



SAN DIEGO
INTERNATIONAL AIRPORT

LET'S **GO.**

Airport Noise Advisory Committee

April 26, 2017

Agenda

1. Welcome and Introductions
2. Presentation Items
 - a. Quieter Home Program Update
 - b. Curfew Violation Review Panel Statistics
 - c. Missed Approach Statistics
 - d. Early Turn Statistics
 - e. Metroplex Update
 - f. Noise Complaint Statistics
 - g. Fly Quiet Report - 4th Quarter 2016
 - h. Subcommittee Update - Letter to FAA
3. Public Comment
4. Approval of February 15, 2017 Minutes
5. Information Items
 - Guest Speaker - Noise Regulations for Airports
 - New Flight Tracker & Complaint Entry
 - Airport Authority Update
6. New Business
7. Next Meeting: June 21, 2017
8. Adjourn



Quieter Home Program Update

PROGRAM STATISTICS	
Applicants / Homes on the Wait List	660/1,402
Homes Completed in 2017	0
Total Completed Homes (through March 31, 2017)	3,453

Updates

- Projects submitted for comprehensive FAA review:
 - 8.12 – Non-historic, multi-family, ventilation only on 2/15/17
 - 8.10 – Historic, single-family, HVAC on 2/22/17
- SDCRAA/FAA meeting on April 10, 2017 to resolve ongoing delays
- Verbal approval on 8.12, still resolving other items

Questions ?



Curfew Violation Review Panel Stats

Year	Total Curfew Violations	Fines Assessed
2013	60	\$ 166,000
2014	47	\$ 178,000
2015	55	\$ 152,165
2016	84	\$ 564,000
2017	11*	\$ 128,000*

*Through March 31, 2017

Curfew Violation Review

Curfew Violations in February 2017 (no violations in March 2017)

Date	Time	Flight ID	Aircraft Type	Penalty Status
2/12/2017	00:00	jetBlue 530	A320	No Penalty, local maintenance
2/18/2017	00:00	American 2002	A321	No Penalty, local weather
2/18/2017	1:21	Alaska 717	B737	No Penalty, local weather

Questions ?



Definition: Missed Approaches



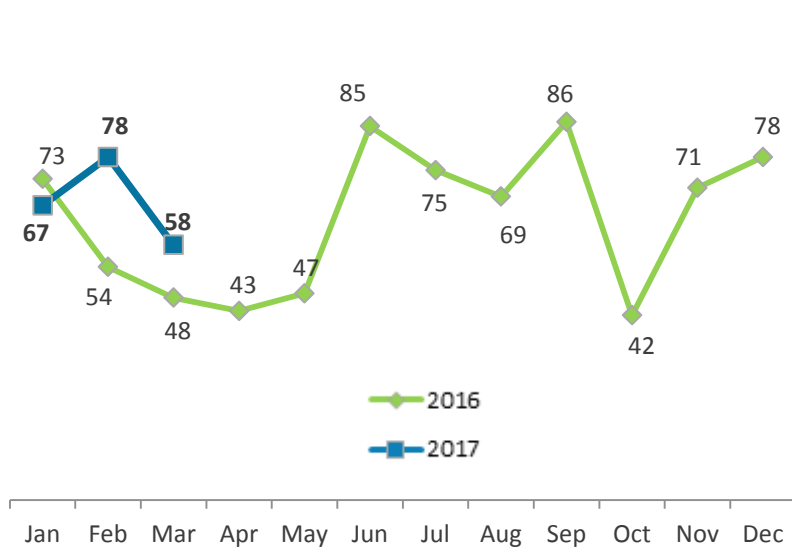
Commonly referred to as a “Go-Around,” a missed approach occurs when an aircraft cannot complete its landing and is required to make another attempt. It can be caused by:

- Inclement weather conditions
- Debris on the runway
- ATC separation of aircraft, slower aircraft unable to exit airspace or runway, forcing larger aircraft to go around

Missed approaches are safety operations that the Authority cannot influence.

Missed Approach Statistics

Missed Approaches by Month



YEAR	Total Missed Approaches	Total Arrivals	% of Total Arrivals that are Missed Approaches
2012	692	93,126	0.7
2013	659	93,985	0.7
2014	637	95,881	0.7
2015	748	96,856	0.8
2016	771	98,566	0.8
2017	203*	23,479**	0.9

