2, 2015 - 7:00 p.m.**

David Chetcuti Community Room – Millbrae City Hall  
450 Poplar 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. Castañeda, 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 a Resolutions of Recognition for Julian Chang & Rich Newman**

*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 Report for August 2015**

*ACTION*

pg. 11

**5. Review and approval of Roundtable Regular Meeting Overview for June 3, 2015 and October 7, 2015**

*ACTION*

pg. 19

## REGULAR AGENDA

**6. Review of SFO FlyQuiet Report for Q3 2015**

*INFORMATION*

Bert Ganoung, Manager - Aircraft Noise Abatement Office

pg. 29



**7. Airport Director's Comments**

*INFORMATION*

John Martin, Director – San Francisco International Airport

**8. FAA Initiative to Address Noise Concerns**

*ACTION*

Cliff Lentz, Roundtable Chairperson

pg. 43

**9. Eshoo's Quiet Communities Act and FAA Community Accountability Act proposal**

*INFORMATION*

Cindy Gibbs, Roundtable Aviation Technical Consultant

pg. 55

**REGULAR AGENDA – WORK PROGRAM ITEMS**

**10. Strategic Plan for 2016-2018 & Work Program for FY 2015-2016**

*ACTION*

Cindy Gibbs, Roundtable Aviation Technical Consultant

pg. 61

**11. Budget for FY 2015-2016**

*ACTION*

James Castañeda, Roundtable Coordinator

pg. 83

**12. Status, Departures Technical Working Group (includes PORTE Departure)**

*INFORMATION*

Cindy Gibbs, Roundtable Aviation Technical Consultant

**13. Status, Arrivals Technical Working Group (includes Woodside overflights)**

*INFORMATION*

Cindy Gibbs, Roundtable Aviation Technical Consultant

**OTHER MATTERS**

**14. Airport Noise Briefing**

*INFORMATION*

Cindy Gibbs, Roundtable Aviation Technical Consultant

**15. Member Communications / Announcements**

*INFORMATION*

Roundtable Members and Staff

**16. Adjourn**

*ACTION*

---

Correspondences

pg. 93

Airport Noise Industry News

pg. 109

Glossary of Common Acoustic & Air Traffic Control Terms

pg. 125

**Next Roundtable Regular Meeting Date: Wednesday, February 3, 2016**

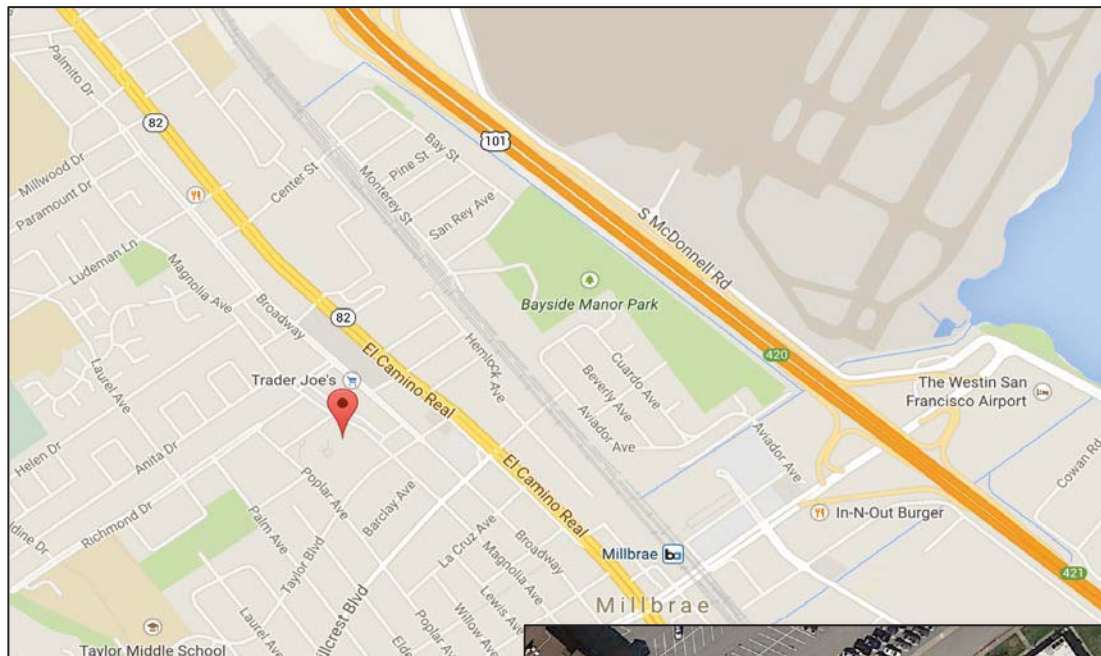
---

**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](http://www.sforoundtable.org).

## 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)).





## 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](mailto:cliff Lentz@ci.brisbane.ca.us)

**Vice-Chairperson:**

**ELIZABETH LEWIS**

Representative, Town of Atherton  
[el Lewis@ci.atherton.ca.us](mailto:el Lewis@ci.atherton.ca.us)

**Roundtable Coordinator:**

**JAMES A. CASTAÑEDA, AICP**

County of San Mateo  
Planning & Building Department  
[jcastaneda@sforoundtable.org](mailto:jcastaneda@sforoundtable.org)





## MEMBERSHIP ROSTER DECEMBER 2015 REGULAR MEMBERS

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

**Representative:** Vacant

**Alternate:** Vacant

### **CITY AND COUNTY OF SAN FRANCISCO MAYOR'S OFFICE**

**Vacant**, (Appointed)

**Alternate:** Edwin Lee, Mayor

### **CITY AND COUNTY OF SAN FRANCISCO AIRPORT COMMISSION REPRESENTATIVE**

**John L. Martin**, Airport Director (Appointed)

**Alternate:** Doug Yakel, Public Information Officer

### **COUNTY OF SAN MATEO BOARD OF SUPERVISORS**

**Dave Pine**, Supervisor

**Alternate:** Don Horsley, Supervisor

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

#### **AIRPORT LAND USE COMMITTEE (ALUC)**

**Vacant**, ALUC Chairperson (Appointed)

**Alternate:** Carol Ford, Aviation Representative (Appointed)

### **TOWN OF ATHERTON**

**Elizabeth Lewis**, Council Member/**Roundtable Vice-Chairperson**

**Alternate:** Bill Widmer, Council Member

### **CITY OF BELMONT**

**Cathy Wright**, Council Member

**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 OCTOBER 2015**

Page 2 of 3

### **CITY OF DALY CITY**

**Raymond Buenaventura**, Mayor

Alternate: Vacant

### **CITY OF FOSTER CITY**

**Steve Okamoto**, Council Member

Alternate: Vacant

### **CITY OF HALF MOON BAY**

**Deborah Ruddock**, Council Member

Alternate: Marina Fraser, Council Member

### **TOWN OF HILLSBOROUGH**

**Alvin Royse**, Council Member

Alternate: Shawn Christianson, Council Member

### **CITY OF MENLO PARK**

**Peter Ohtaki**, Council Member

Alternate: Vacant

### **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

### **CITY OF SAN MATEO**

**David Lim**, Council Member

Alternate: Vacant

## **MEMBERSHIP ROSTER OCTOBER 2015**

Page 3 of 3

### **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 James Abell, United Airlines

Glenn Morse, United Airlines

### **FEDERAL AVIATION ADMINISTRATION**

Andy Richards, SFO Air Traffic Control Tower

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

Tony DiBernardo, FAA District Manager – Sierra-Pacific District

---

## **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

John Hampel, Noise Abatement Specialist

Joyce Satow, Noise Abatement Office Administration Secretary



# **CONSENT AGENDA**

Regular Meeting # 298  
December 2, 2015

(This page is left intentionally blank)

# Airport Director's Report

**Presented at the December 2, 2015  
Airport Community Roundtable Meeting  
SFO Aircraft Noise Abatement Office  
August 2015**




















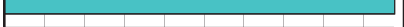
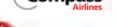
















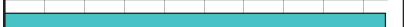
































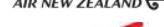










# Monthly Noise Exceedance Report

San Francisco International Airport -- Director's Report

Period: August 2015

SFO

Airline	Noise Exceedances				Noise Exceedance Quality Rating
	Total Noise Exceedances	Total Operations per Month	Exceedances per 1,000 Operations	Score	
 SKW	19	6,598	3	9.97	
 SCX	2	164	12	9.86	
 DAL	35	2,287	15	9.83	
 THY	1	63	16	9.82	
 ANA	1	62	16	9.82	
 CES	1	62	16	9.82	
 CSN	1	62	16	9.82	
 ASA	19	1,140	17	9.81	
 FFT	7	371	19	9.78	
 SWA	51	2,614	20	9.78	
 CPZ	24	1,110	22	9.75	
 VRD	76	3,404	22	9.74	
 BAW	3	125	24	9.73	
 AFR	3	121	25	9.72	
 SWR	3	102	29	9.66	
 ETD	2	62	32	9.63	
 AAL	93	2,863	32	9.63	
 UAL	364	10,875	33	9.62	
 ACA	26	734	35	9.60	
 AMX	7	176	40	9.55	
 WJA	6	126	48	9.46	
 JBU	52	913	57	9.35	
 VIR	7	106	66	9.25	
 TAI	13	124	105	8.80	
 NCA	8	52	154	8.24	
 FDX	16	84	190	7.82	
 SIA	28	123	228	7.40	
 GTI	21	82	256	7.07	
 HAL	42	124	339	6.13	
 EVA	49	138	355	5.94	
 CAL	41	106	387	5.58	
 JAL	25	61	410	5.32	
 CPA	68	150	453	4.82	
 ABX	1	2	500	4.29	
 PAL	39	70	557	3.63	
 KAL	68	122	557	3.63	
 ANZ	30	53	566	3.53	
 AAR	89	107	832	0.49	
 CKS	7	8	875	0.00	
<b>TOTAL</b>	<b>1,348</b>	<b>35,546</b>	<b>7,380</b>		

Source: SFO Noise Abatement Office

**Historical Significant Exceedances Report**  
San Francisco International Airport -- Director's Report  
Period: **August 2015**



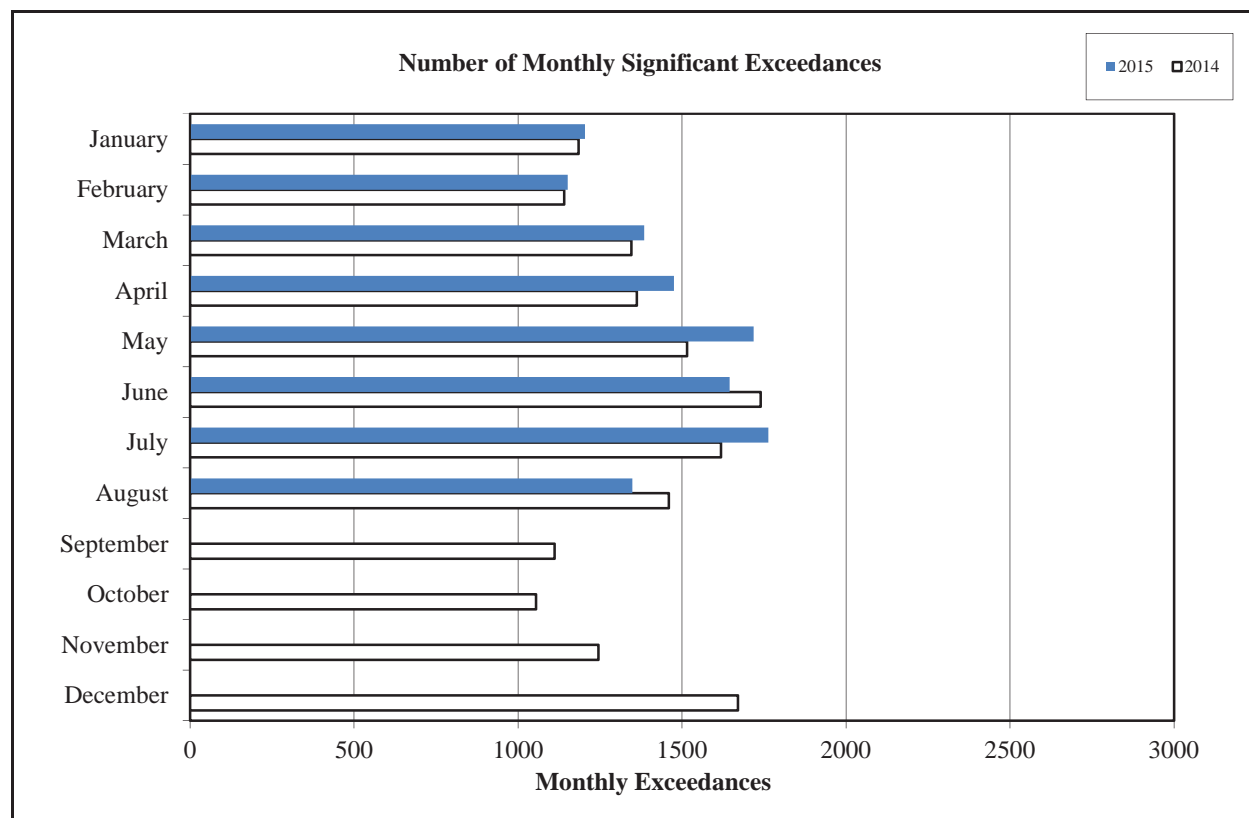
San Francisco International Airport

Month	Number of Monthly Significant Exceedances					Change from Last Year
	2011	2012	2013	2014	2015	
<b>January</b>	1,580	1,378	1,428	1,184	1,204	<b>20</b>
<b>February</b>	1,429	1,581	1,176	1,141	1,151	<b>10</b>
<b>March</b>	1,681	1,703	1,671	1,345	1,384	<b>39</b>
<b>April</b>	1,900	1,870	1,910*	1,362	1,475	<b>113</b>
<b>May</b>	2,024	1,912	1,859*	1,515	1,718	<b>203</b>
<b>June</b>	1,947	2,355	1,915	1,740	1,645	<b>-95</b>
<b>July</b>	2,017	2,621	1,647	1,619	1,763***	<b>144</b>
<b>August</b>	1,847	1,823	1,638**	1,460	1,348	<b>-112</b>
<b>September</b>	1,609	1,464	1,352	1,111		<b>0</b>
<b>October</b>	1,572	1,689	1,277	1,055		<b>0</b>
<b>November</b>	1,575	1,421	1,262	1,245		<b>0</b>
<b>December</b>	1,447	1,439	1,160	1,670		<b>0</b>
<b>Annual Total</b>	20,628	21,256	18,295	16,447	11,688	
<b>Year to Date Trend</b>	<b>20,628</b>	<b>21,256</b>	<b>18,295</b>	<b>16,447</b>	<b>11,688</b>	<b>322</b>

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

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

\*\*\*No data available from Site 2 starting July 17





## Monthly Noise Complaint Summary

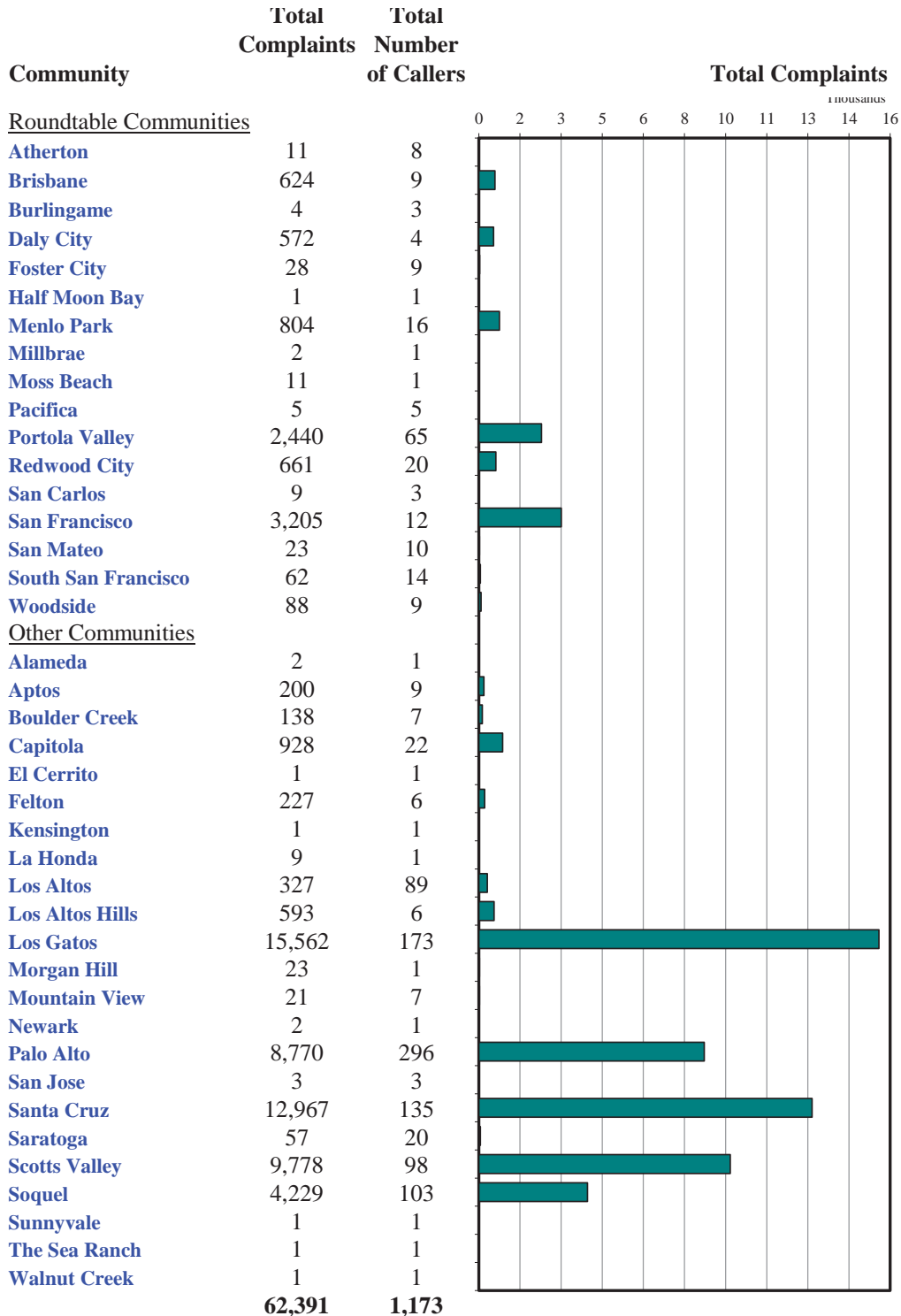
San Francisco International Airport -- Director's Report  
Period: **August 2015**



San Francisco International Airport

### Monthly Calls by Community

Source: Airport Noise Monitoring System



# Monthly Noise Complaint Summary Map August 2015



● Caller Location and Amount of Complaints

Page 4


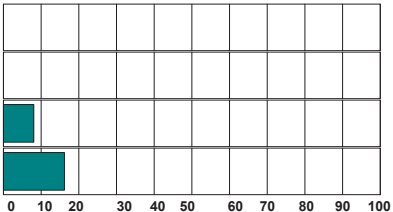



# Monthly Nighttime Power Runups Report (85-06-AOB)

San Francisco International Airport -- Director's Report

Period : **August 2015**

Time of Day : From 10 pm through 7 am



Airline Code		Number of Runups	Runups Per 1,000 Departures	Percentage of Runups	
	DAL	1	0.9	4%	
	TAI	1	16.1	4%	
	UAL	9	1.7	32%	
	AAL	17	11.9	61%	
<b>Total</b>		<b>28</b>			

*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.*



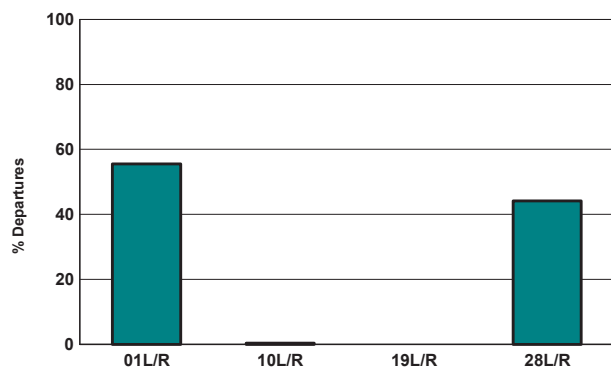
San Francisco International Airport

### Runway Utilization (1 am to 6 am)

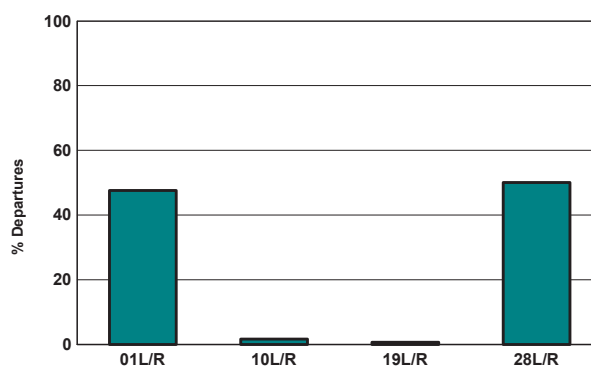
#### Monthly Jet Departures

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
01L/R	99	72	114	178	206	259	303	302	-	-	-	-	1,533
10L/R	5	22	6	17	1	-	-	2	-	-	-	-	53
19L/R	-	22	-	-	-	-	-	-	-	-	-	-	22
28L/R	81	82	181	226	262	269	270	240	-	-	-	-	1,611
<b>Total</b>	<b>185</b>	<b>198</b>	<b>301</b>	<b>421</b>	<b>469</b>	<b>528</b>	<b>573</b>	<b>544</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3,219</b>
01L/R	54%	36%	38%	42%	44%	49%	53%	56%	0%	0%	0%	0%	48%
10L/R	3%	11%	2%	4%	0%	0%	0%	0%	0%	0%	0%	0%	2%
19L/R	0%	11%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
28L/R	44%	41%	60%	54%	56%	51%	47%	44%	0%	0%	0%	0%	50%

#### 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: August 2015

Time of Day : All Hours



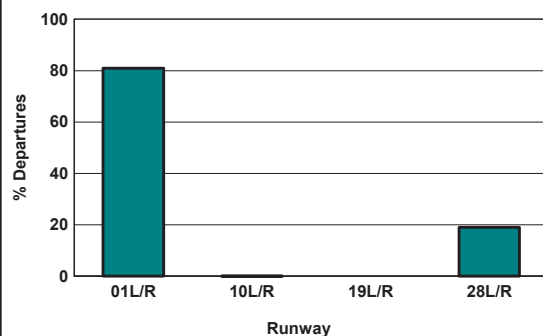
San Francisco International Airport

## Runway Utilization (All Hours)

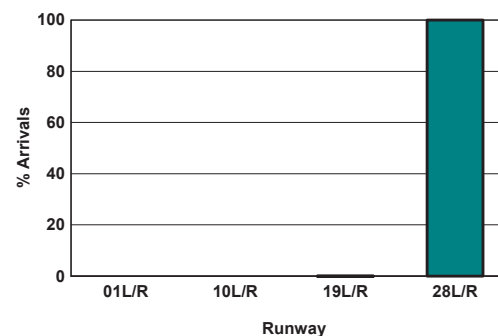
Source: Airport Noise Monitoring System

	Runway Utilization				Total
	01L/R	10L/R	19L/R	28L/R	
Total Monthly Operations					
Departures	14,674	2	0	3,464	18,140
Arrivals	0	0	1	18,207	18,208
Percentage Utilization					
Departures	80.9%	0.0%	0.0%	19.1%	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



## **SFO Airport/Community Roundtable**

Meeting No. 296 Overview

Wednesday, June 3, 2015

### **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 7:10 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**

John Martin – City and County of San Francisco Airport Commission  
Richard Newman – C/CAG Airport Land Use Committee (ALUC)  
Cliff Lentz – City of Brisbane  
Ricardo Ortiz – City of Burlingame  
Raymond Buenaventura – City of Daly City  
Steve Okamoto – City of Foster City  
Deborah Ruddock – City of Half Moon Bay  
Sue Digre – City of Pacifica  
Ann Wengert – Town of Portola Valley  
Rosanne Foust – City of Redwood City  
Mark Addiego – City of South San Francisco  
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 (Vacant)  
County of San Mateo Board of Supervisors  
Town of Atherton  
City of Belmont  
Town of Hillsborough  
City of Menlo Park  
City of Millbrae  
City of San Bruno  
City of San Carlos  
City of San Mateo

#### **ADVISORY MEMBERS PRESENT**

Don Kirby – Northern California TRACON  
Glenn Morse – 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  
John Hampel, Noise Abatement Specialist

## **2. Public Comments on Items Not on the Agenda**

A total of 18 members of the public spoke to express concern over aircraft noise over their communities. The communities represented were Santa Cruz, Scotts Valley, Socal, Los Gatos, Happy Valley, Pacifica, and South San Francisco. Concerns raised by those who spoke focused on increased non-stop aircraft noise over areas that didn't previously experience noise, impact to quality of life, diminishing property value, funding for noise insulation, and lack of representation of other communities on the Roundtable. Some individuals offered technical suggestions for the FAA to consider in modification of the recent procedures, such as moving aircraft off a track and disperse traffic or return to the "Big Sur" procedure.

