

SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY

AIRPORT NOISE ADVISORY COMMITTEE (ANAC)

MEETING AGENDA

Wednesday, August 21, 2019, 4:00 p.m.

**LOCATION: Holiday Inn Bayside
1st Floor, Point Loma Room
4875 N Harbor Drive, San Diego, CA 92106**

1. Welcome and Introductions
2. Presentation Items
 - a. Update on Part 150 Noise Study
 - b. Update on Noise Statistics
3. Action Items
 - a. Approval of June 19, 2019 – Meeting Summary
4. Public Comment
5. Next Meeting: October 16, 2019
6. Adjourn

Please note: There is a free City Parking lot next to the hotel, we will not reimburse for parking at the hotel.



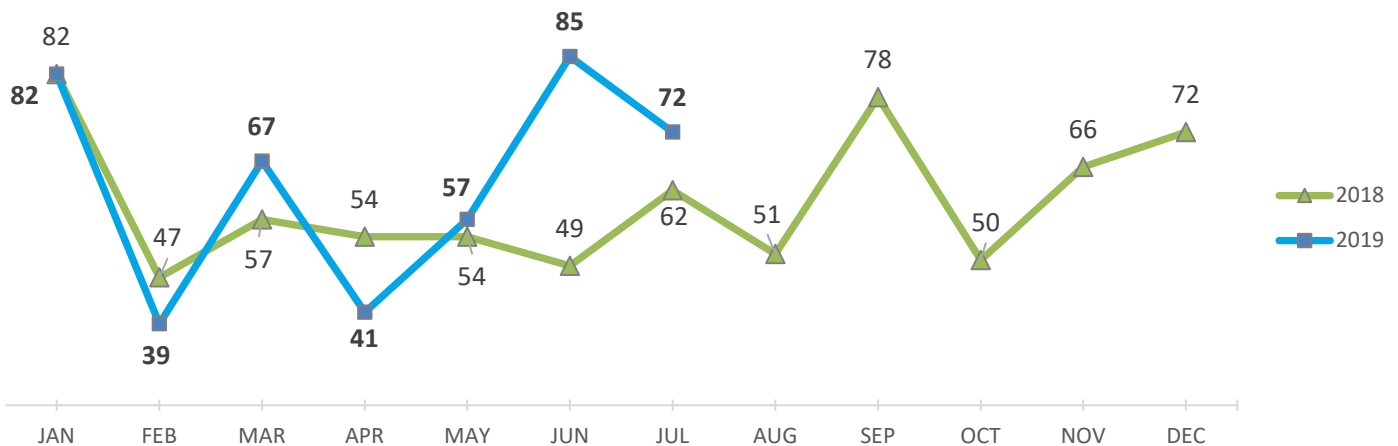
PROGRAM STATISTICS	
Homes on the Wait List	1,406
Added in June	6
Added in July	13
Homes Completed in June & July	93
Estimated Homes to Complete in CY 2019	400
Total Homes Completed (through July 31, 2019)	3,970

Updates

- Forecasted Construction Schedule:

Project	# Homes	Estimated Construction Start
9.7	19	Underway
9.8	136	Underway
9.9	125	Underway
9.10	42	Fall 2019
9.11	46	Winter 2019
9.12	32	Winter 2019
10.1	55	Winter 2019
10.2	63	Spring 2020
10.3	10	Summer 2020
10.4	57	Fall 2020
10.5	15	Fall 2020
10.6	42	Winter 2020

Missed Approaches by Month



NOTE: Missed Approach counts have increased as they now include aircraft that required more than one missed approach.

Missed Approaches by Year

Year	Total Missed Approaches	% Change	Total Arrivals <small>Source: FAA Data</small>	% Change	% of Total Arrivals that are Missed Approaches
2013	665	--	93,985	--	0.7
2014	700	8.7	95,881	2.0	0.7
2015	759	3.6	96,856	1.0	0.7
2016	832	14.8	98,566	1.8	0.8
2017	794	(4.6)	104,725	6.2	0.8
2018	722	(9.3)	112,529	7.5	0.6
2019	443*	--	66,595	--	0.7

* Through July 31, 2019

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	66	15	3	1	70	15
July	58	7	5	2	65	7

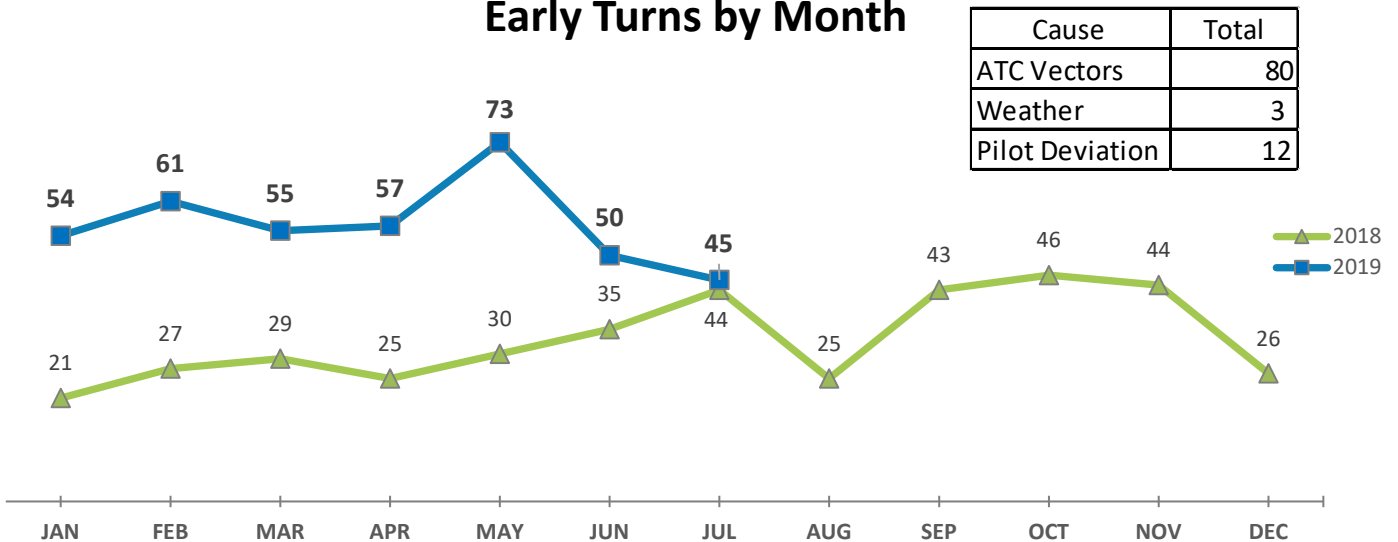
Missed Approaches relative to the FAA Noise Dots

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	4	54	8	14	1
July	1	45	12	5	2



