

## Missed Approaches by Location

All Missed Approaches are Safety-Related Operations

Date	Between 265° - 295° Headings (Standard)	Left of 265°	Right of 295°	East of Airport	Day	Night
June 2018	35	10	2	1	46	2
July 2018	43	14	2	0	48	11

## Missed Approaches relative to the FAA Noise Dots

Missed Approaches may fly through more than one location

Date	Between ND #1 - ND #2	Between ND #2 - JETTI	Between JETTI - ND #3	Between ND #3 - ND #4	Between ND #4 - ND #5
June 2018	1	25	9	8	2
July 2018	1	30	12	13	1



## Missed Approaches by Month by Operator

Operator	June 18	July 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19
Alaska	3	3	8	8	4	9	3	4
Allegiant						1		
American	4	4	4	9	2	5	8	4
Ameriflight							1	
Atlas			1					
British			1					
Compass	4	4	1	6		1	6	6
Delta	3	2	4	5	3	4	5	7
FedEx							1	
Frontier	1	1		2	1	1	1	
Hawaiian		2	1	1				
Horizon							2	2
Japan							1	2
Jazz							1	1
jetBlue	1			1	1	1		1
Lufthansa					1	1		
Pac Valley	1						1	1
Rouge					1			
SkyWest	5	7	3	5	5	7	3	12
Southwest	14	23	18	27	22	24	19	20
Spirit		1	2	3	1		4	1
United	7	9	5	7	4	8	7	8
UPS							1	
GA	5	3	2	1	3	3		6
<b>Total</b>	<b>48</b>	<b>59</b>	<b>50</b>	<b>75</b>	<b>48</b>	<b>65</b>	<b>64</b>	<b>75</b>

## Left Early Turns by Operator (June – July 2018)

Early Turns	Airline	Aircraft	Total Operator Departures
9	General Aviation	(multiple aircraft)	1,625
9	Southwest Airlines	B737, B738	6,751
5	Delta Air Lines	A321, B752, B753	1,574
4	American Airlines	B738	1,626
3	Edelweiss Air	A343	18
2	Alaska Airlines	B738, B739	1,672
2	SkyWest Airlines	E75L	1,532
1	Atlas Air	B762	43
1	Frontier Airlines	A320	263
1	JetBlue Airways	A321	340
1	United Airlines	A319	1,919

