



**SAN DIEGO**  
INTERNATIONAL AIRPORT

LET'S **GO.**

# Airport Noise Advisory Committee

February 21, 2018

# Agenda

1. Welcome and Introductions
2. Presentation Items
  - a. Quieter Home Program Update
  - b. Missed Approach Statistics
  - c. Early Turn Statistics
  - d. Curfew Violation Review Panel Statistics
  - e. Noise Complaint Statistics
  - f. Update on ANAC Recommendations
3. Public Comment
4. Action Items
  - a. Approval of Minutes from December 20, 2017.
  - b. Nomination / Selection of TAC ANAC representatives (2)

Next Meeting: April 18, 2018 \*NEW LOCATION\*

1. Adjourn



# Quieter Home Program Update

PROGRAM STATISTICS	
Applicants / Homes on the Wait List	619/1,323
Homes Completed in Dec. 2017 & Jan. 2018	28
Estimated Homes to Complete in CY 2018	300
Total Homes Completed (through Jan. 31, 2018)	3,487

## Updates

- **8.12** – One construction project underway, completion in March
- **9.1, 8.10, 8.11 & 9.3** – Four construction contracts awarded, pre construction activities underway.
- Two new construction projects starting in late March / early April
- Still waiting for FAA review on treatments above 75 dB and commercially zoned parcels
  - Commercial Properties In Process (in a group) = 7 properties (67 units)
  - Commercial Properties On Wait List = 21 properties (131 units)

# Review of Alternative Funding Sources

Per ANAC recommendation #8, staff reviewed alternative funding sources that could be used to help treat homes in the Quieter Home Program.



## Community Development Block Grants (City of San Diego)

Conversations with the City of San Diego's redevelopment agency, indicate that CDBGs are for low income housing development.



## Caltrans (State)

State funding has been provided to small general aviation airports, there is high demand from these airports so State officials felt it is unlikely that funds would be approved for sound insulation use.



## American Reinvestment and Recovery Act (Federal Government)

When the federal government rolled out the American Reinvestment and Recovery Act, \$5 billion was set aside for energy efficiency improvements like, new windows, doors, more efficient HVAC systems. However, no airports have received any grants for airport sound insulation program and all available grants are focused on other projects, not sound insulation.

# Questions ?



# Definition: Missed Approaches



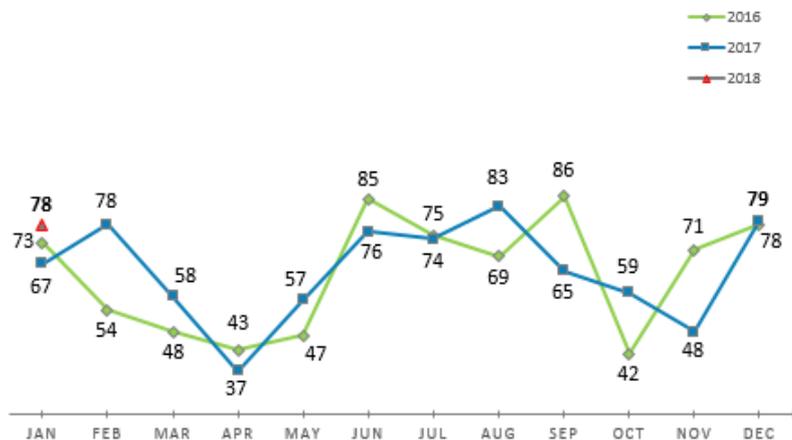
Commonly referred to as a “Go-Around,” a missed approach occurs when an aircraft cannot complete its landing and is required to make another attempt. It can be caused by:

- 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

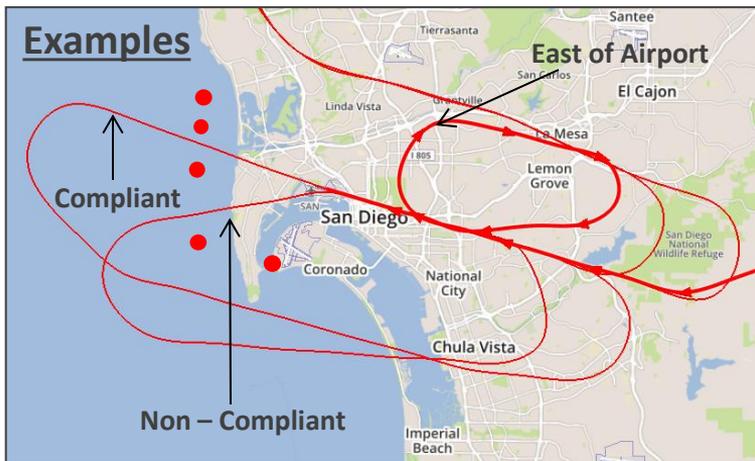


## Missed Approaches by Year

YEAR	Total M/A	% Change	Total Arrivals	% Change	% of Total Arrivals that are M/A
2013	659	--	93,985	--	0.7
2014	637	(3.3%)	95,881	2%	0.7
2015	748	17.4%	96,856	1%	0.8
2016	771	3.1%	98,566	1.8%	0.8
2017	781	1.3%	104,725	6.2%	0.7
2018	78*	--	8,806	--	0.9