## **3. Adoption of a Resolution in Recognition of Julian Chang**

This item was continued till the next Roundtable regular meeting.

### CONSENT AGENDA

#### **4. Review of Airport Director's Reports for March and April 2015**

#### **5. Review of Roundtable Regular Meeting Overview for February 4, 2015 and April 1, 2015**

DISCUSSION: None.

ACTION: Rich Newman **MOVED** the approval of the Consent Agenda. The motion was seconded by Rosanne Foust and **CARRIED**, unanimously.

### REGULAR AGENDA

#### **6. Review of SFO FlyQuiet Report Q2 2015**

Bert Ganoung Noise Abatement Manager, provided an overview of the second quarter Fly Quiet report for 2015.

DISCUSSION: None

## **7. Airport Director's Comments**

Airport Director John Martin, provided a brief update on the airport's current operations. Mr. Martin reiterated the airport's acknowledgement and commitment to working with communities to address noise impacts as a result of the new flight procedures over their respective areas. He indicated that noise monitors are being deployed for the first time in Santa Cruz County, and the airport passenger traffic at SFO continues to grow at approximately 4-5%.

## REGULAR AGENDA – WORK PROGRAM ITEMS

### **8. Report, Departure and Arrivals Technical Working Group**

Roundtable Technical Consultant Cindy Gibbs provided an overview of the Departure and Arrivals Technical Working Group meetings held in late April as outlined in the summary included in the meeting packet.

DISCUSSION: Town of Woodside representative David Burrow indicated that there was a lot of time spent educating at the meeting, and perhaps there's a way to do a separate session to have more time to discuss technical details at these meetings. Ms. Gibbs suggested directing those new to the groups to the "Noise 101" materials posted on the website as one way to help towards that effort. Town of Portola Valley representative Ann Wengert supported coming up with new ways to educate participants, and expressed the Roundtable should be thinking about how to approach such.

### **9. Update, FAA's PORTE Departure Analysis**

Noise Abatement Manager Bert Ganoung provided a brief update as to recent aircraft performance utilizing the PORTE departure. No new significant was reported. At future meetings, this item will be updated by reports from the Arrivals Technical Working Group.

### **10. Update, Oceanic Arrivals over the Woodside VOR**

Noise Abatement Manager Bert Ganoung provided a brief update on oceanic arrival flights over the Woodside VOR. He indicated that its improving. At future meetings, this item will be updated by reports from the Departure Technical Working Group.

### **11. Update, Metroplex**

Noise Abatement Manager Bert Ganoung indicated a new procedure overlay that has gone into effect- YOSEM. Staff will monitor the procedures as it utilized.

DISCUSSION: Roundtable Chairperson Cliff Lentz asked if the procedure is in a review phase. Roundtable Technical Consultant Cindy Gibbs indicated staff will investigate if it is. Town of Woodside representative David Burrow asked for clarification as to what factors were considered in the developing the overlay. Ms. Gibbs indicated that the procedure was most likely reviewed for efficiency.

Ms. Gibbs pointed out two draft letters to the FAA regarding some of the positive impacts of the NIGHT departure procedure, and the work that needs to be address regarding the SURFR arrival procedure.

ACTION: Rich Newman **MOVED** acceptance of the two letters to send to the FAA. The motion was seconded by Sue Digre and **CARRIED**, unanimously.

## OTHER MATTERS

### **12. Upcoming Work Program Subcommittee tasks**

Roundtable Coordinator James Castañeda indicated that the Roundtable's Work Program Subcommittee will need to convene over the summer to work on the Roundtable's three year Strategic Plan, annual Work Plan, and annual budget. Roundtable members will be notified in the coming weeks.

### **13. Airport Noise Briefing**

Roundtable Aviation Technical Consultant Cindy Gibbs provided a brief industry update, including the litigation in progress with the Phoenix Metroplex Environmental Assessment and upcoming ACRP participation opportunities.

DISCUSSION: Town of Woodside David Burrow asked for an update regarding ABAG/RAPC discussing regional noise impacts (specifically regarding Palo Alto). Noise Abatement Manager Bert Ganoung their next meeting is scheduled for August, and will hopefully have an update.

### **14. Member Communications / Announcements**

C/CAG Airport Land Use Commission representative Rich Newman indicated this would be his last meeting. He expressed appreciation for serving with the group, and wished the Roundtable good luck on its continuing mission. Chairperson Lentz commended Mr. Newman for his years of service to the Roundtable.

### **15. Adjourn**

The meeting was adjourned at approximately 9:09 p.m.

---

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

An audio recording of this meeting is available at the Roundtable's website.

## **SFO Airport/Community Roundtable**

Meeting No. 297 Overview

Wednesday, October 7, 2015

### **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 7:05 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 NOT present as follows:

#### **REGULAR MEMBERS PRESENT**

John Martin – City and County of San Francisco Airport Commission  
Cliff Lentz – City of Brisbane  
Ricardo Ortiz - City of Burlingame  
Peter Ohtaki – City of Menlo Park  
Robert Gottschalk – City of Millbrae  
Sue Digre – City of Pacifica  
Ann Wengert – Town of Portola Valley  
Rosanne Foust – City of Redwood City  
Ken Ibarra – City of San Bruno  
Bob Grassilli – City of San Carlos  
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  
County of San Mateo Board of Supervisors  
C/CAG Airport Land Use Committee (ALUC)  
Town of Atherton  
City of Belmont  
City of Daly City  
City of Foster City  
City of Half Moon Bay  
Town of Hillsborough  
City of San Mateo  
City of South San Francisco

#### **ADVISORY MEMBERS PRESENT**

#### **ROUNDTABLE STAFF**

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

#### **SAN FRANCISCO INTERNATIONAL AIRPORT STAFF**

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



## **2. Public Comments on Items Not on the Agenda**

A total of 17 members of the public spoke to express concern over aircraft noise over their communities. The communities represented were Santa Cruz, Socal, Palo Alto, Menlo Park, Pacifica, Brisbane and Los Altos. Concerns raised by those who spoke focused on increased noise from additional aircraft traffic, aircraft overflight noise that didn't previously exist in communities, and impacts to health and the environment.

### CONSENT AGENDA

## **3. Review of Airport Director's Reports for May, June, and July 2015**

DISCUSSION: None.

ACTION: Due to a lack of quorum, action could not be taken on this item. Item is continued to the next regular meeting.

### REGULAR AGENDA

## **4. Review of SFO FlyQuiet Report for Q2 2015**

Bert Ganoung, Noise Abatement Manager, provided an overview of the second quarter Fly Quiet report for 2015.

## **5. Airport Director's Comments**

Airport Director John Martin, provided a brief update on the airport's current operations. Mr. Martin acknowledged the record number of complaints received and indicated that the airport is using more resources as a result, which is to address concerns of all communities and not just those in the SFO environs. It was reported that the airport is also seeing record number passengers but with less aircraft. Still, the Metroplex procedures has presented challenges to the airport regarding noise and is committed to do what's possible to address concerns to the extent the airport is able.

DISCUSSION: Socal resident Eric Rupp noted 12,000 complaints were made through May 2015, and 3,000 complaints a day in last month. He reported that Save Our Skies and Sky Posse will be having a technical meeting with the FAA on Friday, and that October 24, 2015 is "No Fly Day" to picket at SFO and other airports nationwide. Mr. Rupp expressed that those impacted by noise should look forward to working with the Roundtable to work towards addressing the concerns.

Airport Noise Abatement manager Bert Ganoung provided some additional information on the number of noise complaints received, and indicated that the noise complaints are up 1,000% and the Noise Abatement Office is in new, unprecedented territory. The Noise Abatement Office is trying to adapt with the volume by automating complaint logging, accepting bulk spreadsheet data, and continuing to find other methods to adapt. Mr. Ganoung provided some historical data

of the last 15 years, and detailed data on the last year. In response to comments from the public, Mr. Ganoung explained that current measurements taken by recently deployed noise monitors have no historical data to be compared to other than the FAA modeling. Airport Director John Martin stressed that regardless of what the measurement, the airport is still taking the issue seriously as the airport does not want 100,000 complaints immaterial of decibel measurements.

Socal resident Eric Rupp asked what the Roundtable can do to add additional pressure to the FAA to act. Redwood City representative Rosanne Foust added that the pressure should also come from elected representatives, and questioned what came out of the recent meetings with elected representatives and the FAA. Roundtable Technical Noise Consultant Cindy Gibbs indicated that they were high level discussions with regional FAA representatives. Town of Woodside representatives David Burrow indicated there needs to be political pressure, and recommended for member of the public to reach out to them to help add pressure to the FAA.

#### REGULAR AGENDA – WORK PROGRAM ITEMS

#### **6. Strategic Plan for 2016-2018 & Work Program for FY 2015-2016**

#### **7. Budget for FY 2015-2016**

DISCUSSION: None.

ACTION: Due to a lack of quorum, action could not be taken on these item. Item is continued to the next regular meeting.

#### **8. Report, Departures Technical Working Group**

#### **9. Report, Arrivals Technical Working Group**

Roundtable Technical Noise Consultant Cindy Gibbs provided an overview of the two Technical Working Group meetings that occurred on August 19, 2015, as well as the outcomes outlined in the attached meeting summaries. Noise Abatement Manager Bert Ganoung provided an overview of the night time RWY10 procedures that was discussed in detail at the Departures Technical Working Group's meeting and the goal of encouraging increase use of that procedure. Ms. Gibbs and Mr. Ganoung also provided details of the vortex generators equipment installation that was discussed during the Arrivals Technical Working Group's meeting.

DISCUSSION: Menlo Park representative Peter Ohtaki inquired about different ways to capture data of overflights within the MENLO intersection. Mr. Ganoung and Ms. Gibbs provided some context as to the types of data captured and displayed (such as "gates"), but also some of the variable to consider with the data.

Palo Alto resident Rachel Killerman suggested that SFO partner with other Bay Area airports to take out full-page ads to encourage airlines with Airbus fleets to retrofit them, similar to what's

being done with European carriers. Palo Alto resident Amy Cristal echoed Ms. Killerman's suggestion, and felt it should be the airline's own initiative to retrofit aircraft and the airport should use whatever leverage to get airlines to retrofit. She further suggested encouraging boycotting airlines with Airbus aircraft who will not retrofit their fleet. Palo Alto resident Jennifer Landesmann requested that future investigations of traffic over the MENLO intersection consider different dates.

## **10. Update, Metroplex**

Roundtable Aviation Technical Consultant Cindy Gibbs indicated this was discussed as part of items 8 and 9.

DISCUSSION: None

## OTHER MATTERS

## **11. Airport Noise Briefing**

Roundtable Aviation Technical Consultant Cindy Gibbs provided a brief update that included the latest effort to do a periodic Roundtable eNews blast, efforts with Arizona congressional representatives to halt NEPA CatEx until litigation with the Phoenix Metroplex is settled, indicated Palo Alto conducted a pre-bid for their RFP for a noise study, and discussed an effort in the Los Angeles area for a regional noise complaint database/reporting. An update regarding the Quiet Skies Caucus was also provided, and indicated staff will be monitoring their efforts.

## **12. Member Communications / Announcements**

DISCUSSION: None

## **14. Adjourn**

The meeting ended at approximately 9:15 p.m.

---

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

An audio recording of this meeting is available at the Roundtable's website.

# **REGULAR AGENDA**

Regular Meeting # 298  
December 2, 2015

(This page is left intentionally blank)



# Fly Quiet Report

**Presented at the December 2, 2015  
Airport Community Roundtable Meeting**  
SFO Aircraft Noise Abatement Office  
**Third Quarter 2015**



# 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

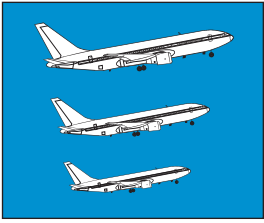
Fly Quiet reports communicate results in a clear, understandable format on a scale of 0-10, zero being poor and ten being good. This allows for an easy comparison between airlines over time. Individual airline scores are computed and reports are generated each quarter. These quantitative scores allow 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

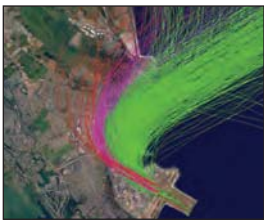
Eliminating high-level noise events is a long-standing goal of the Airport and the Airport Community Roundtable. As a result the Airport has established single event maximum noise level limits at each noise-monitoring site. These thresholds were set to identify aircraft producing noise levels higher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

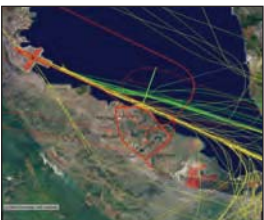
In order to evaluate each airline's performance when flying a Shoreline Departure, a corridor was established using Interstate 101 (green colored flight tracks) as a reference point. The corridor runs north along 101, beginning approximately one-mile north-northwest of the end of Runways 28L and 28R 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.





































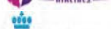



## Foster City Arrival Quality

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.

















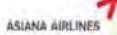



# Airline Fly Quiet Summary Report - 3rd Quarter 2015

July 1 to September 30, 2015

Airline		Fleet Noise Quality	Noise Exceedance	Nighttime Runway Use	Departures		Arrivals	Final Score	Airline Fly Quiet Rating				
					Shoreline	Gap	Foster City						
	CCA	10.00	10.00	-	-	7.76	-	9.25	<div><div></div></div>				
	CSN	9.50	9.97	-	-	6.92	-	8.80	<div><div></div></div>				
	DLH	9.09	10.00	-	10.00	6.00	-	8.77	<div><div></div></div>				
	SAS	8.17	10.00	-	-	6.35	-	8.17	<div><div></div></div>				
	NCA	9.75	8.88	-	-	5.60	-	8.08	<div><div></div></div>				
	CPZ	10.00	9.90	-	9.89	5.19	5.14	8.02	<div><div></div></div>				
	ANA	7.15	9.97	-	-	6.40	-	7.84	<div><div></div></div>				
	WJA	5.82	9.76	-	9.38	8.00	5.00	7.59	<div><div></div></div>				
	ACA	5.42	9.84	-	9.63	4.96	7.72	7.52	<div><div></div></div>				
	GTI	4.86	8.69	10.00	6.25	7.25	7.50	7.42	<div><div></div></div>				
	SKW	10.00	9.98	3.33	9.61	5.68	5.10	7.28	<div><div></div></div>				
	XLF	4.05	10.00	-	6.67	8.39	-	7.28	<div><div></div></div>				
	FFT	5.90	9.93	3.33	10.00	4.62	8.83	7.10	<div><div></div></div>				
	AFR	7.98	9.83	5.00	5.00	6.92	7.50	7.04	<div><div></div></div>				
	DAL	6.27	9.91	3.33	8.13	5.51	8.13	6.88	<div><div></div></div>				
	SWA	5.71	9.88	3.33	9.31	5.04	7.47	6.79	<div><div></div></div>				
	VRD	5.09	9.92	3.33	9.43	5.55	6.64	6.66	<div><div></div></div>				
	CMP	5.82	9.44	-	7.50	3.75	-	6.63	<div><div></div></div>				
	THY	7.15	9.97	-	-	2.47	-	6.53	<div><div></div></div>				
	AAL	5.35	9.84	3.44	8.35	4.48	7.71	6.53	<div><div></div></div>				
	FDX	3.22	9.16	-	7.95	5.75	6.23	6.46	<div><div></div></div>				
	ASA	5.29	9.91	3.33	9.50	5.38	5.12	6.42	<div><div></div></div>				
	ETD	7.15	9.54	-	-	3.96	5.00	6.41	<div><div></div></div>				
								6.39	<div><div>SFO AVERAGE</div></div>				
	ANZ	6.92	7.07	-	-	5.10	-	6.37	<div><div></div></div>				
	VIR	5.41	9.72	-	5.00	5.14	-	6.32	<div><div></div></div>				
	BAW	5.57	9.87	-	-	3.45	-	6.30	<div><div></div></div>				
	UAL	5.58	9.82	3.38	7.61	4.76	6.57	6.29	<div><div></div></div>				
	JBU	4.81	9.77	3.75	6.56	4.70	7.73	6.22	<div><div></div></div>				
	SCX	5.82	9.93	0.00	10.00	6.25	5.00	6.17	<div><div></div></div>				
	AWE	4.74	9.63	-	-	5.00	5.00	6.09	<div><div></div></div>				
	AMX	5.82	9.73	3.33	-	6.18	5.00	6.01	<div><div></div></div>				
	UAE	10.00	10.00	-	0.00	3.57	-	5.89	<div><div></div></div>				
	TAI	5.07	9.43	3.23	-	6.25	5.38	5.87	<div><div></div></div>				
	HAL	4.05	8.36	-	-	5.00	5.00	5.60	<div><div></div></div>				
	KLM	3.43	9.91	-	4.17	4.80	-	5.58	<div><div></div></div>				
	JAL	7.15	8.03	0.51	-	6.46	-	5.54	<div><div></div></div>				
	SWR	8.17	9.92	-	0.00	3.70	-	5.45	<div><div></div></div>				
	EIN	4.05	10.00	-	-	2.28	-	5.44	<div><div></div></div>				

# Airline Fly Quiet Summary Report - 3rd Quarter 2015































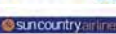




July 1 to September 30, 2015








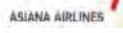

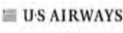












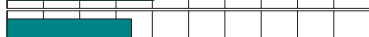
Airline		Fleet Noise Quality	Noise Exceedance	Nighttime Runway Use	Departures Shoreline Gap	Arrivals Foster City	Final Score	Airline Fly Quiet Rating												
	CPA	7.15	7.67	0.00	-	6.79	5.00	5.32												
	EVA	6.73	7.95	0.00	-	4.15	6.88	5.14												
	SIA	7.15	8.74	0.00	-	3.80	-	4.92												
	KAL	8.34	6.38	0.00	-	4.58	5.00	4.86												
	CES	4.05	9.91	0.00	-	5.31	-	4.82												
	CAL	5.54	7.66	0.11	-	5.56	5.00	4.77												
	PAL	7.35	7.12	0.00	-	3.57	-	4.51												
	AAR	4.79	4.90	0.20	-	6.32	5.09	4.26												
	CKS	2.87	0.00	0.00	7.50	3.82	5.00	3.20												
SFO Average		6.37	9.06	2.21	7.39	5.29	6.10	6.39												



# Fleet Noise Quality - 3rd Quarter 2015

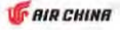







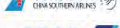




























July 1 to September 30, 2015

Airline		Nationwide	San Francisco		Fleet Noise Quality Rating
		Fleet Noise Quality Rating	Average Daily Jet Operations	Score	
 AIR CHINA	CCA	3.46	1	10.00	<div><div></div></div>
 Emirates	UAE	7.89	1	10.00	<div><div></div></div>
 SkyWest	SKW	10.00	105	10.00	<div><div></div></div>
 Compass Airlines	CPZ	10.00	18	10.00	<div><div></div></div>
 NCA	NCA	3.90	1	9.75	<div><div></div></div>
 中国南方航空 CHINA SOUTHERN AIRLINES	CSN	5.64	1	9.50	<div><div></div></div>
 Lufthansa	DLH	6.09	2	9.09	<div><div></div></div>
 KOREAN AIR	KAL	4.05	2	8.34	<div><div></div></div>
 Scandinavian Airlines	SAS	4.96	1	8.17	<div><div></div></div>
 SWISS	SWR	5.17	1	8.17	<div><div></div></div>
 AIRFRANCE	AFR	5.49	2	7.98	<div><div></div></div>
 Philippines	PAL	5.09	1	7.35	<div><div></div></div>
 ANA	ANA	5.43	1	7.15	<div><div></div></div>
 CATHAY PACIFIC	CPA	4.18	2	7.15	<div><div></div></div>
 ETIHAD	ETD	0.00	1	7.15	<div><div></div></div>
 JAPAN AIRLINES	JAL	4.20	1	7.15	<div><div></div></div>
 SINGAPORE AIRLINES	SIA	5.93	2	7.15	<div><div></div></div>
 TURKISH AIRLINES	THY	6.80	1	7.15	<div><div></div></div>
 AIR NEW ZEALAND	ANZ	4.00	1	6.92	<div><div></div></div>
 EVA AIR	EVA	5.05	2	6.73	<div><div></div></div>
				6.37	<div><div>SFO AVERAGE</div></div>
 DELTA	DAL	4.92	35	6.27	<div><div></div></div>
 FRONTIER AIRLINES	FFT	6.41	6	5.90	<div><div></div></div>
 AEROMEXICO	AMX	5.54	3	5.82	<div><div></div></div>
 Copa Airlines	CMP	6.46	0	5.82	<div><div></div></div>
 sun country airlines	SCX	5.82	3	5.82	<div><div></div></div>
 WESTJET	WJA	5.82	2	5.82	<div><div></div></div>
 Southwest	SWA	5.70	42	5.71	<div><div></div></div>
 UNITED	UAL	5.83	171	5.58	<div><div></div></div>
 BRITISH AIRWAYS	BAW	4.34	2	5.57	<div><div></div></div>
 CHINA AIRLINES	CAL	3.62	2	5.54	<div><div></div></div>
 AIR CANADA	ACA	6.75	12	5.42	<div><div></div></div>
 virgin atlantic	VIR	5.84	2	5.41	<div><div></div></div>
 American Airlines	AAL	3.94	46	5.35	<div><div></div></div>
 Alaska Airlines	ASA	5.10	18	5.29	<div><div></div></div>
 allegiant	VRD	5.31	51	5.09	<div><div></div></div>

Airline		Nationwide	San Francisco		Fleet Noise Quality Rating
		Fleet Noise Quality Rating	Average Daily Jet Operations	Score	
	TAI	5.18	2	5.07	
	GTI	0.93	1	4.86	
	JBU	6.13	15	4.81	
	AAR	3.93	2	4.79	
	AWE	5.67	0	4.74	
	XLF	4.05	0	4.05	
	CES	4.63	1	4.05	
	EIN	4.05	1	4.05	
	HAL	6.21	2	4.05	
	KLM	4.67	1	3.43	
	FDX	2.80	1	3.22	
	CKS	0.60	0	2.87	
AVERAGE		5.05	12	6.37	


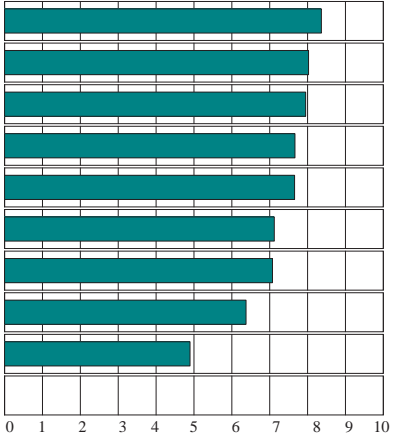









# Noise Exceedance Rating Report - 3rd Quarter 2015

July 1 to September 30, 2015

Airline	Noise Exceedances				Noise Exceedance Quality Rating
	Total Noise Exceedances	Total Quarterly Operations	Exceedances per 1000 Operations	Score	
 AIR CHINA CCA	0	186	0	10.00	<div></div>
 Lufthansa DLH	0	366	0	10.00	<div></div>
 Aer Lingus EIN	0	183	0	10.00	<div></div>
 Scandinavian Airlines SAS	0	182	0	10.00	<div></div>
 Emirates UAE	0	185	0	10.00	<div></div>
 XLF	0	52	0	10.00	<div></div>
 SkyWest SKW	62	19,315	3	9.98	<div></div>
 中国南方航空 CSN	1	186	5	9.97	<div></div>
 ANA ANA	1	184	5	9.97	<div></div>
 TURKISH AIRLINES THY	1	184	5	9.97	<div></div>
 sun country airlines SCX	6	465	13	9.93	<div></div>
 FRONTIER AIRLINES FFT	15	1,099	14	9.93	<div></div>
 SWISS SWR	4	271	15	9.92	<div></div>
 virgin america VRD	144	9,424	15	9.92	<div></div>
 中国东方航空 CHINA EASTERN CES	3	183	16	9.91	<div></div>
 KLM Royal Dutch Airlines KLM	3	183	16	9.91	<div></div>
 Allegiant Air ASA	54	3,243	17	9.91	<div></div>
 DELTA DAL	112	6,471	17	9.91	<div></div>
 Compass Airlines CPZ	64	3,323	19	9.90	<div></div>
 Southwest SWA	185	7,780	24	9.88	<div></div>
 BRITISH AIRWAYS BAW	9	369	24	9.87	<div></div>
 AIR CANADA ACA	64	2,130	30	9.84	<div></div>
 American Airlines AAL	258	8,448	31	9.84	<div></div>
 AIRFRANCE AFR	11	343	32	9.83	<div></div>
 UNITED UAL	1,092	31,599	35	9.82	<div></div>
 jetBlue JBU	118	2,718	43	9.77	<div></div>
 WESTJET WJA	17	372	46	9.76	<div></div>
 AEROMEXICO AMX	26	508	51	9.73	<div></div>
 virgin atlantic VIR	17	316	54	9.72	<div></div>
 US AIRWAYS AWE	1	14	71	9.63	<div></div>
 ETIHAD ETD	16	181	88	9.54	<div></div>
 Copa Airlines CMP	3	28	107	9.44	<div></div>
 Avianca TAI	37	337	110	9.43	<div></div>
 FedEx FDX	42	260	162	9.16	<div></div>
				9.06	<div>SFO AVERAGE</div>
 NCA NCA	34	158	215	8.88	<div></div>
 SINGAPORE AIRLINES SIA	89	368	242	8.74	<div></div>
 ATLAS AIR GTI	67	265	253	8.69	<div></div>




