Source: ANOM

## Right Early Turns by Operator (June – July 2018)

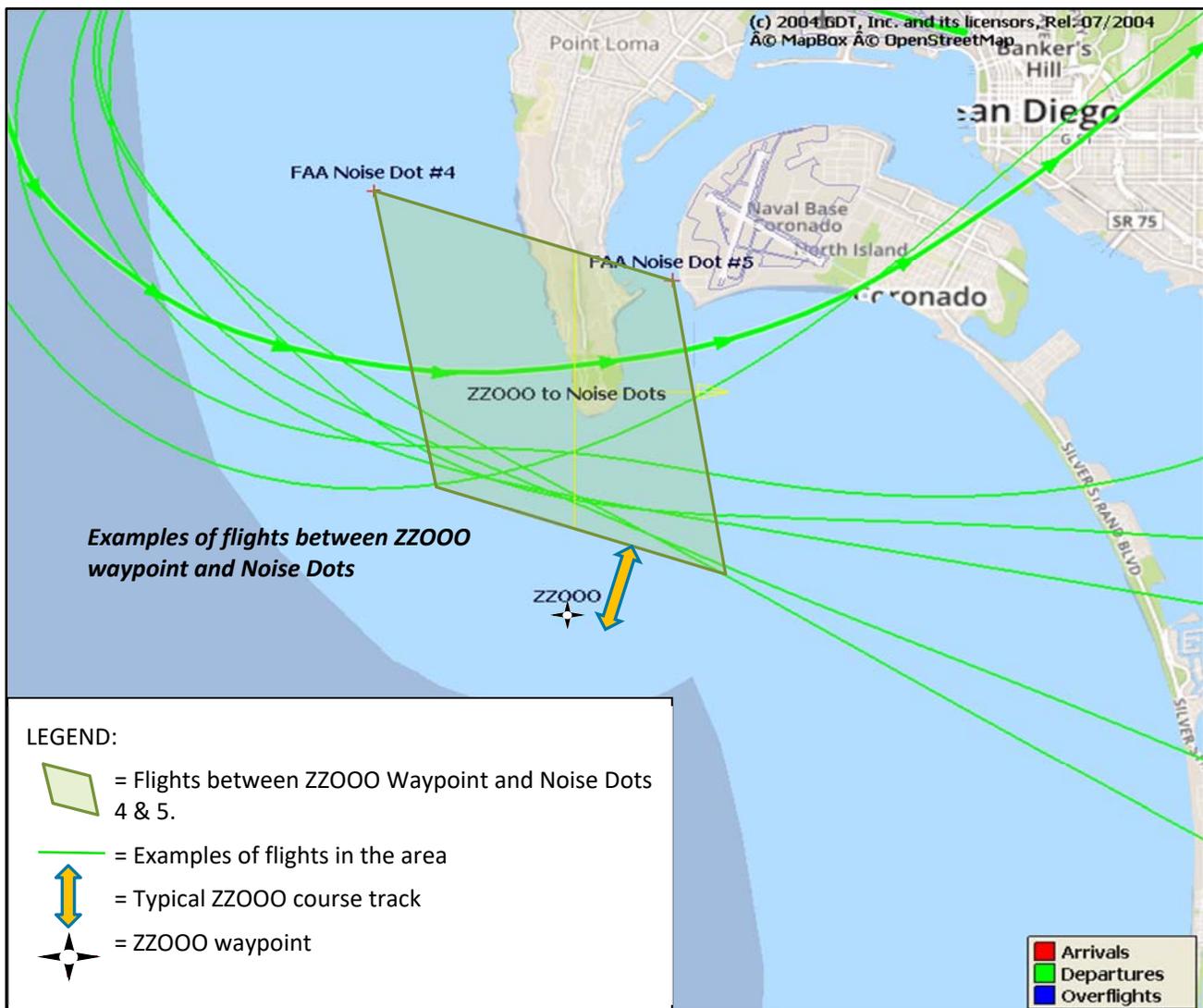
Early Turns	Airline	Aircraft	Total Operator Departures
9	General Aviation	(multiple aircraft)	1,625
2	Japan Airlines	B788	61

Source: ANOMS

## Flights Between ZZ000 Waypoint and Noise Dots

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

Date	Jets Turning Left	Between ZZ000 & Noise Dots
June 2018	5,048	539
July 2018	5,318	561



## Disturbance Type

June & July 2018

Reason	Number of Complaints	%
Too Loud	13,292	99.59
Curfew Violation	47	0.35
Suspected Off-Course	32	0.24
Early Turn	26	0.19
Too Low	21	0.16
Increased Flight Volume	11	0.08
Other	5	0.04
Missed Approach	3	0.02

Neighborhood by Zip Code	Number of Households*
La Jolla – 92037	58
Pt. Loma 92106	34
OB/Sunset Cliffs – 92107	31
Mission Beach/PB – 92109	11
La Mesa/Mt. Helix - 91941	4
Golden Hill - 92102	4
Mission Hills - 92103	2
Midway - 92110	2
Other** (1 Household per zip code)	12
<b>Total</b>	<b>158</b>

Other Zip Codes**			
91917	91942	92102	92116
91932	91978	92104	92117
91935	92101	92115	92119