\*Through January 31, 2018

# Missed Approach Noise Dot Compliance



## Missed Approaches Non-Compliant with FAA Noise Dots

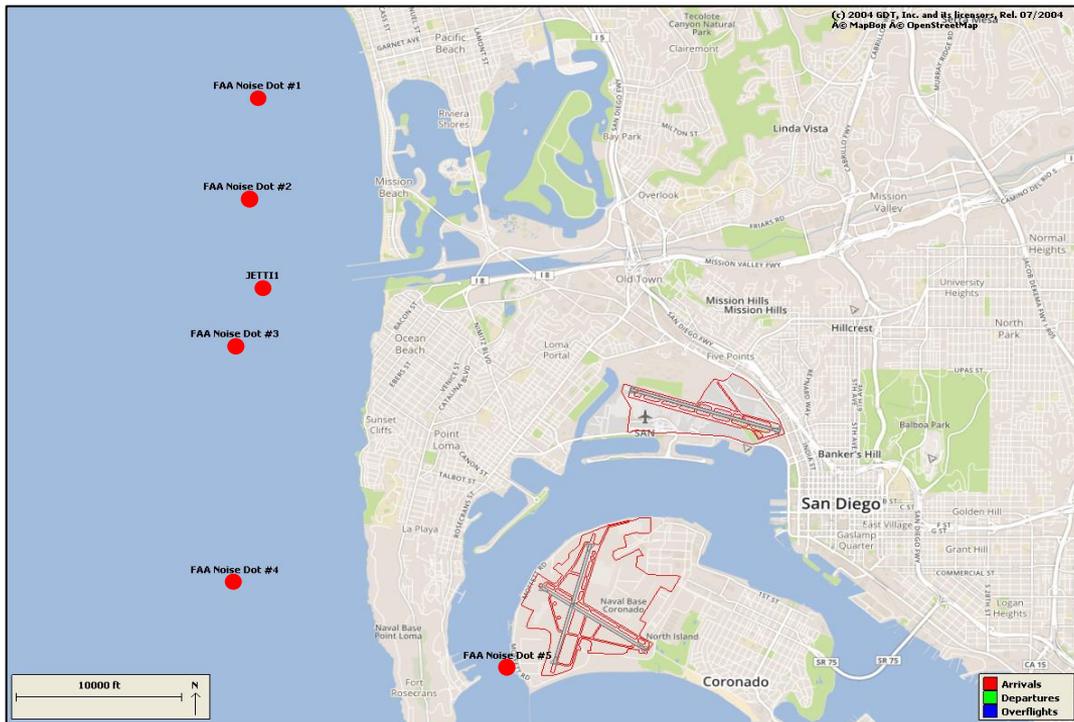
	2016	2017	2018
Jan	18	15	8*
Feb	11	9	
Mar	10	5	
Apr	11	3	
May	12	10	
Jun	29	20	
Jul	25	17	
Aug	19	16	
Sep	22	14	
Oct	11	15	
Nov	11	7	
Dec	12	13	

Date	Compliant	Non Compliant (Left)	Non Compliant (Right)	East of Airport	Day	Night
December 2017	66	11	2	12	56	23
January 2018	70	6	2	7	72	6

\*Through January 31, 2018

*Missed approaches are safety-related operations and are not subject to the FAA Noise Dot agreement*

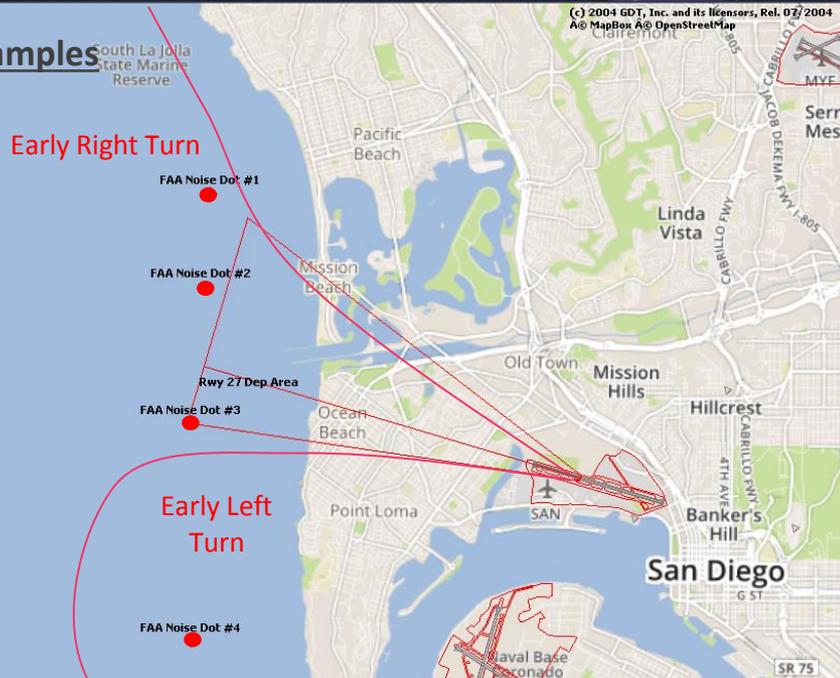
# Missed Approach Noise Dot Compliance



Date	Between ND #1 - ND #2	Between ND #2 - JETTI	Between JETTI - ND #3	Between ND #3 - ND #4
December, 2017	2	43	29	10
January, 2018	1	48	22	7

