SAN DIEGO COUNTY
REGIONAL AIRPORT AUTHORITY

AIRPORT NOISE ADVISORY COMMITTEE (ANAC)

MEETING AGENDA
Wednesday, June 19, 2019, 4:00 p.m.

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

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1. Welcome and Introductions
2. Presentation Items
   a. FAA Presentation on San Diego International Airport – Missed Approaches
3. Action Items
   a. Approval of April 17, 2019 – Meeting Summary
   b. Presentation and possible action on the Flight Procedure Analysis Study
4. Public Comment
5. Next Meeting: August 21, 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.

SAN DIEGO INTERNATIONAL AIRPORT
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SAN DIEGO INTERNATIONAL AIRPORT
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QUIETER HOME PROGRAM

Airport Noise Advisory Committee

June 19, 2019

PROGRAM STATISTICS	
Homes on the Wait List	1,438
Added in April Added in May	21 15
Homes Completed in April & May	40
Estimated Homes to Complete in CY 2019	300
Total Homes Completed (through May 31, 2019)	3,877

Updates

- Forecasted Construction Schedule:

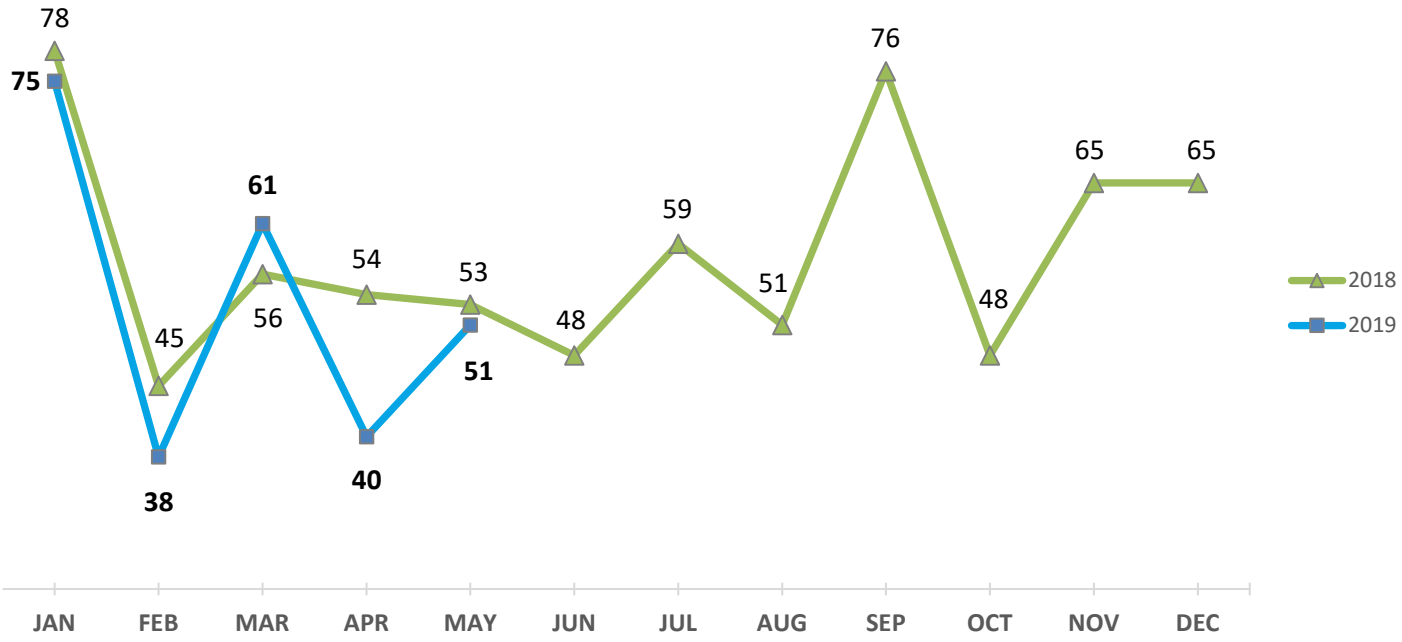
Project	# Homes	Estimated Construction Start
9.7	19	Underway
9.8	138	Underway
9.9	125	Spring 2019
9.10	44	Fall 2019
9.11	56	Winter 2019
9.12	45	Winter 2019
10.1	54	Spring 2020
10.2	63	Spring 2020
10.3	11	Summer 2020
10.4	62	Fall 2020
10.5	14	Winter 2020

MISSED APPROACH STATISTICS

Airport Noise Advisory Committee

June 19, 2019

Missed Approaches by Month



Missed Approaches by Year

Year	Total Missed Approaches	% Change	Total Arrivals	% Change	% of Total Arrivals that are Missed Approaches
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	698	(10.6%)	112,529	7.5%	0.6
2019	265*	--	46,246	--	0.6

Source: FAA Data

* Through May 31, 2019

MISSED APPROACH STATISTICS

Airport Noise Advisory Committee

June 19, 2019

Missed Approaches by Location

All Missed Approaches are Safety-Related Operations

Date	Between 265 º- 295 º Headings (Standard)	Left of 265 º	Right of 295 º	East of Airport	Day	Night
April	19	15	6	0	38	2
May	41	6	2	2	45	6

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
April	1	7	11	10	3
May	1	29	11	0	0

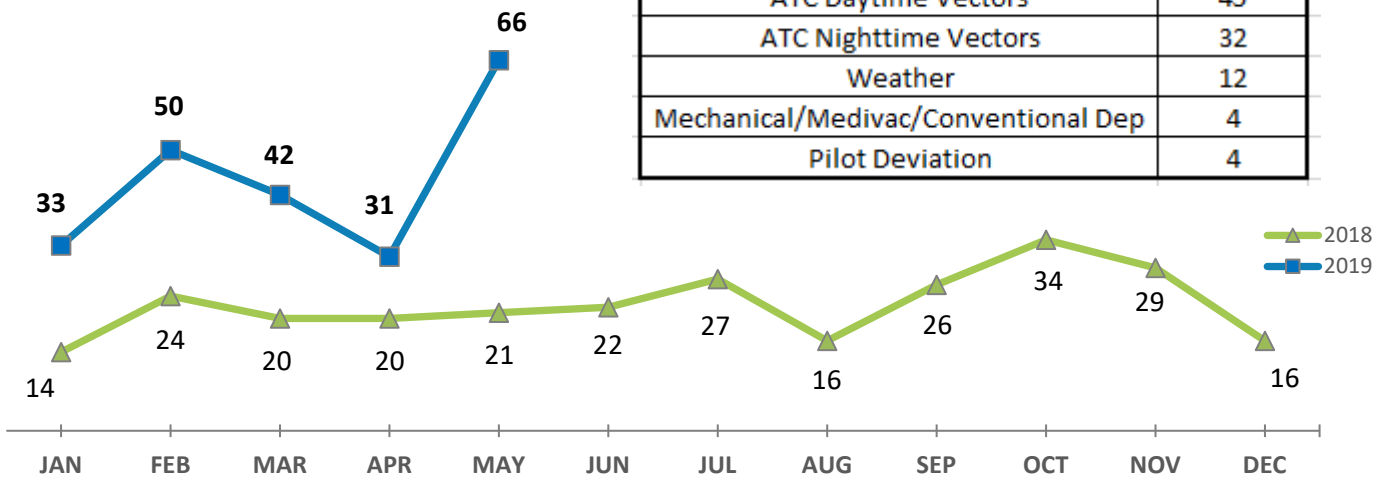
EARLY TURN STATISTICS

Airport Noise Advisory Committee

June 19, 2019

Early Turns by Month

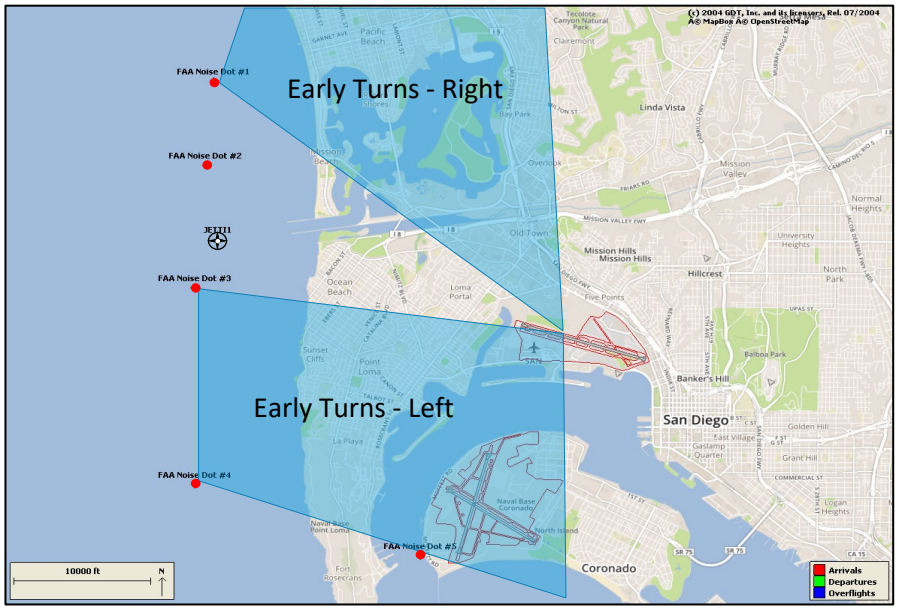
Cause	Total
ATC Daytime Vectors	45
ATC Nighttime Vectors	32
Weather	12
Mechanical/Medivac/Conventional Dep	4
Pilot Deviation	4



Early Turns by Year

YEAR	Early Turns	% Change
2013	829	--
2014	1,105	33
2015	1,293	17
2016	776	(40)
2017	420	(46)
2018	269	(36)
2019	222*	--

* Through May 31, 2019



Note: Departures that turn before reaching the FAA Noise Dots or turn back over the peninsula are considered Early Turns.