* Through March 31, 2017

** Estimated Through March 31, 2017

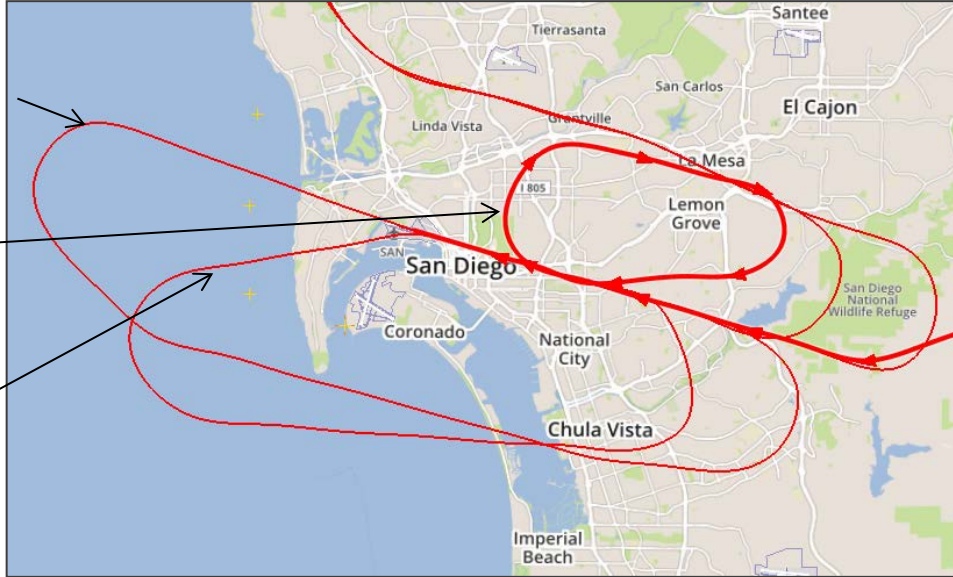
Missed Approach Noise Dot Compliance

Examples

Compliant

Eastern

Non-Compliant



Missed Approaches
Non-Compliant with FAA Noise Dots

	2016	2017
Jan	18	15
Feb	11	9
Mar	10	5
Apr	11	
May	12	
Jun	29	
Jul	25	
Aug	19	
Sep	22	
Oct	11	
Nov	11	
Dec	12	

	Compliant	Eastern M/A	Non-Compliant
February, 2017	65	18	9
March, 2017	49	15	5

*Through March 31, 2017

Definition: Early Turns

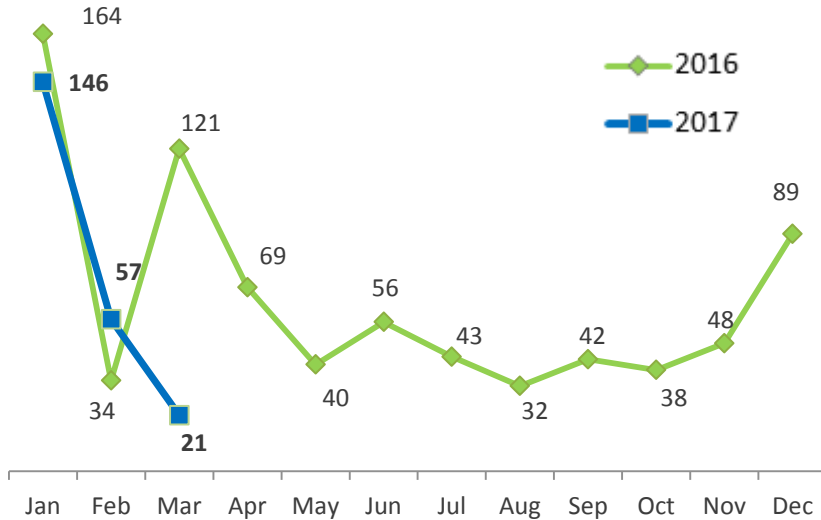


The Authority has defined early turns to the right as those aircraft that turn prior to FAA Noise Dot #1 at the 295-degree heading to the right. Left early turns are defined as those aircraft that turn prior to the 265-degree heading to the left.

Causes for early turns can be similar to missed approaches and are often due to weather or separation.

Early Turn Statistics

Early Turns by Month



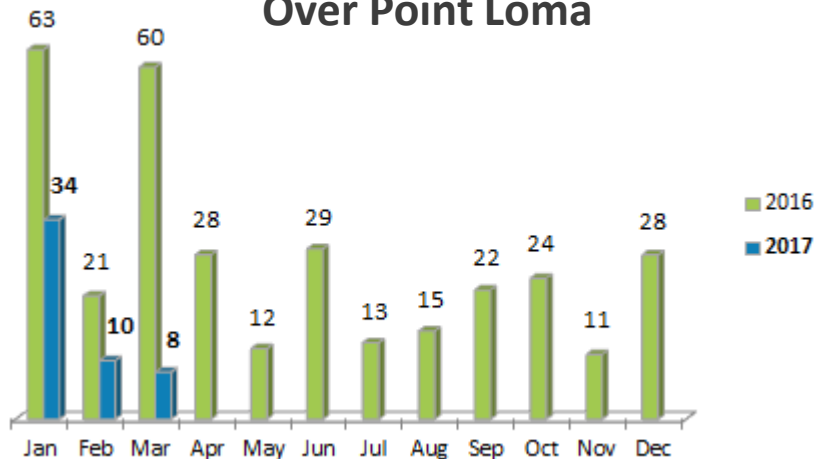
Historical vs. Current Data

YEAR	Below 6,000'	All altitudes
2012	316	538
2013	200	829
2014	338	1,105
2015	467	1,293
2016	559	776
2017	196*	224*