# Definition: Early Turns

## Examples

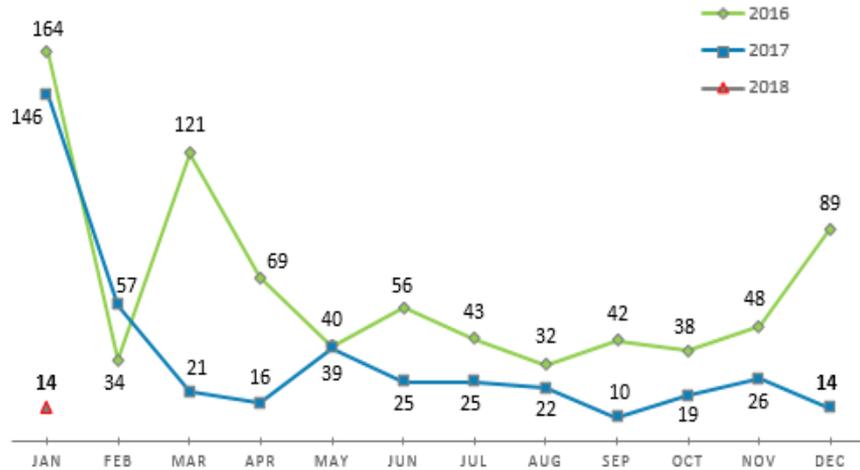


The Authority has defined early turns to the right as those aircraft that turn prior to FAA Noise Dot #1 at the 295-degree heading to the right. Left early turns are defined as those aircraft that turn prior to the FAA Noise Dot #3 at the 265-degree heading to the left.

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

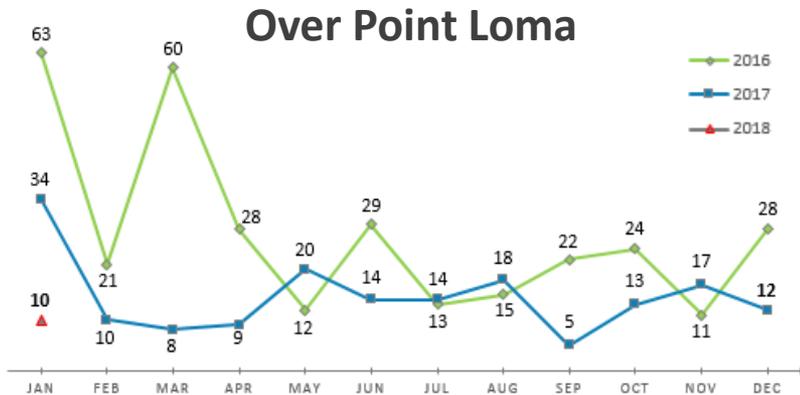


## Historical vs. Current Data

YEAR	Below 6,000'	All Altitudes
2013	200	829
2014	338	1,105
2015	467	1,293
2016	559	776
2017	327	420
2018	7*	14*