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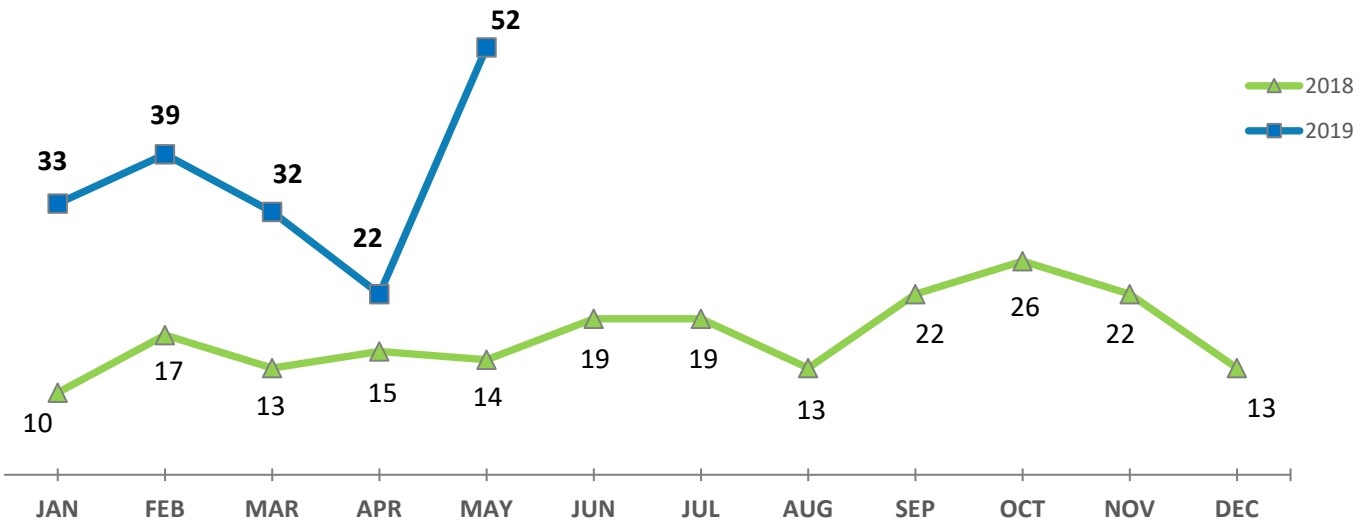
EARLY TURN STATISTICS

Airport Noise Advisory Committee

June 19, 2019

Over Point Loma



Early Turns by Operator (Apr – May 2019)

Count	Airline	Aircraft	Total Operator Departures	% Departures
24	Southwest Airlines	B737, B738	6,592	0.36
12	General Aviation	(multiple aircraft)	1,436	0.84
11	Delta Air Lines	A321, B738, B753	1,401	0.79
9	American Airlines	A321, B738	1,455	0.62
9	United Airlines	A319, A320, B737, B739	1,616	0.56
3	SkyWest Airlines	E75L	1,428	0.21
2	Alaska Airlines	A319, A320	1,803	0.11
2	Frontier Airlines	A20N, A319	242	0.83
2	jetBlue Airways	A320, A321	282	0.71

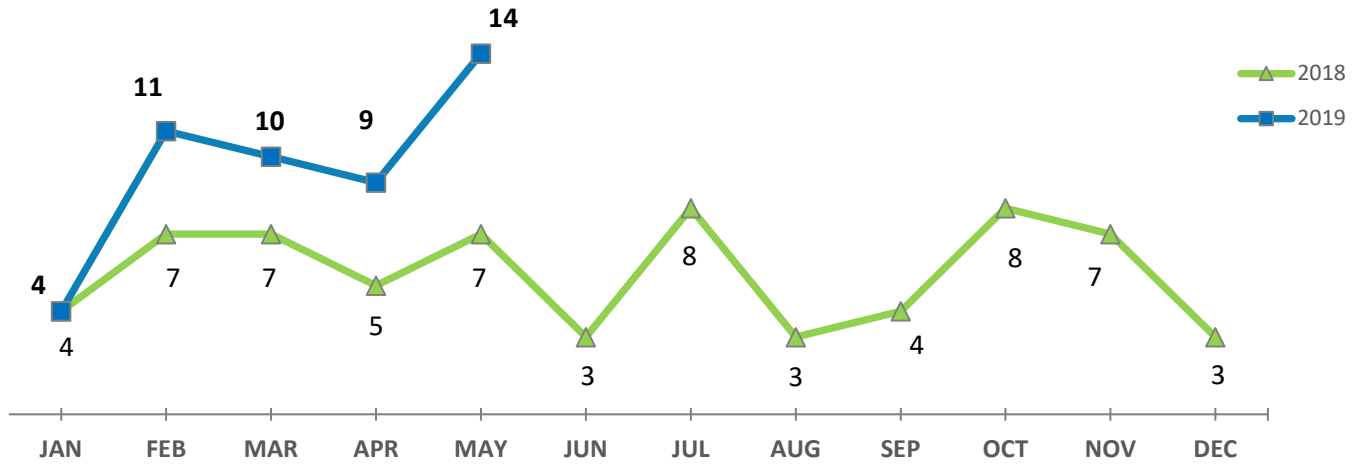
Source: ANOMS

EARLY TURN STATISTICS

Airport Noise Advisory Committee

June 19, 2019

Over Mission Beach



Early Turns by Operator (Apr – May 2019)

Count	Airline	Aircraft	Total Operator Departures	% Departures
19	General Aviation	(multiple aircraft)	1,436	1.32
2	Southwest Airlines	B737	6,592	0.03
1	SkyWest Airlines	E75L	1,428	0.07
1	Jazz Aviation	CRJ9	182	0.55

Source: ANOMS

SAN DIEGO INTERNATIONAL AIRPORT
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FLIGHT INFO
PT. LOMA

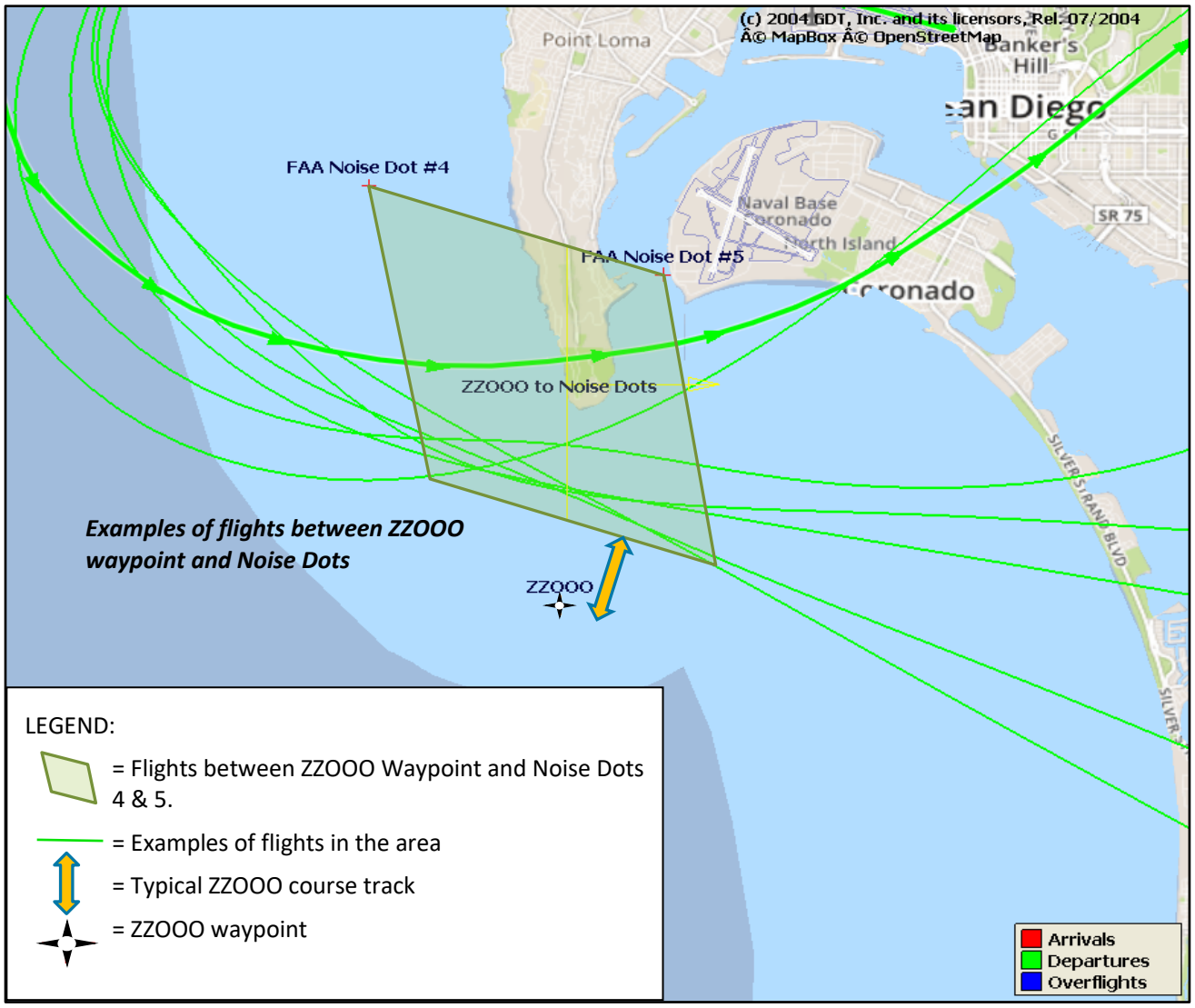
Airport Noise Advisory Committee

June 19, 2019

Flights Between ZZOOO Waypoint and Noise Dots

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

Date	Jets Turning Left	Between ZZOOO & Noise Dots	%
April	4,543	713	16
May	4,819	785	16