*Through March 31, 2017

Early Turn Statistics - Left

Over Point Loma

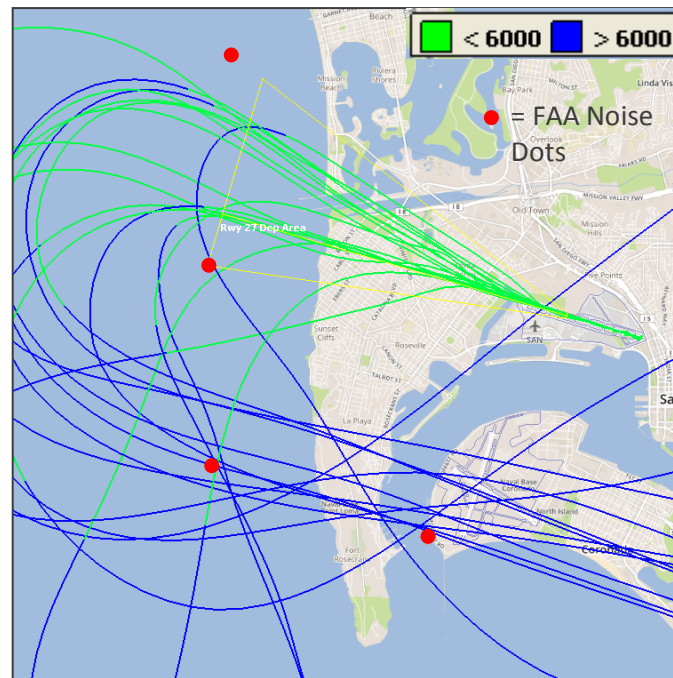


February & March 2017

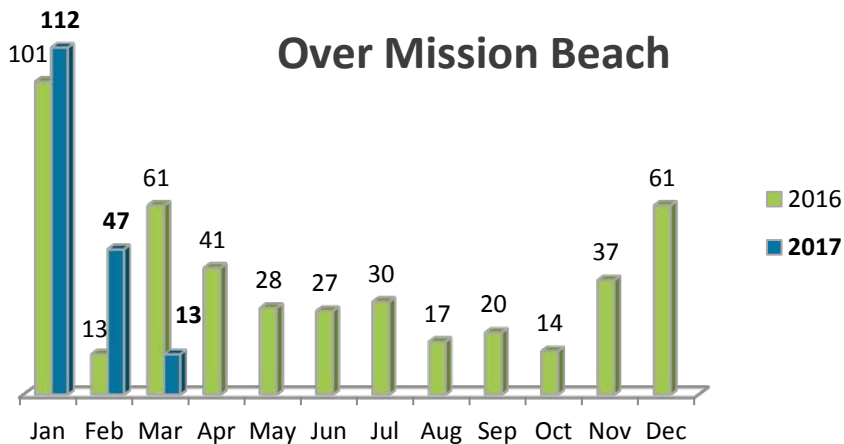
- Decreased significantly over last March (8 vs. 60)

Early Turns by Operator

Count	Airline	Aircraft
7	General Aviation	-
3	Delta Air Lines	A319, B737
3	Southwest Airlines	B737
3	United Airlines	A320, B737
2	American Airlines	A320, B737



Early Turn Statistics - Right

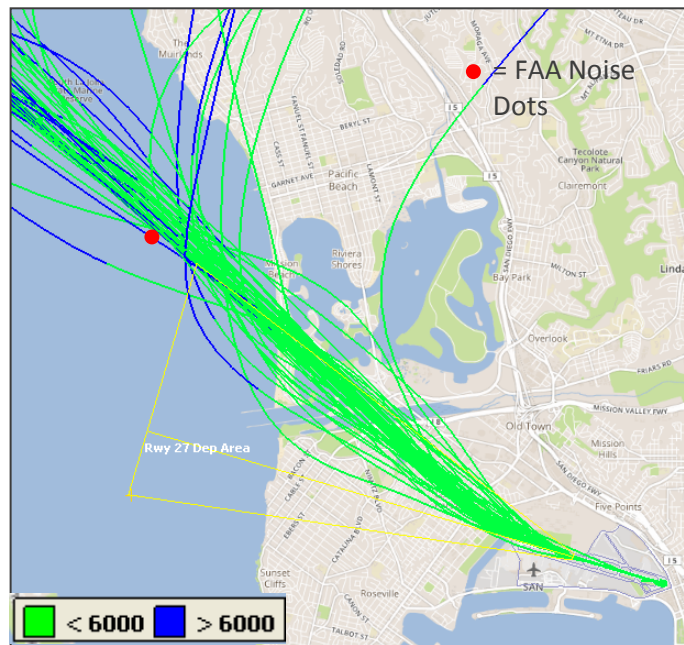


Early Turns by Operator

Count	Airline	Aircraft
23	General Aviation	-
17	Southwest Airlines	B737
10	United Airlines	A319, A320, B737
3	Compass Airlines	E170, E75L
2	SkyWest Airlines	E75L
2	Virgin America	A320
1	American Airlines	A321
1	Delta Air Lines	A319
1	Japan Airlines	B787