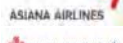













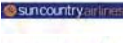


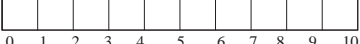




# Noise Exceedance Rating Report - 3rd Quarter 2015

July 1 to September 30, 2015

Airline	Noise Exceedances				Noise Exceedance Quality Rating
	Total Noise Exceedances	Total Quarterly Operations	Exceedances per 1000 Operations	Score	
 HAL	115	365	315	8.36	
 JAL	70	184	380	8.03	
 EVA	164	415	395	7.95	
 CPA	200	445	449	7.67	
 CAL	144	319	451	7.66	
 PAL	122	220	555	7.12	
 ANZ	97	172	564	7.07	
 KAL	257	368	698	6.38	
 AAR	295	300	983	4.90	
 CKS	79	41	1927	0.00	
<b>TOTAL</b>	<b>4,099</b>	<b>104,708</b>			
<b>SFO AVERAGE</b>			<b>181</b>	<b>9.06</b>	

# Nighttime Preferential Runway Use - 3rd Quarter 2015


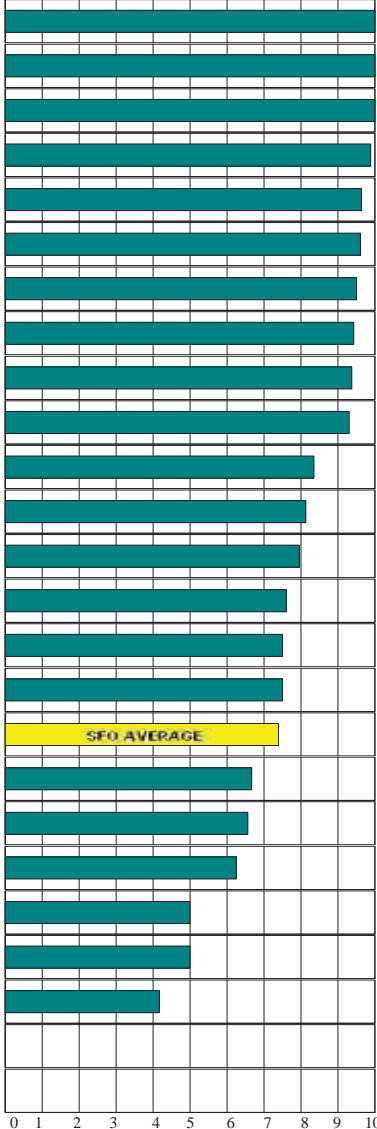

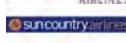





















July 1 to September 30, 2015

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	
 GTI	2	100%	0%	0%	0%	10.00	
 AFR	2	0%	50%	50%	0%	5.00	
 JBU	8	0%	13%	88%	0%	3.75	
 AAL	270	1%	3%	94%	1%	3.44	
 UAL	260	0%	2%	96%	2%	3.38	
 AMX	2	0%	0%	100%	0%	3.33	
 ASA	1	0%	0%	100%	0%	3.33	
 DAL	16	0%	0%	100%	0%	3.33	
 FFT	1	0%	0%	100%	0%	3.33	
 SKW	7	0%	0%	100%	0%	3.33	
 SWA	198	0%	0%	100%	0%	3.33	
 VRD	2	0%	0%	100%	0%	3.33	
 TAI	93	1%	0%	94%	5%	3.23	
						2.21	
 JAL	91	1%	0%	12%	87%	0.51	
 AAR	50	2%	0%	0%	98%	0.20	
 CAL	92	1%	0%	0%	99%	0.11	
 CES	1	0%	0%	0%	100%	0.00	
 CKS	11	0%	0%	0%	100%	0.00	
 CPA	125	0%	0%	0%	100%	0.00	
 EVA	131	0%	0%	0%	100%	0.00	
 KAL	88	0%	0%	0%	100%	0.00	
 PAL	1	0%	0%	0%	100%	0.00	
 SCX	1	0%	0%	0%	100%	0.00	
 SIA	90	0%	0%	0%	100%	0.00	
TOTAL 1,543							
SFO AVERAGE		4%	3%	47%	46%	2.21	





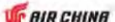









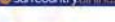





















# Shoreline Departure Rating - 3rd Quarter 2015

July 1 to September 30, 2015

Airline	Shoreline Departures					Shoreline Departure Rating
	Total	Successful	Marginal	Poor	Score	
 DLH	5	100%	0%	0%	10.00	
 FFT	29	100%	0%	0%	10.00	
 SCX	30	100%	0%	0%	10.00	
 CPZ	88	98%	2%	0%	9.89	
 ACA	82	94%	5%	0%	9.63	
 SKW	576	93%	6%	1%	9.61	
 ASA	121	91%	8%	1%	9.50	
 VRD	219	89%	11%	0%	9.43	
 WJA	16	88%	13%	0%	9.38	
 SWA	65	89%	8%	3%	9.31	
 AAL	279	68%	31%	1%	8.35	
 DAL	206	66%	32%	3%	8.13	
 FDX	22	68%	23%	9%	7.95	
 UAL	942	60%	32%	8%	7.61	
 CKS	2	50%	50%	0%	7.50	
 CMP	10	60%	30%	10%	7.50	
					7.39	
					SFO AVERAGE	
 XLF	3	33%	67%	0%	6.67	
 JBU	48	35%	60%	4%	6.56	
 GTI	12	33%	58%	8%	6.25	
 AFR	1	0%	100%	0%	5.00	
 VIR	2	0%	100%	0%	5.00	
 KLM	12	8%	67%	25%	4.17	
 SWR	1	0%	0%	100%	0.00	
 UAE	4	0%	0%	100%	0.00	
TOTAL						2,775
SFO AVERAGE		59%	29%	11%	7.39	
















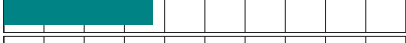







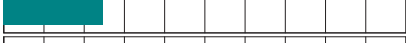


# Gap Departure Climb Rating - 3rd Quarter 2015

July 1 to September 30, 2015

Airline		Gap Departures		Gap Departure Quality Rating
		Total	Score	
	XLF	7	8.39	<div><div></div></div>
	WJA	5	8.00	<div><div></div></div>
	CCA	92	7.76	<div><div></div></div>
	GTI	20	7.25	<div><div></div></div>
	AFR	168	6.92	<div><div></div></div>
	CSN	92	6.92	<div><div></div></div>
	CPA	219	6.79	<div><div></div></div>
	JAL	79	6.46	<div><div></div></div>
	ANA	93	6.40	<div><div></div></div>
	SAS	90	6.35	<div><div></div></div>
	AAR	149	6.32	<div><div></div></div>
	SCX	6	6.25	<div><div></div></div>
	TAI	7	6.25	<div><div></div></div>
	AMX	17	6.18	<div><div></div></div>
	DLH	178	6.00	<div><div></div></div>
	FDX	10	5.75	<div><div></div></div>
	SKW	644	5.68	<div><div></div></div>
	NCA	79	5.60	<div><div></div></div>
	CAL	160	5.56	<div><div></div></div>
	VRD	319	5.55	<div><div></div></div>
	DAL	214	5.51	<div><div></div></div>
	ASA	72	5.38	<div><div></div></div>
	CES	92	5.31	<div><div></div></div>
			5.29	<div>SFO AVERAGE</div>
	CPZ	138	5.19	<div><div></div></div>
	VIR	124	5.14	<div><div></div></div>
	ANZ	84	5.10	<div><div></div></div>
	SWA	373	5.04	<div><div></div></div>
	AWE	1	5.00	<div><div></div></div>
	HAL	15	5.00	<div><div></div></div>
	ACA	32	4.96	<div><div></div></div>
	KLM	19	4.80	<div><div></div></div>
	UAL	3198	4.76	<div><div></div></div>
	JBU	76	4.70	<div><div></div></div>
	FFT	36	4.62	<div><div></div></div>


















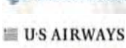









# Gap Departure Climb Rating - 3rd Quarter 2015

July 1 to September 30, 2015

Airline	Gap Departures		Gap Departure Quality Rating
	Total	Score	
 KAL	182	4.58	
 AAL	342	4.48	
 EVA	207	4.15	
 ETD	89	3.96	
 CKS	18	3.82	
 SIA	183	3.80	
 CMP	2	3.75	
 SWR	132	3.70	
 UAE	89	3.57	
 PAL	109	3.57	
 BAW	181	3.45	
 THY	90	2.47	
 EIN	91	2.28	
TOTAL			8623
SFO Average			5.29

### Foster City Arrival Rating - 3rd Quarter 2015

July 1 to September 30, 2015

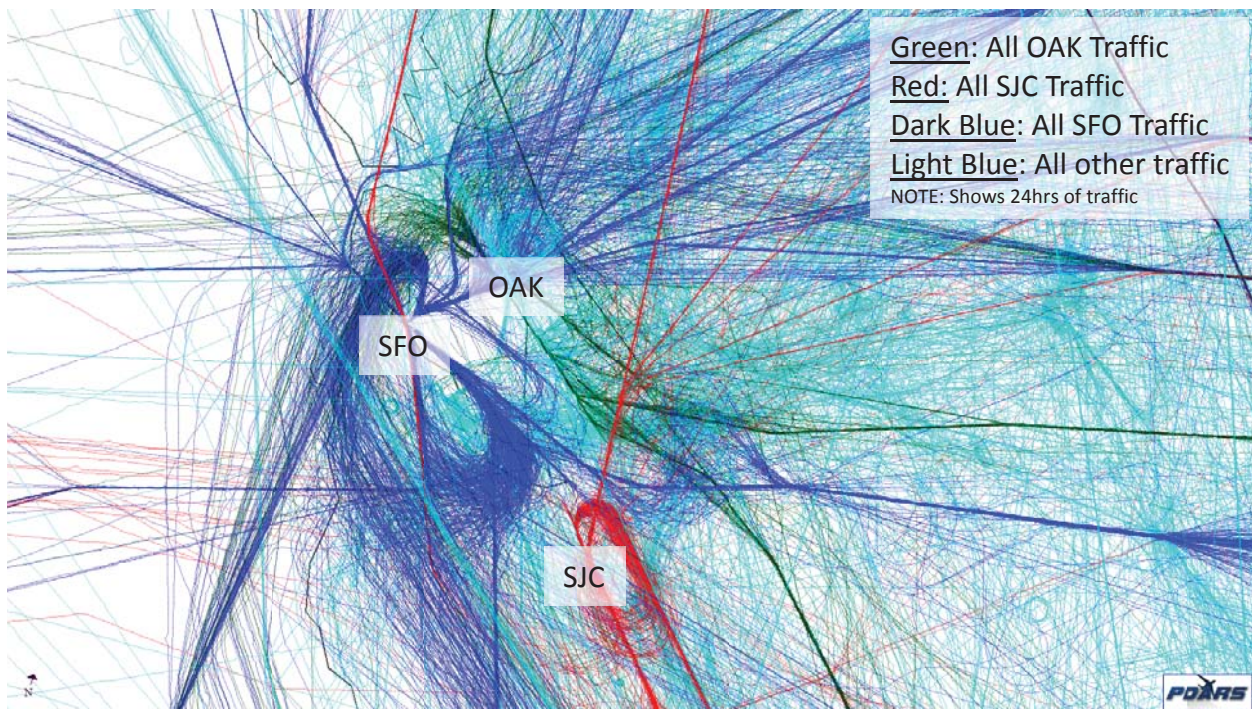
Airline		Foster City Arrivals					Foster City Arrival Rating
		Total	Successful	Marginal	Poor	Score	
	FFT	81	77%	23%	0%	8.83	<div><div></div></div>
	DAL	280	64%	35%	1%	8.13	<div><div></div></div>
	JBU	216	57%	41%	2%	7.73	<div><div></div></div>
	ACA	123	54%	46%	0%	7.72	<div><div></div></div>
	AAL	470	56%	43%	1%	7.71	<div><div></div></div>
	AFR	2	50%	50%	0%	7.50	<div><div></div></div>
	GTI	24	50%	50%	0%	7.50	<div><div></div></div>
	SWA	241	51%	48%	1%	7.47	<div><div></div></div>
	EVA	8	38%	63%	0%	6.88	<div><div></div></div>
	VRD	180	34%	65%	1%	6.64	<div><div></div></div>
	UAL	1,212	33%	65%	2%	6.57	<div><div></div></div>
	FDX	61	26%	72%	2%	6.23	<div><div></div></div>
						6.10	<div><div>SFO AVERAGE</div></div>
	TAI	93	12%	84%	4%	5.38	<div><div></div></div>
	CPZ	146	8%	88%	5%	5.14	<div><div></div></div>
	ASA	172	6%	90%	4%	5.12	<div><div></div></div>
	SKW	99	5%	92%	3%	5.10	<div><div></div></div>
	AAR	54	2%	98%	0%	5.09	<div><div></div></div>
	AMX	3	0%	100%	0%	5.00	<div><div></div></div>
	AWE	3	0%	100%	0%	5.00	<div><div></div></div>
	CAL	5	0%	100%	0%	5.00	<div><div></div></div>
	CKS	12	0%	100%	0%	5.00	<div><div></div></div>
	CPA	18	0%	100%	0%	5.00	<div><div></div></div>
	ETD	1	0%	100%	0%	5.00	<div><div></div></div>
	HAL	8	0%	100%	0%	5.00	<div><div></div></div>
	KAL	93	1%	98%	1%	5.00	<div><div></div></div>
	SCX	2	0%	100%	0%	5.00	<div><div></div></div>
	WJA	5	0%	100%	0%	5.00	<div><div></div></div>
TOTAL		3,612					
SFO AVERAGE			23%	76%	1%	6.10	

# FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties

Compiled at the Requests of Representatives Farr, Eshoo and Speier

## Executive Summary

Northern California airspace is very complex, with traffic from several major airports, smaller regional airports and military activity. All arrival and departure procedures within the Northern California airspace are interconnected, interdependent and were designed to improve safety and efficiency within the National Airspace System (NAS).



Longstanding issues with, as well as changes to, the Northern California TRACON instrument approach and departure procedures have generated noise concerns from local residents of Santa Cruz, Santa Clara, San Mateo and San Francisco Counties. In meetings and correspondence with congressional offices and local community representatives, the Federal Aviation Administration (FAA) has received recommendations to adjust the current published procedures. In response, the FAA has undertaken the following noise initiative to explore such modifications. Airspace and air traffic procedures are highly dependent upon each other within the NAS and must be evaluated collectively to ensure safety and efficiency.

This initiative will be comprised of three phases. During the first phase, the FAA will conduct a detailed analysis and a preliminary feasibility study focusing on flight procedures criteria and overall fly-ability of the new Performance Based Navigation (PBN) procedures, potential



procedural modifications including speed/altitude adjustments, airspace changes and possibility of moving existing waypoints. An assessment of impacts to operations at the surrounding airports and associated procedures will be completed. In addition, coordination with the local stakeholders will be conducted during this first phase.

During the second phase, FAA will consider any amendments and/or new procedures that are determined to be initially feasible, flyable, and operationally acceptable from a safety point of view. As part of this effort, FAA will conduct the formal environmental and safety reviews, coordinate and seek feedback from existing and/or new community roundtables, members of affected industry, and the National Air Traffic Controllers Association (NATCA) before moving forward with the formal amendment process. During phase three, the FAA will implement procedures; conduct any required airspace changes and additional negotiated actions, as needed.

In addition to its mandate to ensure the safe and efficient use of the NAS, the FAA complies with the requirements of the National Environmental Policy Act (“NEPA”). As such, although not specifically detailed within this noise initiative, the FAA’s procedures and standards for evaluating noise impacts associated with all potential modifications to currently published procedures—consistent with FAA Order 1050.1F (effective July 16, 2015)—will be followed and undertaken before implementing any airspace changes. Finally, this document does not constitute either a final decision of the FAA or a re-opening of the FAA’s August 6, 2014 final decision for the Northern California (NorCal) Optimization of Airspace and Procedures in the Metroplex (OAPM).

## **Initiative:**

### **Phase one: Initial Analysis, Feasibility, and Coordination**

#### **1. Instrument Flight Procedures/Airspace:**

**Planned Action:** The FAA will conduct a detailed analysis to include preliminary feasibility from a procedures/criteria perspective and fly-ability from an aircraft perspective. Procedures will be analyzed, modeled, and flown in flight simulators. An assessment of the impact to operations and other procedures will be completed. The analysis should indicate whether the potential procedural changes could be made to effectively reduce noise.

**a. Altitude adjustments:** Raising the floor and/or ceiling of existing procedures may allow the FAA to do the same for other procedures and reduce noise concerns in certain locations.

i. Analyze raising the floor and ceiling of existing SERFR and BRIXX arrivals. (AJV-WOSG)

a) Evaluate raising the altitude at MENLO waypoint to 5,000 feet or establish a new waypoint to allow for crossing the MENLO area closer to 5,000 feet.

ii. Analyze reducing impacts of SSTIK, WESLA, and CNDLE departures. (AJV-WOSG)

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**b. Track adjustments:** Where possible, tracks should be adjusted away from areas of concern and moved over water versus land.

i. Analyze moving the SSTIK and PORTE departures more over water. (AJV-WOSG)

ii. Analyze reducing the impacts of SSTIK, WESLA, and CNDLE departures. (AJV-WOSG)

iii. Analyze moving the ILS/Visual Approach to Runway 28L offshore. (AJV-WOSG)

- iv. Analyze offsetting Visual Approaches until passing the San Mateo Bridge. (AJV-WOSG)
- v. Analyze the impact of non-charted visual approaches to RWY 28 (AJV-WOSG)

NOTE: There are three charted visual approaches to San Francisco (SFO). Two are FAA published approaches, the TIPP TOE VISUAL and the QUIET BRIDGE VISUAL. The third approach is owned by United Airlines and is a special charted visual, also available to other airlines. If changes are made to the procedure, the FAA would request that United Airlines and each airline that uses this procedure update their databases.

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**c. Waypoint Adjustments:**

- i. On the SERFR arrival, analyze moving EPICK waypoint south to approximately 36 54 52.8N and 121 56 32.7W, add restriction to speed of 280 knots and altitude of 15,000 feet. (AJV-WOSG)
- ii. Analyze making adjustments to PORTE departure to maximize offshore routing. (AJV-WOSG)
- iii. Evaluate adding a new waypoint roughly over the Highway 17 summit area, between EPICK and EDDYY, with at least a 10,000 feet and 250 knot restriction. (AJV-WOSG)

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**d. Speed Adjustments:**

- i. Analyze moving speed adjustments over water instead of over land. (AJV-WOSG)
- ii. Analyze reducing the speed on the current SERFR arrival. (AJV-WOSG)
- iii. Analyze data to determine compliance with the requirement to maintain 250 knots or less below 10,000 feet Mean Sea Level (MSL). (AJV-WOSG)

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**e. Holding Patterns**

- i. On the SERFR arrival, study current use of the holding pattern at EPICK and the possibility of moving the holding pattern to WWAVS. (AJV-WOSG)

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**f. PBN Procedures:**

- i. Evaluate proposed PBN arrival procedures from local community groups for feasibility, fly-ability and safety concerns. (AJV-WOSG)
- ii. Evaluate the effect of dispersing flight tracks over a wider range. (AJV-WOSG)
- iii. Study the feasibility of creating new transitions for the NIITE departure for airports to southbound destinations. (AJV-WOSG)
- iv. Study the possibility of new SFO RNP approaches that will serve Runways 28 L/R that follow the Big Sur ground track, curved out over the Bay crossing MENLO at 5000-6000 feet. (AJV-WOSG)

**Status: Analysis began October 2, 2015**

**Completion Date: TBD**

**2. Air Traffic Control:**

**Planned Action:** The Western Service Center, on behalf of the Air Traffic Director of Operations, will work with the facilities to assess what opportunities exist to modify operations. Part of this assessment will include looking at the possibility of adjustments during reduced volume night operations, even if day operations cannot be changed. If changes can be made there will need to be a safety assessment, controller training, pilot briefings, and the SFO community roundtable may need to be engaged.

**a. Sequencing and Vector Points:** There may be actions air traffic controllers can take to reduce noise concerns such as assessing whether changes can be made to vectoring aircraft over water more.

- i. Analyze adjusting air traffic activity in the vicinity of Woodside VOR including altitudes. (AJT, AJV-WOSG)
- ii. Analyze adjusting air traffic to eliminate early turns over land. (AJT, AJV-WOSG)
  - a) Focus on leaving aircraft over water as long feasible.
  - b) Keep aircraft on the SSTIK departure until the SSTIK waypoint before turning.
  - c) Keep aircraft on the NIITE departure to at least the NIITE Waypoint as much as possible.

**Completion Date: TBD**

**b. Use of Descend Via:**

- i. Increase use of descend via procedures. (AJT, AJV-WOSG)
- ii. Increase use of descend via procedures for international flights. (AJT, AJV-WOSG)

**Completion Date: TBD**

**c. Class B Containment:** Some current procedures, as designed, are not fully contained within the existing SFO Class B airspace.

- i. Analyze current versus historic data to determine trends and risks to aircraft exiting and reentering Class B airspace. (AJT, AJI, AJV-WOSG)
- ii. Analyze current RNAV arrival and departure procedures to determine necessity and feasibility of redesign. (AJT, AJI, AJV-WOSG)
- iii. Analyze current RNAV arrival and departure procedures to determine necessity and feasibility of redesigning Class B airspace. (AJI, AJV-WOSG)

**Status: Ongoing**

**Completion Date: TBD**

**d. Speed Brakes:**

- i. Study the potential reduction and/or elimination of the use of speed brakes and conduct a track analysis to determine flight characteristics, utilizing the Aviation Safety Information Analysis and Sharing (ASIAS) database. (MITRE CAASD)
- ii. Work with stakeholders to determine feasibility of reducing the use of speed brakes and other surface controls over land.

**Status: Ongoing**

**Completion Date: TBD**

**e. Runway Usage:**

- i. Study the feasibility of increasing the use of Runway 10. (AJT)
- ii. Study the feasibility of increasing the use of RWY 01 for Departures (AJT). Study the feasibility of proceduralizing the 050 departure heading off RWY 01 at night. (AJT)
- iii. Study the necessity of extending nighttime operations at SFO. According to the SFO Standard Operating Procedure, the preferred Runway for operations between 0100 and 0600 local time is departing Runway 10 and landing Runway 28. (AJT)
- iv. When weather conditions permit, study the increase in use of the Shoreline 7 Departure off RWY 28R or 28L. (AJT, AJV-WOSG)

**Completion Date: TBD**

**f. Instrument Flight Procedures (IFP):**

- i. Study the feasibility of creating new transitions for the NIITE departure for airports to southbound destinations. (AJV-WOSG)
- ii. When weather operations permit, study the use of the Shoreline7 departure off of Runway 28R or 28L. (AJT, AJV-WOSG)
- iii. Study the use of offset visual approaches in lieu of straight in visual approaches. (AJT, AJV-WOSG)
- iv. Study the usage of GAP departure. (AJT, AJV-WOSG)



- v. Study whether international and domestic aircraft are handled the same by Air Traffic Control (ATC). (AJT, AJV-WOSG)
- vi. Study the feasibility of increasing the use of the SSTIK departure during the day and the NIITE departure at night. (AJT, AJV-WOSG)

**Completion Date: TBD**

**g. Opposite Direction Operations (ODO):** Operational changes related to ODO may have increased noise concerns at night in certain locations.

- i. Review recent implementation of ODO procedures and their impacts in the San Francisco Bay area. (AJT, AJI)
- ii. Assess potential options for night operations. (AJT, AJI)

**Completion Date: TBD**

### **3. Traffic Management**

**Planned Action:** The Western Deputy Director of System Operations, on behalf of the Air Traffic Director of Operations, will work with the Western Service Center and local facilities to evaluate the actions and suggestions below. During the analysis, the focus will be on use of traffic management tools and initiative to ensure current practices are as effective and efficient as possible for the potential reduction of noise concerns.

**a. Equitability:** Concentration of noise should be reviewed, especially during nighttime operations.

- i. Review the current nighttime operations to determine if they adequately address preferential Runway usage. (AJT, AJV-WOSG)

NOTE: According to the SFO Standard Operating Procedure, the preferred Runway for operations between 0100 and 0600 local time is departing Runway 10 and landing Runway 28.

- ii. Evaluate the effect of dispersing flight tracks over a wider range or developing multiple parallel RNAV procedures. (AJT, AJV-WOSG)

**Completion Date: TBD**

**b. Interactions and agreements:** Facility agreements between Northern California TRACON (NCT), Oakland Air Route Traffic Control Center (ARTCC) (ZOA), and Los Angeles ARTCC (ZLA) might be amended to reduce the need for off-course vectors and speed adjustments to potentially reduce noise concerns in certain locations.