Early Turns by Month



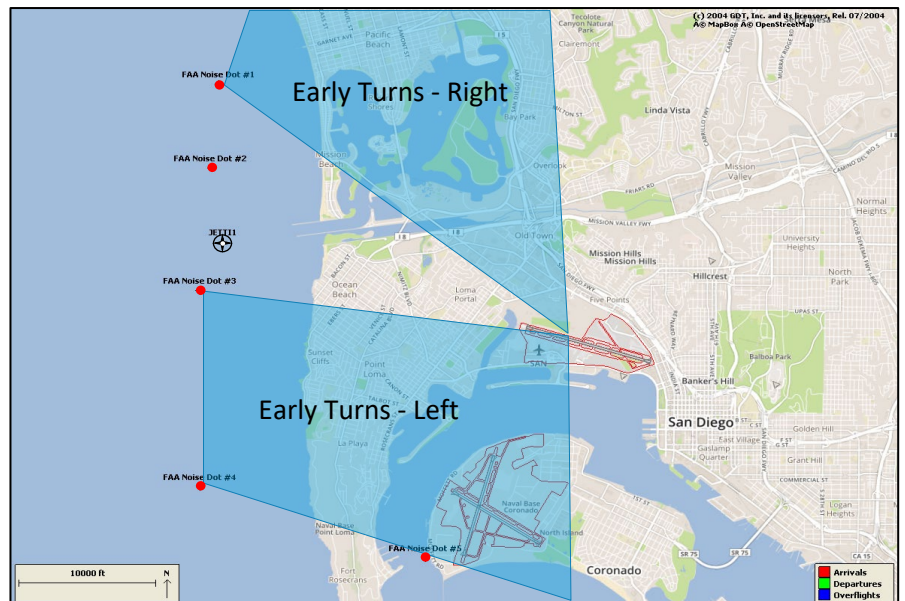
Cause	Total
ATC Vectors	80
Weather	3
Pilot Deviation	12

NOTE: Early Turn counts have increased as they now include missed approaches that turn early.

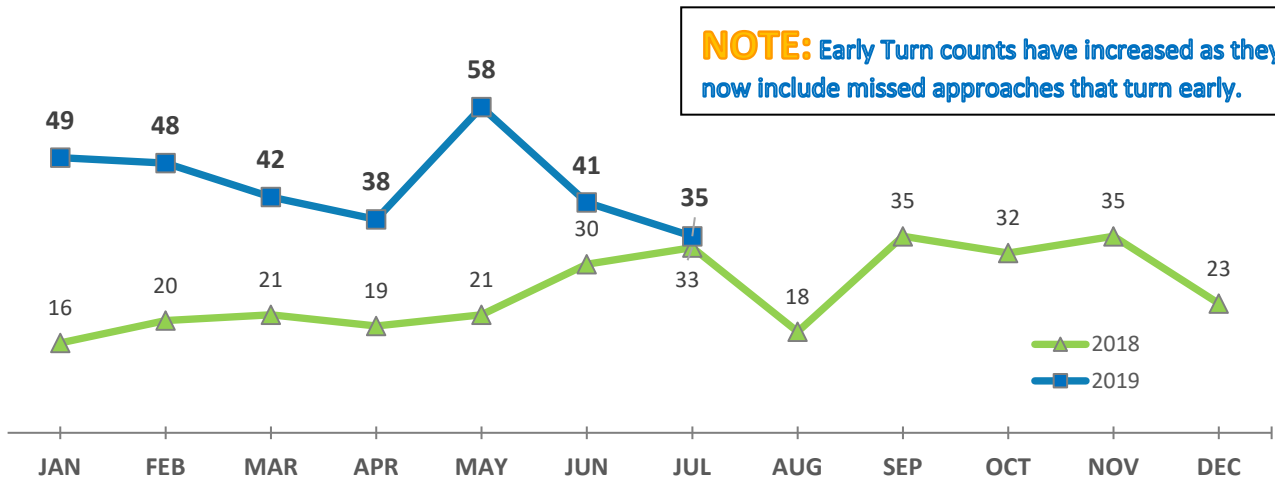
Early Turns by Year

YEAR	Early Turns	% Change
2013	979	--
2014	1,266	29
2015	1,421	12
2016	914	(36)
2017	558	(39)
2018	395	(29)
2019	395*	--

* Through July 31, 2019



Over Point Loma

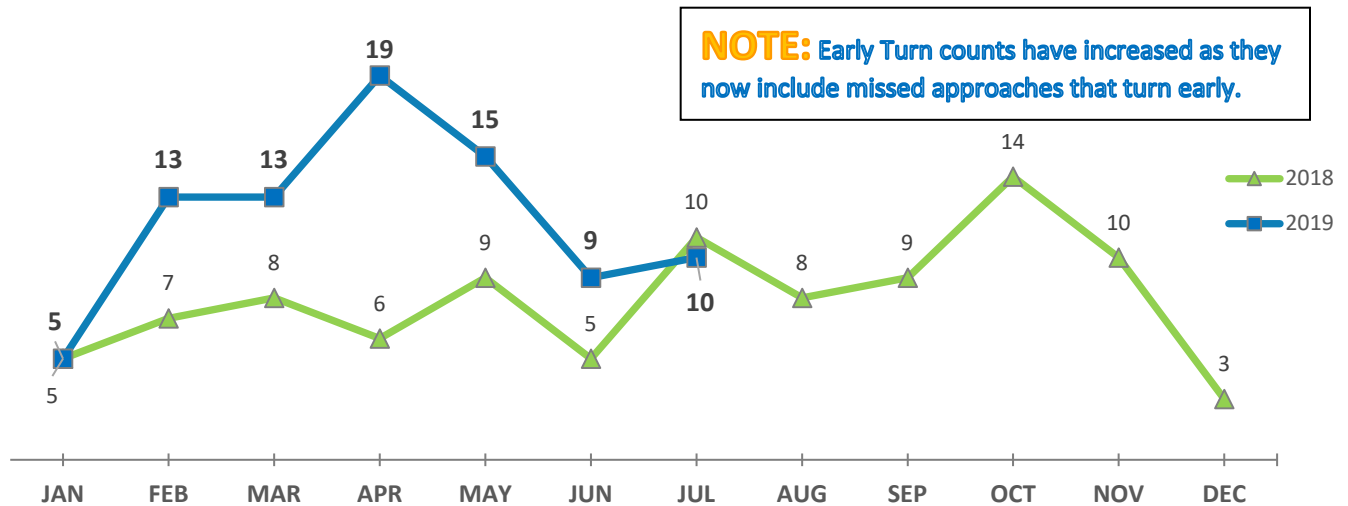


Early Turns by Operator (June – July, 2019)

Count	Airline	Aircraft	Total Operator Departures	% Departures
22	Southwest Airlines	B737, B738	7,017	0.31
16	United Airlines	B737, B738, A320, B752	1,714	0.93
13	General Aviation	Multiple aircraft	1,402	0.93
6	Delta Air Lines	A321, A320	1,757	0.34
6	Alaska Airlines	B739, A320, E75L	2,361	0.25
4	American Airlines	B752, A321, B738	1,560	0.26
2	Edelweiss Air	A343	13	15.38
2	SkyWest Airlines	E75L, CRJ2	1,211	0.17
2	jetBlue Airways	A321	327	0.61
1	Lufthansa	A343	43	2.33
1	FedEx	B763	203	0.49
1	Air Canada Rouge	A321	60	1.67

Source: ANOMS

Over Mission Beach



Early Turns by Operator (June – July, 2019)