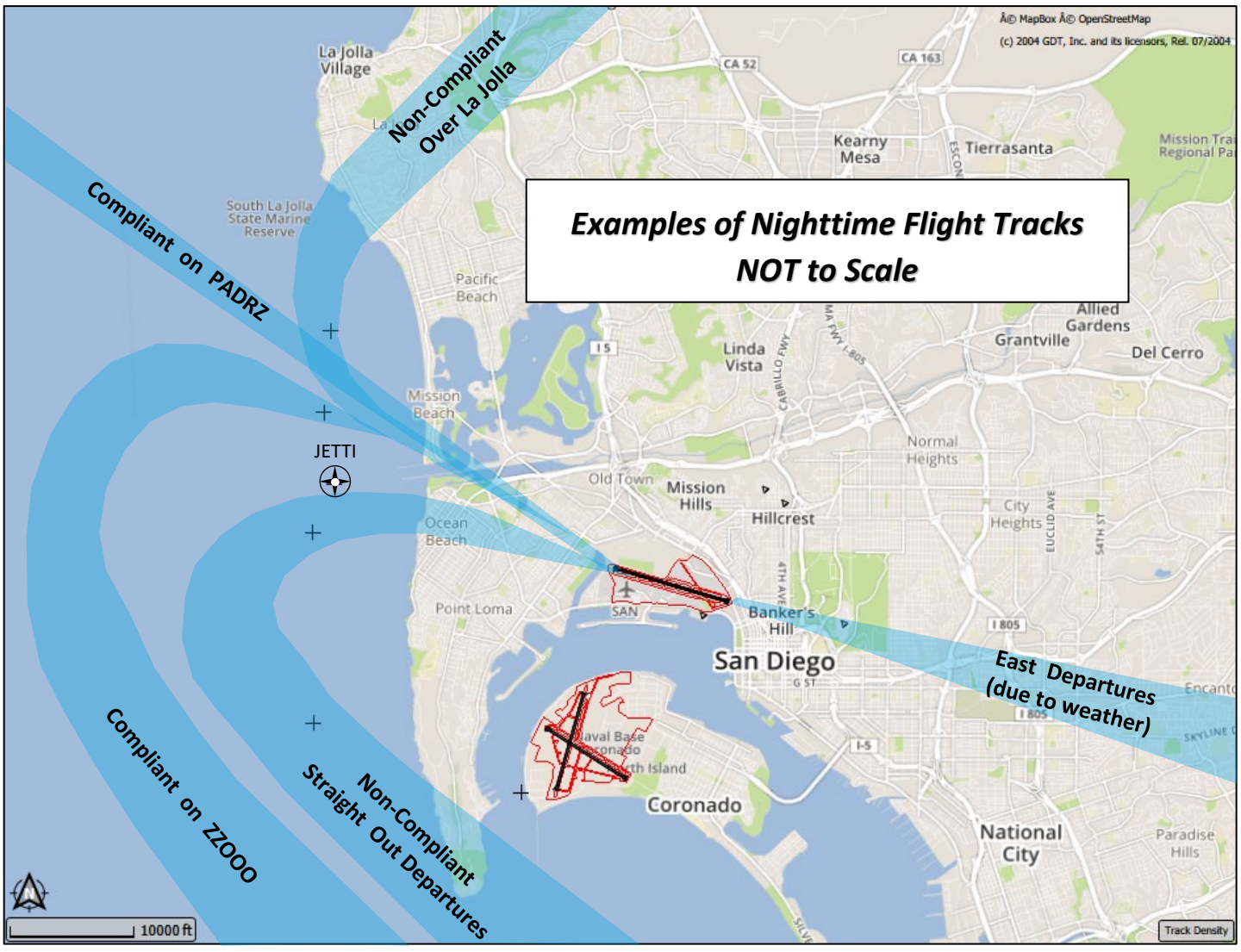
NIGHTTIME DEPARTURE STATISTICS

Airport Noise Advisory Committee

June 19, 2019

Nighttime Departures

Date	Compliant with Nighttime Departure Heading (290^0)	Non-Compliant with Nighttime Departure Heading		
		Straight Out	East Departures	Over La Jolla
April	423	2	0	10
May	441	3	0	14



SAN DIEGO INTERNATIONAL AIRPORT
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CURFEW VIOLATION REVIEW PANEL

Airport Noise Advisory Committee

June 19, 2019

Curfew Violations

April & May 2019

Date	Time	Flight ID	Aircraft	Penalty Status
4/9/19	00:03	American Airlines 2066	A321	Not Fined – Bird Strike
4/18/19	23:41	American Airlines 2066	A321	Fined - $8000
4/24/19	23:54	jetBlue Airways 530	A320	Fined - $12,000
5/9/19	23:52	American Airlines 1889	A321	Fined - $24,000
5/31/19	23:12	N624WC (Rotor – Stage 2)	R44	August CVRP

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)	18	$56,000

SAN DIEGO INTERNATIONAL AIRPORT
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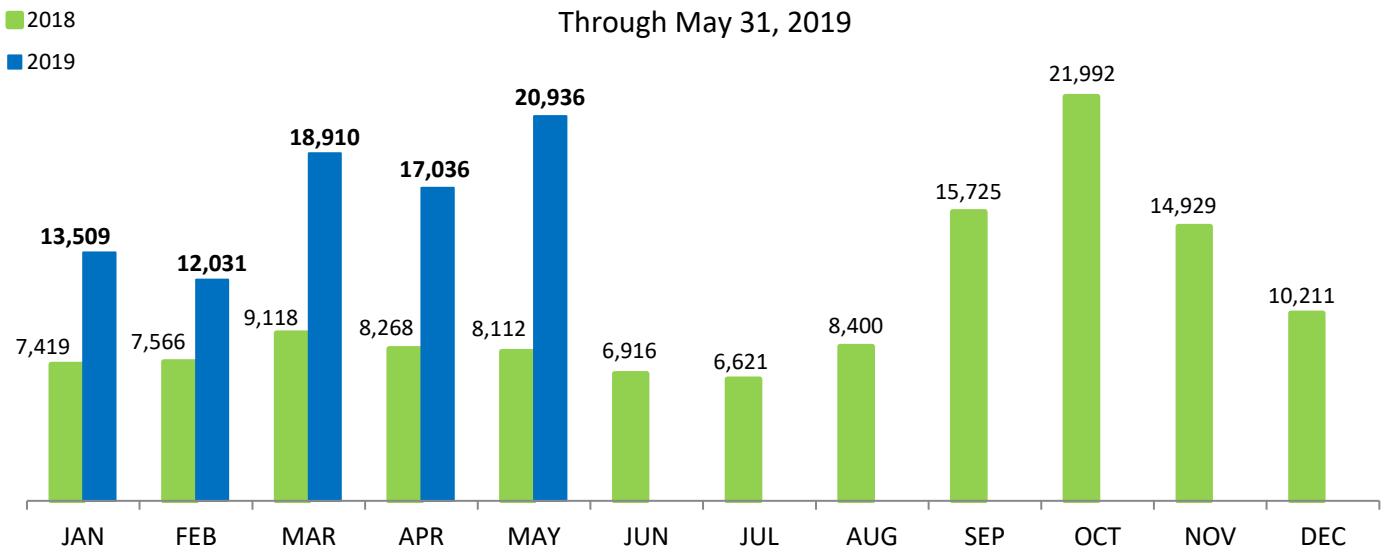
NOISE COMPLAINT STATISTICS

Airport Noise Advisory Committee

June 19, 2019

Total Complaints

Through May 31, 2019



Disturbance Type

April & May 2019

Reason	Number of Complaints	%
Too Loud	30,243	98.08
Overflight	403	1.061
Suspected Off-Course	154	0.406
Too Low	131	0.342
Curfew Violation	28	0.074
Helicopter	7	0.018
Other	4	0.011
Increased Flight Volume	1	0.003
Pollution	1	0.003

Contact Method

April & May 2019

Contact Method	Number of Complaints
Third Party	33,039
Clicker	3,235
App	956
WebTrak	690
Phone	52

Item – Noise Complaint Statistics (6/19/19 ANAC Mtg.)