- i. Review facility agreements for possible changes to aircraft set up and sequencing. (AJT, AJV-WOSG)
- ii. Review facility agreements to ensure they are effective and efficient with regard to routing and speeds. (AJT, AJV-WOSG)

**Completion Date: TBD**

- c. **Time Based Flow Management (TBFM):** The use of TBFM to enhance sequencing may reduce the need for off course vectors and speed adjustments and may reduce noise concerns in certain locations.

- i. Review the current and projected status of using TBFM procedures. (AJT, AJV, AJR)
- ii. Review the impact of using TBFM on current noise issues. (AJT, AJV, AJR)

**Completion Date: TBD**

- d. **Nighttime Offloads/Routes:** Communities want a focus on reducing noise concerns at night.

- i. Review nighttime operations. (AJT)
- ii. Review cargo flight operations to determine if previous actions have adequately addressed all issues. (AJT)
- iii. Review utilizing the current Big Sur for late night cargo arrivals. (AJT, AJV-WOSG)
- iv. Review the current nighttime operations to determine if they adequately address preferential Runway usage. (AJT, AJV-WOSG)

NOTE: According to the SFO Standard Operating Procedure, the preferred Runway for operations between 0100 and 0600 local time is departing Runway 10 and landing Runway 28.

**Completion Date: TBD**

#### **4. Operators:**

**Planned Actions:** AJV will engage Airlines for America (A4A) and The International Air Transport Association (IATA) nationally to solicit perspective and input into defined issues. Operator involvement needs to be discussed, especially if the FAA does not utilize the roundtable concept to work issues with stakeholders. It is assumed that the

Office of the Associate Administrator for Airports (ARP) would want some level of input or engagement as SFO should also be involved directly in these conversations.

- a. **Use of speed brakes:** Operators can focus on reducing the use of speed brakes. Pilots have the sole responsibility to determine when speed brakes should be used. (A4A, IATA)

**Completion Date: TBD**

- b. **Runway choices:** Operators may request more “fly friendly” Runways, especially at night, to reduce noise concerns in certain locations. (A4A, IATA, SFO)

**Completion Date: TBD**

- c. **IFP choices:** Operators can file “fly friendly” procedures, especially at night, to reduce noise concerns in certain locations. (A4A, IATA, SFO)

**Completion Date: TBD**

- d. **Nighttime Offloads/Routes:** Communities want a focus on reducing noise concerns at night. (A4A, IATA, SFO)

**Completion Date: TBD**

- e. **Early Turns:** Operators can assist ATC in ensuring as much as possible of a flight is over water versus over land by not requesting early turns on course. (A4A, IATA)

**Completion Date: TBD**

- f. **International air carrier execution of Optimized Profile Descents (OPDs):** AJV will reach out to IATA to discuss and get input and perspective on this issue. (IATA)

**Completion Date: TBD**

## **5. Community Engagement**

- a. **Community Forums:** Addressing noise concerns in a densely populated and operationally complex area like Northern California is best done in a forum (such as existing and/or new roundtables) that includes community leaders and is supported by the FAA and Bay Area Airports. (AWP, AGI)

- b. San Carlos Airport:** Apart from the efforts described in this report, there are TBD conversations with communities around the airport that are concerned about the increase in flights and noise. (AWP)

#### **Phase two: Modifications and Review**

Based on the outcome of the initial analysis, feasibility and coordination, modifications may be made to the proposed procedures and/or airspace or operating procedures using the guidance found in current FAA Orders, directives and labor agreements which includes conducting the Environmental Review; Safety Risk Management (SRM); and appropriate public outreach.

**Completion Date: TBD**

#### **Phase three: Implementation**

Based on the outcome of the modifications and review phase and assuming the proposed procedure(s) meet the purpose and need, as well as all applicable environmental laws and requirements, the controller workforce and operators will be trained/briefed on any operational or procedural changes before publication and operational use.

**Completion Date: TBD**



FOR IMMEDIATE RELEASE

November 16, 2015

Contact: Charles Stewart (Eshoo), 202-225-8104  
Adam Russell (Farr), 202-225-2861  
Katrina Rill (Speier), 650-342-0300 or 650-208-7441

## ESHOO, FARR, SPEIER RELEASE FAA RESPONSE TO CONGRESSIONAL INQUIRIES ABOUT AIRCRAFT NOISE

WASHINGTON, D.C.—Reps. Anna G. Eshoo (CA-18), Sam Farr (CA-20) and Jackie Speier (CA-14) have received and released to the public the [\*FAA Initiative to Address Noise Concerns\*](#) that the Federal Aviation Administration (FAA) has authored to address the unprecedented constituent complaints about noise from air traffic above San Francisco, San Mateo, Santa Cruz and Santa Clara Counties.

**Eshoo:** “My colleagues and I have worked tirelessly to engage the FAA's leadership to take concrete steps to mitigate and address the noise from aircraft in our respective congressional districts. As a result of our collaboration, FAA Administrator Michael Huerta and FAA Regional Director Glen Martin met with local elected officials, community groups and individuals from our congressional districts to discuss the impacts of the NextGen and additional issues prior to its implementation, including Surf Air at the San Carlos Airport.

“I welcome this important first step the FAA has developed. The FAA leadership will follow up with community meetings, coordinated through our offices, to explain in detail the FAA's plan to address the noise problems being experienced in our region.”

**Farr:** “This plan of action is evidence the FAA is willing to consider the changes proposed by the community. For months, the commercial aircraft noise in Santa Cruz and the surrounding area has been terrible. From the beginning, I have told the FAA that they created this mess so it is up to them to fix it.

“This is only a first step but it is a good one. It shows everyone is committed to developing some real solutions. I hope the FAA will continue to listen to the communities it serves and work with them to solve any problems that arise from the switch to the NextGen flight plan.”

**Speier:** “My constituents have long been impacted by noise caused by aircraft operating at SFO and more recently at San Carlos and Half Moon Bay Airports. The FAA's *Initiative to Address Noise Concerns* is a compilation of the ideas that were offered by the public regarding SFO at the FAA's recent meetings in our three congressional districts, as well as requests made by the SFO Airport Community Roundtable. Some of these ideas may be deemed workable by the FAA and some may not.

“However, having previously been resistant to taking community suggestions, the FAA, for the first time in many years, has committed to studying ideas submitted by the affected communities. I am gratified that the FAA is rolling up its sleeves to come up with solutions. The health of those who live under constant bombardment of airplane noise is being seriously compromised and the FAA has a responsibility to take action to address it.”

The *FAA Initiative to Address Noise Concerns* can be viewed [here](#).   # # #



November 9, 2015

**TO:** Roundtable Representatives and Alternates

**FROM:** Cindy Gibbs, Roundtable Technical Advisor

**SUBJECT:** Quiet Skies Caucus Legislation

---

Congresswoman Anna Eshoo, member of the Quiet Skies Caucus, jointly introduced two U.S. House of Representative Bills, the FAA Accountability Act (H.R. 3965) and Quiet Communities Act of 2015 (H.R. 3384). The following summarizes information known on each bill; The Roundtable will continue to work with our local Congressional representatives and stay updated on the bills as they go through the House.

FAA Accountability Act – H.R. 3965

“To direct the Administrator of the Federal Aviation Administration to improve the process for establishing and revising flight paths and procedures, and for other purposes.”

- Introduced on November 5, 2015 – no text available yet for the bill.
- Establish new process to reconsider the FAA process to revise flight paths.
- Establish Community Ombudsman to represent the voice of communities within the FAA.
- Require the FAA to reconsider existing routes that are exposing residents to unacceptably high levels of aviation noise.
- Require the FAA to work with local communities and limiting noise impacts from new flight paths.

Quiet Communities Act of 2015 – H.R. 3384

“To reestablish the Office of Noise Abatement and Control in the Environmental Protection Agency, and for other purposes.”

- Restore EPA’s Office of Noise Abatement and Control that oversaw nation’s noise control policies and procedures for multiple modes of transportation.
- Defunded in 1981, noise abatement policy and control shifted to the FAA for aviation.
- Requires EPA Administrator to study the effectiveness of the FAA’s noise measurement methods, health impact thresholds and abatement programs.



Text for H.R. 3384

114th CONGRESS  
1st Session

H. R. 3384

To reestablish the Office of Noise Abatement and Control in the Environmental Protection Agency, and for other purposes.

---

IN THE HOUSE OF REPRESENTATIVES  
July 29, 2015

Ms. Meng (for herself, Mr. Gallego, Mrs. Kirkpatrick, Ms. Norton, Mr. Crowley, Mrs. Lowey, Mr. Israel, Mr. Quigley, Mr. Grijalva, Miss Rice of New York, and Ms. Clark of Massachusetts) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committee on Transportation and Infrastructure, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

---

**A BILL**

To reestablish the Office of Noise Abatement and Control in the Environmental Protection Agency, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

SECTION 1. Short title.

This Act may be cited as the “Quiet Communities Act of 2015”.

SEC. 2. Findings.

Congress finds that:

(1) Approximately 28,000,000 Americans are afflicted with some hearing loss and it has been estimated that 10,000,000 of these impairments are at least partially attributable to damage from exposure to noise.

(2) For millions of Americans, noise from aircraft, vehicular traffic, and a variety of other sources is a constant source of torment. Millions of Americans are exposed to noise levels that can lead to sleep loss, psychological and physiological damage, and work disruption.

(3) Chronic exposure to noise has been linked to increased risk of cardiovascular disorders, learning deficits in children, stress, and diminished quality of life.

(4) Excessive noise leading to sleep deprivation and task interruptions can result in untold costs on society in diminished worker productivity.

(5) Pursuant to authorities granted under the Clean Air Act of 1970, the Noise Control Act of 1972, and the Quiet Communities Act of 1978, the Environmental Protection Agency established an Office of Noise Abatement and Control. Its responsibilities included promulgating noise emission standards, requiring product labeling, facilitating the development of low emission products, coordinating Federal noise reduction programs, assisting State and local abatement efforts, and promoting noise education and research. However, funding for the Office of Noise Abatement and Control was terminated in 1982 and no funds have been provided since.

(6) Because the Environmental Protection Agency remains legally responsible for enforcing regulations issued under the Noise Control Act of 1972 even though funding for these activities were terminated, and because the Noise Control Act of 1972 prohibits State and local governments from regulating noise sources in many situations, noise abatement programs across the country lie dormant.

(7) As population growth and air and vehicular traffic continue to increase, noise pollution is likely to become an even greater problem in the future. The health and welfare of our citizens demands that the Environmental Protection Agency, the lead Federal agency for the protection of public health and welfare, once again assume a role in combating noise pollution.

### SEC. 3. Reestablishment of office of noise abatement and control.

(a) Reestablishment.—The Administrator of the Environmental Protection Agency shall reestablish within the Environmental Protection Agency an Office of Noise Abatement and Control.

(b) Duties.—The responsibilities of the Office include the following:

(1) To promote the development of effective State and local noise control programs by providing States with technical assistance and grants to develop the programs, including the purchase of equipment for local communities.

(2) To carry out a national noise control research program to assess the impacts of noise from varied noise sources on mental and physical health.

(3) To carry out a national noise environmental assessment program to identify trends in noise exposure and response, ambient levels, and compliance data and to determine the effectiveness

of noise abatement actions, including actions for areas around major transportation facilities (such as highways, railroad facilities, and airports).

(4) To develop and disseminate information and educational materials to the public on the mental and physical effects of noise and the most effective means for noise control through the use of materials for school curricula, volunteer organizations, radio and television programs, publications, and other means.

(5) To develop educational and training materials and programs, including national and regional workshops, to support State and local noise abatement and control programs.

(6) To establish regional technical assistance centers which use the capabilities of university and private organizations to assist State and local noise control programs.

(7) To undertake an assessment of the effectiveness of the Noise Control Act of 1972.

(c) Preferred Approaches.—In carrying out its duties under this section, the Office shall emphasize noise abatement approaches that rely on local and State activities, market incentives, and coordination with other public and private agencies.

(d) Study.—

(1) IN GENERAL.—Using funds made available to the Office, the Administrator shall carry out a study of airport noise. The Administrator shall carry out the study by entering into contracts or other agreements with independent scientists with expertise in noise measurements, noise effects, and noise abatement techniques to conduct the study.

(2) CONTENTS.—The study shall examine the selection of noise measurement methodologies by the Federal Aviation Administration, the threshold of noise at which health impacts are felt, and the effectiveness of noise abatement programs at airports around the Nation.

(3) REPORT.—Not later than 24 months after the date of enactment of this Act, the Administrator shall transmit to Congress a report on the results of the study, together with specific recommendations on new measures that can be implemented to mitigate the impact of aircraft noise on surrounding communities.

#### SEC. 4. Grants under quiet communities program.

Section 14(c)(1) of the Noise Control Act of 1972 ([42 U.S.C. 4913\(c\)\(1\)](#)) is amended—

(1) by striking “and” at the end of subparagraph (C); and

(2) by adding at the end the following:

“(E) establishing and implementing training programs on use of noise abatement equipment;  
and

“(F) implementing noise abatement plans;”.

SEC. 5. Authorization of appropriations.

There is authorized to be appropriated for each of fiscal years 2016 through 2020 \$21,000,000 for activities of the Office of Noise Abatement and Control reestablished under section 3.

(This page is left intentionally blank)

September 29, 2015

**TO:** Roundtable Representatives and Alternates

**FROM:** James A. Castañeda, AICP, Program Coordinator 

**SUBJECT:** Roundtable Strategic Plan 2015-2018 and Work Program for FY2015-2016

On September 28, 2015, the Work Program Subcommittee assembled to discuss the Roundtable's three year Strategic Plan and the Work Program for FY 2015-2016. Every three years the Roundtable reviews and adopts a Strategic Plan that outlines the long-term goals and vision, and provides a framework for the yearly Work Plan - the means to accomplish those goals.

The following illustration summarizes the relationship between the Strategic Plan and the Work Plan:



The Work Program Subcommittee reviewed and discussed the two documents, and is recommending that the Roundtable approval the attached Strategic Plan for 2015-2018 and Work Plan for FY 2015-2016.



# **DRAFT ROUNDTABLE STRATEGIC PLAN**

November 1, 2015 – December 31, 2018

Presented to the Roundtable for consideration on October 7, 2015

## **ORGANIZATION OF THIS STRATEGIC PLAN**

This Strategic Plan is organized as follows:

- Introduction
- Background/History
- Opportunistic Strategy
- Guiding Principles
- Mission Statement
- Goals, Action Items, Resources, and Desired Results
- Strategic Plan Amendment Process
- Appendices: Roundtable Bylaws and Memorandum of Understanding

## **INTRODUCTION**

In 2010, the Roundtable adopted its first Strategic Plan to better serve its membership and provide long-term goals and vision. As a part of its ongoing mission to serve the residents living in the Roundtable communities (County of San Mateo and the City and County of San Francisco) affected by noise from aircraft operating to and from SFO, the Roundtable embarked on a strategic planning process in early 2010 with a goal of developing a Strategic Plan that would guide the Roundtable actions over the next three years. The Roundtable appointed a Strategic Planning Subcommittee to carry out the strategic planning process and to bring a recommended Strategic Plan back to the full Roundtable for its consideration and adoption.

This Strategic Plan represents the work product of the Subcommittee and is the Strategic Plan that was approved by the full Roundtable at its December 2, 2015 Regular Roundtable meeting; this strategic plan is in place today and serves as the basis for future Strategic Plan iterations. This Strategic Plan will guide the Roundtable's actions for the next three years.

Recognizing that the Roundtable needs to respond to changing conditions over time, there are provisions within the Strategic Plan that allow for its revision prior to 2018. In fact, the Strategic Plan update process will begin a year in advance of the expiration of the Plan or sooner if needed. Until that time, the Roundtable will rely on the guidance provided by the Strategic Plan to develop its annual Work Program, prioritize its activities, and guide its efforts to work with SFO, the Federal Aviation Administration, and the airlines to respond to community concerns and to minimize the impact of aircraft noise on Roundtable member communities.

## **BACKGROUND/HISTORY**

The Airport/Community Roundtable was established in 1981 as a voluntary committee of elected officials to address community noise impacts from aircraft operations at SFO. The Roundtable monitors a performance-based noise mitigation program implemented by airport staff, interprets community concerns and attempts to achieve noise mitigation

through a cooperative sharing of authority among the aviation industry, the Federal Aviation Administration (FAA), SFO management and local government.

The authority to control aircraft in flight and on the ground is vested exclusively in the FAA. The FAA, however, cannot control the number of flights or the time of day aircraft operate. Federal law preempts any local government agency from implementing any action that is intended to control the routes of aircraft in flight. Neither the Roundtable, local elected officials nor airport management can control the routes of aircraft in flight or on the ground.

## **OPPORTUNISTIC STRATEGY**

The Roundtable has adopted a three-year strategic plan that incorporates an “Opportunistic Strategy”. This strategy operates on the principle that the Roundtable will use positive, constructive methods to advance its goals and mission.

Under this strategy, the Roundtable will continue to receive reports on its various programs such as the Fly Quiet Program; receive updates on regional aviation planning activities; and determine and present the annual Fly Quiet Program Awards.

The Roundtable will also take advantage of opportunities to respond to proposed federal or state legislative actions related to aircraft noise or land use compatibility. This level of activity may include actively tracking and responding to proposed aircraft noise legislation by writing letters in support of or against proposed legislation. This strategy will also include the active promotion of aircraft noise reduction technologies or compatible land use planning initiatives by participating in research vehicles such as the Airport Cooperative Research Program (ACRP) or providing written support of technology programs designed to reduce aircraft noise. Under this approach, the Roundtable may prepare and submit project statements and/or participate in a relevant ACRP project panel.<sup>1</sup>

This strategy allows the Roundtable to continue with its historical monitoring of SFO's noise abatement programs, while responding to aircraft noise and land use compatibility legislation on an ad hoc basis, which gives the Roundtable a greater voice in these matters. In addition, actively supporting technology programs designed to reduce aircraft noise and ACRP's research efforts will benefit future generations living in Roundtable communities.

## **GUIDING PRINCIPLES**

The following guiding principles define the manner in which the Roundtable will conduct business over the next three-year period:

---

<sup>1</sup> ACRP Panel members provide technical guidance, review workproduct, and approve guidance documents for release to the public.

1. The Roundtable is the preeminent forum for addressing and resolving community concerns related to noise from aircraft operating to and from San Francisco International Airport.
2. The Roundtable fosters and enhances cooperation between the San Francisco International Airport, noise-impacted communities, the federal government, and the airlines with the purpose of developing, evaluating, and implementing reasonable and feasible policies, procedures, and mitigation actions that will further reduce aircraft noise exposure in neighborhoods and communities in San Francisco and San Mateo Counties.
3. The 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.

## **MISSION STATEMENT**

The Roundtable’s mission is to continue to address and resolve community concerns related to SFO aircraft noise, to monitor aircraft operations and conduct airline outreach, to monitor SFO’s aircraft noise abatement programs, to respond to and support aircraft noise related legislation and programs, and to support research that reduces aircraft noise exposure and promotes compatible land use planning for those communities within the members’ jurisdictions.

## **GOALS, ACTION ITEMS, RESOURCES, AND DESIRED RESULTS**

The following goals are listed in priority order, but may be adjusted as needed over time to reflect the community’s needs:

**Goal No. 1 – Aircraft Procedures:** The Roundtable will focus on aircraft arrival and departure procedures. The focus includes multiple facets: monitor adherence to existing procedures (standard and noise abatement); work with SFO Airport Noise Abatement Office (SFO ANAO) to monitor and develop noise abatement procedures; and work with FAA and airlines to advance the goal of noise reduction.

Action item: The Roundtable will monitor aircraft adherence to procedures and provide support to the SFO ANAO for outreach to airlines and FAA.

Resources: No additional resources beyond Roundtable Staff time required.

Desired results: The ongoing utilization of noise abatement procedures and when able, development of noise abatement procedures.

**Goal No. 2 – Airline Outreach:** The Roundtable will conduct airline outreach and education regarding SFO's aircraft noise abatement program through the Fly Quiet Program and other avenues as needed.

Action item: The Roundtable will continue to communicate positively with the airlines regarding the noise sensitive issues in and around the community.

Resources: No additional resources beyond Roundtable Staff time required.

Desired results: Improved airline awareness to aircraft noise issues in the Roundtable communities.

**Goal No. 3 – Support Aircraft Noise Reduction Legislation and Research:** The Roundtable will support appropriate aircraft noise reduction legislation and research.

Action item: The Roundtable will actively review, monitor, and support, when appropriate, research, legislation, and aircraft noise reduction programs.

Resources: No additional resources beyond Roundtable Staff time required.

Desired results: Continued reduction aircraft noise levels.

**Goal No. 4 – Address Community Concerns:** The Roundtable will remain the forum for addressing community concerns regarding noise from aircraft operating to and from SFO affecting its membership. The Roundtable will remain focused on its membership, including the cities within San Mateo County, San Mateo County, and the City and County of San Francisco. While the Roundtable operates to serve those within its membership, it continues to be sensitive and inclusive of noise concerns from operations at SFO beyond its members to the bay area region.

Action item: The Roundtable will continue to actively respond to community concerns regarding aircraft noise issues and provide education opportunities for the bay area and Roundtable membership to learn about airport operations, aircraft noise, and air traffic procedures.

Resources: No additional resources beyond Roundtable Staff time required and budget items for special reports, studies, or professional services.

Desired results: An informed regional community and Roundtable membership regarding aircraft noise issues at SFO.

## **STRATEGIC PLAN AMENDMENT PROCESS**

This Strategic Plan is a long-term plan that is intended to guide the Roundtable over a three-year period. Among other things, the Strategic Plan shall be used to guide the development of the Roundtable's annual Work Program. The Work Program can be tailored to respond to short-term needs, while remaining responsive the Roundtable's long-term goals.

There may be circumstances, however, during which conditions change to a point that require an update of the Strategic Plan. In those instances, the Strategic Planning Subcommittee shall be convened to discuss the required changes to Strategic Plan and, when appropriate, shall make recommendations to the full Roundtable regarding the required updates to the Strategic Plan. If the full Roundtable adopts the Subcommittee's recommendations, the Strategic Plan will be amended to reflect those recommendations.

The foregoing notwithstanding, the Strategic Plan shall be updated no less than every three years. The strategic planning process shall commence no less than one year prior to the expiration plan. The Strategic Planning Subcommittee shall be convened to conduct the strategic planning process and present a recommended Strategic Plan to the full Roundtable for consideration and adoption.



DRAFT

**ROUNDTABLE ANNUAL  
WORK PLAN**

July 1, 2015 through June 30, 2016

Presented to the Roundtable for consideration on October 7, 2015

## **Organization of the Work Program**

The Work Program is organized as follows. Each of the items includes: item description, background, present to Roundtable, staff assigned, Strategic Plan goal and budget allocated.

- Administrative Items
- Legislative Items
- Research Items
- Aircraft Operations/ Airspace

## **Introduction**

The Work Program is part of the Roundtable's overall approach to planning efforts; it is guided by the Roundtable's Strategic Plan. The Strategic Plan has a three-year planning horizon and the Work Program has a one-year planning horizon. The Work Program items are distilled from the overall Strategic Plan goals; each of the Work Program items are associated with a Strategic Plan goal.

While the Work Program is a one-year document, many items will be rolled over through multiple planning cycles. This is due to the longer-term nature of some items, including standing updates and future technologies. These longer-term items remain on the Work Program in order for the Roundtable to maintain their understanding of the issue. The Roundtable appointed a Work Program Subcommittee to carry out the work program planning process and to bring a recommended Work Program back to the full Roundtable for its consideration and adoption.

## **Work Program – Administrative Items**

### **AI1. Roundtable Website Maintenance**

#### **Item Description:**

Maintain the Roundtable website [www.sforoundtable.org](http://www.sforoundtable.org) and update with new information as required for the public.

- Maintain existing website.
- Include historical information as required.
- Upload agendas, agenda packets, and subcommittee meeting information.
- Maintain and continue to populate informational section containing Noise 101 presentations and noise metric videos.

#### **Background:**

The Roundtable updated its website as a Work Program item in 2013 – 2014 and was presented to the Roundtable at its September 2013 meeting.

This is a maintenance item. Roundtable staff and consultant staff will update the website on per-meeting with the agenda and agenda packet, upload subcommittee agendas, and update the website with appropriate documents, links, and tweets.

**Present to Roundtable:** As new information is uploaded.

**Staff Assigned:** Roundtable staff

**Strategic Goal:** 4

**Budget Allocated:** No extra budget effort for RT staff is anticipated; updates will utilize existing staff resources where possible.

#### AI2. Fly Quiet Update

**Item Description:**

Continue receiving updates to the airport's Fly Quiet Program

**Background:**

The Roundtable and SFO launched the Fly Quiet Program in 2001. The Fly Quiet Program is a quarterly report of airline performance in specific categories. The Roundtable holds the Fly Quiet awards at the February meeting each year, inviting the overall winner and category winners to the Roundtable meeting for an official presentation of the awards. The awards presented are: Chairman's Award, Fly Quiet Award, and Most Improved. It is recommended the February meeting be held at the SFO airport museum to present the awards to airlines receiving them to celebrate their accomplishments.