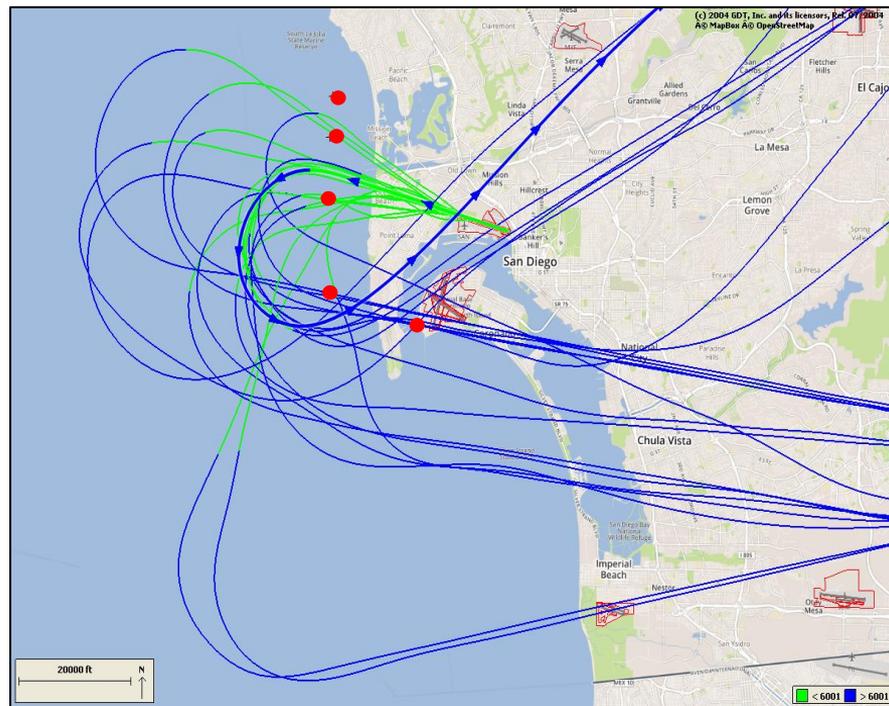
\*Through January 31, 2018

# Early Turn Statistics - Left



## Early Turns by Operator (Dec. 2017 – Jan. 2018)

Count	Airline	Aircraft	Total Operator Departures
8	General Aviation	--	1,174
5	Southwest Airlines	B737, B738	6,170
2	American Airlines	A321, B738	1,487
2	Delta Air Lines	B738, B739	1,076
1	Alaska Airlines	B738	1,273
1	FedEx	B752	244
1	Frontier Airlines	A320	211
1	SkyWest Airlines	E75L	1,652
1	United Airlines	B739	1,602



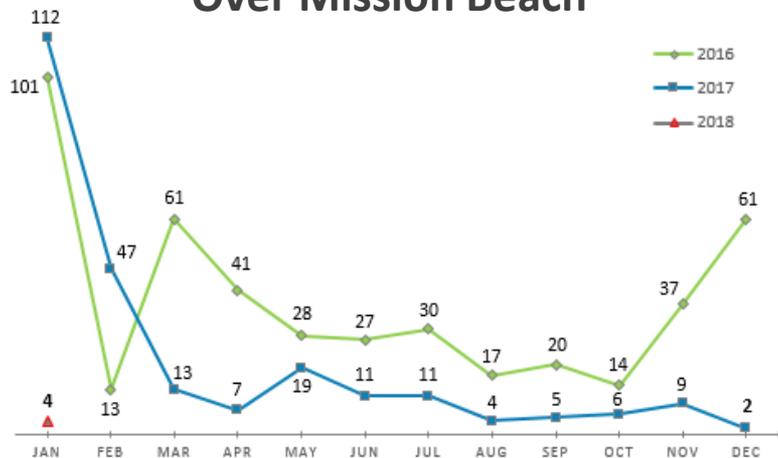
### Legend:



● = FAA Noise Dots

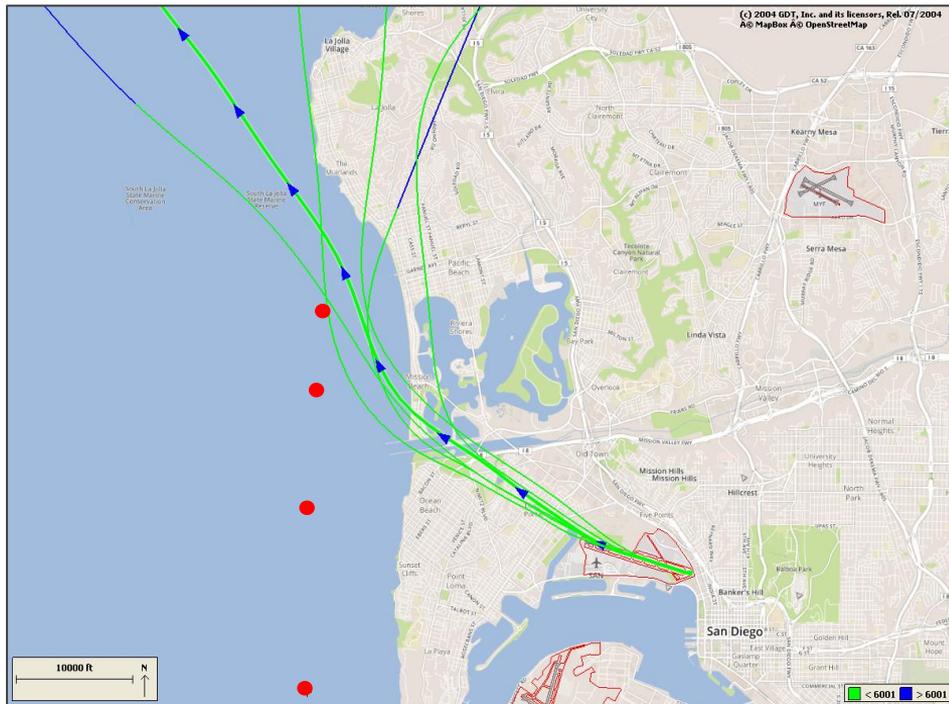
# Early Turn Statistics - Right

## Over Mission Beach



## Early Turns by Operator (Dec. 2017 – Jan. 2018)

Count	Airline	Aircraft	Total Operator Departures
5	General Aviation	--	1,174
1	UPS	B763	85