SAN DIEGO INTERNATIONAL AIRPORT
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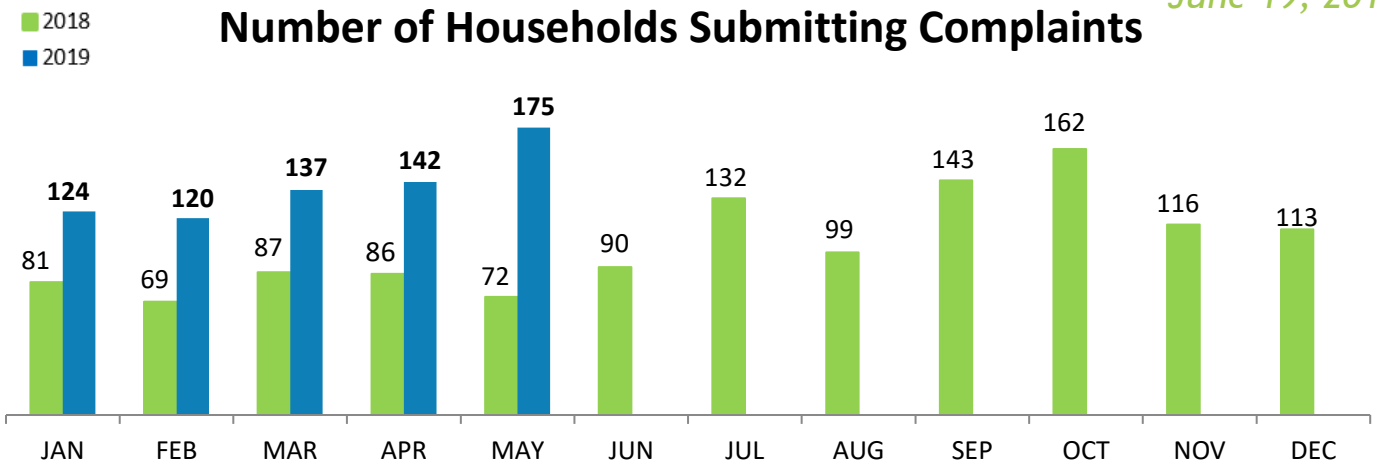
NOISE COMPLAINT STATISTICS

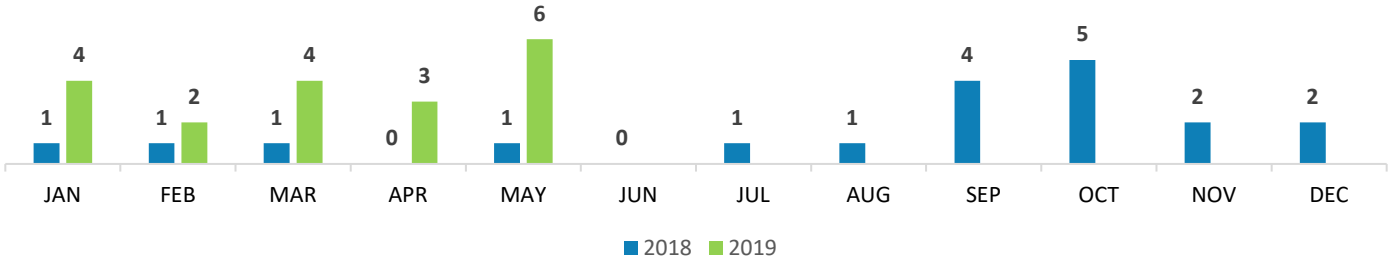
Airport Noise Advisory Committee

June 19, 2019

Number of Households Submitting Complaints



Total Number of Households with 1,000+ Complaints



Number of Complaints by Neighborhood

Neighborhood	Complaints	Neighborhood	Complaints
Mission Beach	13,034	Muirlands	987
Roseville/Fleetridge	5,188	Mt. Helix	653
Bird Rock	5,188	La Playa	438
Mid-City	1,873	Loma Portal	239
Spring Valley	1,624	Del Mar	193
La Jolla	1,575	Wooded Area	169
Sunset Cliffs	1,460	Crown Point	104
Pacific Beach	1,338	Poway	97
Ocean Beach	1,117	Other	83
		TOTAL	***37,972**