**Present to Roundtable:** This item is anticipated to be presented to the Roundtable at meetings immediately following the closing of each reporting quarter, including information on fleet mix trends at SFO.

**Staff Assigned:** Airport staff

**Strategic Goal:** 2

**Budget Allocated:** Budget expenditure to include refreshments and the existing budget for awards.

#### AI3. Airport Updates

**Item Description:**

Continue receiving updates from the airport Director or other staff on significant airport happenings, traffic levels, operations, and other data from the preceding months

**Background:**

The airport provides information germane to the RT and noise issues at each meeting. The briefing is typically provided by the airport Director.

**Present to Roundtable:** This item is anticipated to be presented to the Roundtable at each meeting.

**Staff Assigned:** Airport staff

**Strategic Goal:** 4

**Budget Allocated:** No extra budget effort anticipated.

AI4. Outreach to OAK Noise Forum and Potential Santa Clara County Noise Forum

**Item Description:**

Continue dialogue with the noise forums within the Bay Area at Oakland International Airport and Mineta San Jose International Airport to share information and best practices, discuss issues relating to Bay Area and national airport noise issues. Assist Santa Clara County with advice on implementing a noise forum and share information with cities regarding aircraft operations.

**Background:**

The SFO RT has a history of maintaining interaction with fellow airport-sponsored noise organizations in the Bay Area. This has led to joint letters to the FAA and other organizations regarding noise mitigation issues, joint trip to NORCAL TRACON, and understanding how all three airports interact with regards to airspace and noise mitigation. Santa Clara County does not currently have a sanctioned group focused on aircraft noise issues, however there are studies being commissioned by municipalities in Santa Clara County regarding SFO-related aircraft operations. Mineta San Jose International Airport used to have a noise forum that met on a quarterly basis; the noise forum stopped meeting and all noise-related issues are heard at the SJC Airport Commission Meeting. The SFO RT, at its September 28, 2015 Subcommittee meeting, proposed to continue outreach to Santa Clara County with regards to SFO overflights and sharing of information from overflight noise from aircraft transitioning the airspace from other regional airports.

**Present to Roundtable:** This item is anticipated to be presented to the Roundtable after any interactions or 'teaming' with OAK, SJC, or related organizations on a regional level.

**Staff Assigned:** RT staff

**Strategic Goal:** 3

**Budget Allocated:** No extra budget effort anticipated.

AI5. Include LAX and ORD Roundtable Groups on SFO RT Distribution List

**Item Description:**

Maintain contact with Roundtable organizations throughout the country via correspondence relating to Roundtable issues on a state and national level.

**Background:**

The SFO RT has a history of maintaining interaction with the fellow airport-sponsored noise organizations in the country through sharing correspondence relating to current noise issues including pending legislation, funding allocation, or new technology.

**Present to Roundtable:** This item is anticipated to be in the correspondence section of the RT packets as required.

**Staff Assigned:** RT staff

**Strategic Goal: 3**

**Budget Allocated:** No extra budget effort anticipated.

AI6. Send RT Member(s) to Noise Forums or Technical Conference

**Item Description:**

Maintain knowledge base of the RT and its members by sending members to technical conferences or other noise forums.

**Background:**

The SFO RT has a history of maintaining a strong knowledge base of aircraft noise theory that is communicated to the membership. This has been done through conducting Noise 101 sessions, sending RT members to NORCAL TRACON, and to industry conferences.

**Present to Roundtable:** Fall 2015 meeting; Post-conference attendance updates

**Staff Assigned:** RT staff

**Strategic Goal: 4**

**Budget Allocated:** Anticipated budget of \$2,000/member to attend the AAAE/ACI conference in San Diego in fall 2016. Local meeting attendance not anticipated to have a budgetary impact.

#### AI7. Send RT Coordinator to LAX Roundtable Meeting

##### **Item Description:**

Continue to correspond and maintain understanding of the LAX Roundtable structure and issues by making a yearly site visit.

##### **Background:**

The SFO RT keeps in contact with other airport noise organizations, including the LAX Roundtable. In the past, the SFO RT has sent the RT Coordinator to an LAX Roundtable meeting to observe their practices and exchange information with their staff. The RT Coordinator and Technical Advisor will attend an LAX Roundtable meeting on an odd-numbered month in 2015.

**Staff Assigned:** RT staff and Technical advisor

**Strategic Goal: 4**

**Budget Allocated:** Anticipated budget of \$1,000 for the RT Coordinator.

#### AI8. National Organization to Insure a Sound Controlled Environment N.O.I.S.E. Membership

##### **Item Description:**

Maintain understanding of regional and national aircraft noise issues and join with a national group to support legislation and research to quieter aircraft, procedures, and technology.

##### **Background:**

The National Organization to Insure a Sound Controlled Environment (N.O.I.S.E.) is an advocacy group focused on reducing noise for communities surrounding airports. The Washington, D.C.-based organization works with major organizations including the National League of Cities to arrange meetings with federal agencies and Congressional offices. The County of San Mateo has historically been involved with N.O.I.S.E. The Roundtable can look for opportunities within N.O.I.S.E. and the League of Cities to make presentations regarding aircraft noise issues. At this time, N.O.I.S.E. is active, but its efficacy isn't fully understood. At the September 28, 2015 Subcommittee meeting, the members recommended staff investigate the pros and cons of membership; approval of this item would be brought to the Roundtable at a subsequent regular meeting.

**Present to Roundtable:** As required and as legislative information is available.

**Staff Assigned:** RT staff

**Strategic Goal: 3**



**Budget Allocated:** Anticipated budget of \$5,000 to join N.O.I.S.E. and \$2,000/member and/or RT staff to attend its Legislative Summit in a yet-to-be-determined location.

## **Work Program – Legislative Items**

### LI1. Research Federal, State, and International Noise Legislation

#### **Item Description:**

The Roundtable will continue its research of federal, state, and international proposed noise legislation, as well as existing legislation as it applies to operations at San Francisco International Airport.

#### **Background:**

The Roundtable keeps track of legislative issues on state, federal, and international level to determine the implications of legislation on operations and noise issues at San Francisco International Airport. This is done through a subscription to the Airport Noise Report (ANR) as well as monitoring legislation through the Federal Register and other list services. In addition to the RT monitoring noise issues on a federal level, the organization will monitor noise regulations suggested by CAEP/ICAO as voluntary or mandatory. The International Civil Aviation Organization (ICAO) is an organization that recommends best practices and adopts standards for the aviation industry, including noise as it relates to aircraft operations. This research could result in correspondence from the RT to the legislative sponsor regarding any positive or negative impact of the legislation.

**Present to Roundtable:** This item will be reviewed by the RT as required.

**Staff Assigned:** Roundtable staff

**Strategic Goal: 3**

**Budget Allocated:** No extra budget effort for RT staff. The yearly subscription to ANR is \$850.

## **Work Program - Research Items**

### RI1. Guest Speaker

#### **Item Description:**

The Roundtable will continue its efforts to have guest speakers invited to RT meetings to present information regarding a topic of interest to the RT.

#### **Background:**

The Roundtable, in an effort to keep current on trends in noise and airports, set up a guest speaker item as part of the 2011-2012 Work Program. It is the goal of the RT to continue inviting speakers to the RT, increasing the membership and public's understanding of current issues. The RT and airport staff will recommend speakers, and the RT membership is encouraged to request experts in a specific topic to speak.

**Present to Roundtable:** This item will be reviewed by the RT as required.

**Staff Assigned:** Roundtable staff

**Strategic Goal: 3**

**Budget Allocated:** No extra budget effort for RT staff, travel costs would be at the expense of the speaker.

### RI2. Noise Effects of Aircraft – Traditional Arrival versus Optimized Procedure Descent (OPD)

#### **Item Description:**

Determine the difference, measured using a single event metric, of traditional aircraft arrivals versus aircraft utilizing published Optimized Procedure Descent (OPD) criteria.

#### **Background:**

As part of NextGen, aircraft will at times execute an OPD approach, which allows an aircraft to descend to an airport using idle power from cruise altitude instead of the standard step-down approach. This type of approach can bring aircraft in lower altitudes above residential areas on the Peninsula. Studies have been conducted in the Woodside area by the Airport Noise Abatement Office, as well as with the Boeing Corporation.

The Roundtable consultant presented a report of aircraft arrivals over the Woodside area comparing traditional to OPD approaches to the Subcommittee in June 2013 and to the full Roundtable in September 2013. This item should be continued as more aircraft become equipped to fly an OPD approach.

**Present to Roundtable:** This item will be reviewed by the RT as required.

**Staff Assigned:** Roundtable staff, in conjunction with Airport staff

**Strategic Goal: 1**

**Budget Allocated:** Budget to be determined if additional studies need to be conducted beyond capabilities of Airport staff.

### RI3. Airport Cooperative Research Program (ACRP) Participation

**Item Description:**

The Roundtable has the option to become involved with ACRP in three ways: submit a problem statement to the Airport Cooperative Research Program (ACRP) for an item to study in depth, submit applications to serve on an ACRP panel, or support research statements to carry forward.

**Background:**

ACRP is a subset of the Transportation Research Board (TRB) that studies issues relating to airport operations, including noise abatement. Each year ACRP solicits problem statements relating to a global issue that affect airports throughout the country. ACRP chooses the problem statements to then turn into research projects. Each research project is comprised of a panel of experts and a consultant that completes the research document under the guidance of the expert panel.

In addition to ACRP soliciting for proposals, expert panel members are also required each year. If there are research projects that are applicable to community noise groups or noise mitigation, members of the RT are encouraged to apply to these expert panels. The expert panels meet 2-3 times per project in Washington, D.C.

**Present to Roundtable:** ACRP Problem Statements are solicited in the spring and applications to serve on an ACRP panel open up in the fall.

**Staff Assigned:** Roundtable staff

**Strategic Goal: 3**

**Budget Allocated:** No extra budget effort; all travel is paid by ACRP.

### RI4. CNEL Noise Insulation Boundary Update

**Item Description:**

The Roundtable will receive updates on the status of the residential sound insulation program at SFO on a biannual basis to include items such as: number of homes within the currently-

approved Noise Exposure Map that are not insulated, number of homes that declined participation in the program, and estimated number of homes being insulated.

**Background:**

The Roundtable has received updates from the airport over the course of the sound insulation program. The program's focus is to find and inform eligible homeowners that their residence can receive sound insulation treatments for being within the 65 CNEL noise contour, or Noise Exposure Map. The airport is in the process of updating its NEM.

**Present to Roundtable:** This item will be reviewed by the RT as required.

**Staff Assigned:** Roundtable and airport staff

**Strategic Goal:** 4

**Budget Allocated:** No extra budget effort for RT staff.

RI5. Use of Single Event Noise Metrics to Evaluate Noise Outside of the 65 CNEL

**Item Description:**

The Roundtable will research the feasibility of using supplemental noise metrics outside of the 65 CNEL to determine the impact of aircraft operations.

**Background:**

The 65 CNEL is the federally and state accepted metric to determine impacts from aircraft noise as well as eligibility for sound insulation programs. As aircraft become quieter, the 65 CNEL noise contour has become smaller in size, reducing the "affected areas" as defined by federal and state standards. As a response to this, airports have studied utilizing supplemental metrics, which show noise levels at various locations in the community utilizing metrics including Lmax and SENEL.

**Present to Roundtable:** This item will be reviewed by the RT as required.

**Staff Assigned:** Roundtable staff

**Strategic Goal:** 3

**Budget Allocated:** No extra budget effort for RT staff.

## RI6. Use of Unmanned Aerial System in the National Airspace System

### **Item Description:**

The Roundtable will monitor legislation and research related to Unmanned Aerial Systems (UAS) within the National Airspace System (NAS) that is controlled by the Federal Aviation Administration.

### **Background:**

UAS are any unmanned aerial vehicle, drone, or system that is flown remotely by a pilot or via an onboard computer system. Rules and regulations for UAS operations are in its infancy; there are no noise regulations on their use. This program item will monitor uses of UAS and FAA regulations regarding their use and noise abatement regulations.

**Present to Roundtable:** This item will be reviewed by the RT as required.

**Staff Assigned:** Roundtable staff

**Strategic Goal: 4**

**Budget Allocated:** No extra budget effort for RT staff.

### **Work Program – Aircraft Operations/ Airspace**

#### AO1. NorCal Optimization of Airspace and Procedures in the Metroplex (Metroplex)

### **Item Description:**

The Roundtable will monitor implementation of flight procedures in the NorCal Metroplex project specific to procedures and operations at San Francisco International Airport. This program, formerly referred to as “OAPM”, is now “Metroplex.”

### **Background:**

The NorCal Metroplex is the update of the airspace in the bay area. Federal regulations required the FAA complete an Environmental Assessment (EA) for the project, determining any environmental impacts to the project study area. The EA was released in March 2014; the Record of Decision on the EA was published July 2014; all Metroplex procedures related to SFO operations are operational.

The Roundtable staff and its consultant will monitor implementation of the 14 new or enhanced procedures for SFO, with specific attention on the following:

- NIITE procedure enhancing the QUIET Standard Instrument Departure (SID)
- SERFR enhancing the BIG SUR & HADLY arrivals
- SSTIK procedure enhancing the PORTE and OFFSHORE SID

**Present to Roundtable:** This item will be reviewed by the RT as required and updates to the RT will be from RT staff or the FAA.

**Staff Assigned:** Roundtable staff

**Strategic Goal: 1**

**Budget Allocated:** No extra budget effort for RT staff.

#### AO2. Woodside Optimized Profile Descents (OPD)

**Item Description:**

The Roundtable will receive briefings on the Woodside OPD

**Background:**

The Airport currently publishes the weekly Woodside VOR report on its website. This report shows the number of aircraft that flew over the Woodside VOR between the hours of 10:30 p.m. – 6:30 a.m. This Work Program item would require the Airport to provide a report on aircraft that utilized the OPD approach between these hours.

**Present to Roundtable:** This item will be reviewed by the RT as required.

**Staff Assigned:** Roundtable staff

**Strategic Goal: 1**

**Budget Allocated:** No extra budget effort for RT staff.

#### AO3. SSTIK and PORTE 5 Departures

**Item Description:**

The Roundtable will continue to monitor operations on the SSTIK and PORTE 5 departures.

**Background:**

As part of the Metroplex, the SSTIK departure procedure replaced the PORTE departure for all aircraft equipped to fly RNAV procedures. Both departures fly over portions of the City of Brisbane. In 2012-2013, the Roundtable resumed its work with NORCAL TRACON, SFO Tower, airlines, and SFO staff to determine why the number of aircraft flying over southern portions of Brisbane increased. This Work Program item will continue to monitor this issue and initiate outreach to stakeholders that can assist with mitigation.

**Present to Roundtable:** This item will be reviewed by the RT as required.



**Staff Assigned:** Roundtable staff

**Strategic Goal:** 1

**Budget Allocated:** No extra budget effort for RT staff.

#### AO4. Visit NORCAL TRACON

**Item Description:**

The Roundtable membership will visit the NORCAL TRACON facility in Mather, California.

**Background:**

NORCAL TRACON is a radar approach facility that controls aircraft movements in the bay area and other portions of Northern California and Nevada. NORCAL TRACON is a key stakeholder for the RT and has historically worked with the RT to implement noise abatement procedures when traffic allows. This site visit will provide members of the RT with an understanding of how NORCAL TRACON operates and watch aircraft movements in real time. The OAK Noise Office has coordinate this effort; the Roundtable proposes to coordinate this effort for the spring 2016 trip.

**Present to Roundtable:** Schedule trip in spring 2016; present a trip report to the Roundtable following the trip.

**Staff Assigned:** Roundtable staff

**Strategic Goal:** 4

**Budget Allocated:** The Roundtable's contribution on previous joint trips with the Oakland Noise Forum has been approximately \$550, which included transportation and meals for up to 10-12 Roundtable members. For the spring 2016 trip, the Roundtable's contribution would be approximately \$1,000 for transportation and meals as the primary coordinator of the trip.

#### AO5. Aircraft Use of Satellite Procedures

**Item Description:**

Monitor additional uses of satellite-based procedures to enhance operations as they are applicable to SFO.

**Background:**

As referenced in Work Program Item AO1, the airspace related to operations at SFO was part of the Metroplex airspace project. This project identified numerous Area Navigation (RNAV) procedures to enhance existing arrival and departure procedures. This Work Program item will

further define procedures to help noise abatement efforts at SFO, including Required Navigation Performance (RNP). This item would be collaborative with the SFO Noise Abatement Office and at least one airline to assist with procedure enhancements. This item has moved from information to research/action.

**Present to Roundtable:** As required.

**Staff Assigned:** Roundtable staff

**Strategic Goal:** 1

**Budget Allocated:** No extra budget effort for RT staff.

#### AO6. Airbus A320 Aircraft Vortex Generator

##### **Item Description:**

Work with the SFO Noise Abatement Office to equip carriers that use the Airbus A320/319 family of aircraft with vortex generators for the underwing fuel vent.

##### **Background:**

Research has shown that Airbus A320 aircraft have a fuel vent on the underside of each wing. At certain altitudes and speeds, air coming in contact with these vents results in a wind vortex that emits a high-pitched whine noise. This is typically heard 20 – 30 miles away from an airport on arrival. The SFO noise abatement office has researched the solution, which is approximately \$3,000.00, includes labor and parts to install. The Roundtable will work with the noise office to advance this effort.

**Present to Roundtable:** As required.

**Staff Assigned:** Roundtable staff

**Strategic Goal:** 2


**Budget Allocated:** No extra budget effort for RT staff.

(This page is left intentionally blank)



September 29, 2015

**TO:** Roundtable members and Interested Persons

**FROM:** James A. Castañeda, AICP, Roundtable Coordinator 

**SUBJECT:** Service Performance Report and Proposed Roundtable Budget for FY 2014-2015

---

Staff has prepared a draft Roundtable Budget for the current FY 2015-2016 for the Roundtable to review and consider at the October 7, 2015 Regular Meeting.

On September 28, 2015, the Work Program Subcommittee reviewed and discussed the draft budget, and recommending the Roundtable consider and adopt the budget contained within this memorandum.

As part of preparing the draft budget, staff also has prepared a brief review of the work and services provided by staff during the previous fiscal year, as well as an overview of the expenditures incurred during that time.

## **COUNTY SERVICE REPORT**

### **BACKGROUND**

On July 1, 2012, the City and County of San Francisco and the County of San Mateo entered into a three year agreement to provide coordinating services for the SFO Airport/Community Roundtable ("Roundtable") in their role to identify noise impacts and reduction measures. The agreement contract required the following from the County of San Mateo:

- Planner (half-time position) as Program Coordinator
- Retain qualified technical consultant for technical support
- Administrative Support to the Program Coordinator
- Roundtable Media Program, Media Support and Website Content
- Provide operating needs of the Roundtable (postage, photocopying, office equipment/supplies, website support, etc.)

San Mateo County ("County") is compensated for the aforementioned requirements from the Roundtable Trust Fund, which the funding is contributed partially from the City and County of San Francisco Airport Commission ("SFO") and the Roundtable membership's annual dues.

As part of this agreement, the County is to provide a report to SFO that generally describes the work performed for the Roundtable by County staff. That report is as follows:

## **SERVICE DETIALS**

### **A. Planner (half-time position) - Program Coordinator**

Per the established agreement, San Mateo County assigns a Planner from the Planning & Building Department to act as Program Coordinator at a half-time (20 hours/week, or 1,040 hours annually) position. The typical assigned Coordinator tasks performed and completed in FY 2013-2014 by the Coordinator include (but not limited) to the following:

- Maintain communications with Airport staff regarding Roundtable agenda items, Work Program items, noise complaints, monthly noise reports, quarterly reports, and related items.
- Retain and manage a technical consultant to provide technical support to the Roundtable (BridgeNet International).
- Coordinate, review, and approve the work products and monthly billing per the scopes of work of the technical consultant.
- Directs/assigns administrative assistance work to available County Planning & Building administrative staff when needed.
- Administrative support to Roundtable including preparation of materials for agenda items, annual draft budget, meeting summaries, and preparation and distribution of monthly agenda packets.
- Attend all Regular Roundtable Meetings, workshops and subcommittee meetings.
- Update website as necessary.

In addition to the listed tasks necessary for typical Roundtable operations, the following tasks have also have either been completed or ongoing:

- Implementation of an "eNews" email distribution general Roundtable announcements and aircraft noise related news and information
- Modernization of meeting packet presentation and distribution

**B. Retain qualified technical consultant for technical support**

This effort was conducted and completed in September 2012. On October 3, 2012, the Roundtable accepted a three-year agreement with BridgeNet International, who began technical support services to the Roundtable November 2012, and will continue to do so through January 31, 2016. At that time, staff will circulate a Request for Proposal to review and evaluate potential qualified technical consultants.

**C. Administrative Support to the Program Coordinator**

As part of the County service structure, the Program Coordinator has utilized County Planning administrative staff to assist the Roundtable when necessary.

**D. Roundtable Media Program, Media Support and Website Content**

During the course of the current fiscal year, staff has maintained and updated the Roundtable's website where necessary with agendas, minutes, published reports, and other relevant information. Staff has created an e-mail distribution to lists to cities and other interested parties for important noise impact announcements. Earlier this summer, staff implemented an "eNews" distribution designed to give periodic updates, news and information to Roundtable members and interested parties between meetings and other events. Staff will continue explore other media opportunities with resources available.

**E. Provide operating needs of the Roundtable (postage, photocopying, office equipment/supplies, website support, etc.)**

County staff over the course of the current fiscal year has provided all materials necessary for the Roundtable's operations. This includes expenses incurred related to the Fly Quiet Awards expenses, meeting supplies, as well as independent data services and storage.

**BUDGET EXPENDITURES FY 2014-2015**

**A. Income**

In the previous fiscal year, all excepted sources of funding with the exceptions of three cities were received (staff is following up with those outstanding dues). This included contributions from SFO, Roundtable member cities, County of San Mateo and C/CAG Airport Land Use Committee. A remaining balance of \$118,881 from FY 2013-2014 was carried over as a result of the allocated contingencies funds being utilized. Total funded balance in FY 2014-2015 was \$249,131.

As a result of the large surplus due to unused contingency funds and other allocations, SFO requested that staff evaluate options to reduce the surplus. Staff elected to collect half of SFO contributions for FY 2014-2015 only, resulting in a total contribution of \$110,000. All other contributions remained at half of the normal dues as practiced since FY 2011-2012 on a year-by-year temporary basis.

## **B. Expenditures**

At the end of FY 2014-2015, the Roundtable Trust Fund incurred approximately \$169,119 in expenditures.

The expenditures included the allocated staff and consulting support cost of \$163,529, which did not exceed allocated amounts as set from the adopted FY2014-2015 budget.

Roundtable administration/operational costs accounts for \$1,496 of the allocated \$4,300. Postage and printing did not meet or exceed the allocation, as no additional meetings were required, but also staff reduced cost by limiting printing of packets in black and white, limiting printed distribution, and encouraging use of the electronic version of the meeting packets. Website allocations were utilized to renew the Roundtable's domain, as well as pay the annual dues for webhosting. A total of \$633 was used for general supplies, equipment exclusive for Roundtable's use, mileage reimbursements, FlyQuiet Awards trophies, and meeting supplies.

During FY 2014-2015, allocations were established to allow the Roundtable coordinator and interested Roundtable members to attend the UC Davis Noise Symposium. This year, the Roundtable Chair and Vice-Chair attended the meeting, and funds were allocated for such. The Roundtable coordinator was not in attendance.

Starting with the adoption of the budget for FY 2012-2013, contingency funds were allocated in order to cover unanticipated costs associated with additional work required of the technical consultants or other expenses not originally accounted for with the adoption of the budget during the course of the upcoming fiscal year. During the FY 2014-2015, staff utilized funds from the General contingency to purchase a new projector to use at subcommittee meetings. No funds were utilized from the Aviation Consultant Contingency. All unused amounts will roll over as additional funds for FY 2015-2016.



## **PROPOSED FY 2015-2016 BUDGET**

### **BACKGROUND**

The Roundtable is funded by its membership. The annual membership contributions are maintained in a Roundtable Trust Fund. The County of San Mateo Planning and Building Department, on behalf of the Roundtable, administer the fund. All Roundtable expenses, such as staff support, technical support consultant contracts, office supplies/equipment, mailing/photocopying costs, etc. are paid from that Fund. Any monies that are not spent each year (Roundtable Fund Balance) are added as revenue to the budget for the following fiscal year. All staff support and professional consultant services are provided to the Roundtable through the County of San Mateo Planning and Building Department. The amounts for these support services are shown as budgeted expenditures in the annual Roundtable budget.

### **BUDGET DISCUSSION**

The expected funding sources for the FY 2015-2016 include the following: 1) the San Francisco Airport Commission, 2) Roundtable member cities (18 cities), 3) the County of San Mateo, and 4) the City/County Association of Governments of San Mateo County (C/CAG), for a representative of the C/CAG Airport Land Use Commission (ALUC), and 5) the estimated Roundtable fund balance from FY 2012-2013.