\*Combined total for June & July 2018

# ANAC Subcommittee Recommendations

## CURFEW PENALTIES

Recommendation – <b>PASSED: In Favor = 7, Opposed = 1</b>	STATUS
<p>1. Increase the amount of fines assessed on the airlines for curfew violations commensurate with the increase in cost of living. Continue to maintain multiplier.</p>	<p><b>Complete:</b> Presentation by SDCRAA at 10/17/18 ANAC mtg. Current level of curfew violations will not support an increase in fines. SDCRAA to monitor and if number of curfew violations near 2016 levels, this item will be readdressed.</p>
<p>2. Use 100% of curfew violations 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, the San Diego County Regional Airport Authority (SDCRAA) should make community members aware of these fines and how they are being used to reduce noise impacts.</p>	<p><b>Complete:</b> Presentation by SDCRAA at 10/17/18 and 2/20/19. Starting 7/1/19, \$350K will be added to the QHP budget to reflect curfew fines collected.</p>

## SUBCOMMITTEE CONTINUATION

Recommendation - <b>PASSED: In Favor = 4, Opposed = 2, Abstain = 1</b>	STATUS
3. Continue the subcommittee to ensure continued community input from affected neighborhoods. Post applications on the website for 2017/2018 seats.	<b>Complete:</b> SDCRAA created CAC for Part 150.

## FAA AIR TRAFFIC CONTROL RADIO FREQUENCIES

Recommendation - <b>PASSED: Unanimous</b>	STATUS
4. FAA to provide full public access to TRACON SoCal Arrivals and Departures live radio broadcast frequencies including the live FAA feeds (as provided at LAX) via LiveATC.net or similar.	<b>Complete:</b> Online in December 2017.
5. SDCRAA to archive and make publically available on its website ATC of Clearance Delivery, Ground Control, Tower and Approach/Departure, SoCal Arrival and Departure Control radio communications for prior 6-month period.	<b>Complete:</b> Online in December 2017. 30-day history.

## ANAC COMMITTEE

Recommendation - <b>PASSED: Unanimous</b>	STATUS
6. SDCRAA to make all raw noise related data available to the public.	<b>Complete:</b> Available via request to Noise Office and online flight tracking.
7. Modify ANAC Committee Policy to add one representative each from Pacific Beach, Bird Rock, La Jolla, Point Loma Heights, and other directly impacted communities.	<b>Complete:</b> Policy updated in March of

2018. New members started in June 2018.

## QUIETER HOME PROGRAM

Recommendation - <b>PASSED: Unanimous</b>	STATUS
8. Review alternative funding sources to expand the homes treated by the Quieter Home Program (QHP) to noise-impacted homes outside the current noise contour.	<b>Complete:</b> Presentation by SDCRAA at 2/21/18 ANAC mtg. No known alternative sources for funding.
9. SDCRAA to track and report to ANAC at each meeting the count and specific circumstances where applicants are denied Air Conditioning (AC) installations in their QHP applications so that ANAC may consider recommendations to pursue the FAA reconsider the terms of the FAA recommendations.	<b>Complete:</b> All owners are offered ventilation options consistent with FAA eligibility.

## NOISE MONITORING AND MITIGATION

Recommendation – <b>PASSED: Unanimous</b>	STATUS
10. Conduct portable noise monitoring in areas that express concerns about aircraft noise that do not have a permanent noise monitoring site close by. Initially these locations would include Mission Beach parallel to Noise Dot #1, Fleetridge, South Fleetridge, Point Loma Heights, Dana Middle School or the Wooded Area on the bayside of the Point.	<b>In Process:</b> Noise monitoring will be conducted during the Part 150 Study.

11. Study the feasibility and benefit of noise barriers/airport noise mitigation on the water side of the airport and runways across from the Car Rental agency.