### Legend:



● = FAA Noise Dots

# Breakdown of Early Turns

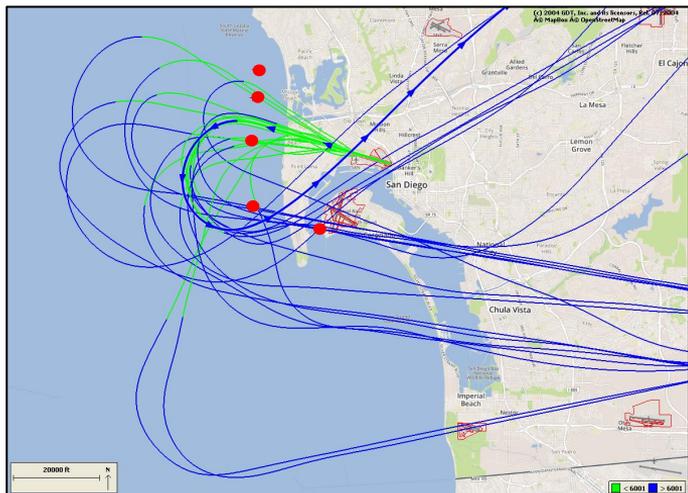
## Over Point Loma

Reason	Count	%
Air Traffic Control (ATC)	11	50%
Within 1,500 ft. from Noise Dot	7	31%
Pilot Deviation / Equipment Error	2	9%
Contra Flow (weather-related)	1	5%
Unknown (no radio confirmation)	1	5%
<b>TOTAL</b>	<b>22</b>	<b>100%</b>

**Note:**  
Cause breakdown is based on SDCRAA review of flight track replay and has not been confirmed by the FAA

## Over Mission Beach

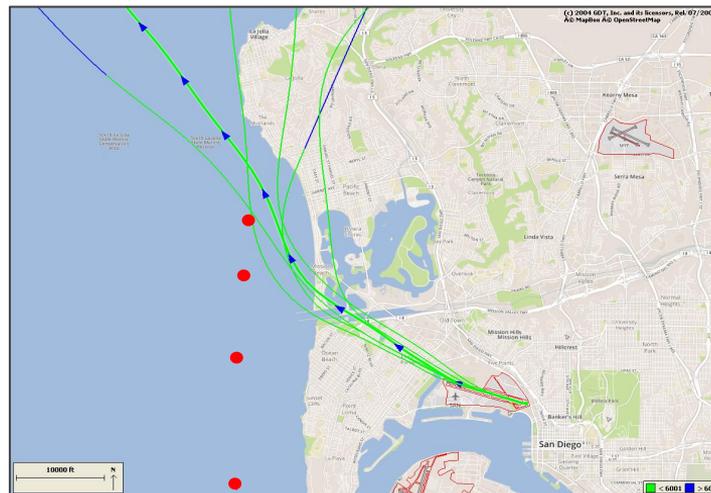
Reason	Count	%
Air Traffic Control (ATC)	4	66%
Within 1,500 ft. from Noise Dot	1	17%
Pilot Deviation / Equipment Error	1	17%
<b>TOTAL</b>	<b>6</b>	<b>100%</b>