This summer, SFO and the County agreed on a new three year contract to provide the same services agreed upon with the 2012-2015 contract. As part of this new contract, the amounts contributed by SFO were reduced from \$220,000 per year, to \$175,000 in light of the Roundtable's large unallocated year-to-year surplus. SFO has supported the Roundtable through fiscally difficult years allowing for the Roundtable to temporarily reduce member cities' dues in order to provide financial relief to encourage ongoing participation. For FY 2015-2016, the Work Program Subcommittee is recommending that the dues remain at the temporary 50% dues for member cities, the County of San Mateo, and C/CAG. The contributions are as follows:

San Francisco Int'l Airport:	\$175,000
Member Cities (18 cities):	\$750
County of San Mateo:	\$6,000
C/CAG:	\$750

### **Expected Funding Sources**

#### **A. Annual Funding from the San Francisco Airport Commission**

The Commission's contribution for FY 2014-2015 is \$175,000.

**B. Annual Funding from Other Roundtable Members**

The annual funding amounts from the other Roundtable members (18 cities, the County of San Mateo, and C/CAG for the C/CAG Airport Land Use Committee (ALUC)) will be at the original normal fees, resulting in the following dues: Cities - \$750 each; County - \$6,000, and C/CAG - \$750.

**C. Estimated Roundtable Fund Balance from the Prior Fiscal Year**

The estimated Roundtable fund balance from the previous fiscal year (FY 2014-2015) is \$77,431. This is the balance after closeout of all prior contract obligations from that fiscal year, as well as contingencies funds that were not utilized.

**Potential Funding Allocations for FY 2015-2016**

**A. Staff and Consultant Support Services - \$183,000**

Funding for staff support to the Roundtable will consist of the following:

1. **Roundtable Coordinator (\$113,000).** This amount represents a reimbursement to the County of San Mateo to provide half-time Planner support to the Roundtable. This fee is the half-time loaded wage rate for a Planner III provided from the county. This includes all administrative support to the coordinator. This amount is unchanged from FY 2014-2015.
2. **Roundtable Aviation Consultant for Technical Support (\$70,000).** This is not to exceed contract amount to provide the Roundtable with Aviation Technical Support. This amount is unchanged from FY 2014-2015.

**B. Roundtable Administration/Operations - \$3,500**

1. **Postage/Photocopying (\$2,500).** This amount represents a reimbursement to the County of San Mateo for costs associated with reproduction of meeting materials and postage. This amount is considerate of electronic distribution of materials to offset costs when possible. This amount is lowered from the allocated amount from FY 2014-2015, as cost for publication has been lower than expected. The proposed reduction still allows for packets for additional meetings the Roundtable may elect to have as necessary.
2. **Website (\$200).** This amount represents a reimbursement to the County of San Mateo for costs associated with paying website hosting dues and renewal of domain registration. Maintenance of the website will be performed by the Roundtable Coordinator. This amount is unchanged from FY 2014-2015.

3. **Data Storage and Conference Services (\$800).** This amount represents a reimbursement to the County of San Mateo for the cost associated with maintaining all of the Roundtable's files and archives to Internet based storage. In the last year, the need for online conference services has risen due to expanding subcommittee meeting services for remote members. As a result, this amount is an increase of \$400 from FY 2014-2015 in order to offer expanded remote meeting services to members.
4. **Supplies/Equipment (\$1,200).** This amount represents a reimbursement to the County of San Mateo to provide supplies and equipment to the Roundtable Coordinator and administrative support staff when needed, as well as supplies used during meetings, including the FlyQuiet Awards in the spring. This amount is unchanged from FY 2014-2015.

**C. Projects, Programs, and Additional Allocations - \$13,850**

For FY 2014-2015, the Roundtable allocated additional funds to cover expenses associated with attendance at noise conferences, TRACON field trips, and subscription to aircraft noise publications. With the Roundtable's 35<sup>th</sup> Anniversary occurring in 2016, funds are also proposed for allocation to hold a special event as in the past for the 25<sup>th</sup> and 30<sup>th</sup> Anniversary's.

1. **Noise Conference Attendance, Coordinator (\$3,000).** This amount represents a reimbursement to the Coordinator for attendance to the annual UC Davis Noise Symposium held in the spring, National Organization to Insure a sound Control Environment (N.O.I.S.E.) legislative summit, and/or other aircraft noise related conferences that would be beneficial to the Roundtable. This amount is unchanged from FY 2014-2015.
2. **Additional Noise Conferences Attendees (\$4,000).** This amount represents the cost associated with additional Roundtable member attendance of the UC Davis Noise Symposium held in the spring, the National Organization to Insure a sound Control Environment (N.O.I.S.E.) legislative summit, and/or other aircraft noise related conferences that would be beneficial to the Roundtable. Estimated cost per person is \$2,000 and allows for up to two members to attend one conference. This amount is unchanged from FY 2014-2015.
3. **TRACON Field Trip (\$1,500).** This amount represents the estimated cost associated with providing transportation and lunch to members for a field trip to the NorCal TRACON facility, normally in conjunction with the Oakland Noise Forum. This amount is unchanged from FY 2014-2015.

4. **Airport Noise Report newsletter subscription (\$850).** This amount represents the annual subscription dues for the Roundtable to receive the Airport Noise Report to help keep Roundtable staff and members informed of news related to aircraft noise. This amount is unchanged from FY 2014-2015.
5. **LAX Roundtable Attendance, Coordinator (\$1,000).** This amount represents a reimbursement to the Coordinator to attend an LAX Roundtable meeting. In the past, the Roundtable has sent the Coordinator to observe their practices and exchange information with their staff. This item was introduced last year as part of the adopted Work Program for FY 2014-2015. This amount is unchanged from FY 2014-2015
6. **Join National Organization to Insure A Sound Control Environment (\$0).** This amount represents the cost associated with membership with National Organization to Insure a sound Control Environment (N.O.I.S.E.). While funds were allocated in FY 2014-2015 to joining pending investigation, allocations were not utilized to participate in that fiscal year. The Work Program Subcommittee recommended as part of the proposed Work Plan for FY 2015-2016 for staff to continue to investigate the benefits of the Roundtable's participation with the organization, and present to the Roundtable at a future date for their consideration. At this time the amount allocated is zero until the Roundtable has committed to participation with organization.
7. **Roundtable 35<sup>th</sup> Anniversary Event (\$1,000).** On June 1, 2016, the Roundtable will celebrate its 35<sup>th</sup> year since its first meeting held on June 1, 1981. The Roundtable has traditionally celebrated landmark years, such as the 25<sup>th</sup> and 30<sup>th</sup> anniversaries, during the June regular meeting by honoring the the accomplishments and diligent work the Roundtable has done over the years. The event normally includes guest speakers and other commemorative activities. The proposed allocation covers food and beverages to be provided, any associated venue cost, as well as publication materials to be distributed at the event.

**D. Contingency Funds - \$40,000**

This amount will be reserved as a contingency for any unforeseen costs associated with any work that is unanticipated/out-of-scope for Roundtable staff and Aviation consultants for Technical Support. The total estimated amount is \$40,000, which is split equally between a contingency for the Aviation Consultant and a General Contingency. This amount is unchanged from FY 2014-2015.

**Attachments:**

Proposed FY 2015-2016 Budget

## SFO Airport/Community Roundtable - Proposed Budget FY 2015-2016

### A EXPECTED FUNDING

	2012-2013	2013-2014	2014-2015	2015-2016
<b>FUND SOURCE</b>				
1 San Francisco Airport Commission	\$222,000	\$220,000	\$110,000	\$175,000
2 Roundtable Member Cities (18 Cities)	\$13,500	\$13,500	\$13,500	\$13,500
3 County of San Mateo	\$6,000	\$6,000	\$6,000	\$6,000
4 C/CAG Airport Land Use Committee	\$750	\$750	\$750	\$750
5 Estimated Fund Balance from Previous Year	\$2,124	\$69,457	\$118,881	\$77,762
<b>TOTAL:</b>	<b>\$242,374</b>	<b>\$309,707</b>	<b>\$249,131</b>	<b>\$273,012</b>

### B POTENTIAL FUNDING ALLOCATIONS

	2012-2013	2012-2013	2013-2014	2015-2016
<b>STAFF/CONSULTANT SUPPORT</b>	<b>\$190,016</b>	<b>\$183,000</b>	<b>\$183,000</b>	<b>\$183,000</b>
1 Count of San Mateo Coordination Services	\$120,016	\$113,000	\$113,000	\$113,000
2 Roundtable Aviation Technical Consultant	\$70,000	\$70,000	\$70,000	\$70,000
<b>ADMINISTRATION / OPERATIONS</b>	<b>\$4,800</b>	<b>\$4,100</b>	<b>\$4,300</b>	<b>\$3,500</b>
1 Postage / Printing	\$3,500	\$2,500	\$2,500	\$1,500
2 Website	\$200	\$200	\$200	\$200
3 Data Storage & Conference Services	\$300	\$400	\$400	\$800
4 Miscellaneous Office Expenses/Equipment	\$800	\$1,000	\$1,200	\$1,000
<b>PROJECTS, PROGRAMS, &amp; ADDITIONAL ALLOCATION</b>	<b>\$0</b>	<b>\$15,350</b>	<b>\$15,350</b>	<b>\$10,850</b>
1 Noise Conferences Attendance, Coordinator	\$0	\$2,000	\$3,000	\$3,000
2 Noise Conferences Attendance, Members	\$0	\$12,000	\$4,000	\$4,000
3 TRACON Field Trip(s)	\$0	\$500	\$1,500	\$1,000
4 Airport Noise Report subscription	\$0	\$850	\$850	\$850
5 N.O.I.S.E.			\$5,000	\$0
6 LAX Roundtable Attendance, Coordinator/Staff			\$1,000	\$1,000
7 35th Roundtable Anniversary Event				\$1,000
<b>CONTINGENCY FUND</b>	<b>\$47,558</b>	<b>\$40,000</b>	<b>\$40,000</b>	<b>\$40,000</b>
1 Aviation Consultant Contingency	\$20,000	\$20,000	\$20,000	\$20,000
2 General Contingency	\$27,558	\$20,000	\$20,000	\$20,000
<b>SUBTOTAL</b>	<b>\$242,374</b>	<b>\$242,450</b>	<b>\$242,650</b>	<b>\$237,350</b>
<b>UNCOMMITTED FUNDS / YEAR END BALANCE</b>	<b>\$0</b>	<b>\$69,457</b>	<b>\$6,481</b>	<b>\$35,662</b>

(This page is left intentionally blank)

# **CORRESPONDENCES**

Regular Meeting # 298  
December 2, 2015



(This page is left intentionally blank)



San Francisco International  
Airport/Community Roundtable

455 County Center, 2<sup>nd</sup> Floor  
Redwood City, CA 94063  
T (650) 363-1853  
F (650) 363-4849  
[www.sforoundtable.org](http://www.sforoundtable.org)

October 26, 2015

Mr. Don Kirby  
Manager  
Northern California Terminal Radar Approach Control  
Federal Aviation Administration

Re: SSTIK and CNDLE Departures

Dear Don:

Hope this letter finds you doing well.

I want to start by thanking you for attending our Departures and Arrivals Technical Advisory Committee meetings. These groups were formed to provide a platform for all stakeholders to come to the table and have constructive dialog with each other regarding airplane noise over our cities. Your presence at the last two meetings shows your commitment to this issue. I appreciate the feedback you brought to the discussion, and your willingness to improve the situation where feasible.

Following direction from the Departures Technical Working Group (DTWG), our technical consultant recently provided information regarding the % of flights that fly over the SSTIK waypoint between its implementation in January through October 2015; the results are in the attached PDF and video, Exhibits 1 and 2. The data provided by Cindy reveal that, between 50 - 65% of aircraft initiating a left turn have flown over the waypoint, using a Point of Closest Approach (PCA) of a 1/4 mile radius at the SSTIK waypoint.

The provided flight simulation video was created to notionally show a SSTIK and CNDLE departure from SFO and OAK, respectively, with a box indicating the minimum airspace requirements for the typical SSTIK departure. These flight tracks were chosen because each follows the respective charted procedure. The community feedback I've received in Brisbane shows that as published, these procedures are quieter than vectored flights and result in less complaints and lower noise for our residents. We would like to see the SSTIK and CNDLE flown in this manner as much as possible, especially during late night and early morning hours. This video demonstrates the potential compatibility of the two flight procedures, showing what appears to be appropriate vertical and horizontal safety separation between planes.

On October 7, 2015, Cindy Gibbs, technical consultant, met me in Brisbane and we drove to a



vantage point in our town where we could see flights coming out of SFO, as well as OAK. We observed seven aircraft departures between approximately 12 pm and 12:35 pm. The flight conditions were clear skies, with very little wind. We noticed that some SFO flights were vectored, while others were not. One flight in particular, American flight 2207, flew by around 12:19 pm, had a steady climb as it went through the SSTIK waypoint, continued up the shoreline for a considerable distance, then turned over Brisbane at a height that did not appear to cause a noise disturbance. This flight is a great example of how safety, efficiency and reduction in noise impacts can be in harmony with each other. These flights are shown in Exhibit 3.

There is an area of Brisbane called the Baylands, as shown in Exhibit 4. It has never had residential use, and will likely stay this way for a considerable amount of time in the future due to its past use as a city refuse site. From the ground, the sweet spot for SSTIK procedures making the left turn past the SSTIK waypoint is one to two miles up the shoreline. With a similar elevation as United flight 1927, planes turning within this mile to two mile window will eliminate most of the noise impacts felt by our citizens, as well as those by the adjacent cities on the other side of San Bruno Mt.

I was pleased to hear that you and the SFO Noise Abatement Office Staff had been working to reinvigorate the nighttime noise abatement right turn to heading 050° for the Runways 01 L/R departures. This subject was brought up again at the forum hosted by Congresswoman Speier. The implementation of this simple procedure made excellent use of the bay and keeps a large quantity of flights from overflying many highly populated cities throughout San Francisco and San Mateo Counties, very near the entire length of the peninsula.

If SFO planes heading to Southern California and other points southwest flew the 050° operation at night, and flew as many flights as safely possible through the SSTIK waypoint, while turning within that window a mile to two miles past the SSTIK waypoint, we would see a dramatic reduction in the number of flights that cause noise disturbances.

We have the technology to make this happen, while also ensuring safety and efficiency. The SSTIK and CNDLE procedures were created to be flown as chartered as much as possible, so that vectoring could be reduced; this was a constant theme in the NorCal Metroplex EA for improving efficiency.

It is our hope that this data can be used to assist your current noise abatement efforts by your facility as the air traffic controllers manage the skies over our communities. Keeping a plane twenty to forty seconds along the shoreline, before turning left towards San Bruno Mt makes a huge difference in whether or not people will get a good night's sleep or can enjoy spending time outdoors.

I thank you for your assistance and past help. We are not asking for flight procedures to be changed or noise disturbances be shifted to other communities, but rather that we work together to ensure that SSTIK and CNDLE procedures are flown as chartered when safe to do so.

I look forward to hearing from you.

Best regards,

A handwritten signature in dark ink, appearing to read 'Cliff Lentz', is positioned above the printed name.

Cliff Lentz

Mayor Pro Tem, City of Brisbane  
Chair, San Francisco Airport Community Roundtable

CC: Oakland International Airport Noise Forum

# SSTIK Turns Through Way Point

- First waypoint of SSTIK procedure is the SSTIK.
- SSTIK PCA – 1/4 nautical mile around the SSTIK waypoint.
- Analysis looked at all flights that flew a presumed SSTIK departure and flew through the PCA 24 hours a day.
- Analysis time frame
  - January 12, 2015 – October 6, 2015

# SSTIK PCA Turns - Results

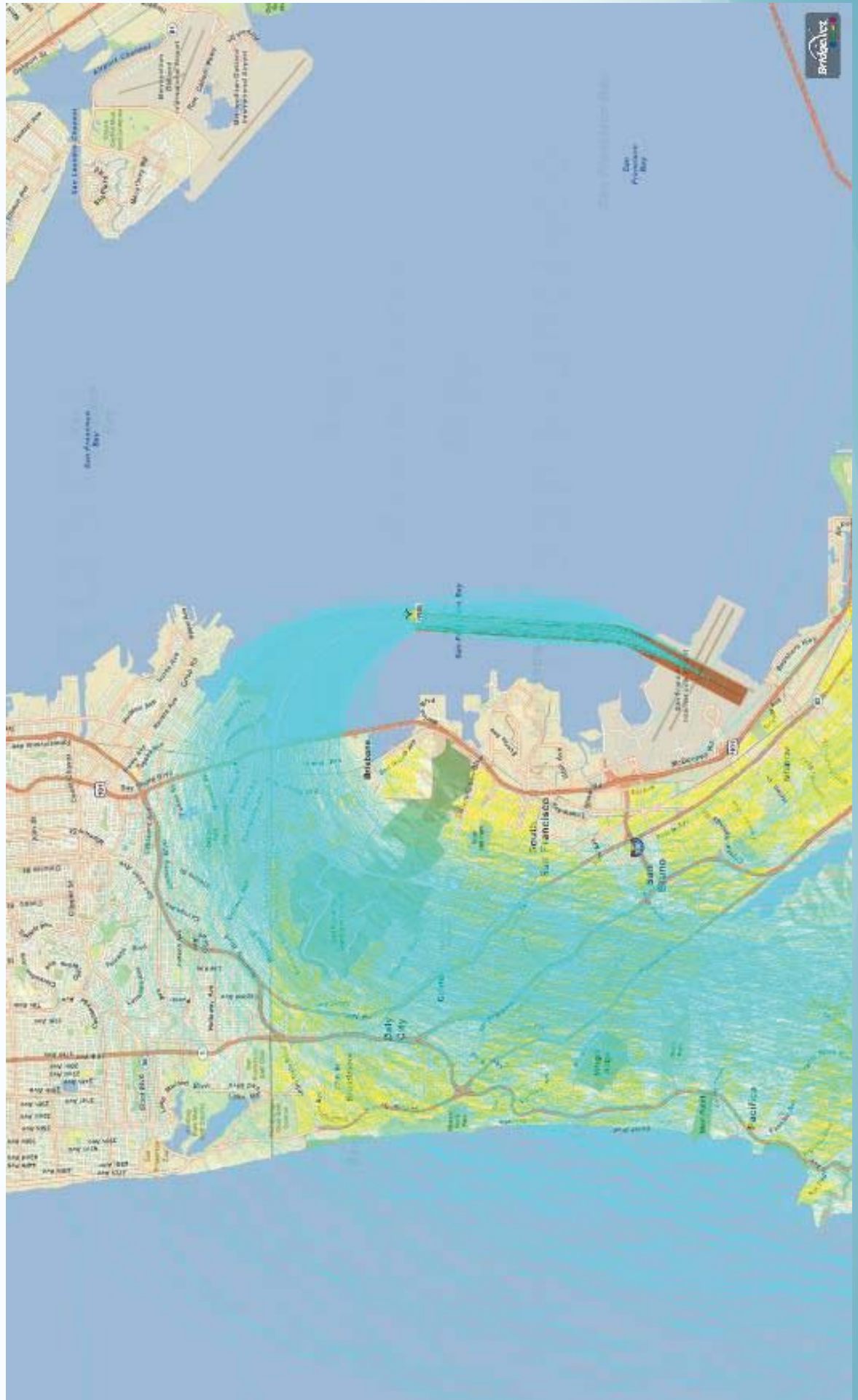
	Flights Turn outside PCA	Flights Turn in PCA	Total Flights	% Turned in PCA	
JAN	1,466	1,879	3,345	56%	
FEB	1,964	1,935	3,899	50%	
MAR	2,308	2,842	5,150	55%	
APR	1,963	2,334	4,297	54%	
MAY	1,575	2,261	3,836	59%	
JUN	1,674	2,823	4,497	63%	
JUL	1,570	2,926	4,496	65%	
AUG	1,384	2,607	3,991	65%	
SEPT	1,618	2,508	4,126	61%	
OCT	268	413	681	61%	