**In Process:** This will be analyzed in Part 150 Study.

## ADDITIONAL SDCRAA ANALYSIS

Recommendation – PASSED: Unanimous	STATUS
<p>12. SDCRAA to conduct additional analysis and publish this data as part of ANAC data package, this information should include:</p> <ul style="list-style-type: none"> <li>a. Missed approaches as it relates to the noise dots (complaint vs. non-compliant both left and right), by time of day. <b>Included</b></li> <li>b. Missed approaches 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). <b>Included</b></li> <li>c. Include the definition and calculation of early turn’s departures to the left of the JETTI waypoint and to the right of the original Noise Dot #1 (which is now Noise Dot #2). <b>Included</b></li> <li>d. ZZ000 departures that are outside/south of ZZ000 waypoint, noise dot compliant but not outside ZZ000 waypoint, early turns to the left and aircraft that are cleared direct to the MTBAL waypoint. <b>Included</b></li> <li>e. Include airline information associated with missed approaches, curfew violations, and early turns. <b>Included</b></li> <li>f. Report on noise events using the number above (Nx or N65) to indicate how many noise events are occurring. <b>Published in 4/18/18 member package uploaded on the website</b></li> <li>g. Report all noise complaints by time, date, flight number, and neighborhood (reinstate historical noise complaint reporting). <b>Included for neighborhoods, due to the volume of complaints it is not feasible to publish all complaints by time, date and flight number</b></li> </ul>	<p><b>Complete:</b> Statistics started in February of 2018. Statistics that were removed in June – August of 2018 were added back in and are available on the website.</p> <p>See notes in red for details.</p>

<ul style="list-style-type: none"> <li>h. SDCRAA to publish 55dB CNEL contour on their website. <b>Published in 4/18/18 member package uploaded on the website</b></li> <li>i. Conduct an independent audit of the accuracy of web-based Flight Tracking system. <b>ANOMS system is currently being review by Caltrans for system acceptance</b></li> <li>j. Implement a range of ways to educate the community on how to use the Flight Tracker. <b>Five public workshops were held in different communities and further workshops are being planned</b></li> <li>k. Track conformance to the “290 degree” departure heading (from end of Runway 27) to the Nighttime Noise Abatement Procedure. <b>Included in member materials</b></li> </ul>	
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**FLIGHT PROCEDURE CHANGES - OVERALL**

<b>Recommendation</b>	<b>STATUS</b>
13. SDCRAA will engage an independent third party consultant, with public involvement, to provide a full and honest analysis and evaluation of the overall alignment of current SID’s, STAR’s and Procedures and Agreements.	<b>In Process:</b> Consultant is reviewing this in the Flight Procedure Analysis and Part 150 Study update.

**FLIGHT PROCEDURE CHANGES – PADRZ SID**

<b>Recommendation (to be included as a subset of #13)</b>	<b>STATUS</b>
14. Revise PADRZ or create a new procedure to reduce noise in La Jolla, Mission Beach and Pacific Beach.	<b>In Process:</b> Consultant is reviewing this in the Flight Procedure Analysis and Part 150 Study update.

**PROCEDURE SUGGESTIONS – PADRZ SID:**

Several members of the subcommittee worked to develop potential revised procedures to reduce noise impacts. The suggestions below are included as, and meant to be, examples to clarify the desired outcome and to bring up potential alternatives to the current procedure.

- Move the WNFLD and LNDND waypoints south as to align with the relocated Noise Dot #1 at 290 (15 degree separation from JETTI at 275 degrees) and designate as “Flyover” waypoints in the respective SID’s, consistent with JETTI.
- Establish within the PADRZ SID procedure a horizontal distance from end of runway (1.0 miles) along a fixed heading which must be satisfied along with altitude before a right turn can be initiated to preclude flights that quickly attain the current 520’ altitude and turn right of and prior to the Noise Dot #1 before correcting to WYNFLD which results in aircraft flying farther north over Mission Beach.
- PADRZ ONE SID As currently designed the PADRZ ONE departure leaves aircraft very close to and almost paralleling the coast along La Jolla, increasing noise impacts significantly. We recommend moving WNFLD and KERNL waypoints 1.5NM south of their current positions. This will ensure aircraft proceed more directly off the coast without paralleling the shore and adds less than a mile of track distance to PADRZ.
- Create a new procedure BROCK-2 (alternative 1) Request FAA to revise PADRZ SID and establish new waypoint BROCK1. Adds min increased flight time and take aircraft further off shore before turning to northern destinations. This will help all coastal neighborhoods with noise issues.
- Create a new procedure BROCK-1 (alternative 2 – preferred) Relocate waypoints WNFLD and LNDN .75 miles directly south or adopt BROXK recommendation. Maintain 274 departure until Altitude 520 or greater. Maintain 274 departure heading until 520-foot altitude or greater and the aircraft have reached (new) flyover waypoint 0.25 to 0.5 miles from the end of the runway before turning toward WNFLD, LANDN or new BROCK Waypoint.