*Combined Total Complaints for Apr & May 2019

SAN DIEGO INTERNATIONAL AIRPORT
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NOISE COMPLAINT STATISTICS

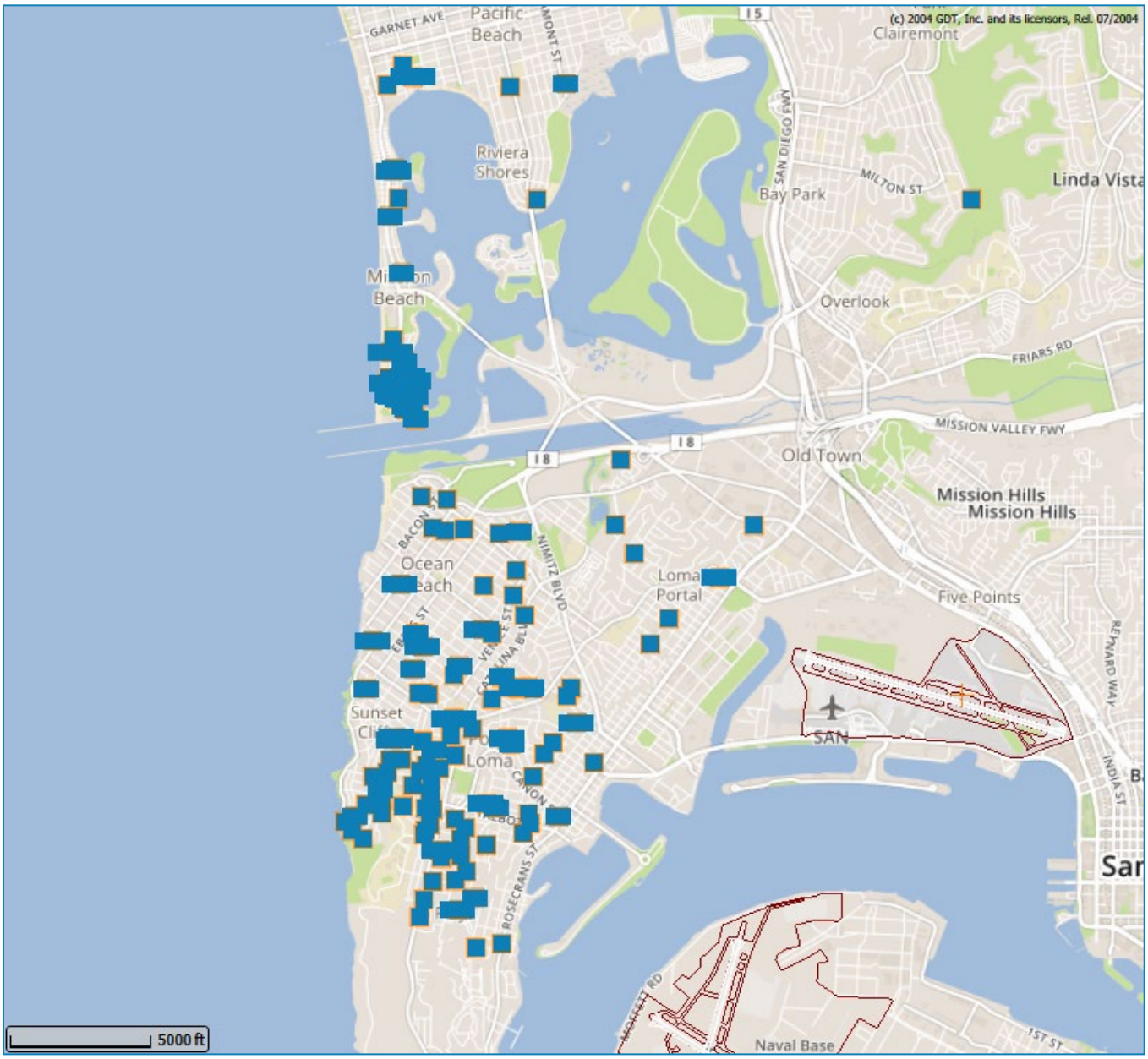
Airport Noise Advisory Committee

June 19, 2019

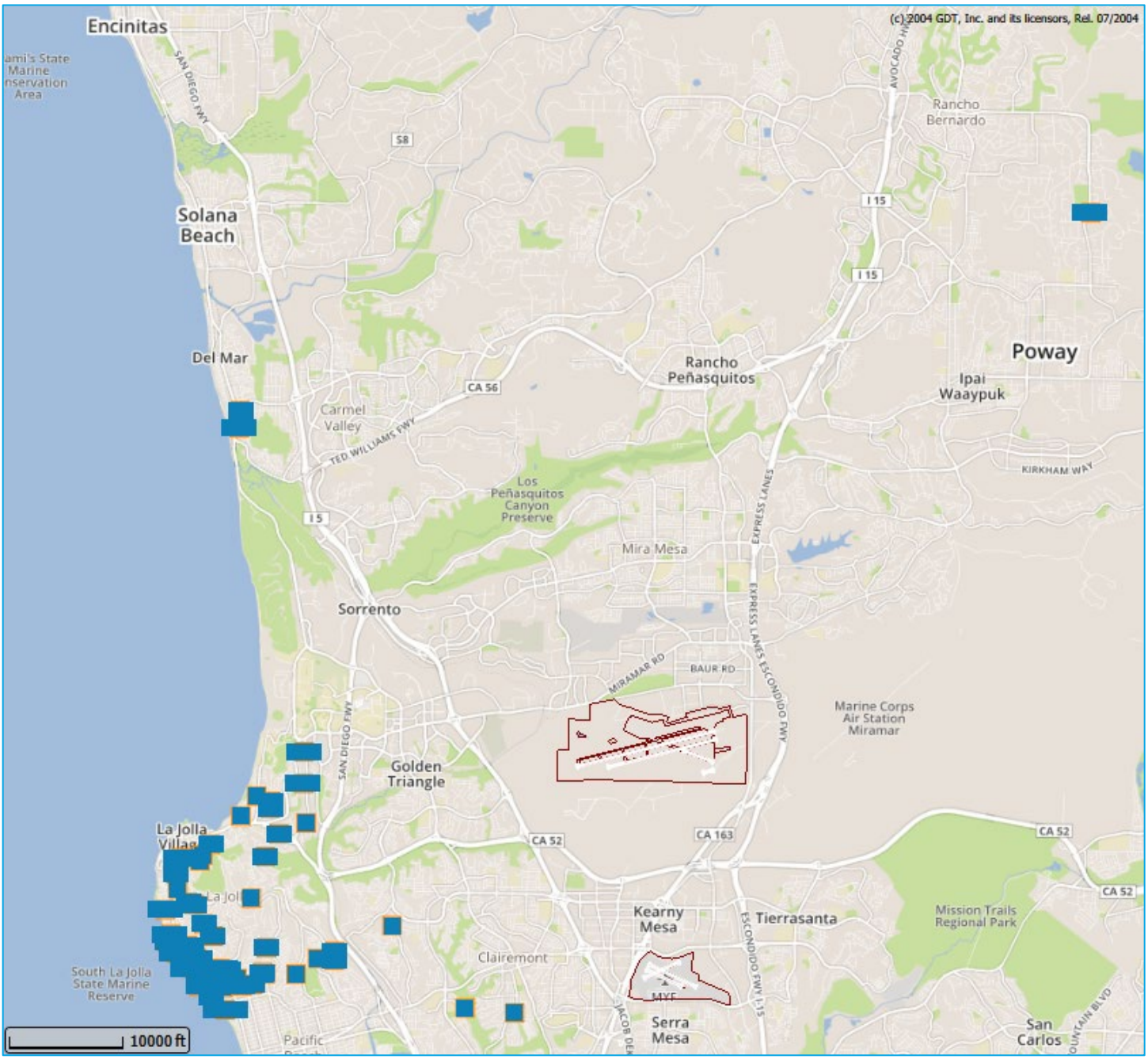
Location of Complaints

April & May 2019

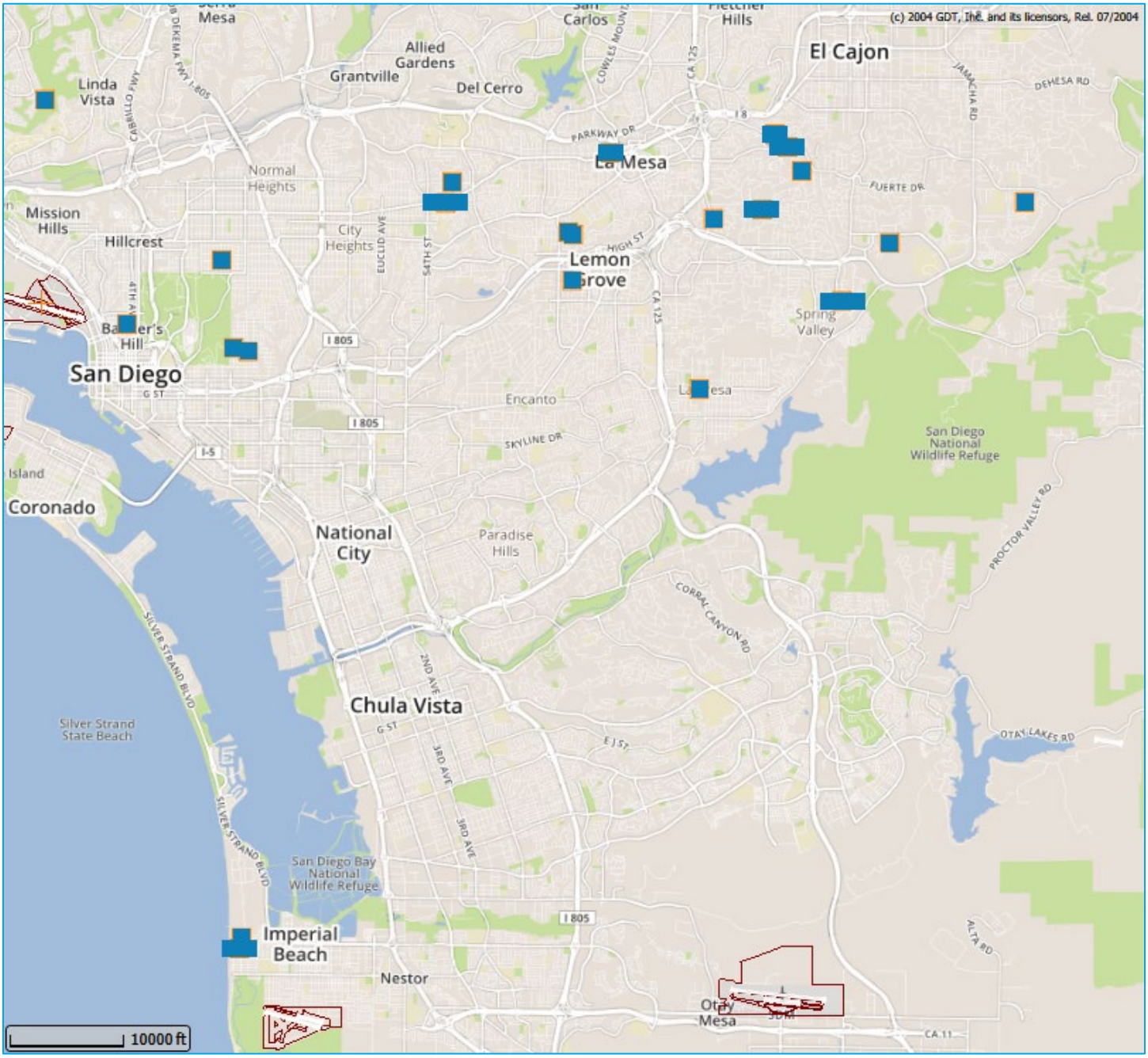
Point Loma/Ocean Beach/Mission Beach/Pacific Beach



La Jolla/North County



East County/South County/Coronado/Banker's Hill/Golden Hill



June 12, 2019

Fly Quiet Report

1st Quarter 2019

Prepared by:

Jim Payne
Senior Aircraft Noise Specialist
Planning & Environmental Affairs
San Diego County Regional Airport Authority

1.0 Summary of 1st 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 1st 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 to be compared with in the 2019 reports. In addition, a section discussing changes in the operating environment having an impact on noise was added.

Notable Noise Reduction Efforts:

- Compass Airlines improved their scores through the replacement of base model Embraer 175 aircraft with the enhanced version that has better airfield performance and a lower noise impact.

- Hawaiian Airlines improved their scores significantly by introducing the A321neo to the market for half of their operations. With no curfew violations and the fleet quality improvement, they have posted the greatest gain from the First Quarter of 2018 moving from 14th place to 4th place.

- Spirit Airlines continues their lead gained last year as a result of fleet improvement with additional A320neo aircraft.

- The use of quieter Airbus A320neo by Frontier Airlines, Alaska Airlines and Spirit Airlines continues. Southwest, United and WestJet have had to discontinue MAX service due to FAA grounding. The number of operations for the MAX were small, 3-4 per day. Ramp up was expected for the summer, but that will be delayed until at least the fall.

- Virgin America and Alaska Airlines completed their merger. As a result, Virgin America has been removed from the program. The addition of the Virgin America fleet, which included the A320neo, to the Alaska Airlines fleet has led to an improvement in the scores for Alaska Airlines.

2.0 Fly Quiet Program Description

The purpose of the SDIA Fly Quiet Program is to encourage individual commercial operators to fly as quietly as possible in the San Diego area by acknowledging those operators that fly the quietest. By grading an operator's performance and making the scores available to the public, the program creates a participatory atmosphere for operators to actively reduce noise.

The Fly Quiet Program offers a dynamic venue for reviewing noise abatement initiatives by praising and publicizing active participation rather than a system that admonishes violations from essentially voluntary procedures.

2.1 Goals

The overall goal of the Fly Quiet Program is to influence commercial operators to fly as quietly as possible in the San Diego area by acknowledging those operators that make the greatest effort. Monitoring, collecting, and analyzing comprehensive amounts of operational and noise data highlights both airport trends and individual operator performance on specific noise abatement programs. Fly Quiet Program data is quantified and translated into quarterly reports for each operator rated in the Fly Quiet Program at SDIA.

2.2 Reports

Fly Quiet reports communicate results in a clear, understandable format on a scale of 0-10, zero being poor and ten being the best. (*Note: an operator can have a score higher than 10 in the Curfew Violations element only, if they had no violations and also cancelled flights to avoid a Curfew Violation*). This allows for an easy comparison between operators over time. Individual operator scores are computed and reports are generated each quarter. These quantitative scores allow operator 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 San Diego area. The overall airport score is tracked to measure the overall improvement over time.

2.3 Elements

Currently the Fly Quiet Program scores commercial operators on the following three elements that will be described in detail in the next section.

- Curfew Violations
- Noise Exceedances
- Fleet Noise Quality

2.3.1 Curfew Violations

SDIA has had a curfew in place since 1976. SDIA's curfew is governed as part of the Airport Use Regulations and may result in a monetary fine if an operator violates the curfew. All departures are restricted from 11:30 p.m. to 6:30 a.m. Aircraft may arrive at SDIA 24 hours a day.

The departure curfew is mandatory; however, there are exemptions for lifeguard and emergency flights; compliance is at the discretion of the pilot or operator. Penalties may be waived if there are local issues impacting safety, such as weather or maintenance of the aircraft.

The curfew violations system includes administrative fines if $2,000 for the first violation by a particular operator in a compliance period; $6,000 for the second violation in a compliance period, and, $10,000 for the third violation in a compliance period. Additionally, a multiplier is added to reflect the number of violations from the previous compliance period. Each compliance period is six (6) calendar months, starting January 1 and July 1. The Fly Quiet Program formalizes the effort of working with the operators to reduce the number of curfew violations of departing aircraft to include encouraging the carriers to cancel potential violating operations. The airport's noise monitoring system documents which operator and aircraft type depart between the curfew times, this information is used to accurately assign the point value for each operation.

Calculation of Rating:

An operator that does not log any curfew violations during the time period is automatically assigned a score of 10 points. Every operator starts with a score of 10 points. Scores are then adjusted based upon the following:

1. Number of Curfew Violations that are Penalized (Fined):

   If the Airport's Curfew Violation Review Panel (CVRP) determines that a flight violated curfew and will be penalized, the score will be adjusted by subtracting 2 points.

2. Number of Curfew Violations that are Not Penalized (Not Fined):

   If the Airport's Curfew Violation Review Panel (CVRP) determines that a flight violated curfew and will not be penalized, the score will be adjusted by subtracting 1 point.