February & March 2017

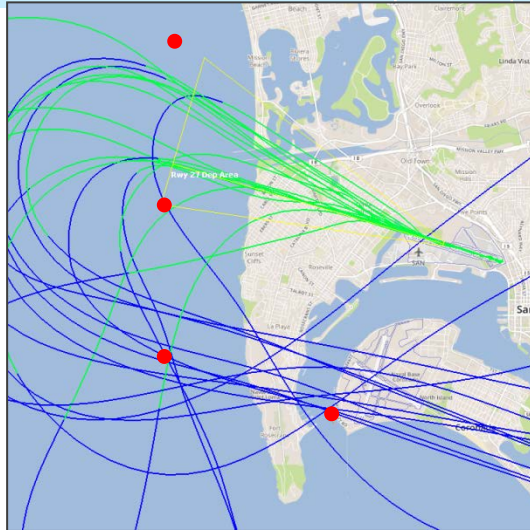
- Trending down since January (112, 47, 13)
- Lower than last year (13 vs. 61)



Breakdown of Early Turns

Over Point Loma

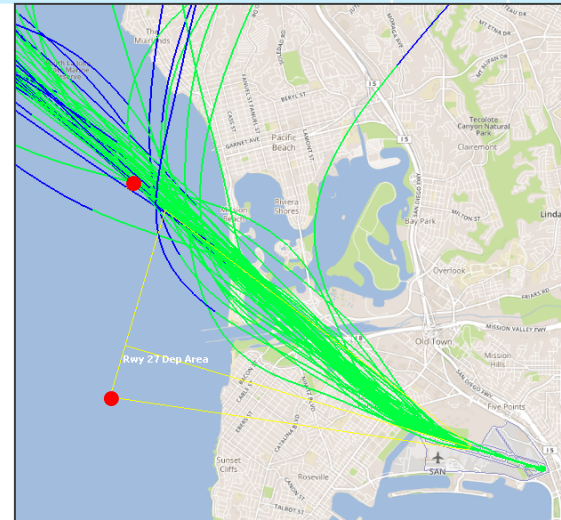
Reason	Number	%
Close to the Dot (within 1,500 ft.)	7	39%
Pending Investigation	6	33%
ATC	2	11%
Pilot Deviation	2	11%
Weather	1	6%



● = FAA Noise Dots

Over Mission Beach

Reason	Number	%
Close to the Dot (within 1,500 ft.)	41	68%
Pilot Deviation	9	15%
Weather	6	10%
ATC	2	3%
Pending Investigation	2	3%



Questions ?