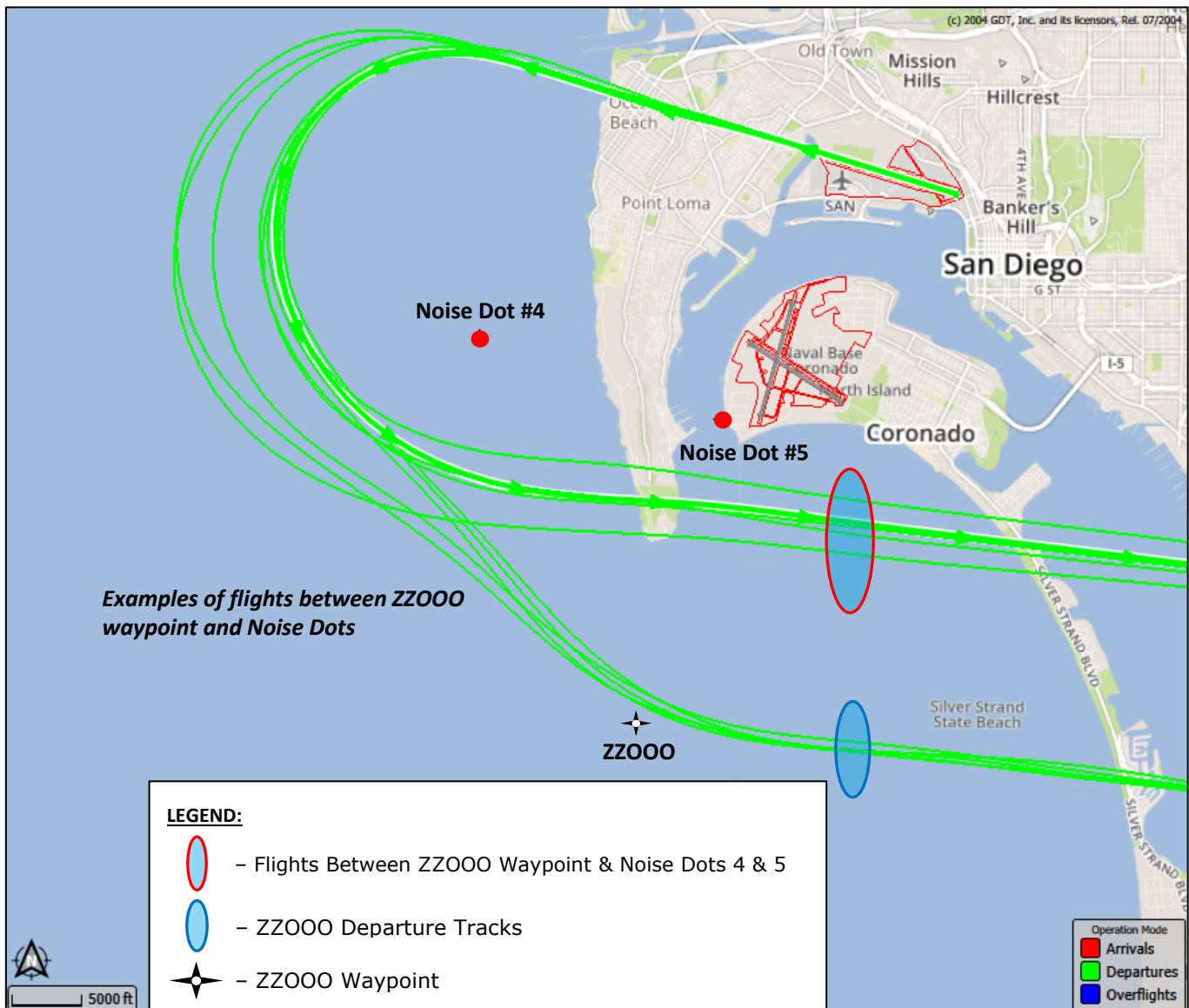
Count	Airline	Aircraft	Total Operator Departures	% Departures
4	General Aviation	Multiple Aircraft	1,402	0.29
4	Alaska Airlines	B738, B739	2,361	0.13
2	Delta Air Lines	A320, A321	1,757	0.11
2	Southwest Airlines	B737	7,017	0.03
2	UPS	B763	68	2.94
1	Compass Air	E75L	703	0.14
1	United Airlines	A320	1,714	0.06
1	American Airlines	A321	1,560	0.06
1	FedEx	B763	203	0.49
1	Jazz	CRJ9	183	0.55

Source: ANOMS

Flights Between ZZ000 Waypoint and Noise Dots

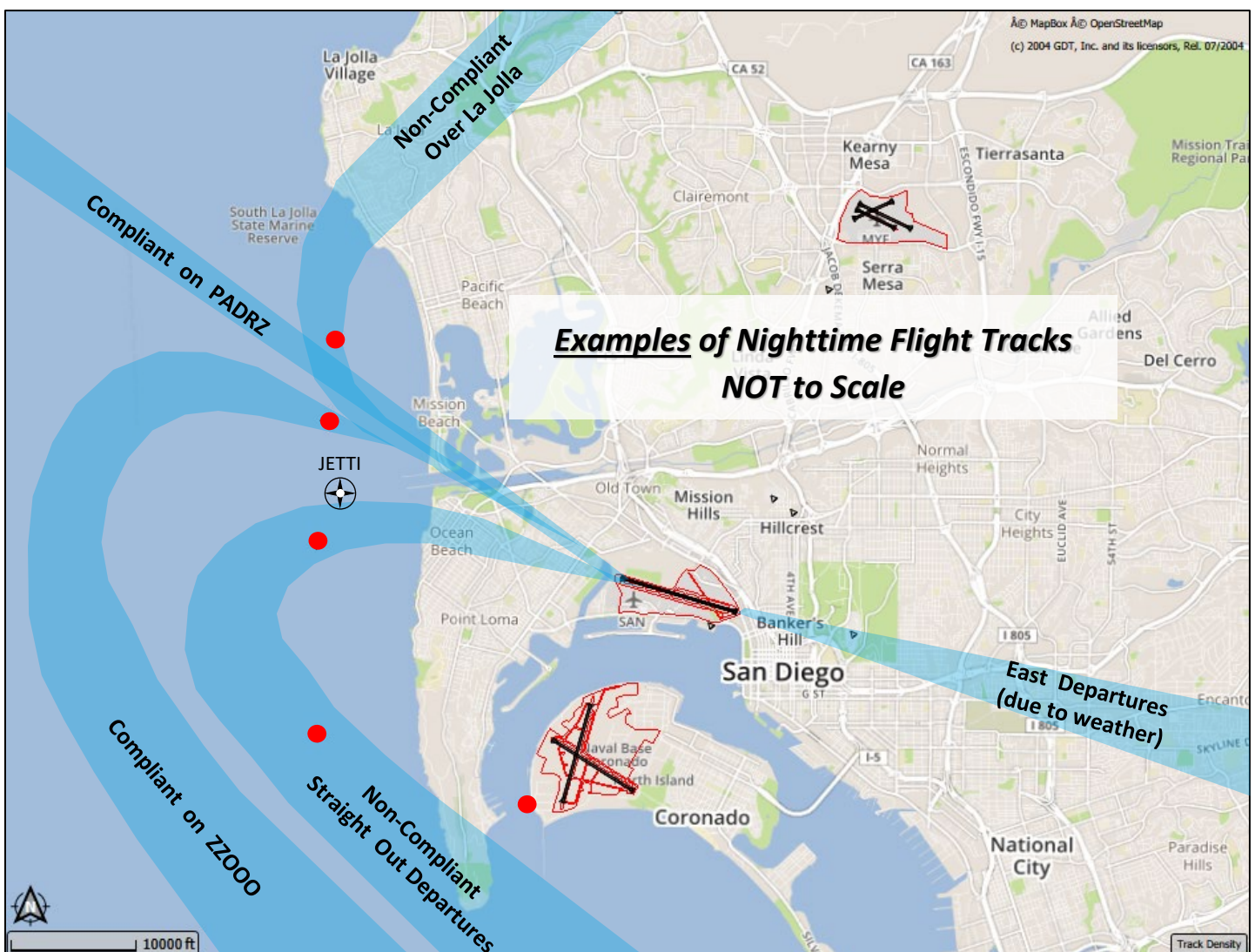
Note: These flights are all following published flight routes and are considered on-course