To encourage cancelling potential violations, one (1) point will be added to any operator's score that cancelled a flight in order to avoid violating curfew.

2.3.2 Noise Exceedances

Eliminating loud aircraft noise events is a long-standing goal of the Airport, as a result, the Airport has established an element that identifies the loudest 10% of aircraft arriving and departing at SDIA, as measured at Noise Monitoring Terminals (NMT's) #1 and #7[1], respectively. NMT #1 is located approximately one (1.0) mile from the arrival end of Runway 27 and NMT #7 is located approximately one-half (0.5) mile from the departure end of Runway 27.

Each NMT has established thresholds to identify aircraft. Whenever an aircraft produces a noise level higher than the threshold, a noise exceedance occurs. A noise exceedance may take place during arrival or departure and are logged by the exact operation along with the aircraft type and airline name.

[1] For a map of the Remote Monitoring Terminals, go to the Airport's online flight tracking site: http://webtrak.bkems.net/san

Calculation of Rating:

The Noise Exceedances Score for each operator is determined based upon the total number of noise exceedances for the quarter compared with their total number of operations at the airport. Arrivals and departures are sorted separately, and then combined into the overall score. This is reflected as a "percentage of operations". The percentage of exceedances (exceedances divided by total operations for the period) is then multiplied by a factor of 10 to develop a score between 0 and 10 points.

2.3.3 Fleet Noise Quality

The Fleet Noise Quality score evaluates the noise contribution of each operator's fleet as it actually operates at SDIA. Operators generally own a variety of aircraft types and schedule them according to both operational and marketing considerations. The Fly Quiet Program assigns a higher rating or grade to operators flying quieter, new generation aircraft, while operators flying older, louder technology aircraft would rate lower. The goal of this measurement is to fairly compare operators – not just by the fleet they own, but by the frequency that they schedule and fly particular aircraft into SDIA.

Historically airports have rated fleet noise quality by the relative percentage of Stage 2 vs. Stage 3 operations[2]. Since the completion of the phase out of Stage 2 aircraft mandated by the Airport Noise and Capacity Act (ANCA) of 1990, all aircraft in the U.S. over 75,000 pounds meet the more stringent Stage 3 standards. However, within the allowable Stage 3 criteria, there is a wide range of noise levels, and the Federal Aviation Administration (FAA) does not distinguish between these aircraft types. There is a Stage 4 aircraft type, applicable to aircraft with a type certification issued after January 1, 2006; all aircraft manufactured today that are over 12,500 pounds meet these Stage 4 standards.

The method used here bases an operator's Fleet Noise Quality Rating on aircraft manufacturer noise certification data. For each aircraft type, 14 CFR Part 36 specifies allowable noise levels at three measurement locations: approach, departure, and sideline[3]. Per 14 CFR Part 36 allowable noise limits increase with weight, so that larger aircraft, serving more passengers, are not penalized as compared to smaller types.

The rating method for the Fleet Noise Quality totals the difference between each aircraft's certified noise levels at all three measuring points (takeoff, approach and sideline) and the Stage 3 standard for that aircraft type, weight and engine type. Aircraft with the greatest number of decibels below Stage 3 threshold are rated the best.

Similar to and consistent with 14 CFR Part 36, the Fleet Noise Quality Rating allows for higher noise levels for larger aircraft. It is important to credit larger aircraft serving more passengers, because they offer more air service in fewer flights and less total noise than multiple operations in smaller aircraft types.

[2] Stages 1-4 were established by a Federal Aviation Regulation called 14 CFR Part 36 which mandated the allowable noise levels for the manufacture of aircraft. Over time both Stage 1 and Stage 2 aircraft have been phased out of operation in the U.S. as a result of subsequent federal regulations.

[3] 14 CFR Part 36 standards are measured in terms of the single event metric Effective Perceived Noise Level (EPNdB), which accounts for different frequency characteristics of noise, such as low frequency.

Calculation of Rating:

The Fleet Noise Quality rating calculation takes the takeoff, approach and sideline noise difference of the allowable Part 36 Stage 3 limit from the Part 36 certification level and then produces a total. Table 1 demonstrates this methodology for a B737-700 aircraft where the difference between the Stage 3 limit and certificated value is 4.1 dB on takeoff, 3.8 dB on approach and 6.8 dB for sideline noise; for a total difference of 14.7 dB.

Table 1 – B737-700 Aircraft Example

B737-700 Aircraft	Takeoff (EPNdB)	Approach (EPNdB)	Sideline (EPNdB)	Total dB Below Stage 3 Limits
Part 36 Stage 3 Limit	91.2	99.7	96.6	-
Part 36 Certification Level	87.1	95.9	89.8	-
Difference	**4.1**	**3.8**	**6.8**	**14.7**

The Part 36 certification database for commercial aircraft is very extensive in listing many different noise values for variations on the same aircraft type depending on weight, flap settings, engine types, and other specifications. The Fleet Noise Quality rating methodology looks at each operator at SDIA and their specific aircraft fleet. Certifications values for each aircraft type are averaged together per operator.

Table 2 provides an example for computing the Fleet Noise Quality Sub Score. The example airline has four different aircraft types in their fleet that operate at SDIA. The number of operations is multiplied by the Cumulative Noise Level of the aircraft type generative a product of cumulative noise. The product of cumulative noise is then divided by the sum of operations for the carrier to create a fleet average Sub Score.

Table 2 – Example for Computing the Fleet Noise Quality Sub Score.

Aircraft Types	Cumulative Noise Level	Operations	Sum of Cumulatives Noise
B737	14.3	80.0	1144.0
B737MAX	25.2	10.0	252.0
B738	13.1	50.0	655.0
B738MAX	25.3	10.0	253.0
Fleet Avg (sum of CNEL divided by Total Operations):			**15.4**

Table 3 demonstrates the impact to a particular Fleet Quality score as they incorporate quieter aircraft, like the 737Max or A320neo into their operation at the airport.

Table 3 – Example of Fleet Noise Quality Improvement

Aircraft Types	Cumulative Noise Level	Operations	Sum of Cumulatives Noise
B737	14.3	70.0	1001.0
B737MAX	25.2	20.0	504.0
B738	13.1	40.0	524.0
B738MAX	25.3	20.0	506.0
Fleet Avg (sum of CNEL divided by Total Operations):			**16.9**

The Fleet Noise Quality Score for each operator is determined based upon what range the sub score falls under. The following is a list of the Fleet Noise Quality Scores and corresponding sub score ranges.

- 0 Points; Sub Score between 0 and 5
- 1 Point; Sub Score between 5 and 10
- 2 Points; Sub Score between 10 and 11
- 3 Points; Sub Score between 11 and 12
- 4 Points; Sub Score between 12 and 13
- 5 Points; Sub Score between 13 and 14
- 6 Points; Sub Score between 14 and 15
- 7 Points; Sub Score between 15 and 16
- 8 Points; Sub Score between 16 and 17
- 9 Points; Sub Score between 17 and 18
- 10 Points; Sub Score 18 or Greater

In the example of Table 2, the sub score is 15.4 and therefore the operator's final Fleet Noise Quality score would be 7.0. In Table 3, that same score increases to 8.0 through the utilization of newer aircraft.

3.0 Reports

The following pages contain the individual element reports and summary report for the 1st Quarter of 2019. The Fly Quiet Summary Report contains the total Fly Quiet score and ranking of the commercial operators.

Curfew Violations Report San Diego International Airport's Fly Quiet Program 1st Quarter 2019 (January -March, 2019)							
Airline Code		Number of Operations	Percent of Total Operations	Number of Curfew Violations Penalized	Number of Curfew Violations Not Penalized	Number of Cancellations	Curfew Violations Score
AAL	American Airlines	4,054	8.4%	0	1	4	13.0
SWA	Southwest	18,940	39.2%	0	0	0	10.0
UAL	United	4,469	9.2%	0	0	0	10.0
DAL	Delta	4,025	8.3%	0	0	0	10.0
CPZ	Compass Airlines	1,816	3.8%	0	0	0	10.0
NKS	Spirit	852	1.8%	0	0	0	10.0
FFT	Frontier	645	1.3%	0	0	0	10.0
FDX	FedEx	621	1.3%	0	0	0	10.0
HAL	Hawaiian Airlines	360	0.7%	0	0	0	10.0
UPS	ups	208	0.4%	0	0	0	10.0
JAL	Japan Airlines	181	0.4%	0	0	0	10.0
BAW	British Airways	179	0.4%	0	0	0	10.0
ROU	Air Canada rouge	165	0.3%	0	0	0	10.0
GTI	Atlas Air	128	0.3%	0	0	0	10.0
DLH	Lufthansa	114	0.2%	0	0	0	10.0
WJA	WestJet	112	0.2%	0	0	0	10.0
SCX	sun country airlines	104	0.2%	0	0	0	10.0
AAY	allegiant air	71	0.1%	0	0	0	10.0
SKW	SkyWest Airlines	5,303	11.0%	0	1	0	9.0
ASA	Alaska	4,673	9.7%	0	1	0	9.0
JZA	Jazz	525	1.1%	0	1	0	9.0
JBU	jetBlue Airways	798	1.7%	1	1	1	8.0
Total		48,343	100%	1	5	5	
Average							9.9