### Legend:

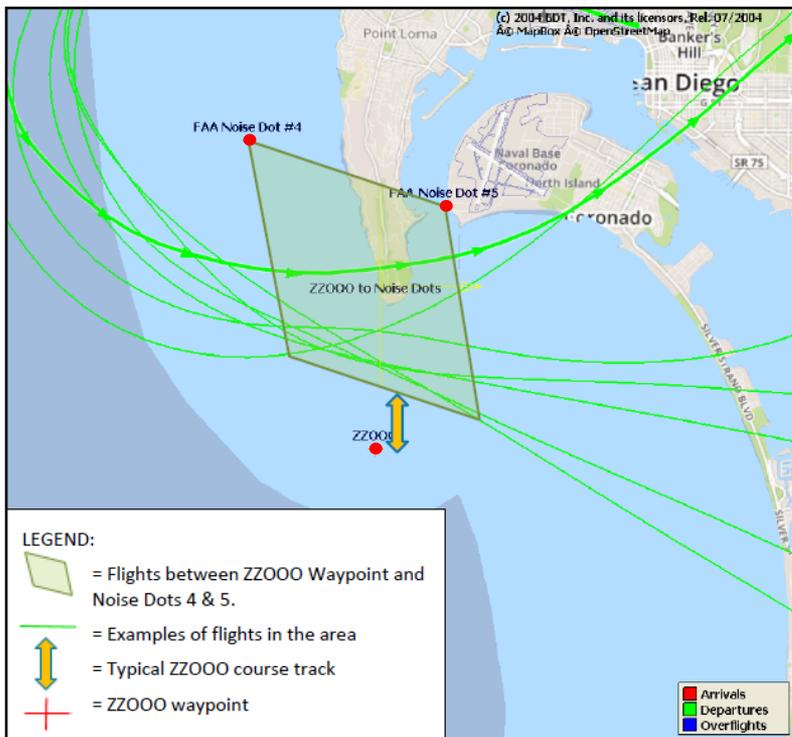


● = FAA Noise Dots



# Flight Information - Pt. Loma

## Flights Between ZZO00 Waypoint and Noise Dots



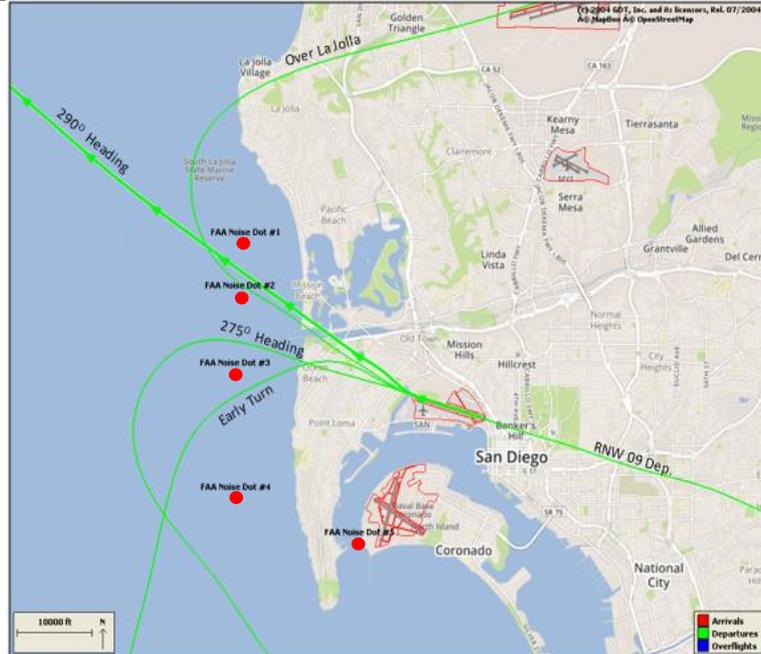
Date	Total Jet Departures	Between ZZO00 and Noise Dots	% of Total Jet Departures
December 2017	8,510	599	7%
January 2018	8,343	608	7%

Note: These flights are following published flight routes and are not off course.

# Flight Information - Nighttime Departures

Date	Runway Heading (275°)	Adhered to Nighttime Dep. (290°)	Early Turns	RNW 09 Dep.	Total (Jet)	Over La Jolla (compliant)
December, 2017	4	362	1 (Left)	--	= 367	27
January, 2018	3	241	--	8	= 252	28

Nighttime is  
10:00 p.m. –  
6:30 a.m.



# Questions ?



# Curfew Violation Review

## Curfew Violations in December 2017 - January 2018

### **SUMMARY:**

13 violations in December, penalized 1

5 violations in January, penalized 2 (1 to be heard in April)

### **No Penalty Weather:**

December 28, 2017: 2 AAL

December 29, 2017: 1 AAL/ 1 ASA/1 JBU

December 30, 2017: 3 AAL/ 2 SWA/ 1 VRD/ 1 ASA

### **Mechanical:**

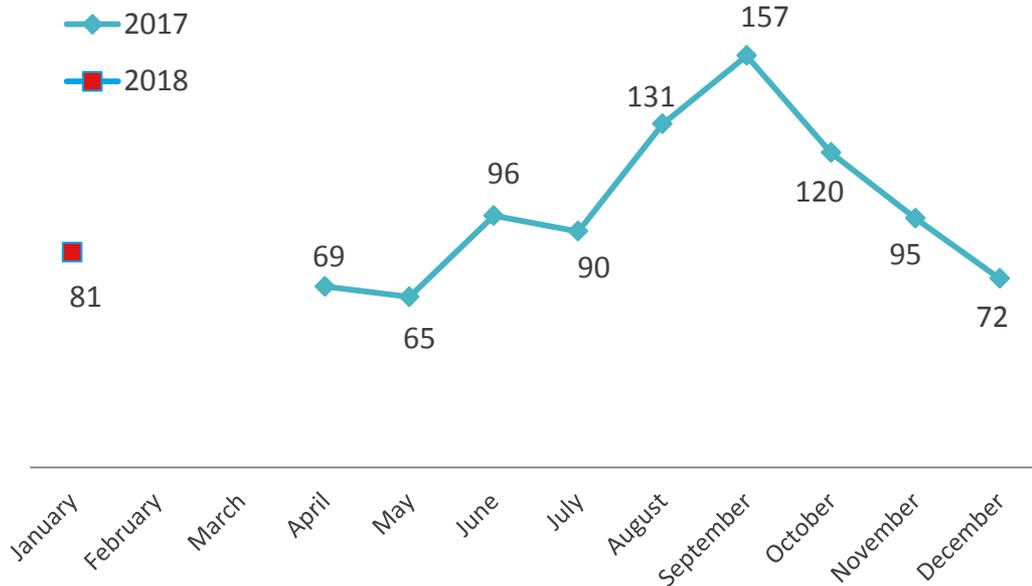
January 2, 2018: JBU – Engine Fuel Leak

January 17,2018: ASA – Flight Management System issue

Year	Total Curfew Violations	Fines Assessed
2013	60	\$ 166,000
2014	47	\$ 178,000
2015	55	\$ 152,165
2016	84	\$ 564,000
2017	72	\$ 376,000
2018	7*	\$ 16,000*