Date	Jets Turning Left	Between ZZ000 & Noise Dots	%
June	4,894	742	15
July	5,196	715	14



Nighttime Departures

Date	Compliant with Nighttime Departure Heading (290°)	Non-Compliant with Nighttime Departure Heading		
		Straight Out	East Departures	Over La Jolla
June	514	1	12	12
July	570	7	7	13



CURFEW VIOLATION REVIEW PANEL

Airport Noise Advisory Committee

August 21, 2019

Curfew Violations

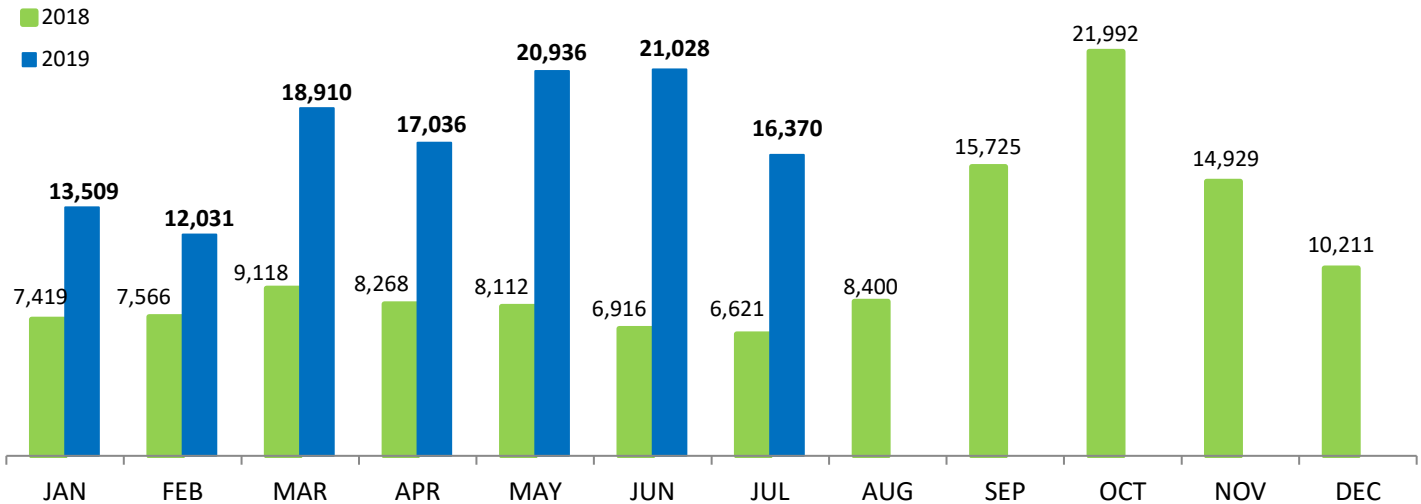
June & July 2019

Date	Time	Flight ID	Penalty Status
7/7/2019	23:52	DAL 692	Fined - \$2,000
7/8/2019	00:43	JBU 620	NOT FINED
7/10/2019	23:59	MNU 2662	PENDING
7/14/2019	00:17	AAL 1936	PENDING
7/19/2019	23:45	DAL 1636	PENDING
7/21/2019	00:31	FFT 1194	PENDING

Annual Violations and Penalties Assessed		
Year	Total Violations	Fines Assessed
2015	55	\$152,165
2016	84	\$564,000
2017	72	\$376,000
2018	59	\$254,000
2019 (YTD)	25	\$58,000

Total Complaints

Through July 31, 2019



Disturbance Type

June & July, 2019

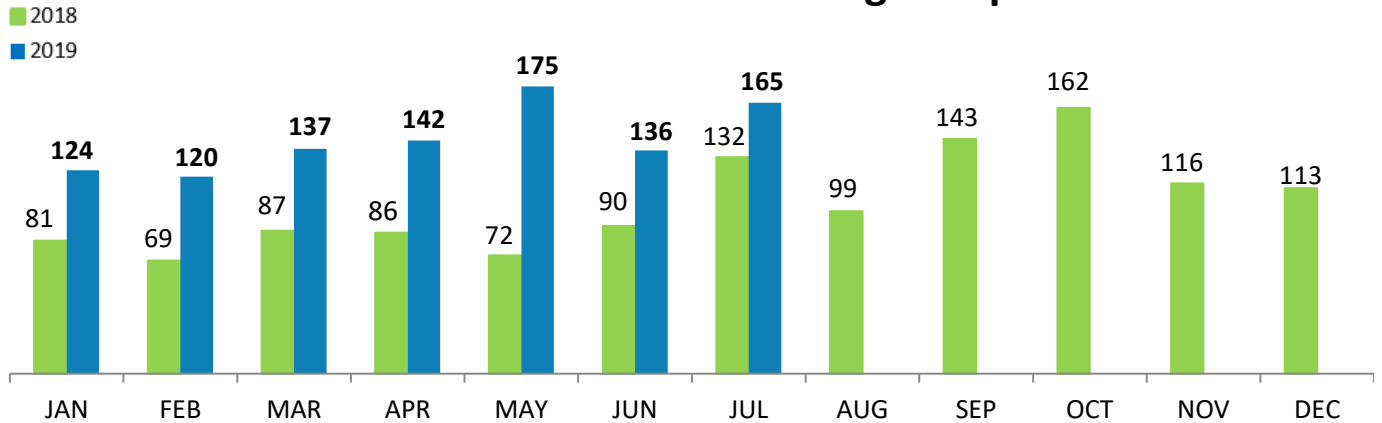
Reason	Number of Complaints	%
Too Loud	36,817	98.45
Overflight	273	0.730
Suspected Off-Course	81	0.217
Too Low	67	0.179
Curfew Violation	63	0.168
Other/Unknown	59	0.158
Helicopter	33	0.088
Fixed With	3	0.008
Off Course	1	0.003
Pollution	1	0.003