- Do not move the PADRZ SID further south to avoid negative noise impacts on the south side communities of the Point Loma Peninsula.

## FLIGHT PROCEDURE CHANGES – ZZOOO SID

Recommendation (to be included as a subset of #13)	STATUS
15. Revise ZZOOO to significantly reduce or eliminate flights over the Point Loma Peninsula, including Cabrillo National Park and reduce or eliminate eastbound turns over La Jolla.	<b>In Process:</b> Consultant is reviewing this in the Flight Procedure Analysis and Part 150 Study update.
<p><b><u>PROCEDURE SUGGESTIONS – ZZOOO SID:</u></b></p> <p>Several members of the subcommittee worked to develop potential revised procedures designed to reduce noise and enforce compliance with Noise Dots and the ZZOOO procedure over Point Loma. Those suggestions are included as, and meant to be, examples to clarify the desired outcome and to bring up potential alternatives to the current procedure.</p>	
<ul style="list-style-type: none"> <li>• Eastbound flights should reach a minimum of 8K feet before crossing over ZZOOO to minimize thrusters and reduce duration of noise impacts over Point Loma.</li> </ul>	
<ul style="list-style-type: none"> <li>• FAA/TRACON to discourage the practice of redirecting flights off their filed ZZOOO flight plan departure, to turn north then east over La Jolla.</li> </ul>	
<ul style="list-style-type: none"> <li>• FAA/TRACON to direct that ALL SAN departure separation be limited to between JETTI (275 degrees) and the historical Red Noise Dot #1 (290 degree vectors from the end of Runway 27) for LNSAY, BRODER, PEBLE and ZZOOO, etc. (plus all new Metroplex SID's) Prohibit 250 to 275 departure vector range, except for specific safety events ("Runway 27 STAR Missed Approach Wave Off").</li> </ul>	
<ul style="list-style-type: none"> <li>• Follow ZZOOO procedure, comply with the JETTI flyover waypoint and consider the establishment of minimum vectoring altitude for Eastbound turns.</li> </ul>	
<ul style="list-style-type: none"> <li>• The ZZOOO ONE departure as currently designed puts departing aircraft close to Point Loma peninsula and the southern end of coastal La Jolla, subjecting residents to increased and at</li> </ul>	

times incessant noise from departing aircraft. Aircraft need to be further offshore before beginning the turn south to the ZZOOO waypoint. We recommend replacing the JETTI waypoint with a waypoint along the same track from the departure end of Runway 27 that is 2NM further west, located at approximately 32.75360N by -117.25755W.