# SSTIK February

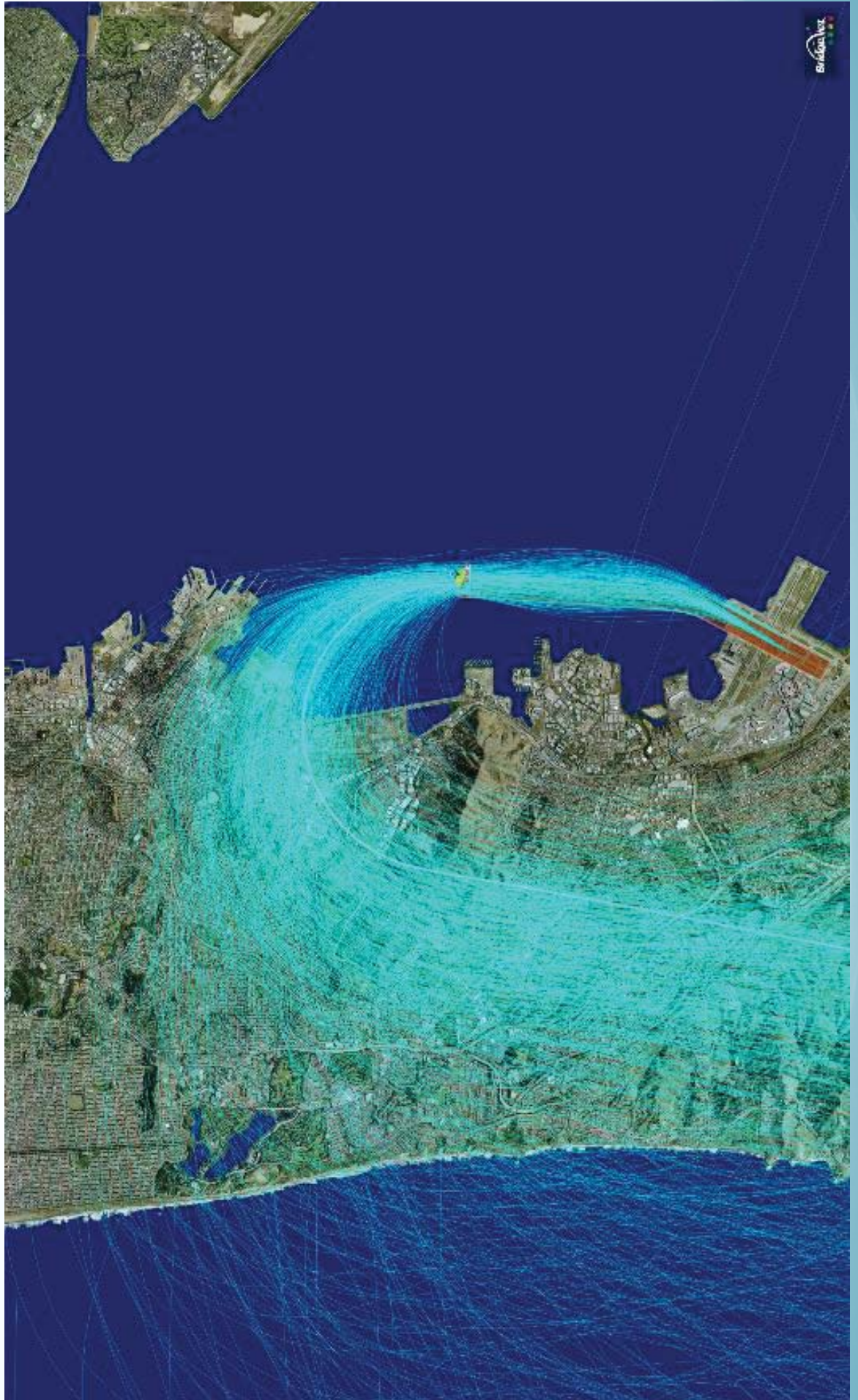


# SSTIK July

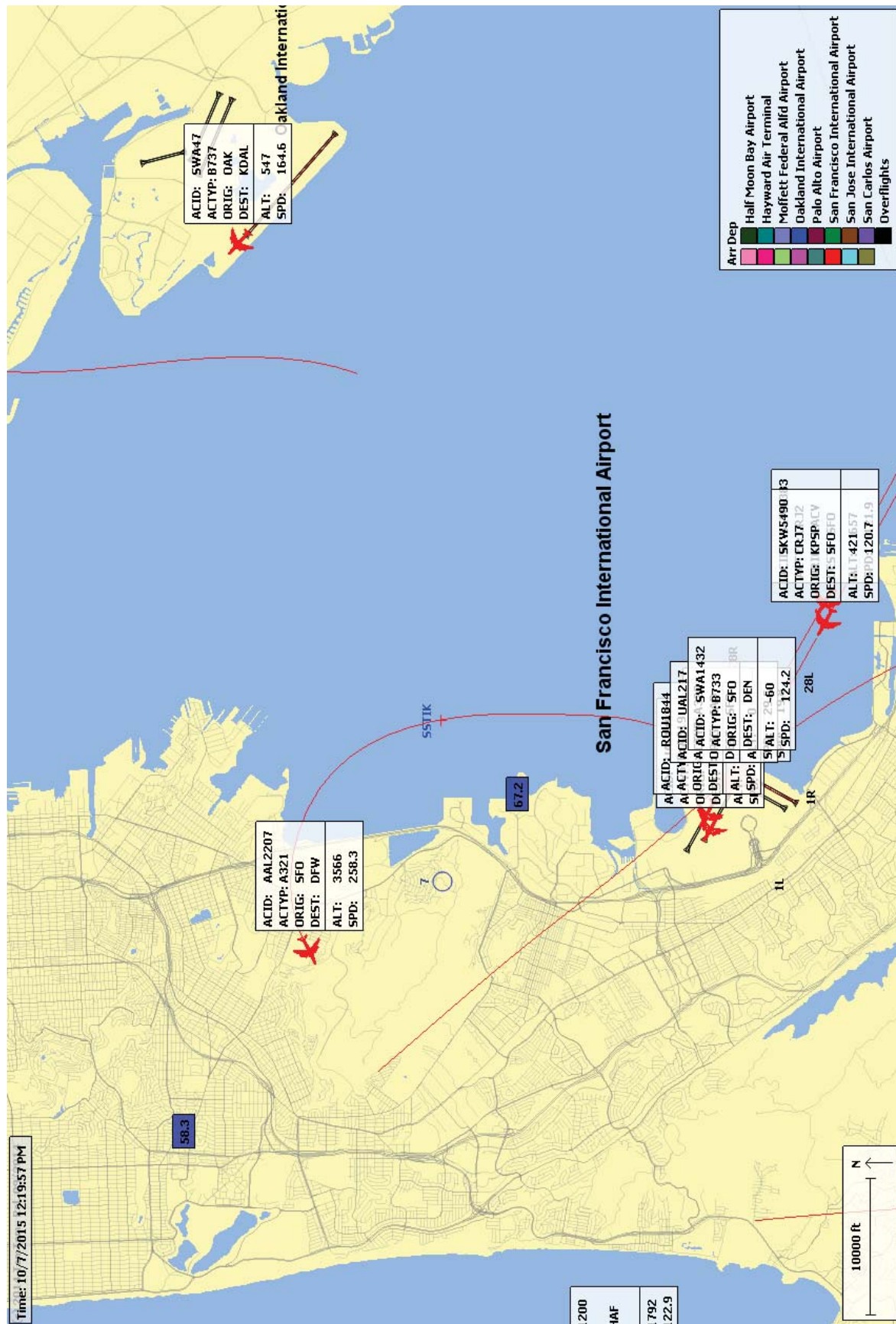


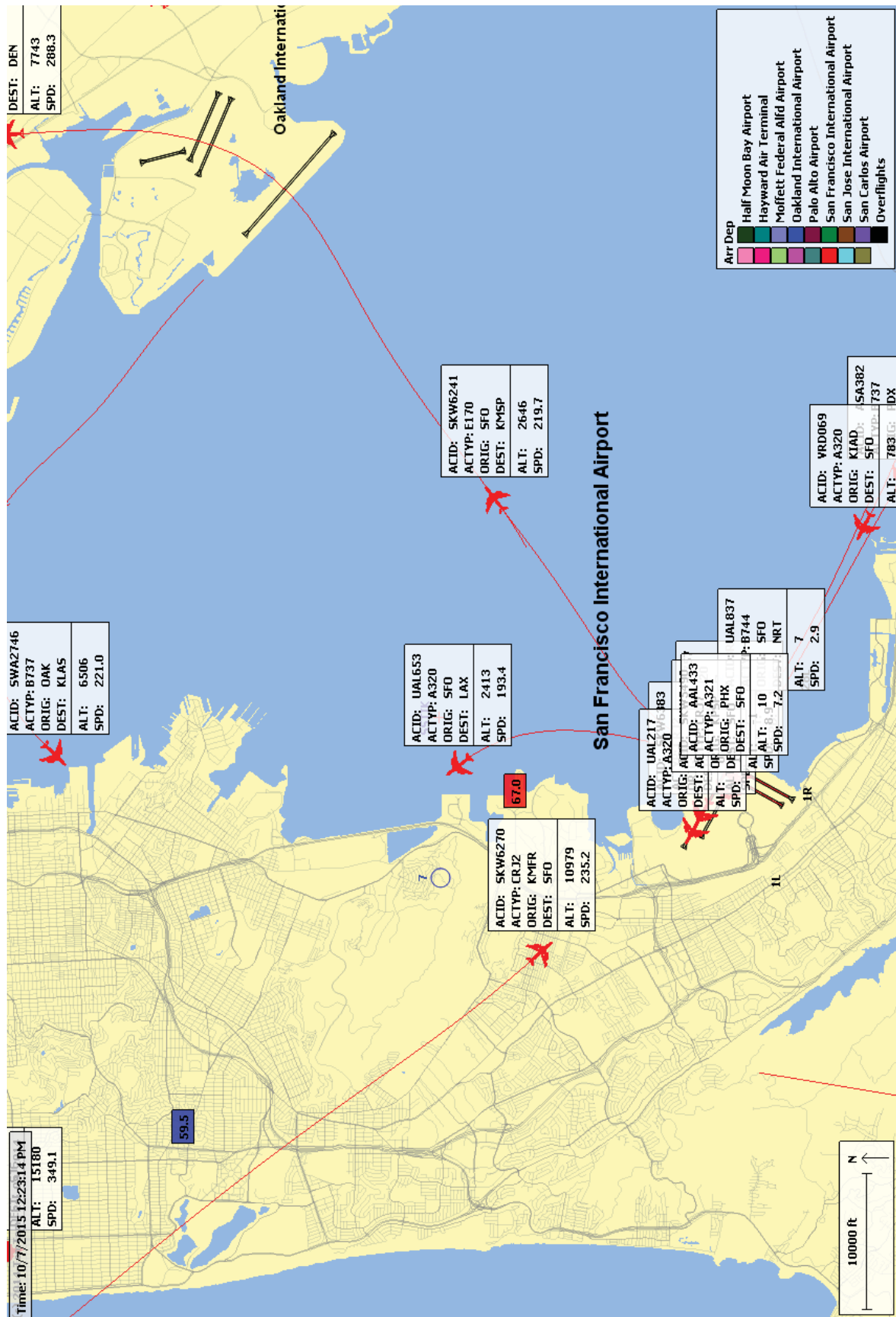


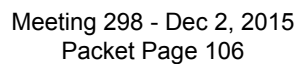
# SSTIK August













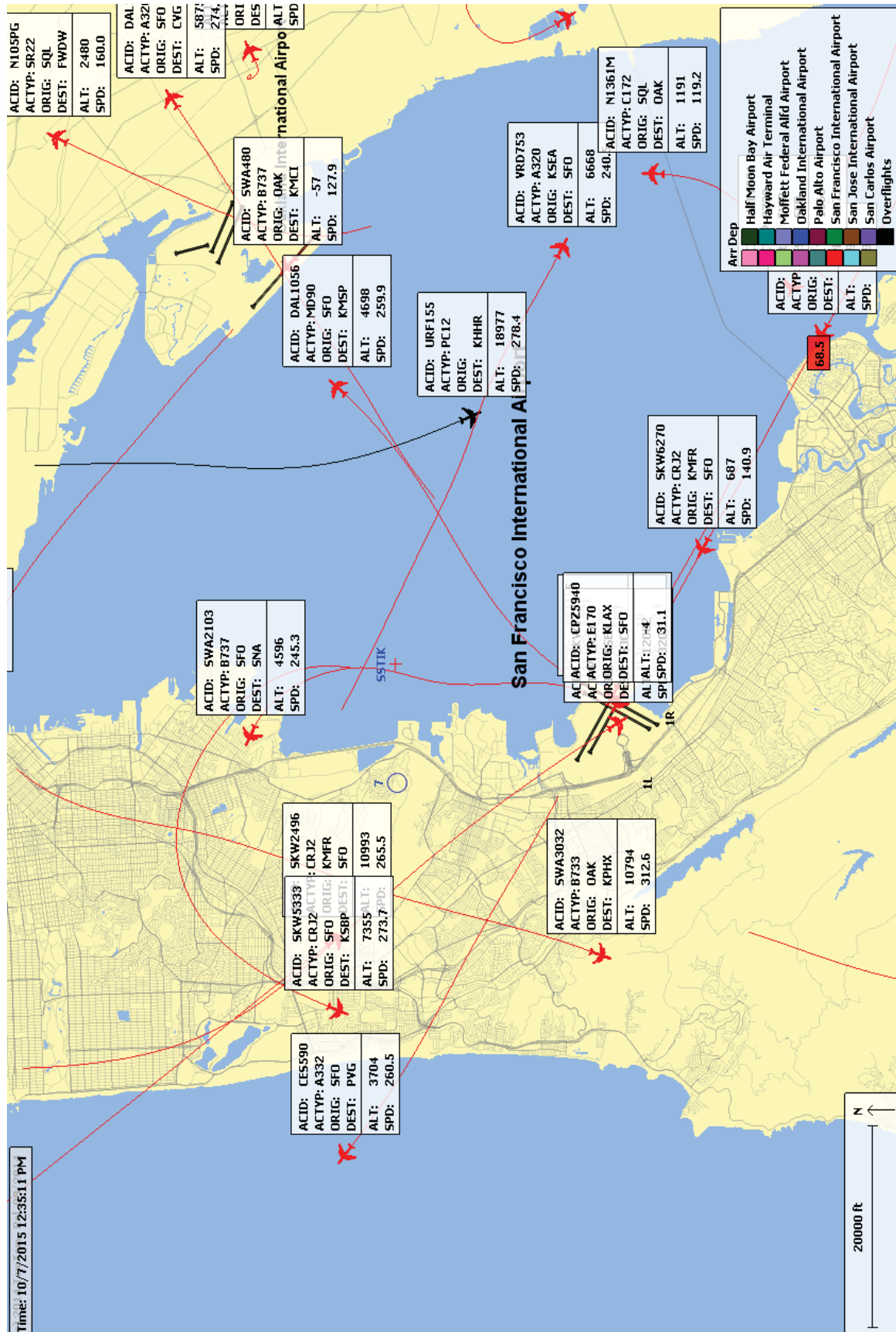
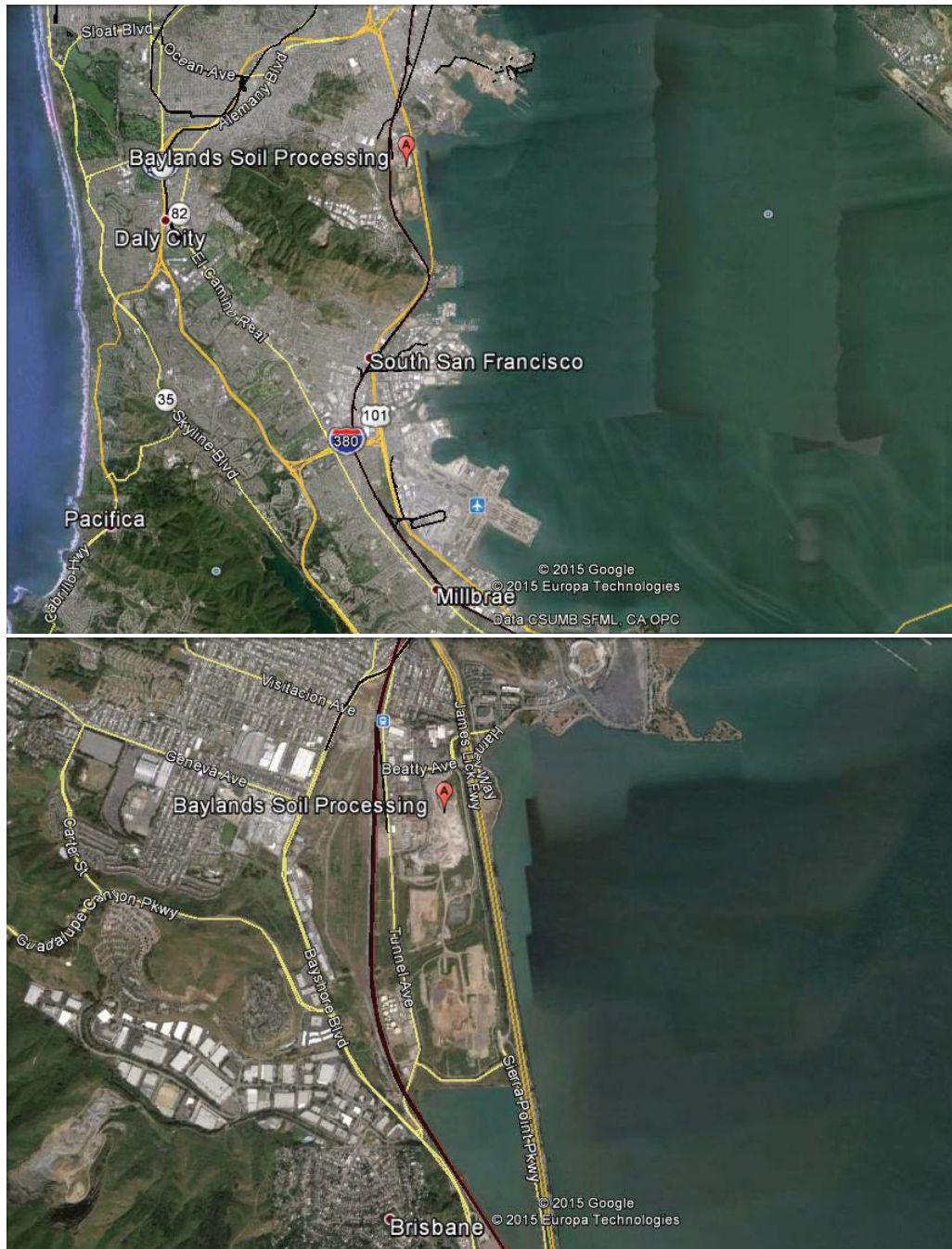




Exhibit 4, Brisbane Baylands Soil Processing Location



# **AIRPORT NOISE NEWS**

Regular Meeting # 298  
December 2, 2015

(This page is left intentionally blank)

# Airport Noise Report



A weekly update on litigation, regulations, and technological developments

Volume 27, Number 38

November 6, 2015

## Legislation

### **BILL WOULD COMPEL FAA TO RECONSIDER NEXT-GEN ROUTES WITH HIGH NOISE IMPACT**

Rep. Ruben Gallego (D-AZ) and 14 cosponsors introduced legislation in the U.S. House of Representatives Nov. 5 to give local communities a say in the Federal Aviation Administration's decision-making process regarding NextGen flight paths.

The FAA Community Accountability Act of 2015 would establish a new process to compel the FAA to reconsider existing NextGen flight routes that are exposing residents to unacceptably high levels of aviation noise.

The legislation also would end the presumption under current law that flight paths implemented through the NextGen program may not follow pre-existing routes, even when these paths better reflect land use around the airport.

The bill would designate Community Ombudsmen to serve as effective, independent voices for airport communities within the agency and would prevent the FAA from bypassing the environmental review process for new flight paths over the objections of local communities.

*(Continued on p. 153)*

## NextGen

### **N.O.I.S.E. ESTABLISHES WORKING GROUP TO HELP COMMUNITY LEADERS ADDRESS PBN**

The National Organization to Insure a Sound-Controlled Environment (N.O.I.S.E.) has established a Performance-based Navigation (PBN) Working Group to provide community leaders with a forum and ongoing resources to address the implications of PBN implementation at their airports.

The working group was announced during the N.O.I.S.E. annual Policy Summit/Community Involvement Workshop held Nov. 4 in Nashville in conjunction with the National League of Cities Conference.

The Working Group will be chaired by College Park, GA, Councilman and active N.O.I.S.E. member Ambrose Clay who has a background in technology and who is sought out by community leaders from across the U.S. for counsel on PBN implementation issues.

Said Councilman Clay, "If we are to be effective in managing aircraft noise impacts on our communities, we need to acquire a common understanding of the technology and government rationale that are shaping the evolution of the national airspace, so that we can formulate strategies for working with airports and the FAA

*(Continued on p. 154)*

## *In This Issue...*

**Legislation ...** House bill would give communities a say in FAA's decision-making on NextGen flight paths, compel FAA to reconsider flight paths with high noise impact - p. 152

**PBN ...** N.O.I.S.E. establishes a PBN Working Group to help community leaders address implications of PBN procedures - p. 152

**ACRP ...** TRB seeks contractors able to quickly form multi-disciplinary teams to hold new "Insight Events" that will illuminate aviation issues that need attention; forum on challenges to implementing successful land use strategies at airports will be one of first events - p. 153

**News Briefs ...** Trend in quieter aircraft arrivals at Heathrow Airport continues as airport officials work to increase use of CDAs; Greg Bracci is appointed Director of B&K's Environmental Management Solutions Americas division - p. 155

## Legislation, from p. 152

Cosponsors include representatives of congressional districts with high levels of community complaints about the noise impact of NextGen airspace changes: Reps. David Schweikert (R-AZ), Mike Quigley (D-IL), Steve Israel (D-NY), Ann Kirkpatrick (D-AZ), Anna Eshoo (D-CA), Katherine Clark (D-MA), Stephen F. Lynch (D-MA), Eleanor Holmes Norton (D-DC), Joseph Crowley (D-NY), Gregory Meeks (D-NY), Grace Meng (D-NY), Kathleen Rice (D-NY), Alan Grayson (D-FL), and Don Beyer (D-VA).

“Last September, the FAA altered flight paths for aircrafts departing from Phoenix’s Sky Harbor International Airport. The changes were made without meaningful input or consultation with community members or civic leaders and have caused severe noise disruptions that have lowered the quality of life for many members of my community,” said Rep. Gallego.

“My bill would help address this problem in Phoenix and make sure that other communities across the country don’t suffer the same consequences of the FAA’s opaque decision-making process.”

### Provisions of Bill

The FAA Community Accountability Act of 2015, which has not yet been assigned a number, states that:

- Notwithstanding any other provision of law, in considering new or revised flight paths or procedures as part of the implementation of the Next Generation Air Transportation System, the Administrator of the Federal Aviation Administration:

- (1) shall take actions to limit negative impacts on the human environment in the vicinity of an affected airport; and

- (2) may give preference to overlays of existing flight paths or procedures to ensure compatibility with land use in the vicinity of an affected airport.

- Requires the FAA Administrator to appoint within 180 days of enactment of the legislation an FAA Community Ombudsman for each region of the FAA who shall:

- (1) act as a liaison between affected communities and the FAA Administrator with respect to problems related to the impact of commercial aviation on the human environment, including concerns regarding aircraft noise, pollution, and safety;

- (2) monitor the impact of the implementation of the Next Generation Air Transportation System on communities in the vicinity of affected airports;

- (3) make recommendations to the FAA Administrator to address concerns raised by communities and to improve the use of community comments in Administration decision-making processes; and

- (4) report to Congress periodically on issues related to the impact of commercial aviation on the human environment and on Administration responsiveness to concerns raised by affected communities.

- Stipulates that the FAA Administrator may not treat the

establishment or revision of a flight path or procedure as covered by a categorical exclusion (as defined in section 1508.4 of title 40, Code of Federal Regulations) if an FAA Community Ombudsman or the operator of an airport affected by such establishment or revision submits written notification to the Administrator that:

- (1) extraordinary circumstances exist; or

- (2) the establishment or revision will have a significant adverse impact on the human environment in the vicinity of such airport.

- Stipulates that, at least 30 days before treating the establishment or revision of a flight path or procedure as covered by a categorical exclusion, the Administrator shall provide notice and an opportunity for comment to persons affected by such establishment or revision, including the operator of any affected airport.

- Requires the FAA Administrator to reconsider a flight path or procedures established or revised after Feb. 14, 2012, as part of the implementation of the NextGen Air Transportation System if an FAA Community Ombudsman or the operator of an airport affected by such establishment or revision submits written notification to the Administrator that the establishment or revision is resulting in a significant adverse impact on the human environment in the vicinity of such airport and to:

- (1) provide notice of the reconsideration and an opportunity for public comment;

- (2) assess the impacts on the human environment of such flight path or procedure; and

- (3) not later than 180 days after the date on which the relevant notification was received, submit to Congress and make available to the public a report that addresses comments received, describes the results of the assessment carried out, and describes any change to be made to such flight path or procedure or the justification for not making any change.

## ACRP

### TRB SEEKS 2-4 CONTRACTORS TO HOLD NEW ‘INSIGHT EVENTS’

The Transportation Research Board (TRB) issued a request for proposals on Nov. 4 seeking two to four task-order contractors that can quickly assemble multidisciplinary teams to prepare, plan, and hold new “Insight Events” over the next five years to illuminate aviation issues that need attention.

The Airport Cooperative Research Program (ACRP) provides practical solutions to challenges faced by airport industry practitioners.

However, TRB said, “Not all challenges lend themselves to applied research or to published solutions due to their dynamic or unsettled nature, lack of maturity, or because the state of knowledge or practice is still evolving. Nonetheless, the airport industry would benefit from a deeper understanding and dialog on many of these challenges even if an imme-



diate solution is not practical.”

So, in 2015, ACRP Project 11-08 established Insight Events as a way to bring together airport-industry leaders and subject-matter experts in various fields to encourage discussion and deeper insight on a broad range of topics of significance to airport operators.

The ACRP Oversight Committee (AOC) will decide if a particular topic warrants an ACRP Insight Event in order to provide needed insight on airport-industry topics of significance. Expectations are that each event will take place within 12 months of AOC funding authorization.

Because ACRP is part of TRB’s cooperative research programs and does not adhere to the requirements of the Federal Advisory Committee Act as amended in 1997, ACRP research cannot produce policy recommendations, or advice to federal agencies or to Congress.

Because of this, an ACRP Insight Event may result in webinar-style video recordings, web content, podcasts, infographics, or meeting notes.

Other products, such as event summaries, a forum or workshop in brief, or proceedings, are possible through an Academies report review and then published by the National Academies. However, TRB said, guidelines for such products are strict and rigid.

Although ACRP Insight Events do not produce solutions themselves, they illuminate issues that need attention and may result in one or more ACRP problem statements, which could lead to funding an ACRP applied research project, legal study, or synthesis of practice.

Through this RFP process, TRB will select and prequalify a small number of service providers who can respond quickly and competitively, with requisite capabilities, to task-orders for specific event-projects in fiscal years 2016 through 2020.

### **FY 2016 Insight Events Selected**

The ACRP Oversight Committee has already selected the following three Insight Events for FY 2016. Each event will have a budget of \$100,000:

- A Forum on Challenges to Implementing Successful Land Use Strategies at Airports;
- A Forum on Economic and Social Sustainability at Airports, and
- A forum on Airport Roles in Reducing Communicable Diseases Transmission.

The Successful Land Use Forum is being held to discuss the key challenges to airports associated with influencing land uses around their facilities.

TRB said that presenters may include airports, regions, and states that have successfully implemented effective land use controls around airports or other facilities that are incompatible with a range of land uses.

Topics could include strategies for improving the ability of airports to control or influence land uses in their vicinity and guidance for airports and communities in successfully collaborating with developers and similar entities.

“Successful land use strategies generally consist of en-

couraging compatible land uses around airports. Land use planning and controls surrounding airports are often the responsibility of the local governments, with the surrounding jurisdictions in many cases having no ties to the airport facilities,” TRB explained.

“Even in instances where the airport and local land uses are controlled by the same governmental entity, the airport may have little influence and the government little ability to adequately control land uses near the airport. The pressure to develop near airports can be significant and planning and land use considerations are often decided without considering the airport’s future development needs and ongoing operational requirements.

“As airports and the FAA continue to refine airfield layouts and approach and departure procedures, respectively, the determination of what is compatible both today and in the future continues to be challenging. Given the magnitude and variety of the challenges to controlling land uses around airports, research is needed to provide airports, communities, and developers with information and tools to protect and improve land uses around airports.”

Contractors responding to the TRB’s RFP should include their proposals for the three FY 2016 forums.

The RFP closing date is Dec. 23. The RFP can be downloaded at <http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=4026>

### ***N.O.I.S.E., from p. 152***

to locate aircraft flight paths appropriately.”

The PBN Working Group will hold quarterly webinars that will feature presentations by community leaders, industry stakeholders, and N.O.I.S.E. staff to keep members updated and provide access to the latest information and developments at the FAA and in Congress related to PBN.

In addition, N.O.I.S.E. staff will provide on-going access to reference and support for members and interested communities.

N.O.I.S.E. President and Aurora, CO, City Council Member Brad Pierce indicated that the organization’s announcement was in response to a need for resources and conversation from a community perspective around the issue of PBN implementation.

“It is clear that communities are facing growing challenges with the implementation of PBN and our staff and key members have experience in these areas,” said Pierce. “We want to be sure to be a resource to communities and to help facilitate a space to share experiences and best practices as they relate to airport and FAA engagement.”

N.O.I.S.E. is an affiliate of the NLC and has served for over four decades as America’s only nationwide, community-based association committed to reducing the impact of excessive aviation noise on local communities.