Contact Method

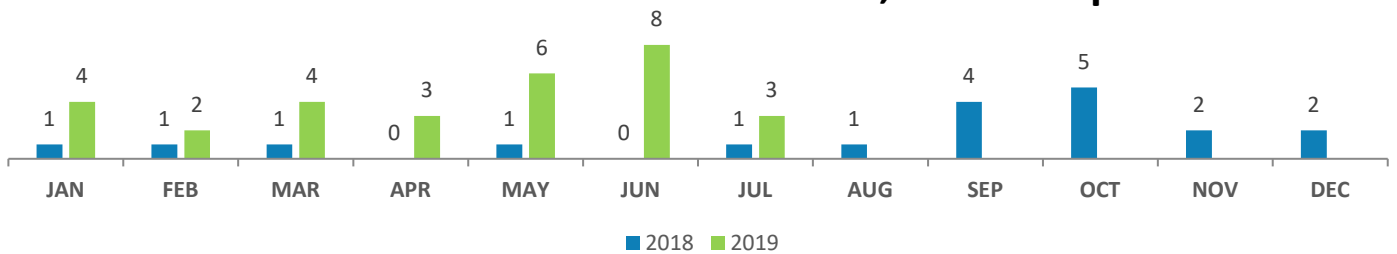
June & July, 2019

Contact Method	Number of Complaints
Third Party	26,332
Clicker	10,078
App	690
WebTrak	233
Phone	65

Number of Households Submitting Complaints



Total Number of Households with 1,000+ Complaints



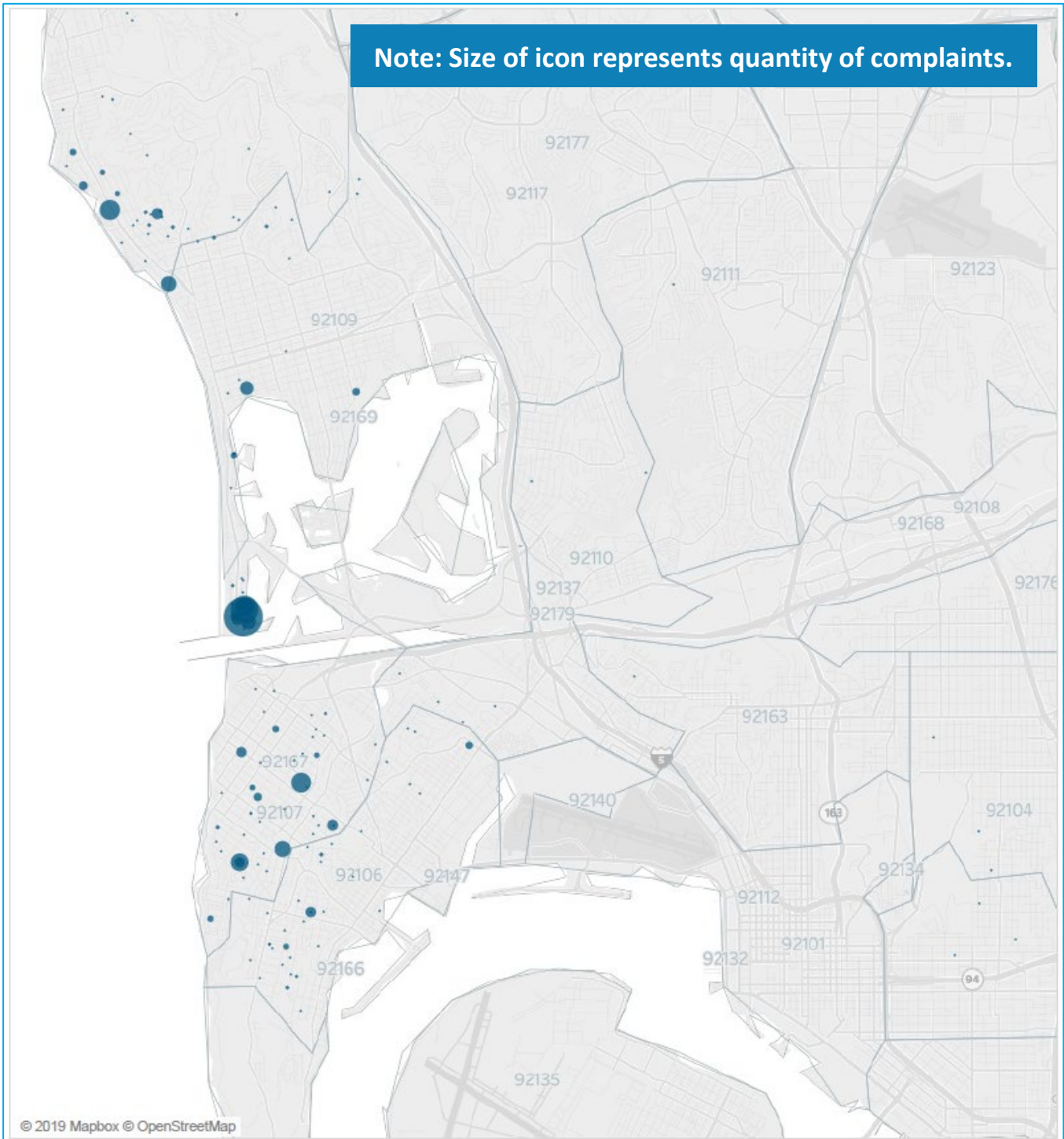
Number of Complaints by Neighborhood

June & July, 2019

Neighborhood	Complaints	Neighborhood	Complaints
Mission Beach	17,114	La Playa	674
Bird Rock	3,905	Loma Portal	315
Roseville/Fleetridge	3,776	Crown Point	222
Mt. Helix	2,415	Wooded Area	206
Sunset Cliffs	2,215	Del Mar	113
Spring Valley	1,490	Poway	44
Ocean Beach	1,373	Imperial Beach	32
Mid – City	1,106	La Mesa	15
Pacific Beach	876	Point Loma Heights	24
La Jolla	732	Golden Hill	8
Muirlands	710	Other	33
		TOTAL	37,398

Location of Complaints

June & July, 2019



August 21, 2019

Summary of 2nd Quarter 2019 Report

Each quarter, the Airport Noise Mitigation Office publishes a report that outlines the trends on how quietly each operator flies in and out of San Diego International Airport (SDIA). This is a summary of the Fly Quiet Report for 2nd Quarter 2019.