Noise Complaint Statistics

Noise Complaints by Month

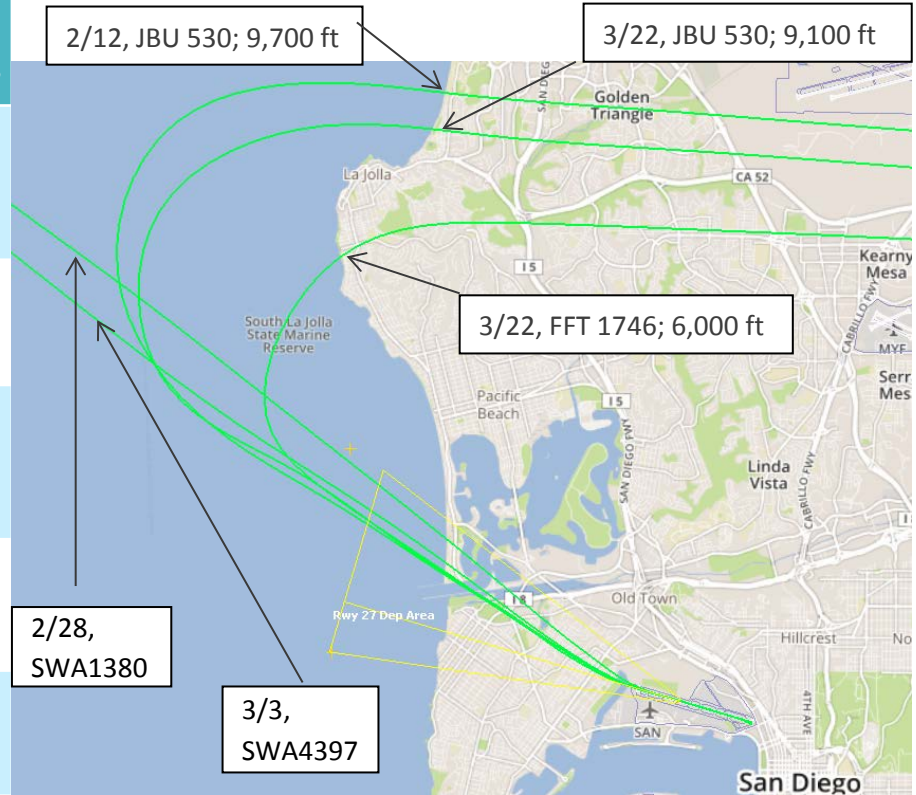


YEAR	Total Noise Complaints
2013	172
2014	156
2015	3,926
2016	31,624
2017	8,229*

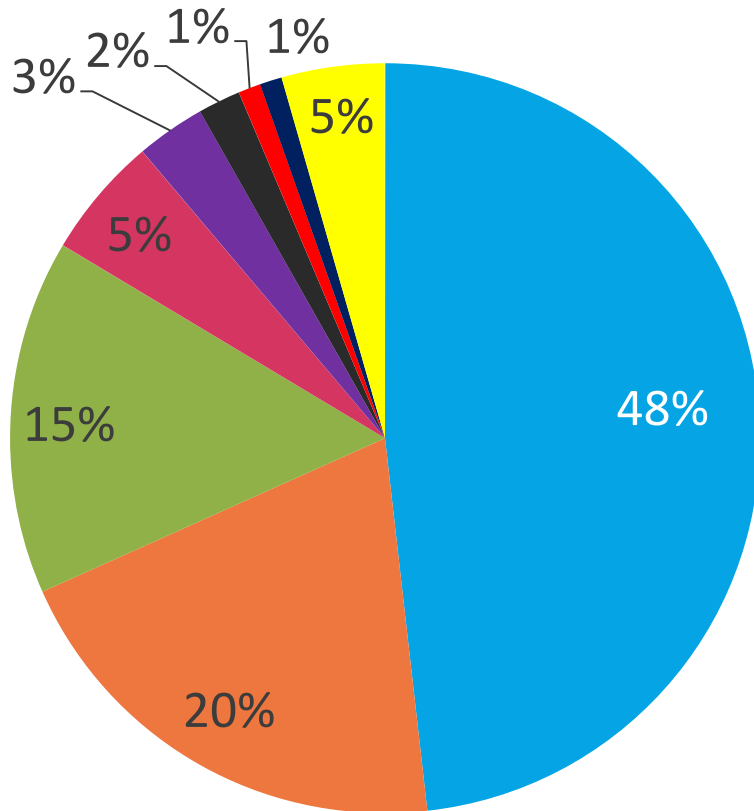
*Through March 31, 2017

Top 5 Noise Events Tracks

Date/Time	Noise Event	Number of Complaints
3/22/17 @ 10:44 p.m.	FFT 1746; following nighttime noise abatement and right turn over La Jolla	7
2/12/17 @ 12:00 a.m.	JBU 530; Curfew violation no penalty, local mx	6
3/22/17 @ 10:38 p.m.	JBU 530; following nighttime noise abatement and right turn over La Jolla	5
2/28/17 @ 7:36 a.m.	SWA 1380; Compliant with all procedures	4
3/3/17 @ 9:30 p.m.	SWA 4397; Compliant with all procedures	4



Noise Complaint Breakdown



Reason for Complaint	Number of Complaints
Low or Loud	3,030
Loud over Ocean	1,264
Suspected Off-Course and (Low and/or Loud)	962
Noise	329
Continuous/Prolonged Noise, Frequency of Flights	187
Heard at my Home	116
Unhappy with Nighttime Procedures	60
Not Following Waypoints	60
Other/Blank	280
Grand Total	6,288

Noise Complaints by Neighborhood

Neighborhood	Number of Households
La Jolla	44
La Jolla Mesa	21
Point Loma Heights	13
La Jolla Shores	12
Loma Portal	11
Bird Rock	8
Wooded Area	7
Pacific Beach	5
Ocean Beach	4
Golden Hill	3
Mission Beach	3
Sunset Cliffs	3
Other (<2 households)	18
Grand Total	152

February & March 2017

- 6,288 complaints; 2,208 less than Feb. & Mar. 2016
- 2,908 more complaints than Dec. 16 & Jan. 17
- 64% or 4,028 complaints came from 4 households

Questions ?



Fly Quiet Changes since 3rd Quarter

Changes Since Last Quarter

United and Southwest Airlines had a high number of early turns. Staff is working with FAA ATCT and TRACON to reduce FAA-directed early turns. We also reached out to the airlines to remind them of the FAA noise dots.

Early turns have decreased with the implementation of Metroplex procedures.

Curfew violations were higher than normal during the holidays. This brought several carriers scores down. Several carriers cancelled flights to avoid curfew violations: United, Delta, British and American.

Fleet quality continues to improve as older, louder aircraft are replaced.

Fly Quiet Score: Curfew Violations

Airlines that increased their score by cancelling a flight to avoid violating the curfew: United Airlines (2 flights), Delta Air Lines (2 flights), British Airways (1 flight), and American Airlines (1 flight).

Curfew Score:

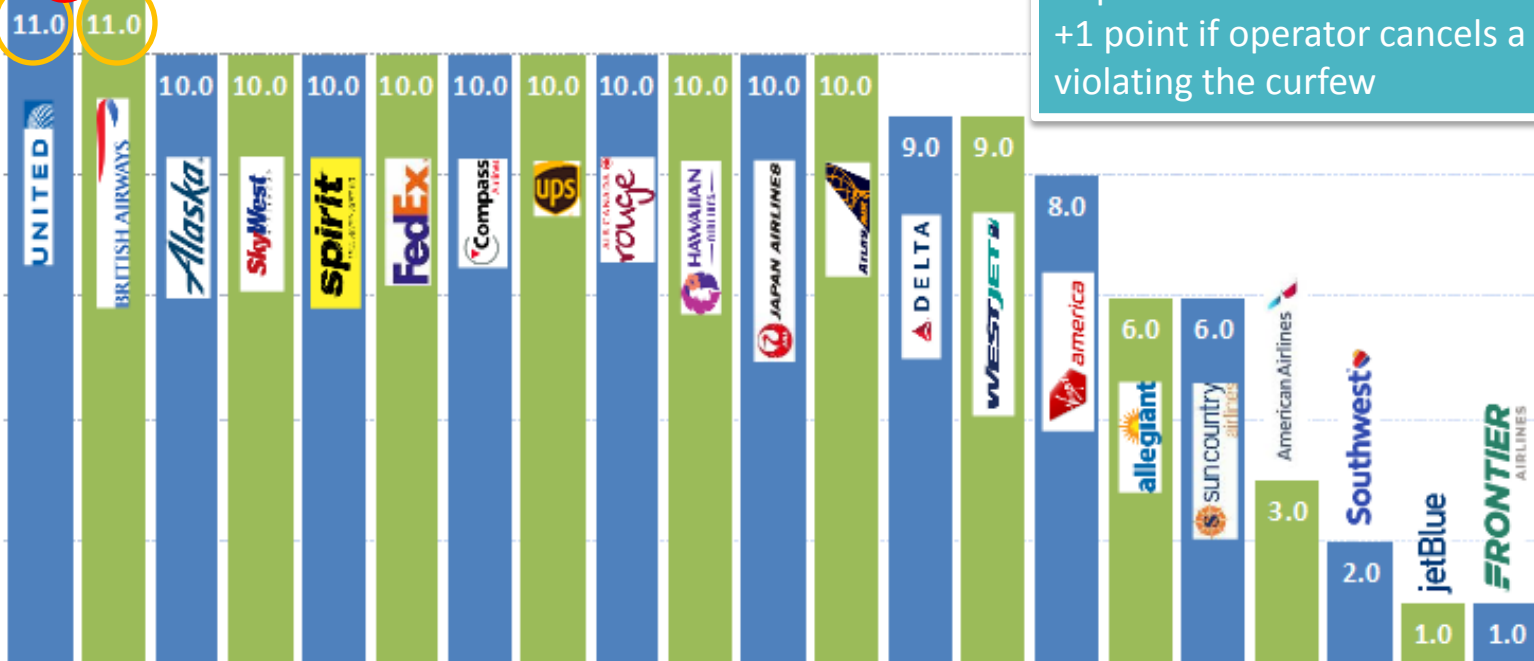
Operator starts with 10 points.

-1 point for curfew violation, no penalty

-2 points for curfew violation with penalty

+1 point if operator cancels a flight to avoid violating the curfew

Quietest scores



Fly Quiet Score: Early Turns

Quietest
score = 10

Airlines	# of Early Turns	4th Qtr. Departures	Early Turn Score
Spirit Airlines	0	463	10.0
FedEx	0	335	10.0
UPS	0	125	10.0
Sun Country Airlines	0	106	10.0
Hawaiian Airlines	0	93	10.0
British Airways	0	90	10.0
WestJet Airlines	0	75	10.0
Atlas Air	0	64	10.0
Allegiant Air	1	116	9.5
Japan Airlines	1	92	9.0
Rouge Air Canada	2	105	8.5

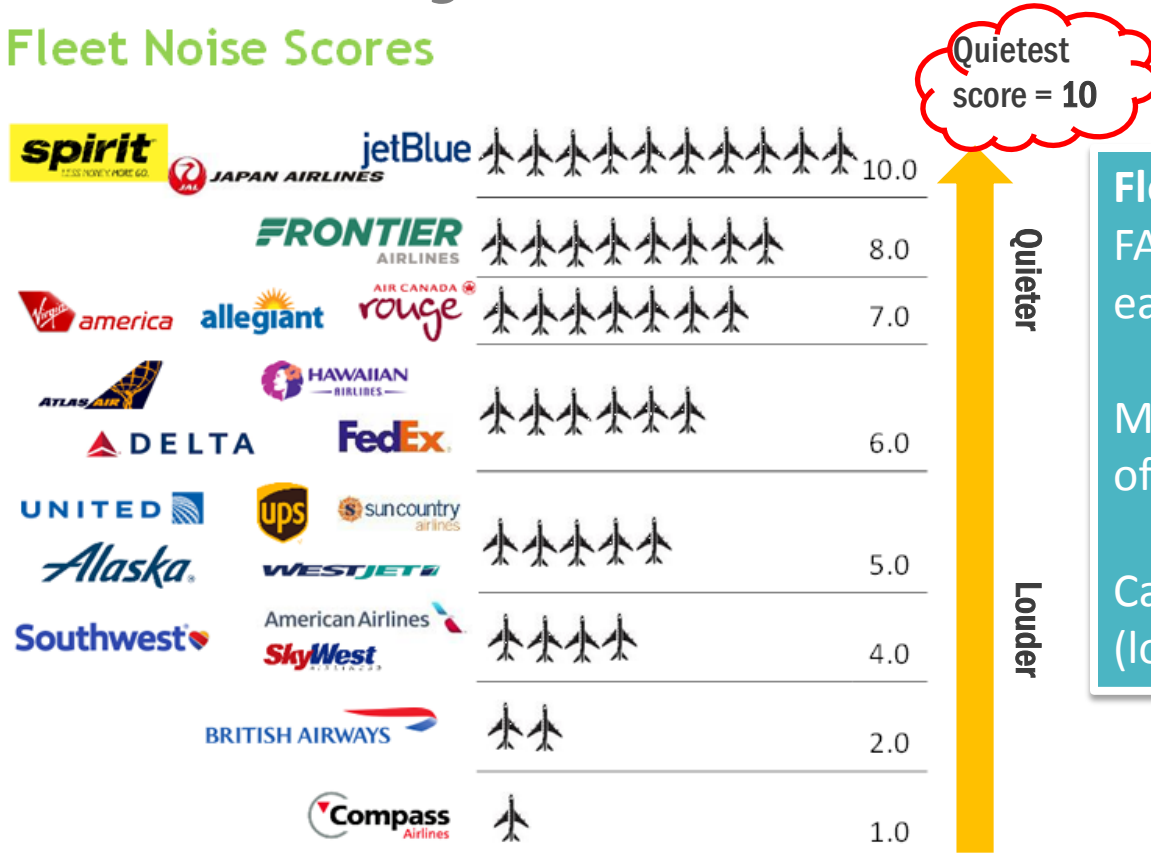
Airlines	# of Early Turns	4th Qtr. Departures	Early Turn Score
Virgin America	3	512	8.0
Compass Airlines	4	158	8.0
Alaska Airlines	3	1,809	7.5
jetBlue Airways	6	432	7.0
SkyWest Airlines	6	681	6.5
Frontier Airlines	5	240	6.5
Delta Air Lines	10	1,654	5.0
American Airlines	8	2,203	4.0
Southwest Airlines	41	8,522	0.0
United Airlines	32	2,318	0.0