Higher Number = Better Score

Noise Exceedances Report						
San Diego International Airport's Fly Quiet Program						
1st Quarter 2019 (January -March, 2019)						
Airline Code		**Number of Operations**	**Percent of Total Operations**	**Total Noise Exceedances**	**Sub Score**	**Noise Exceedances Score**
AAY	allegiant air	71	0.1%	0	1.00	10
SKW	SkyWest Airlines	5,303	11.0%	6	1.00	10
JZA	Jazz	525	1.1%	1	1.00	10
NKS	spirit LESS MONEY MORE GO	852	1.8%	3	1.00	10
CPZ	Compass Airlines	1,816	3.8%	9	1.00	10
SCX	sun country airlines	104	0.2%	1	0.99	10
SWA	Southwest	18,940	39.2%	294	0.98	10
WJA	WESTJET	112	0.2%	3	0.97	10
JAL	JAL JAPAN AIRLINES	181	0.4%	7	0.96	10
FFT	FRONTIER LOW FARES DONE RIGHT	645	1.3%	52	0.92	9
ASA	Alaska	4,673	9.7%	408	0.91	9
UAL	UNITED	4,469	9.2%	557	0.88	9
JBU	jetBlue AIRWAYS	798	1.7%	110	0.86	9
AAL	American Airlines	4,054	8.4%	741	0.82	8
DAL	DELTA	4,025	8.3%	762	0.81	8
HAL	HAWAIIAN AIRLINES	360	0.7%	99	0.73	7
FDX	FedEx	621	1.3%	192	0.69	7
GTI	ATLAS AIR	128	0.3%	40	0.69	7
UPS	ups	208	0.4%	73	0.65	6
ROU	AIR CANADA rouge	165	0.3%	59	0.64	6
DLH	Lufthansa	114	0.2%	77	0.32	3
BAW	BRITISH AIRWAYS	179	0.4%	167	0.07	1
Total		48,343	100%	3,661		
Average					0.8	8.1

Higher Number = Better Score

Fleet Noise Quality Report San Diego International Airport's Fly Quiet Program 1st Quarter 2019 (January -March, 2019)					
Airline Code		Number of Operations	Percent of Total Operations	Sub Score	Fleet Noise Quality Score
JAL	JAPAN AIRLINES	181	0.4%	27.7	10.0
DLH	Lufthansa	114	0.2%	21.4	10.0
HAL	HAWAIIAN AIRLINES	360	0.7%	20.4	10.0
NKS	spirit	852	1.8%	19.3	10.0
AAY	allegiant air	71	0.1%	19.2	10.0
UPS	ups	208	0.4%	16.0	8.0
FDX	FedEx	621	1.3%	15.9	7.0
UAL	UNITED	4,469	9.2%	15.4	7.0
ASA	Alaska	4,673	9.7%	15.0	7.0
JBU	jetBlue AIRWAYS	798	1.7%	14.7	6.0
BAW	BRITISH AIRWAYS	179	0.4%	14.6	6.0
SWA	Southwest	18,940	39.2%	14.6	6.0
WJA	WESTJET	112	0.2%	14.6	6.0
JZA	Jazz	525	1.1%	13.8	5.0
AAL	American Airlines	4,054	8.4%	13.5	5.0
SCX	sun country airlines	104	0.2%	12.9	4.0
SKW	SkyWest AIRLINES	5,303	11.0%	12.9	4.0
FFT	FRONTIER LOW FARES DONE RIGHT	645	1.3%	12.3	4.0
DAL	DELTA	4,025	8.3%	12.2	4.0
CPZ	Compass Airlines	1,816	3.8%	12.1	4.0
GTI	ATLAS AIR	128	0.3%	9.3	1.0
ROU	AIR CANADA rouge	165	0.3%	8.8	1.0
Total		48,343	100%		
Average				15.3	6.1

Higher Number = Better Score

Higher Number = Better Score
Summary Report Ranks by "Quietest" to "Loudest" Operator
Tie Breaker is the "Number of Operations"

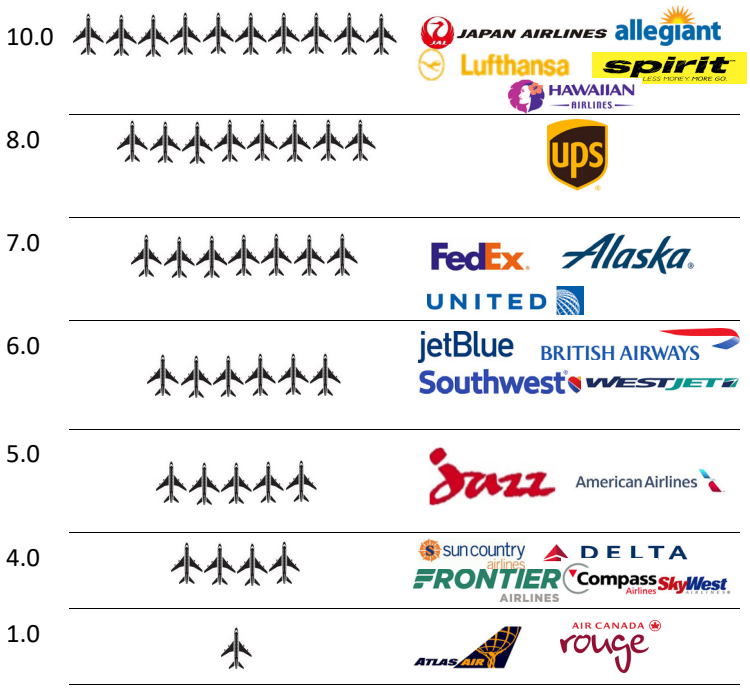
Summary Report								
San Diego International Airport's Fly Quiet Program								
1st Quarter 2019 (January -March, 2019)								
Airline Code		Number of Operations	Percent of Total Operations	Curfew Violations Score	Noise Exceedances Score	Fleet Noise Quality Score	Total Fly Quiet Score	Ranking
NKS	spirit	852	1.8%	10	10	10	30	1
JAL	JAPAN AIRLINES	181	0.4%	10	10	10	30	1
AAY	allegiant air	71	0.1%	10	10	10	30	1
HAL	HAWAIIAN AIRLINES	360	0.7%	10	7	10	27	4
SWA	Southwest	18,940	39.2%	10	10	6	26	5
UAL	UNITED	4,469	9.2%	10	9	7	26	5
AAL	American Airlines	4,054	8.4%	13	8	5	26	5
WJA	WESTJET	112	0.2%	10	10	6	26	5
ASA	Alaska	4,673	9.7%	9	9	7	25	9
CPZ	Compass Airlines	1,816	3.8%	10	10	4	24	10
FDX	FedEx	621	1.3%	10	7	7	24	10
JZA	Jazz	525	1.1%	9	10	5	24	10
UPS	ups	208	0.4%	10	6	8	24	10
SCX	sun country airlines	104	0.2%	10	10	4	24	10
SKW	SkyWest	5,303	11.0%	9	10	4	23	15
JBU	jetBlue AIRWAYS	798	1.7%	8	9	6	23	15
FFT	FRONTIER	645	1.3%	10	9	4	23	15
DLH	Lufthansa	114	0.2%	10	3	10	23	15
DAL	DELTA	4,025	8.3%	10	8	4	22	19
GTI	ATLAS AIR	128	0.3%	10	7	1	18	20
BAW	BRITISH AIRWAYS	179	0.4%	10	1	6	17	21
ROU	rouge	165	0.3%	10	6	1	17	21
Total		48,343	100%					
Average				10	8	6	24	

Fly Quiet Program—1st. Qtr. 2019

Airport Noise Advisory Committee

June 19, 2019

Fleet Noise Scores

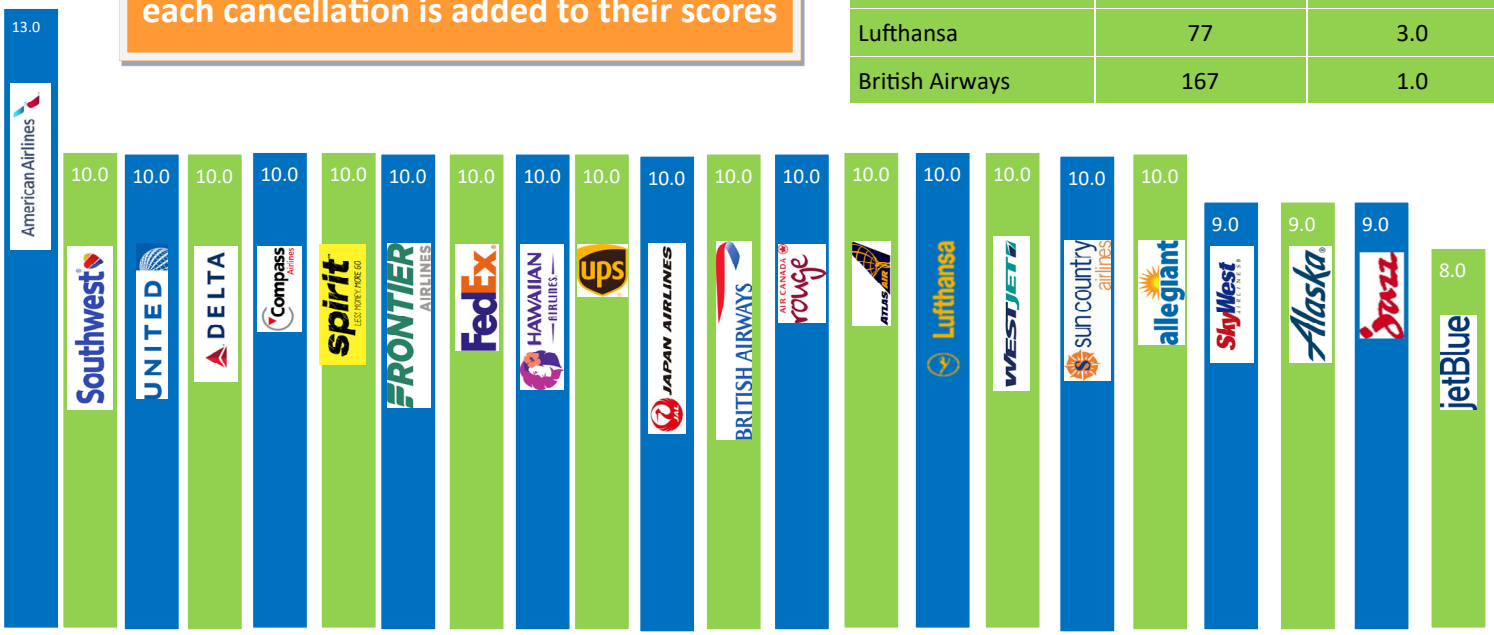


Noise Exceedance

Airlines	Number of Noise Exceedances	Noise Exceedances Score
Allegiant Air	0	10.0
Skywest Airlines	6	10.0
Jazz	1	10.0
Spirit	3	10.0
Compass Airlines	9	10.0
Sun Country Airlines	1	10.0
Southwest Airlines	294	10.0
Westjet	3	10.0
Japan Airlines	7	10.0
Frontier Airlines	52	10.0
Alaska	408	9.0
United	557	9.0
jetBlue	110	9.0
American Airlines	741	8.0
Delta Air Lines	762	8.0
Hawaiian Airlines	99	7.0
FedEx	192	7.0
Atlas Air	40	7.0
UPS	73	6.0
Rouge Air Canada	59	6.0
Lufthansa	77	3.0
British Airways	167	1.0