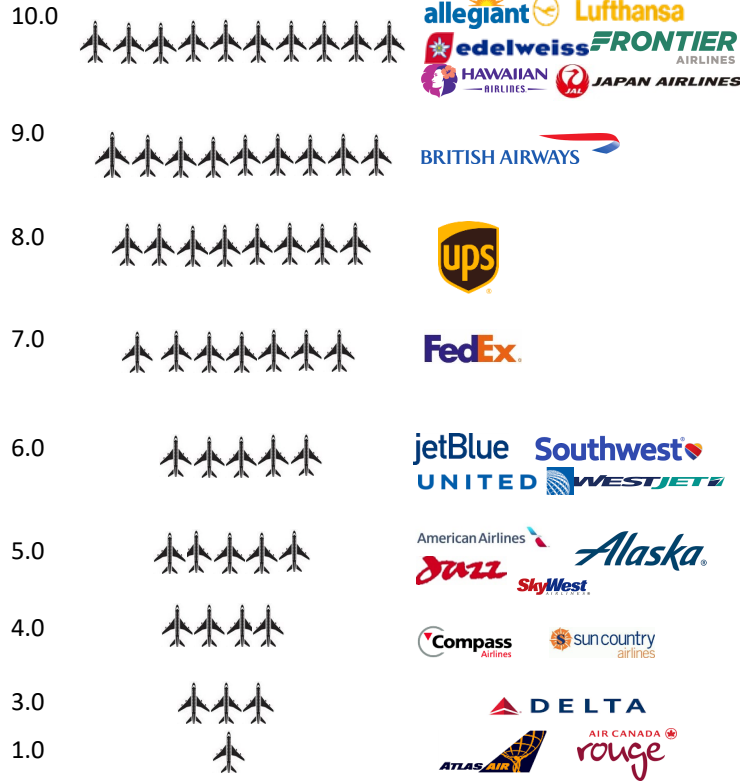
Last year, the Fly Quiet Report was modified to remove the Early Turn element and replace it with a new Noise Exceedance element establishing a new baseline for the 2019 reports.

Notable Noise Reduction Efforts:

- [United Airlines](#) ranks first in this quarter as a result of eleven (11) flight cancellations to avoid a curfew violation.
- Allegiant [Airlines](#) continues to benefit significantly from the elimination of the louder MD-80 aircraft.
- Hawaiian [Airlines](#) also continues to benefit from the introduction of the quieter A321Neo for the Maui market.
- Southwest [Airlines](#) fleet quality score is hindered by the continued 737MAX grounding.
- The use of quieter Airbus A320neo by [Frontier](#), [Spirit](#), and [Alaska Airlines](#) has helped their scores incrementally, in particular [Frontier Airlines](#).
- This quarter, the number of curfew violations were remarkably low. There were five (5) MEDIVAC departures and only three (3) violations in April, two (2) in May and none in June.

August 21, 2019

Fleet Noise Scores



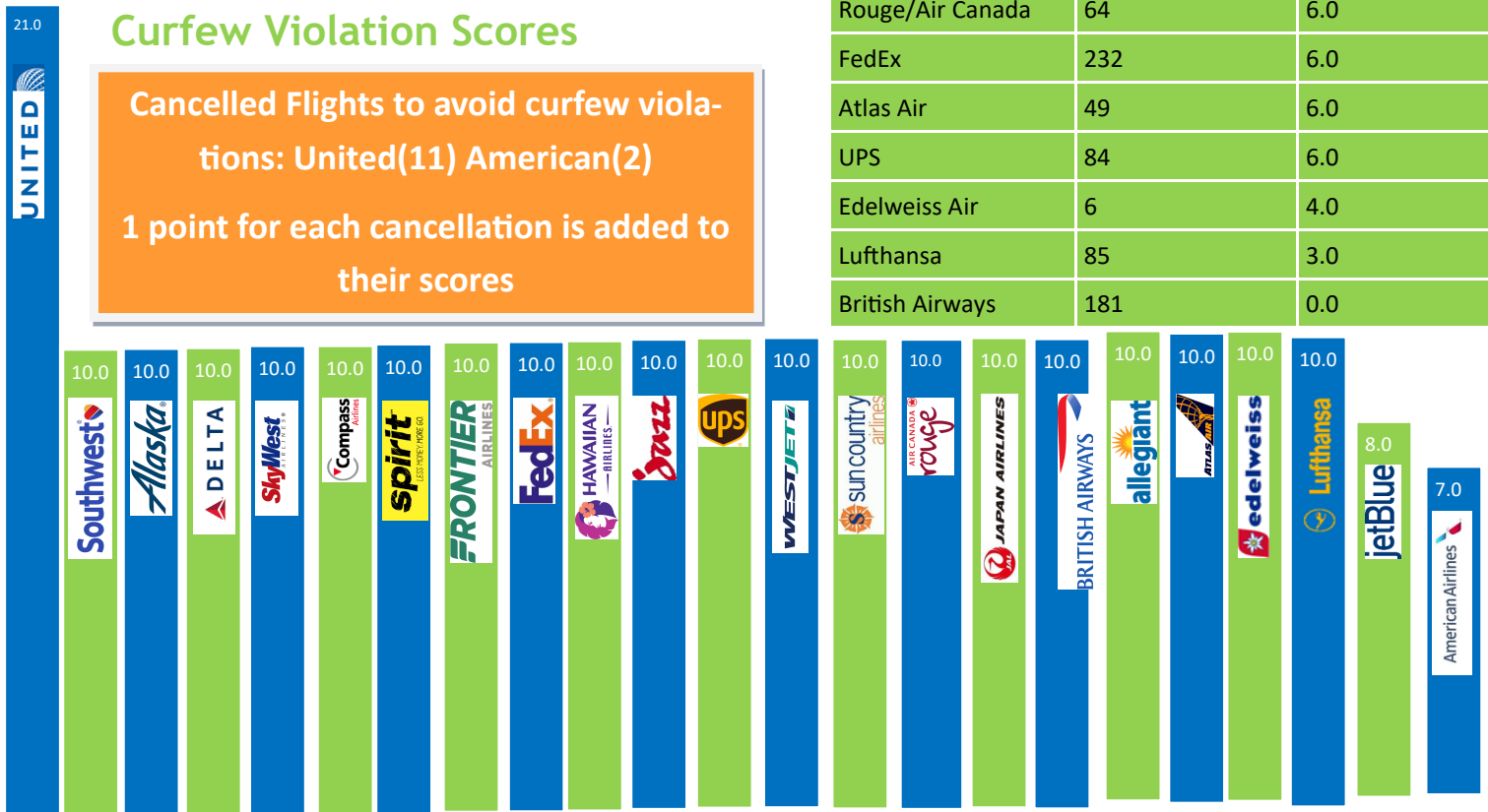
Noise Exceedance

Airlines	Number of noise exceedances	Noise exceedance score
Japan Airlines	0	10.0
Allegiant Air	0	10.0
SkyWest Airlines	3	10.0
Jazz	1	10.0
Compass Airlines	6	10.0
Southwest Airlines	238	10.0
Spirit	22	10.0
Frontier Airlines	22	10.0
WestJet	5	10.0
Sun Country Airlines	9	9.0
Alaska	443	9.0
United	712	9.0
jetBlue	138	8.0
American Airlines	820	8.0
Delta Air Lines	857	8.0
Hawaiian Airlines	113	7.0
Rouge/Air Canada	64	6.0
FedEx	232	6.0
Atlas Air	49	6.0
UPS	84	6.0
Edelweiss Air	6	4.0
Lufthansa	85	3.0
British Airways	181	0.0

Total Operations, 2nd Quarter 2019 = 57,283

Curfew Violation Scores

Cancelled Flights to avoid curfew violations: United(11) American(2)
1 point for each cancellation is added to their scores



MEETING SUMMARY

Airport Noise Advisory Committee

Date | Time 6/19/2019 4:00 p.m.