Early Turn Score: Operator starts with 10 points.
 - 0.5 Point Per Early Turn Within 1,500 Feet from Any Noise Dot
 - 1.0 Point Per Early Turn Greater Than 1,500 Feet from Any Noise Dot

Note: In future, points will not be counted if FAA directs the plane to turn.

Fly Quiet Score: Fleet

Fleet Noise Scores



Fleet Score:

FAA Certified Noise Level for each aircraft

Multiplied by the percentage of operations for the quarter.

Carriers are given scores 0 (loudest) to 10 (quietest.)

Questions ?



Web-Based Flight Tracking Noise Complaints

New web-based flight tracking and noise complaint system



New and Improved “Flight Tracker”

New vendor for web-based flight tracking allows for more customization to meet the needs of our local community (FAA Noise Dots), while continuing similar functionality as WebTrak.



Automated Noise Complaint Entry

New system requires valid information to help staff conduct research to provide more accurate and relevant information to the public.

WebTrak (Current)

WebTrak (Current)

- “Near” real time feed delay = 30 minutes
- FAA Data Source = NOP (Natl. Offload Program)
- Noise Monitors = Near real time
- Historical data = 3 months
- Customization = Limited

Flight Tracker (New)

Flight Tracker (New)

- “Near” real time feed delay = 15 minutes
- FAA Data Source = SWIM (System Wide Information Management)
- Noise Monitors = 24 hr. delay
- Historical data = 6 months
- Customization = Ability to modify to meet our needs

New Noise Complaint Process

*Complaints can be received
three ways:*



Flight Tracker: <http://www.san.org/Airport-Noise/Flight-Tracking>



Web form:
www.san.org/airport-noise



Noise Hotline: (619) 400-2799

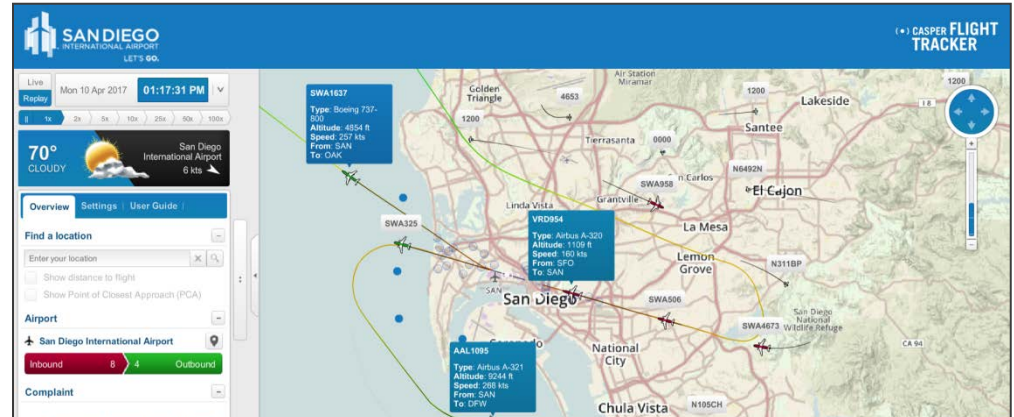
On May 27, 2017,
the noise office
will no longer
accept emailed
noise complaints.

New Noise Complaint System



Flight Tracker

New vendor, Casper. Uses latest FAA sourced data with a more complete set of data.