\*Through January 31, 2018

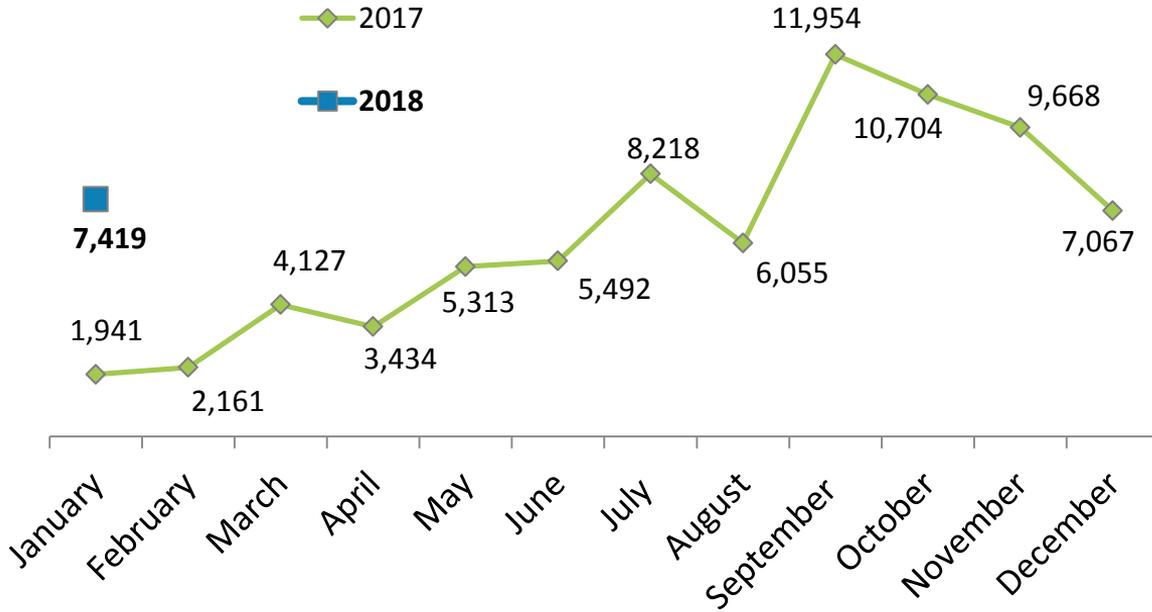
# Households Submitting Complaints



Neighborhood by Zip Code	Number of Households
La Jolla – 92037	43
OB/Sunset Cliffs – 92107	18
Pt. Loma – 92106	16
Mission Beach/PB 92109	4
La Mesa – 91942	3
La Mesa/Mt. Helix - 91941	3
North Park - 92104	3
Other (<2 households)	12
<b>Total</b>	<b>102</b>

\*New noise complaint system started in April, 2017.

# Noise Complaints



Reason for Complaint	Number of Complaints
Loud Aircraft	14,294
Curfew Violation	21
Suspected Off-Course	33
Low Flying	80
Increased Flight Volume	15
Early Turn	23
Missed Approach	8
Other	12

Through January 31, 2018

# Questions ?



# Update on ANAC Recommendations

In October of 2017, ANAC approved 21 recommendations, which the Board accepted Staff's Action Plan in December of 2017.



## Recommendation #1 - Increase the Amount of Curfew Penalties

Staff is researching other airports with curfews to determine how much and how frequently they penalize operators. Working with Legal Counsel to determine next course of action.



## Recommendation #5 - Provide Public Access to SoCal TRACON

Completed in December of 2017, access is available via [liveATC.net](http://liveATC.net).

# Policy 9.20 Membership Amendments

Per ANAC recommendation #7, staff reviewed Board Policy 9.20 - Airport Noise Advisory Committee to add new community members and conduct a comprehensive review to ensure the most effective and balanced committee structure.

- **Voting Majority Most Impacted**

Residents most impacted by aircraft noise (delineation of 65 decibel contour) will make up majority of voting membership.

- **Continued Use of San Diego Community Planning Groups**

Staff proposes the continued use of City of San Diego Community Planning Groups to obtain most of the community members.

- **Additional Aviation Industry Members**

To facilitate a more productive and balanced conversation, staff is recommending adding additional aviation members.

- **Voting Members Outside Impacted Area**

To address the ANAC recommendation, staff is proposing to include four additional community members outside the 65 decibel contour. Three from within the City of San Diego and one outside.

- **Selection of Members Outside 65 contour**

Based on the communities that have the highest number of households submitting concerns.

- **Terms**

Terms for community members within the 65 contour would be two years with one potential reappointment. Members outside the 65 contour will have a term of two years.