Meeting called to order by: Heidi Gantwerk

In Attendance

<u>Name</u>	<u>Affiliation</u>	<u>In Attendance</u>
Community Planning Groups Within the 65 dB contour		
Anthony Bernal	Downtown Community Planning Council	No
Melissa Hernholm-Danzo	Community Resident at Large within 65 dB CNEL	Yes
Judy Holiday	Midway-Pacific Highway Community Planning Group	Yes
David Swarens	Greater Golden Hill Planning Committee	Yes
Chris Cole	Uptown Planners	Yes
Anthony Ciulla	Ocean Beach Planning Board	Yes
Fred Kosmo	Peninsula Community Planning Board	Yes
Community Planning Groups Outside the 65 dB contour		
Matthew Price	La Jolla Community Planning Association	Yes
Lori Myers	Grossmont-Mt. Helix Improvement Association (Alternate)	Yes
Jason Legros	Pacific Beach Planning Group	No
Deborah Watkins	Mission Beach Precise Planning Board	Yes
Aviation Stakeholders		
Olivier Brackett	San Diego County Airports	Yes
Wayne Reiter	City of San Diego Airports	Yes
Carl "Rick" Huenefeld	MCRD	No*
Robert Bates	Airline Pilot (Active)	Yes
Kallie Glover	Airline Flight Operations	Yes
	NBAA	No
Ex-Officio Non-Voting Members		
Justin Cook	Acoustical Engineer	No*
Ashley Campbell	Congress, 53rd District, for Rep. Susan Davis	Yes
Joshua Coyne	San Diego City Council, District 2, for Jennifer Campbell	Yes
Kiera Galloway	Congress, 52nd District, for Rep. Scott Peters	Yes
Marshall Anderson	S.D. County Board of Supervisors, District 1, for Sup. Greg Cox	Yes
Keith Lusk, James Kosanovich, Dave Foyle and William Freeman	FAA Representatives	Yes
Staff		
Sjohnna Knack	SDCRAA Program Manager	Yes
Jim Payne	SDCRAA Sr. Noise Specialist	Yes
Roman Lanyak	SDCRAA Sr. Noise Specialist	Yes
Heidi Gantwerk	Facilitator	Yes

*Members contacted staff ahead of time and are considered excused.

1. Welcome and Introductions

Heidi Gantwerk, facilitator for the Airport Noise Advisory Committee (ANAC), opened the meeting at 4:00 p.m. Introductions were made around the table. Ms. Gantwerk briefly shared the agenda.

2. Presentations

Note: A copy of the information in the presentation can be found via our website using the following link: <http://www.san.org/Airport-Authority/Meetings-Agendas/ANAC>

Missed Approaches

Dave Foyle, FAA, presented on go-arounds and missed approaches. He explained that the terms go-around and missed approach can be used somewhat interchangeably. However, from a technical perspective they have two separate definitions.

Safety is the primary reason for the initiation of a go-around or missed approach; to ensure that we maintain the appropriate margin of safety in the Air Traffic Control (ATC) environment.

A go-around can be either pilot-initiated or ATC initiated instructions for a pilot to abandon his or her approach to landing. Additional instructions by ATC are required for aircraft on a visual approach. The majority of arrivals into San Diego are still on an instrument approach. A pilot on an Instrument Flight Rule (IFR) Flight Plan conducting an instrument approach, which make up the majority of arrivals into to San Diego, flies the published missed approach procedure when given instruction to go-around.

A missed approach is commonly initiated by the pilot when an aircraft on instrument approach cannot land. A common reason for a missed approach is an unstable approach, which can be caused by weather, especially tail winds which may create a situation where the pilot is too high or too fast to land.

The published missed approach procedure is climb to 2,500 feet on a heading of 275-degrees, and then follow ground based navigational aids until given instruction by ATC. These procedures can be modified by ATC to maintain separation from other aircraft.

Rarely, a missed approach is initiated by the pilot because the runway is unsafe for landing; i.e. wildlife on the runway or a non-departed aircraft. Ideally, ATC would recognize this and send the pilot around, and the pilot would only make the decision in the event ATC does not. Missed approaches due to weather conditions are normally initiated by the pilot.

In of May 2019, there were 9,531 arrivals into San Diego. Of those, 51 were go-arounds or missed approaches. Of the 51, 24 were pilot-initiated and 27 ATC-initiated, totaling .54 percent of total arrivals.

Of Core 30 airports, the busiest from a commercial aviation perspective, San Diego falls down the list. Lindbergh has the third highest percentage of aircraft that go around compared to other airports. Number one is Washington National, number two is Baltimore.

3. Presentations

- a. **Approval of the minutes:** Ms. Gantwerk asked for motion to approve the meeting summary from April ANAC meeting. Wayne Reiter made the motion, Chris Cole seconded the motion and it was approved with three abstentions.

b. Presentation and Possible Action on The Flight Procedure Analysis Study

Steve Smith, Ricondo, gave an overview of the Flight Procedure Analysis Study (Study). He reviewed the ANAC recommendations and categorized the flight procedure recommendations into two subgroups: Traffic Procedures (recommendations 14, 15, 16) and Early Turns / Noise Dots (recommendations 17 and 20).

For the Study, the objectives were to:

1. Try to meet ANAC recommendation intent;
2. Determine feasibility of the design or procedures;
3. Calculate and assess the change in noise and not move noise to any new community;
4. Provide the recommendations to ANAC.

The FAA is the only entity with authority to implement a flight procedure change. The first and most important question is does the proposed flight procedure change meet the FAA goals and objectives? If yes, they move on to the next step; if not, they're done.

CAC input was important to ensure that the intent of the ANAC recommendations were met. They reviewed designs and provided input and feedback. The TAC was a broader stakeholder group, including airline and FAA participation. That group reviewed suggested procedures to determine if there were any operational issues. There were six meetings with the groups in the past year. Between the preliminary and the draft phases, the consultant team took all questions and comments from members and answered them in writing. Information was shared with the public; meetings were open for public to observe, and presentation material was shared on the website.

Design parameters for the Study included:

1. Do not change flight path areas exposed to the CNEL 65.
2. Do not impact safety of the air traffic system or airfield
3. Meet the design criteria of the FAA.
4. Fit within existing airspace in which the FAA manages traffic
5. Do not impact the capacity of the airport.
6. Do not move noise to new non-compatible areas.

Actions performed during the Study:

1. Designs were proposed compatible with the environment.
2. Critical input was gathered from CAC and TAC.
3. Coordinated with the FAA staff during the concept design process.
4. Developed key information for the FAA if something is submitted to them.
5. Calculated changing noise levels for final design concepts.

In terms of design concepts, the consultants began with suggestions from ANAC, and anything that looked even possibly feasible was evaluated. Overall, a total of 20 different design alternatives were considered. Of those 20, three involved changing the heading out the end of

the runway, which could affect the 65 dB contour which will be reviewed in the Part 150 update. Five procedures were evaluated further.

For #14, nighttime departure to the northwest or PADRZ, a design was considered in which aircraft turn at 1.5 miles to maintain the FAA noise dots. Another considered was aircraft turning at .5 miles, a design suggested by a La Jolla member of CAC.

For #15, eastbound nighttime departures (10:00 p.m. to 6:30 a.m.), a design was considered where aircraft would maintain the 1.5 mile without turning, and another one at .5 miles from shoreline; daytime departures were also considered, modifying the ZZOOO departure. (6:30 a.m. to 10:00 p.m.)