## FLIGHT PROCEDURE CHANGES – COMIX STAR

Recommendation (to be included as a subset of #13)	STATUS
<p>16. Reassess and revise the entire arrival corridor in a manner that more appropriately “shares the noise” instead of concentrating arrivals from the North in a very narrow corridor.</p>	<p><b>In Process:</b> Consultant is reviewing this in the Flight Procedure Analysis and Part 150 Study update.</p>
<p><b><u>PROCEDURE SUGGESTIONS – COMIX STAR:</u></b>            Several members of the subcommittee worked to develop revised procedures to COMIX STAR designed to reduce the increased noise that has resulted from the implementation of Metroplex and NextGen. Those suggestions are included as, and meant to be, examples to clarify the desired outcome and to bring up potential alternatives to the current procedure.</p>	
<ul style="list-style-type: none"> <li>• Revise COMIX STAR procedure in order to shift flights that Metroplex has moved and concentrated farther South (the downwind leg) over less populated areas and restore prior altitude.</li> </ul>	
<ul style="list-style-type: none"> <li>• Shift waypoint XMANS on the COMIX STAR north to a location that is over the interstate freeway 805 and 52 with the constraint to remain clear of MCAS Miramar’s airspace. It would come ashore over Torrey Pines State Park before connecting with KLOMN.</li> </ul>	
<ul style="list-style-type: none"> <li>• Increase Min. Altitude at LNTRN (LCOVE) at or above 10,000’. This change would result in aircraft flying over less populated areas, including industrial businesses, thus reducing the noise impact and saving time/fuel. This proposed path is closer to the historical flights pre-NextGen.</li> </ul>	

- COMIX ONE STAR The RNAV-only COMIX ONE arrival is very similar to the existing non-RNAV BAYVU arrival in terms of ground track with a key difference being that COMIX arrival has an “at or above 8,000” altitude restriction on its last offshore waypoint (LNTRN). The BAYVI arrival has an “at or above 9,000 feet” restriction at its nearly identical-located LCOVE waypoint. This has resulted in aircraft being lower and noisier over La Jolla. We recommend changing LANTERN waypoint’s altitude restriction to “at or above 9,000 feet”.

## NIGHTTIME NOISE ABATEMENT PROCEDURE

Recommendation – PASSED: Unanimous (Review procedure changes described under Item 13, this recommendation is specifically focused on increasing current compliance)	STATUS
17. Determine methods to increase current Nighttime Noise Abatement Procedures to improve noise impacts for affected communities and ensure that ATC is only turning aircraft off this procedure for safety reasons only.	<b>In Process:</b> Consultant will be reviewing this in the Part 150 Study update.

## FAA NOISE DOTS

Recommendation – to be included as a subset of #13	STATUS
18. Review if the current definition of an early turn, and define what an early turn means, and conduct comparative analysis of actual flight paths.	<b>In Process:</b> Consultant is reviewing this in the Flight Procedure Analysis
19. Work with FAA/ATC to modify flight procedures to increase compliance and reduce early turns, with consideration of aircraft performance.	
20. FAA/TRACON to incorporate Red Dot waypoint locations into current and future SID’s as part of the formal SID and STAR Procedures, so that Red Dots become waypoints on departure procedures and data is collected on waypoints.	

- a. Reposition Noise DOT #1 from its current position at 296 degrees (implemented by FAA/AA without public notice) to its “original” pre 2005 position at 290 degrees from the end of SAN Runway 27 and 1.5 miles off the coast.
- b. Reposition FAA noise Dot #3 from its current position at 265 degrees (implemented by the FAA/AA without public notice) to its “original” pre 2005 position of 275 degrees (JETTI) and 1/5 miles off of the coast.
- c. Reposition FAA Noise Dot #4 from its current location (west of Fort Rosecrans) to coincide with the ZZ000 waypoint to deter regular early left turns inside of ZZ000 which continue to occur at the direction of ATC in direct conflict with the SID routing. ZZ000 was specifically designed by the FAA to provide an efficient and cost effective departure for eastbound traffic and to mitigate impacts to affected DOT Section 4(f) resources (including Fort Rosecrans, Cabrillo National Monument) and the peninsula community.

## NOISE ABATEMENT PROCEDURE (NADP)

Recommendation – to be included as a subset of #13	STATUS
21. Have SDCRAA conduct an engineering analysis of modification to the Noise Abatement Departure Procedure to assess the potential improvement to noise contours around the airport.	<b>In Process:</b> Consultant will be reviewing this in the Part 150 Study update.