# Committee Composition

## Existing Voting Membership = 13

Member Type	Breakdown
<b>Community Members</b> 9 Total	7 – Community Planning Groups 1 – General Community member in 65 dB 1 – Community group related to noise
<b>Stakeholders</b> 4 Total	2 – staff from jurisdictions 1 – Military 1 – Pilot (retired)

## Proposed Voting Membership = 18

Member Type	Breakdown
<b>Community Members</b> 11 Total	6 – Community Planning Groups, within 65 dB 1 – General Community member within 65 dB rotated west and east every two years 3 – San Diego CPG, outside 65 dB 1 – Outside San Diego
<b>Stakeholders</b> 7 Total	2 – Airport staff from City/Co. 1 – Military 1 – Pilot (active) 1 – Airline Flight Ops 1 – NBAA 1 – EDC / Tourism

# ANAC Policy Additional Modifications

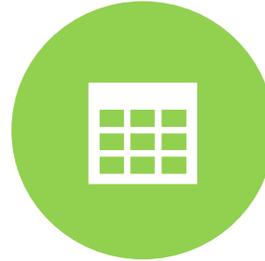
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Greater clarity on the purpose of ANAC and member roles.



Creation of an annual work plan to identify initiatives to help guide member's efforts.



Other administrative items to update the Policy.

# Noise Budget Breakdown

**ANAC Recommendation #2:** Use 100% of curfew violation fines for noise mitigation efforts, including but not limited to, additional noise monitoring, home upgrades not covered by QHP, engineering studies, community awareness, etc. In addition, SDCRAA should make community members aware of these fines and how they are being used to reduce noise impacts.

Description	Annual Total
Professional Services (Fly Quiet, Quarterly Reports, Noise Monitoring, Etc.)	\$120,000
Noise Staff Labor (2 Noise Specialists, Admin Assistant, Program Manager)	\$263,000
ANOMS Maintenance	\$140,000
Administrative Costs (advertisements, printing, postage)	\$5,000
Training	\$4,000
ANAC Meeting Costs	\$18,000
Web Based Flight Tracking	\$50,000
<b>ANNUAL TOTAL</b>	<b>\$600,000</b>

# Additional Statistics (Recommendation #12)

Description	Action
Missed Approaches related to Noise Dots, compliant versus non-compliant, left and right by time of day.	Included in Stats
Missed approaches to the left of the JETTI waypoint, in between JETTI and the original noise dot #1 (which is now Noise dot 2) and to the right of the original Noise Dot #1 (which is now Noise Dot #2.)	Included in Stats
Include in the definition and calculation of early turns departures to the left of the JETTI waypoint and to the right of the original Noise Dot #1 (which is now Noise Dot #2).	Included in Stats presentation ET to Left = ND#3 Et to Right = ND#1
ZZOOO departures that are outside/south of ZZOOO waypoint, noise dot compliant but not outside the ZZOOO waypoint, early turns to the left and aircraft that are cleared direct to the MTBAL waypoint.	Included in Stats, do not have MTBAL data
Include airline information associated with missed approaches, curfew violations, and early turns.	All but airlines for Missed Approaches, those are safety

# Additional Statistics (Recommendation #12) Cont.

Description	Action
Conduct an independent audit of the accuracy of web-based Flight Tracking system.	Currently out to bid for a new NOMS New system will require acceptance testing to meet Title 21
Implement a range of ways to educate the community on how to use Flight Tracker.	Proposing to have staff setup a Flight Tracker demonstration at local libraries
Track conformance to the “the 290 degree” departure heading (from end of runway 27) to the Nighttime Noise Abatement Procedure.	Included in Stats
Report on noise events using the number above (Nx or N65) to indicate how many loud aircraft noise events are occurring.	Ongoing will present at next meeting
Report all noise complaints by time, date, flight number, and neighborhood (reinstate historical noise complaint reporting).	Total complaints, as presented in the past, is included in the stats
SDCRAA to publish 55 dB CNEL contour on their website.	Ongoing will present at next meeting

# Flight Procedure Analysis



## Flight Procedures Outside the 65 dB will be started first

- Staff has pulled together a team of consultants to start working on the flight procedure analysis, the same type of analysis that is conducted in a FAA 7100.41A
- The CAC and TAC will be established to first work on the Flight Procedure Analysis and then the Part 150 update
- CAC applications are open until February 28<sup>th</sup>. 15 members from a broad range of communities will be selected.
- First CAC meeting is on **March 22 at 2PM**. The first TAC will be on **March 29 at 2PM**
- Need to select two ANAC members to sit on the TAC

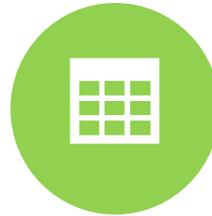
# FAR Part 150 Update



Staff advertised an request for consultants on February 5<sup>th</sup>, proposals due March 5.



Seeking an FAA Grant to conduct the study.



Anticipate going to the Board with a contract by April of 2018



Study will commence after grant is received.

***Note: Schedule is pending FAA Airports office reviews.***

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Next Meeting: April 18, 2018 \*NEW LOCATION\*

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# New ANAC Location

## San Diego Holiday Inn Bayside

4875 N. Harbor Dr., San Diego, CA 92106

Please visit

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

For exact meeting room