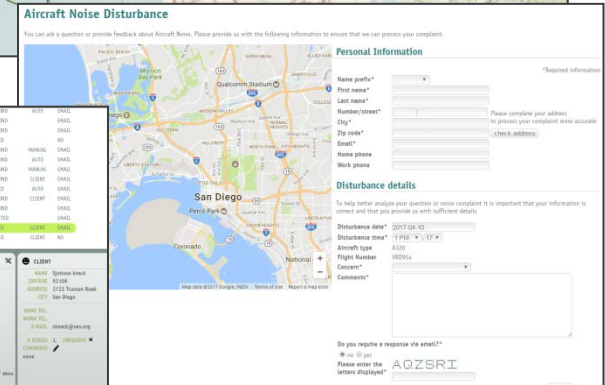
Removal of Email

Allows staff time to conduct research and provide information back to the public with supplied accurate and relevant information from the public.



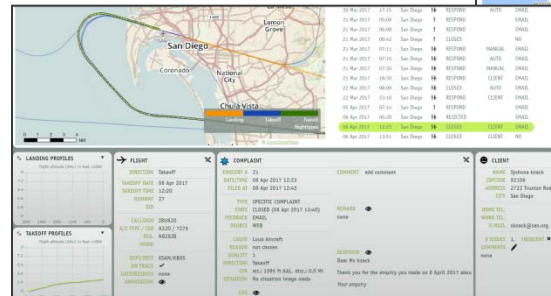
Online Noise Complaint Form

New online form requires specific fields to give our team information to research cause of concerns.



More Effective Use of Staff

Currently eight staff are inputting noise complaints into our system. The new system will automatically input the complaint without any data entry, allowing staff time for more research and analysis.



Live
Replay Wed 12 Apr 2017 08:32:21 AM

1x 2x 5x 10x 25x 50x 100x

59° PARTLY CLOUDY
San Diego International Airport
0 kts

Overview Settings User Guide

Find a location
2722 Truxtun Road, San Diego CA 92106

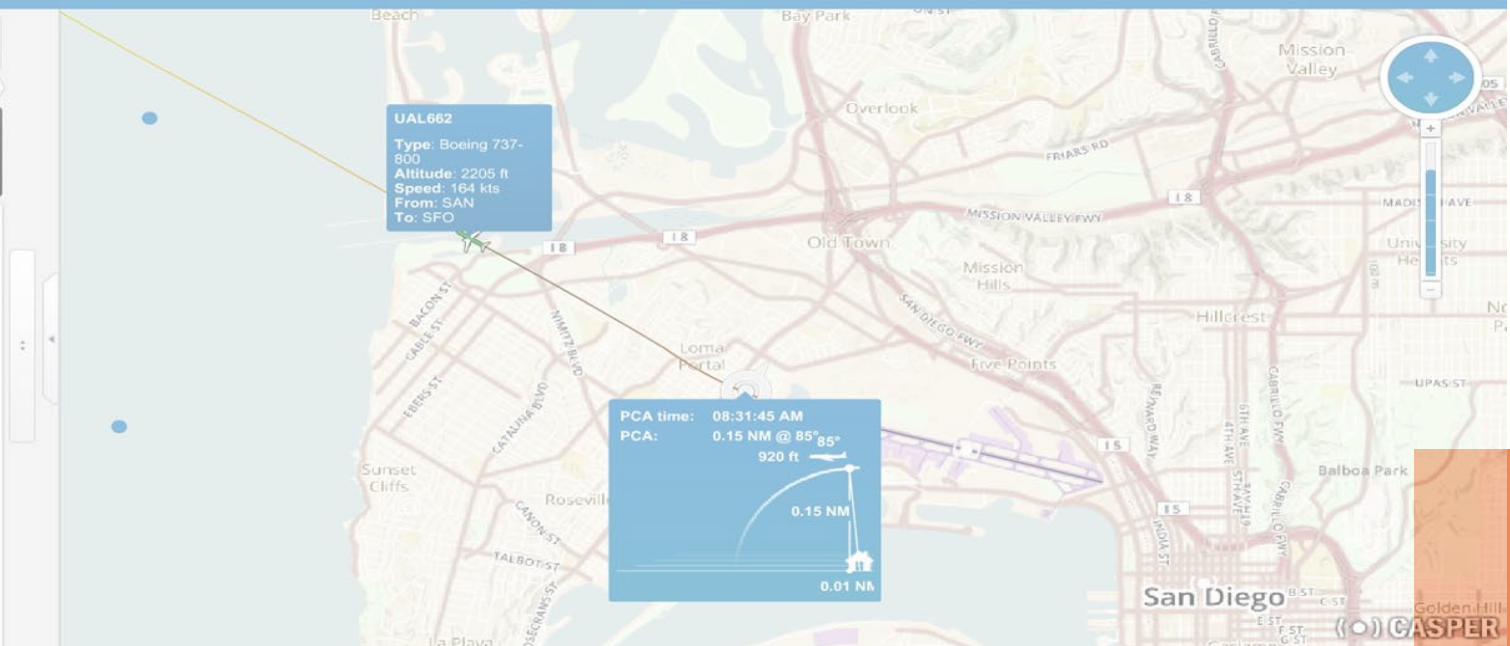
Show distance to flight
Show Point of Closest Approach (PCA)

Airport
San Diego International Airport

Inbound 4 Outbound 3

Complaint
Make a noise complaint about this aircraft.

Flight information



DEMO

<http://flighttracking.casper.aero/san/>

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