For Recommendation #16, which includes all day and night, arrivals from the northwest (COMIX), a final design was completed and noise-screened.

Noise Analysis was conducted on these recommendations and all procedure modification showed some levels of noise reductions except for #16 where noise impacts were reduced in some locations but increased in others.

At the last meeting with the CAC and TAC, at which the groups reviewed final concepts, the committees unanimously agreed to maintain the early turn restriction; that no aircraft turn before 1.5 miles and elected not to proceed with the .5 miles turn. They also supported holding the nighttime departure procedure designs until they are addressed in the Part 150 update, and not to proceed until that issue is resolved. They also did not recommend proceeding with the arrival procedure as it shifted noise to new communities.

For 18, 19 and 20 a report was released on March 25, 2019¹, detailing findings and recommendations. Regarding 18, the current definition of early turn was reviewed and it was determined that the Authority is properly evaluating and identifying early turns. The only recommendation was to include the missed approaches that turn early in that evaluation.

Recommendation 19 deals with compliance of early turns. All procedures that existed today were reviewed. As designed, they are all in compliance with the early turn restriction. The procedures currently implemented, if followed, complies with the early turn agreement.

Recommendation 20, regarding noise dots to incorporate waypoints into procedures was determined to be infeasible. What is critical is that the procedures as written comply with the early turn agreement. We proposed moving noise dots 3 and 4 down just south of Point Loma. If the FAA does have to radar vector, that may be a possibility. We asked the FAA for their initial reaction to moving noise dots 3 and 4, and their initial reaction is that most likely, that will not be feasible. The recommendation is to propose the change through the formal process.

Questions from ANAC: David Swarens stated he's relatively satisfied that the general approach in the Study is a good one and consistent with what has been previously provided, especially moving the noise dots further from shore, increasing elevation of flights.

¹ Also uploaded on the Airports website: https://www.san.org/Airport-Noise/FAR-Part-150?EntryId=12746&Command=Core_Download

Questions from ANAC: Deborah Watkins asked regarding ANAC 14, how does it affect Mission Beach and Pacific Beach? And regarding the new Waypoint at BROCK, how does that help Mission Beach? Would BROCK eliminate PADRZ?

Mr. Smith said the critical issue and element with the most potential to impact Mission Beach is the initial departure heading, but that is not part of the recommendation because it will be studied in the Part 150 update. The new waypoint, BROCK, does not necessarily help Mission Beach. PADRZ would still exist for daytime, but if a heading identified specifically for nighttime, you could see if it would work daytime, and see if FAA is willing to modify PADRZ for daytime.

Questions from ANAC: Wayne Reiter asked if there will be unintended consequences with changing flight tracks, suggesting that in the future these changes might create new communities complaining about noise.

Mr. Smith said they reviewed noise grids out grids as far out as South Bay. As of the current assessment, there was no substantial unforeseen consequences. Theoretically, with the ZZ000 departure, aircraft would be even higher than they are over South Bay today.

Ms. Gantwerk asked for a motion to proceed with the consultant's recommendations.

David Swarens made motion to proceed as described by the consultant (proceed with the consultant's recommendations on Slide 38 of the presentation). Chris Cole seconded. The motion passed with a quorum, with two abstentions.

Dave Swarens asked to note in the minutes that there was an agreement that all further assessment of design modifications that might affect the initial heading should be moved to the Part 150 study.

Ms. Knack stated that the TAC and CAC are both carrying through into the Part 150 Process. Those same people will now be involved in each committee. Commitments have been made to come back to ANAC, and Deb Watkins and Melissa Hernholm-Danzo (both members of the TAC) will continue to report on progress, and the consultant will come back frequently to update the committee during critical junctures.

4. Public Comment

Cathy Austin, South Mission Beach, expressed concerns over the increase of flight noise over the past year. She feels the flight path has become more compressed since the northbound departing flights are using new procedures, resulting in more noise. She is hopeful that the ongoing noise studies will provide some noise relief for her community, especially at night.

Carol Naught, South Mission Beach, expressed similar concerns to her neighbor Cathy. She has lived in her home since 1999 but in recent years the noise has impacted her health. She hopes that the nighttime tracks will be spread out more evenly instead of all over Mission Beach. She is frustrated with the impacts on her life while having people over to her home, talking on the phone and trying to sleep.

Barbara Franklin, Point Loma, wanted to know how noise levels are determined in the Point Loma area when there are no monitors in her neighborhood. She expressed concerns over aircraft that fly over her home which is not under the flight path, at low altitudes and that the frequency of these flights had increased. She does a lot of tracking and takes a lot of photos to document that the planes are not flying the correct flight path. She thinks that the information presented doesn't accurately portray what she is viewing from her home.

Julie Connelly, Point Loma, has been involved in aircraft noise for several years and is concerned she can't ask a question and get an answer in public comment. She wanted to ask the question about the missed approach procedure's heading. The procedure shows flying a 275-degree heading but in her experience, it seems like the majority of missed approaches fly at a heading of 250-degrees, which happens to be right over her head. She reports them when she can. She takes screenshots when she can. Can that question be answered?

Ms. Gantwerk said there are airport staff business cards available if she wants to engage on that directly.

Ms. Connelly says what is presented doesn't match what happens in reality. She also asked if there had been a study of how the increase in airport operations, with the addition of new gates will affect the missed approaches?

Questions from ANAC: Matthew Price asked, why was the FAA allowed to change or shift paths or procedures that ended up shifting noise, whereas now, if there are shifts in paths or procedures that change noise patterns, that's not acceptable?

Steve Smith, Ricondo, stated that when the FAA takes an action, as in the case with Metroplex, they conducted an environmental assessment which requires noise analysis, similar to the analysis he conducted for the flight procedure study. They followed the process required within the National Environmental Policy Act.

Ms. Gantwerk said if there are other questions, to email to her, and they'll take them to the FAA and try to get answers as best they can.

Dave Foyle said they're not shirking the question; they just need to be able to speak to it authoritatively. He will address it at a future meeting.

Questions from ANAC: Melissa Hernholm-Danzo asked about the missed approach procedure's heading as she agrees that it doesn't seem the 275-degree heading is used for missed approaches.

Mr. Smith said the 275-degree heading is for the published missed approach, if there's nobody in front of that aircraft, then they would fly that procedure. If there is aircraft traffic in front of them or on the runway, ATC will take measures to separate those two planes. That's when the 250-degree heading will be used.

5. Next Meeting/Adjourn

Ms. Gantwerk engaged the ANAC members in a discussion on future speakers to present. Some suggestions include:

- An active pilot who can speak about the challenges flying into San Diego
- Airline management to speak about aircraft noise from their perspective
- Aircraft manufacturer to get a presentation on engine technology and what is expected in the future
- A deeper discussion on the Fly Quiet Program in terms of publicly recognizing (possibly at an Airport Authority Board meeting) airlines who have made improvements to fly quieter
- Further Part 150 updates by the consultant team (planned for August)
- Effects of aircraft noise on cardiovascular and mental health

Next meeting is Aug 21, 2019.

Meeting was adjourned.

DRAFT