Composed of local elected officials representing thousands of citizens across the United States, N.O.I.S.E. serves

## ANR EDITORIAL ADVISORY BOARD

**Peter J. Kirsch, Esq.**

Kaplan, Kirsch & Rockwell LLP  
Denver

**Vincent E. Mestre, P.E.**

President, Mestre Greve Associates  
Laguna Niguel, CA

**Steven F. Pflaum, Esq.**

Neal, Gerber & Eisenberg LLP  
Chicago

**Mary L. Vigilante**

President, Synergy Consultants  
Seattle

**Gregory S. Walden, Esq.**

Akin Gump Strauss Hauer & Feld  
Washington, D.C.

to help communities join together and inject the concerns of their constituents into the national debate on aviation noise mitigation.

### *In Brief...*

#### **Quieter Arrivals at Heathrow**

The trend of quieter aircraft arrivals continues at London Heathrow Airport, according to the results of the latest 'Fly Quiet League', which tracked the noise performance of aircraft from April to June 2015.

The Fly Quiet League table compares each of the top 50 airlines (according to the number of annual flights through Heathrow) across six different noise metrics.

Heathrow said it is a pioneer in the use of the Continuous Descent Approach, with over 85% of arriving aircraft adhering to this quieter flight procedure as they arrive into the airport. Heathrow's technical teams have been working with airlines to improve their use of CDAs.

Heathrow's CEO John Holland-Kaye took this a step further when he wrote to airlines' executives last year asking for them to improve on their scores. This has led to marked improvements.

Said Matt Gorman, Heathrow's Sustainability and Environment Director, "We are pleased to see the great leaps forward made by some airlines in their use of continuous descent approaches into the airport, while innovative noise-reduction tools like steeper approaches are being explored and employed by all our airlines."

#### **B&K Appointment**

Brüel & Kjær EMS (Environmental Management Solutions) announced Oct. 26 that Greg Bracci has been appointed Director – Americas. Based in Sacramento, he will lead the EMS business unit throughout North and South America.

Over the past five years, Mr. Bracci – who hold a bachelor's degree in electrical engineering from Purdue University – successfully grew Brüel & Kjær's urban and industrial noise practice in the Americas. He also managed teams within B&K in Texas, New England, and the Mid-Atlantic states.

"Greg's outstanding leadership and in-depth understanding of noise technology and community noise issues will be an asset to our clients. With over 15 years' experience with Brüel & Kjær, and a track record of organizational leadership, Greg is the perfect candidate to lead the EMS Americas team," said B&K EMS Vice President Robert Brodecky.

## **AIRPORT NOISE REPORT**

**Anne H. Kohut**, Publisher

Published 44 times a year at 43978 Urbancrest Ct., Ashburn, Va. 20147; Phone: (703) 729-4867; FAX: (703) 729-4528.  
e-mail: [editor@airportnoisereport.com](mailto:editor@airportnoisereport.com); Price \$850.

Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by Airport Noise Report, provided that the base fee of US\$1.03 per page per copy is paid directly to Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. USA.



# Like a 'stab in your brain' -- Complaints from Bay Area residents in noisy flight path spike 2,706%

By **Sarah D. Wire**

NOVEMBER 17, 2015

The rumble of jets overhead every five minutes means Rachel Kellerman has a hard time working from her Palo Alto home.

“It’s this big spike all of a sudden,” she said. “Over and over again, it’s like a stab in your brain.”

Hundreds of flights pass over Kellerman’s home each day through routes designed by a state-of-the-art air traffic control system being implemented nationwide by the Federal Aviation Administration.

The result — complaints about noise from residents in the flight path have spiked 2,706% in one year.

Kellerman is one of thousands of Peninsula residents concerned about the noise, and members of the state’s congressional delegation are pushing back on how the agency has implemented the Next Generation Air Transportation System, known as NextGen. The FAA responded Monday with a plan to consider those concerns and weigh if changes should be made.

Reports on the [San Francisco International Airport’s Noise Abatement office website](#) show a spike in noise complaints since NextGen was implemented. Many of the complaints come from areas that didn’t frequently complain to the airport in the past.

Between March and August, residents filed 147,442 complaints. During the same months in 2014, there were just 5,254. August alone notched 62,391 complaints, compared with 824 the year before.

Kellerman, a librarian at the local high school, said the noise punctuates the walls of newly constructed classrooms. The roar of overnight flights splits the silence and startles homeowners awake, she said.

**[SIGN UP for our free Essential Politics newsletter >>](#)**

For a while, Kellerman had a professional noise monitor in her backyard. She’d watch the ticker jump from around 30 decibels on a normal moment to 70 decibels when a jet passed over, she

said.

Residents avoid going outside during Friday and Sunday night “rush hours,” she said.

“These are people who’ve owned their houses since the '60s and the '70s,” Kellerman said. “They love their neighborhood and they can’t go outside. It’s just crazy.”

## How did this happen?

Set to gradually deploy by 2025, NextGen uses satellites rather than radar to set routes and to organize plane departures and arrivals in an effort to save fuel and reduce both emissions and delays. With more information and control of where planes are, controllers can space aircraft closer together during takeoffs, landings and flights — meaning airports could handle more traffic. To coordinate flights in areas with multiple commercial and general aviation airports, the FAA has designated “Metroplex” areas.

The North California Metroplex includes Oakland International, San Francisco International, Norman Y. Mineta San Jose International and Sacramento International Airports.

An August 2014 FAA review found that new routes in the area “[would not result in significant noise impacts.](#)”

Since the new routes took effect in Northern California this spring, Bay Area community groups worried about the economic and health effects of the transportation noise have formed to encourage elected leaders to find a solution. That includes Sky Posse Palo Alto, to which Kellerman belongs.

She and other concerned community members have compiled data on the effects of airplane noise and pollution on human and plant health. They have examined if the new routes actually save fuel, and they question if the way the FAA determines noise pollution is outdated.

At least one route stretches the length of Democratic Rep. Anna Eshoo’s Menlo Park district, prompting a flood of complaints from all over the district to her office.

“These are not anecdotal stories from within one or two communities,” Eshoo said.

While she supports NextGen’s efficiency and safety measures, “the program has proven itself to cause widespread problems. It’s at their doorstep and they need to address [it],” she said.

## FAA responds

The FAA is reevaluating aspects of the routes, Ian Gregor, an agency spokesman in Los Angeles, said in an e-mail.

“People have identified a number of distinct issues and/or proposed remedies. In response, the FAA is developing a detailed plan of action to explore the proposed modifications,” he said last week.

According to the report released Monday, the FAA will look into several of the community groups’ suggestions — including whether to change flight paths so more planes come in over water, to adjust airplane speed to manage noise and to modify the angle and timing at which planes come into Northern California Metroplex airports. The agency said it would then meet with community and industry groups to discuss its findings before making changes.

Worries about increased noise from new routes aren’t specific to California. Politicians in cities such as Chicago and Washington, D.C., have raised similar concerns and Phoenix city officials sued the agency in June.

Eshoo, Rep. Sam Farr (D-Carmel) and Rep. Jackie Speier (D-Hillsborough) recently joined members of the Congressional Quiet Skies Caucus in introducing legislation aimed at reducing noise.

The Quiet Communities Act would re-establish the Environmental Protection Agency’s Office of Noise Abatement and Control and task it with reviewing the effects of airplane noise. The FAA Community Accountability Act would require the FAA to hire community ombudsmen to listen, and if necessary, propose changes. It would also prevent the agency from skipping environmental reviews for some new flight paths.

There is Republican support for the Community Accountability Act, but the measure's supporters say they are worried about getting both pieces of legislation past House Transportation and Infrastructure Committee Chairman Bill Shuster (R-Pa.), who hasn’t acted on similar requests.

Eshoo said the FAA should work hard to involve communities.

“They design something, they come up with it, they implement it... and then everyone has to react to it,” she said. “This is not one size fits all. The FAA is going to have to work with each region, each area that is affected.”

Gregor said the agency hosted public workshops in Sacramento, Oakland, San Francisco, San Jose and San Mateo in April. The agency informed local, state and federal elected officials, announced the meetings on social media and collected public comments for 45 days, he said. More than 100 people submitted comments about the proposed plan to the FAA in person or online.

Still, Farr said people in his district more than 50 miles from the airport were shocked when planes flying into San Francisco were suddenly funneled into a route above their homes.

"They come minutes apart and even late into the night. It's unbelievable," Farr said. "The FAA never informed these people of what was going to come."

Kellerman said she often files complaints three times a day because she thinks government officials look at data to make decisions.

"I don't think of it as complaining, I think of it as testifying," she said.

A member of Save Our Skies Santa Cruz said he can file up to 20 complaints a day.

## And Southern California is next.

Some in Southern California **already are bracing for changes** as the Federal Aviation Administration determines new routes for flights in the "SoCal Metroplex," which will organize flights from 13 regional airports including Los Angeles International, John Wayne in Orange County and San Diego International.

The agency held **11 public meetings** in a four-month long comment period that closed in early October, Gregor said. In June, the agency released a draft environmental assessment that found there would be no significant noise effects in Southern California.

Without elected officials' intervention, Kellerman said she doesn't expect the Northern California route to change.

She stressed she doesn't just want the route shifted to be above other people's homes. Instead the flight path should be disbursed, she said.

"No region in any place in our country should be a sacrificial noise corridor," she said. "They created these pencil-thin routes so they can save a bit of fuel. We don't want this in anybody's backyard."

### Noisy neighbors up above

The number of complaints to the San Francisco International Airport's Noise Abatement Office have spiked since new routes passing over Palo Alto and Santa Cruz were put in place last spring. The Federal Aviation Administration is reviewing the routes.

Month	2014	2015	% Increase
-------	------	------	------------

March	1,096	3,019	175%
April	1,164	3,954	240%
May	1,076	12,091	1,024%
June	449	17,564	3,812%
July	645	48,423	7,407%
August	824	62,391	7,472%
Total	5,254	147,442	2,706%

\* Number of complaints does not mean number of people who called. Some people file multiple complaints.

Source: Monthly reports from San Francisco International Airport Director to Community Roundtable. Graphics reporting by Sarah Wire

**[sarah.wire@latimes.com](mailto:sarah.wire@latimes.com)**

**Follow @[sarahdwire](#) on Twitter**

**Read more about the 55 members of California's delegation at [latimes.com/politics](http://latimes.com/politics)**

Copyright © 2015, Los Angeles Times

**[VIEW COMMENTS \(25\)](#)**

# Airport Noise Report



A weekly update on litigation, regulations, and technological developments

Volume 27, Number 39

November 20, 2015

## Legislation

### SENATE PASSES AMENDMENT GIVING AIRPORTS, COMMUNITIES INPUT ON PBN

On Nov. 18, the U.S. Senate unanimously agreed to an amendment filed by U.S. Sens. John McCain (R-AZ) and Jeff Flake (R-AZ) to the Transportation, Housing and Urban Development (THUD) Appropriations Bill that would address community concerns about recent flight path changes at Phoenix Sky Harbor International Airport and airports across the country.

The senators said their amendment would ensure that communities and airports have the opportunity to fully engage with the Federal Aviation Administration before future flight path changes are made.

In addition, for communities that have been negatively impacted by recent flight path changes that have already been implemented, the amendment would create a process to review those changes and require the FAA to consult with airports to determine steps to mitigate the negative effects.

“Our amendment creates a long-awaited opportunity for residents around Phoenix Sky Harbor International Airport negatively impacted by flight noise to

*(Continued on p. 157)*

## N. CA Metroplex Plan

### FAA TO ASSESS FEASIBILITY OF COMMUNITY IDEAS FOR REDUCING FLIGHT PATH NOISE

Under strong political pressure, the Federal Aviation Administration has agreed to explore the feasibility of implementing ideas proposed by the public and the San Francisco International Airport Community Roundtable for reducing the noise impact of new NextGen arrival and departure paths for San Francisco International Airport.

The new flight paths were implemented last year under FAA’s Northern California Metroplex plan and have sparked unprecedented levels of noise complaints from thousands of people in communities in four counties west and south of SFO.

On Nov. 16, Northern California congressional representatives Anna Eshoo (D), Sam Farr (D), and Jackie Speier (D) announced that FAA had submitted to them a three-step plan to review flight paths and PBN procedures entitled “FAA Initiative to Address Noise Concerns of Santa Cruz/Santa Clara/San Mateo/San Francisco Counties.”

The Initiative can be downloaded at <http://eshoo.house.gov/wp-content/uploads/2015/11/11.16.15-FAA-Initiative-to-Address-Noise-Concerns.pdf>

FAA’s Initiative “is a compilation of the ideas that were offered by the public

*(Continued on p. 158)*

## In This Issue...

**Legislation ...** Senate approves McCain/Flake amendment to THUD funding bill that gives airports, communities input on new PBN flight paths - p. 156

**N. Cal. Metroplex ...** FAA will evaluate feasibility of implementing ideas proposed by public, SFO Roundtable for reducing noise impact of new PBN flight paths for San Francisco Int’l - p. 156

**ACRP ...** Updates provided on completion dates for the nine noise projects being conducted under TRB’s Airport Cooperative Research Program - p. 157

**Boston Logan Int’l ...** FAA representative will attend a Dec. 3 public forum hosted by the Town of Milton, which sits under new PBN flight paths - p. 158

**Conferences ...** Charles Lindbergh’s grandson will give keynote at 2016 UC Davis Aviation Noise and Air Quality Symposium in Palm Springs, CA - p. 158



**Legislation, from p. 156**

have their voices heard by the FAA,” said Senators McCain and Flake.

“It establishes a process to have recent flight path changes reviewed by the FAA in an effort to identify ways to mitigate noise impacts on the community. It also ensures that airports and local communities will be involved in future flight path decisions. There’s no doubt that implementing new flight path changes as part of FAA’s NextGen program is important for enhancing passenger safety and increasing travel efficiency, but these changes shouldn’t be made without fully engaging the communities that will ultimately be affected.”

**Amendment Language**

McCain and Flake’s amendment would amend Section 213(c) of the FAA Modernization and Reform Act of 2012, which established the controversial CatEx 1 and CatEx 2 categorical exclusions for PBN procedures that communities staunchly oppose.

The amendment stipulates that “Not less than 90 days before applying a categorical exclusion under this subsection to a new procedure at an OEP airport [the busiest 35 airports in the U.S.], the Administrator shall:

- notify and consult with the operator of the airport at which the procedure would be implemented, and
- consider consultations or other engagement with the community in which the airport is located to inform the public of the procedure.”

The amendment also would require the FAA Administrator to review prior decisions to grant categorical exclusions to PBN procedures at OEP airports “to determine if the implementation of the procedure had a significant effect on the human environment in the community in which the airport is located, if the operator of that airport requests such a review and demonstrates that there is good cause to believe that the implementation of the procedure had such an effect.”

“Human environment” is defined in Section 1508.14 of Title 40, Code of Federal Regulations, which states:

Human environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. (See the definition of “effects” (§1508.8).) This means that economic or social effects are not intended by themselves to require preparation of an environmental impact statement. When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment.

McCain said the Senate is expected to vote on final passage of the THUD appropriations bill this week.

The House passed its version of the THUD appropriations bill in June. It included several noise-related provisions, including an amendment by Rep. Ruben Gallego (D-AZ) that bars FAA from receiving funding to redesign the Phoenix Metroplex airspace (27 ANR 86).

**ACRP****UPDATE ON COMPLETION DATES FOR NINE ACRP NOISE PROJECTS**

Following is an update on the completion dates for the nine noise projects currently being conducted under the Transportation Research Board’s Airport Cooperative Research Program.

Reports on these projects are expected to be issued two to three months after their completion dates.

For further details on the projects, go to <http://www.trb.org/ACRP/FindaProject.aspx> and search by project number.

**Projects Completed But Not Yet Published**

- ACRP 02-44: Helicopter Noise Modeling Guidance – Anticipated publication date is January 2016; TRB is only publishing a Research Results Digest for this project.

- ACRP 02-51: Evaluating Methods for Determining Interior Noise Levels Used in Airport Sound Insulation Programs – Research is completed and project report is moving toward the editing/publication stage; TRB cannot be more specific than estimating a first quarter of 2016 publication date.

**Still Active Noise Projects**

- ACRP 02-47: Assessing Aircraft Noise Conditions Affecting Student Achievement: Case Studies – Because the research team has not yet received permission to conduct surveys in classrooms, the completion date will be moved to near the end of 2016.

- ACRP 02-48: Assessing Community Annoyance of Helicopter Noise – There is a delay in conducting the third and final annoyance survey of this project. The survey will not be conducted until spring of 2016. So, the research will not be completed until the end of next summer suggesting that the report will be published by the end of 2016.

- ACRP 02-52: Improving AEDT Noise Modeling of Hard, Soft, and Mixed Ground Surfaces – Completion date is Oct. 31, 2016, with publication two to three months later.

- ACRP 02-55: Enhanced AEDT Modeling of Aircraft Arrival and Departure Profiles – Completion date of Dec. 8, 2015, with publication two to three months later.

- ACRP 02-66: Commercial Space Operations Noise and Sonic Boom Modeling and Analysis – Completion date of May 29, 2017, with publication two to three months later.

- ACRP 03-31: Aligning Community Expectations with Airport Roles – Completion date of April 14, 2016, with publication two to three months later.



- ACRP 03-38: Understanding FAA Grant Assurance Obligations – Completion date of July 27, 2016, with publication two to three months later.

## Conferences

### LINDBERGH'S GRANDSON TO GIVE UC DAVIS SYMPOSIUM KEYNOTE

Aviator and artist Erik Lindbergh – the grandson of aviation pioneer Charles Lindbergh – will give the keynote address at the upcoming UC Davis Aviation Noise & Air Quality Symposium to be held Feb. 28 - March 2, 2016, in Palm Springs, CA.

As CEO of Powering Imagination, Erik Lindbergh promotes sustainable aviation and the development of cleaner, quieter electric aircraft.

The conference theme – Charting New Headings to Quieter and Cleaner Flight Paths – sets stage for three days of conference sessions on the following timely topics:

- Key lessons learned by the City of Phoenix in addressing new noise impact and community outrage following NextGen implementation at Sky Harbor Int'l;
- Best practices for effective community involvement in a highly charged environment; communicating effectively across disparate groups;
- How to improve community involvement in planning for air traffic changes: examples of successful efforts and solicitation of input from the audience;
- Communication is key: what data should airport environmental offices share with communities and other stakeholders and what medium should they use to communicate that data;
- Quantifying the environmental benefits of PBN procedures: results of groundbreaking project at Portland International with Boeing and Alaska Airlines;
- Key roles and new methods for navigating airspace changes; understanding the airport's role in PBN; how are environmental factors considered in the airspace planning process;
- Tech updates on NASA's Environmentally Responsible Aviation (ERA) and ecoDemonstrator projects; how will new ISO-1996-1 standard on measurement and assessment of environmental noise affect FAA noise policy;
- What's coming down the flight path: ATC reform and environmental policy in FAA reauthorization bill; new predictions for growth in air travel; how the new AEDT version 2B will be used in NEPA analysis and airport master planning;
- Lessons from afar: Community efforts in France; aircraft noise respite in the UK; NAV Canada's new protocol on community consultation on flight path changes;
- Legislative updates: how will aircraft noise be considered in the FAA reauthorization bill;
- Air quality: understanding air quality and health studies

related to airports; emissions planning in Canada.

Dec. 16 is the deadline for Early Bird Registration. Registration information is on the conference website at <http://sites.google.com/site/2016ucdaviationsymposium/>

## NextGen

### FAA REP TO ATTEND MILTON FORUM ON FLIGHT PATH NOISE

On Dec. 3, Congressman Stephen Lynch (D-MA) will host a public forum in Milton, MA, to address growing aircraft noise complaints by residents of the town, which is located under new NextGen flight paths for Boston Logan International Airport.

"Much of the increase in noise coincides with the adoption of the NextGen, GPS-based navigation system," Rep. Lynch explained in a Nov. 12 announcement.

Since 2014, Congressman Lynch has called on the Federal Aviation Administration to meet directly with concerned residents. While the FAA has been open to meeting with elected officials, requests for constituent meetings have been denied in the past.

Following a meeting with FAA Administrator Michael Huerta and State Representative Walter F. Timilty (D-MA) in Washington, DC, in late September, Congressman Lynch was able to secure an agreement that the FAA would participate in a community forum in Milton.

"The upcoming face-to-face meeting in Milton with FAA officials will allow people who are being impacted to have the opportunity to be heard. Local communities deserve to have more say in the FAA decision-making process. I am hopeful that through this forum we can increase community engagement and find a way to ease the disproportionate burden of airplane noise on residents of impacted communities," said Congressman Lynch.

The Dec. 3 forum will be open to residents of all communities affected by the increase in airplane noise. In addition to a presentation from the FAA, the FAA representatives will hear directly from concerned residents during the question and answer portion of the program.

Invited guests include representatives of the FAA, Massport, and the Logan Airport Community Advisory Committee, U.S. Reps. Michael Capuano (D-MA) and Katherine Clark (D-MA), State Sen. Brian Joyce, State Rep. Walter Timilty, and Milton Town Administrator Annemarie Fagan.

### *N. CA Metroplex, from p. 156*

regarding SFO at the FAA's recent meetings in our three congressional districts, as well as requests made by the SFO Airport Community Roundtable. Some of these ideas may be deemed workable by the FAA and some may not," explained Rep. Speier.

## ANR EDITORIAL ADVISORY BOARD

**Peter J. Kirsch, Esq.**

Kaplan, Kirsch & Rockwell LLP  
Denver

**Vincent E. Mestre, P.E.**

President, Mestre Greve Associates  
Laguna Niguel, CA

**Steven F. Pflaum, Esq.**

Neal, Gerber & Eisenberg LLP  
Chicago

**Mary L. Vigilante**

President, Synergy Consultants  
Seattle

**Gregory S. Walden, Esq.**

Akin Gump Strauss Hauer & Feld  
Washington, D.C.

“However,” she added, “having previously been resistant to taking community suggestions, the FAA, for the first time in many years, has committed to studying ideas submitted by the affected communities. I am gratified that the FAA is rolling up its sleeves to come up with solutions. The health of those who live under constant bombardment of airplane noise is being seriously compromised and the FAA has a responsibility to take action to address it.”

Said Rep. Eshoo, “I welcome this important first step the FAA has developed. The FAA leadership will follow up with community meetings, coordinated through our offices, to explain in detail the FAA’s plan to address the noise problems being experienced in our region.”

Added Rep. Farr, “This plan of action is evidence the FAA is willing to consider the changes proposed by the community. For months, the commercial aircraft noise in Santa Cruz and the surrounding area has been terrible. From the beginning, I have told the FAA that they created this mess so it is up to them to fix it.”

### Three-Phase Initiative

FAA’s flight path review initiative includes three phases. Under the first phase, the agency will conduct a detailed analysis and preliminary feasibility study focusing on flight procedure criteria and “overall fly-ability” of the new PBN procedures.

FAA will coordinate with local stakeholders in considering modifications to these PBN procedures, including speed/altitude adjustments and airspace changes and relocation of existing waypoints. The agency also will consider the impact of any airspace changes on operations at airports near SFO.

Under the second phase of its Initiative, FAA will consider amendments and/or new procedures that are determined to be “initially feasible, flyable, and operationally acceptable from a safety point of view,” FAA explained.

As part of this effort, FAA said it “will conduct the formal environmental and safety reviews, coordinate and seek feedback from existing and/or new community roundtables, members of affected industry, and the National Air Traffic Controllers Association (NATCA) before moving forward with the formal amendment process.”

During phase three, the agency said it “will implement procedures, conduct any required airspace changes and additional negotiated actions, as needed.”

The FAA said it will follow the standards and procedures set forth in its updated environmental order (FAA Order 1050.1F; effective on July 16, 2015) before implementing any airspace changes.

## AIRPORT NOISE REPORT

Anne H. Kohut, Publisher

Published 44 times a year at 43978 Urbancrest Ct., Ashburn, Va. 20147; Phone: (703) 729-4867; FAX: (703) 729-4528.  
e-mail: [editor@airportnoisereport.com](mailto:editor@airportnoisereport.com); Price \$850.

Authorization to photocopy items for internal or personal use, or the internal or personal use of specific clients, is granted by Airport Noise Report, provided that the base fee of US\$1.03 per page per copy is paid directly to Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. USA.

(This page is left intentionally blank)

## 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

# how to reach us

**SFO Aircraft Noise Abatement Office mailing address is:**  
**P.O. Box 8097, San Francisco, CA 94128**

<b>Phone:</b>	<b>650.821.5100</b>
<b>Fax:</b>	<b>650.821.5112</b>
<b>Noise Complaint Line:</b>	<b>650.821.4736</b>
<b>Toll Free Noise Complaint Line:</b>	<b>877.206.8290</b>
<b>Noise Complaint E-mail:</b>	<b><a href="mailto:sfo.noise@flysfo.com">sfo.noise@flysfo.com</a></b>
<b>Airport Web Page:</b>	<b><a href="http://www.flysfo.com">www.flysfo.com</a></b>
<b>Noise Abatement Web Page:</b>	<b><a href="http://www.flysfo.com/community-environment/noise-abatement">http://www.flysfo.com/community-environment/noise-abatement</a></b>
<b>Roundtable Web Page:</b>	<b><a href="http://www.sforoundtable.org">www.sforoundtable.org</a></b>