Curfew Violation Scores

Cancelled Flights to avoid curfew violations: American(4), jetBlue(1)-1 point for each cancellation is added to their scores



MEETING SUMMARY

Airport Noise Advisory Committee

Date | Time 4/17/2019 4:00 p.m.

Meeting called to order by: Heidi Gantwerk

In Attendance

Name	Affiliation	In Attendance
Community Planning Groups Within the 65 dB contour		
Anthony Bernal	Downtown Community Planning Council	Yes
Melissa Hernholm-Danzo	Community Resident at Large within 65 dB CNEL	No*
Dawn Reilly	Midway-Pacific Highway Community Planning Group	No*
David Swarens	Greater Golden Hill Planning Committee	Yes
Chris Cole	Uptown Planners	Yes
Tom Gawronski	Ocean Beach Planning Board	No
Fred Kosmo	Peninsula Community Planning Board	Yes
Community Planning Groups Outside the 65 dB contour		
Matthew Price	La Jolla Community Planning Association	Yes
Susan Nichols	Grossmont-Mt. Helix Improvement Association	Yes
Jason Legros	Pacific Beach Planning Group	Yes
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
Carlos Phillips	Airline Flight Operations (Alternate)	Yes
Dave Ryan	NBAA	Yes
Ex-Officio Non-Voting Members		
Justin Cook	Acoustical Engineer	Yes
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	FAA Representatives	Yes
Speakers		
Brendan Reed	SDCRAA Director, Planning & Environmental Affairs	Yes
Angela Shafer-Payne	SDCRAA Vice President & COO, Operations	Yes
Nick Johnson	President, Johnson Aviation	Yes
Mary Ellen Eagan	President, HMMH	Yes
Heidi Gantwerk	Facilitator	Yes
Steve Smith	Director, Ricondo	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. She announced that the June 19 meeting will include a presentation on the Flight Procedure Analysis and a presentation from the FAA on operations, particularly missed approaches.

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

Flight Procedure Analysis

Steve Smith, Ricondo & Associates, presented an update on the Flight Procedure Analysis. He discussed the flight procedure modifications intended to address noise in La Jolla, Mission Beach, Ocean Beach, and Point Loma.

The analysis looked at operational feasibility and noise impacts of various designs. A separate working group for East County, which has specific airspace challenges, is reviewing flight procedure modifications that might mitigate air noise for East County Communities.

The analysis also provided an independent review of the Airport Noise Office definition of early turns (ANAC Recommendation #18).

The flight procedure evaluation process included coordination with the Technical Advisory Committee and the Citizen Advisory Committee, over the course of five meetings. All meetings were open to the public and information was shared on the website as it became available. The process reviewed nearly 20 different procedure designs. As of the April ANAC meeting, the consultant team is making three recommendations for further consideration, after examining operational feasibility assessments and designs, what's allowed in FAA design criteria, and the noise screening results. The ANAC Recommendation #17, nighttime noise abatement heading, will be evaluated in the Part 150 because of its potential effects on the 65 dB contour.

Next steps involve presenting the final recommendations to the TAC and CAC, providing an update on results and recommendations based on comments received, and then bringing a more detailed update to ANAC in June.

Ryk Dunkelberg, Mead & Hunt, gave an update on the Part 150 study update. A Part 150 study is an aircraft noise and land use compatibility study that considers both future and existing aircraft noise and the impacts that noise has on population as well as noise-sensitive land uses. It consists of two complementary documents, a set of maps called noise exposure maps and a set of recommendations called a Noise Compatibility Program. It utilizes a five-year planning horizon, starting from the date the document is submitted to the FAA.

The noise exposure maps must be accepted by the FAA. The Noise Compatibility Program recommendations are approved or disapproved by the FAA. The study period is anticipated to take approximately 18 months, which means the five-year planning horizon will begin a year-and-a-half from now. The Part 150 addresses noise effects inside the 65dB contour. Changes at San Diego International Airport requiring the study be updated are 1) aircraft fleet mix change; 2)reduction in noise levels of individual aircraft, 3) a change in activity levels (number of aircraft operating here in a year); 4) the implementation of a new noise model. Parameters guiding the study state that any suggested

modifications: 1) cannot shift noise from one non-compatible use to another; 2) cannot impact safety; 3) cannot impact capacity; 4) cannot modify or change the existing curfew; 5) cannot evaluate alternatives that would trigger a Part 161 study, which is an access restriction to the airport. The overall goal is to reduce the number of people affected by noise. The interactive noise study website is now live (www.sannoisestudy.com), and is designed to gather input from the community with specific questions, and will be an integral part of the study. The next step is to generate an existing and future baseline noise contour, based on forecasts developed and approved by the FAA in the EIR and Part 150 Study.

Question from ANAC: Fred Kosmo asked for clarification on how ANAC recommendations 14 and 15 are being addressed, and asked if a recommendation will be put forward to the FAA and the airport consistent with this?

Mr. Smith said the consultant team is recommending to this body that the design seems to be feasible and meets the intent of the recommendation related to 14 and 15 at night. Ultimately, there is a design that could be submitted to the FAA for consideration, but nothing they're doing replaces the FAA process. It's submitted to the FAA, and they go through their own independent process.

Mr. Kosmo asked if all San Diego departures separations are between JETTI at 275-degrees and the historic red dot #1 at 290-degrees?

Mr. Smith said the intent for recommendation 14 was to try and move northbound departures further south of La Jolla, while not changing the initial headings from the runway. For recommendation 15, at night, they're on the right-turn heading, so the design is intended to work between 10-11:30 pm. There is no current RNAV for that particular procedure, so in essence, it may improve flight tracks because if everything is vectored going south and east, an RNAV would have better predictability in the flight track.

Mr. Kosmo asked if recommendation 15 has eastbound daytime flights going around Point Loma?

Mr. Smith said 15 ANAC suggested to move JETTI two miles further west. The consultant reviewed the ANAC suggestion as originally designed, and found it feasible.

Mr. Kosmo questioned if they are saying it's feasible for eastbound daytime flights to follow the ZZOOO procedure and not fly over Point Loma?

Mr. Smith said if they are on the RNAV procedure and they stay on it, and ATC doesn't vector them off for any reason, yes, but there's nothing about this procedure or anything being recommended that would prevent the FAA from doing whatever they need to do to maintain safe separations. Vectoring still can occur.

Matthew Price said the nighttime abatement heading is supposed to be 290 for all flights, but on the documentation it seems as if the initial heading is PADRZ, which is 295; is there data regarding that?

Mr. Smith said that that issue is included in ANAC recommendation 17, which hasn't been fully assessed yet, and will take place as part of the Part 150 Study. Some change may happen in the 65 and it needs to be evaluated under that process.

Mr. Kosmo asked as for aircraft noise reductions, is anything being studied that might remove cargo planes from mix at the airport, or international flights?

Mr. Dunkelberg said no to both.

3. Action items (taken out of order of agenda)

Ms. Gantwerk asked for approval of meeting summary from the April meeting. With a motion by Fred Kosmo and a second by Deborah Watkins the meeting summary was approved.

Airport Development Program (ADP) – Environmental Impact Report (EIR)

Angela Shafer-Payne, SDCRAA VP & COO, Operations, presented an introduction on the ADP EIR.

- The ADP planning looked at the aging facility in the Terminal 1 complex, built in 1967, which was built to handle 2.5 million annual passengers. Last year, the airport exceeded 24 million annual passengers.
- Fifty percent of last year's operations were run through Terminal 1. What is being accommodated in Terminal 1 is not providing customers with an adequate level of service, from restrooms to gate hold rooms.
- It's important to note that in this planning process, the single runway is the limiting factor. The replacement for Terminal 1 accommodates customer service at a greater level. It does not provide additional capacity, which is defined as the number of operations that can operate on the runway.
- The other factor is the curfew, which defines the operating window. The Airport Noise and Capacity Act of 1990 limits the Airport's ability to place any restrictions on the types of aircraft that can operate at the airport.
- Airlines have proven that if there is capacity on the runway, they will find ways to operate out of your facility. Customer demand will continue, and airlines will respond to it, despite the fact that terminal facilities are not adequate.

Airport Development Plan - Overview

Brandon Reed, SDCRAA Director, Planning & Environmental Affairs, gave an overview of the ADP project components.

- We are considered a Top 30 or Core 30 airport, playing an important role in overall national air system.
- Last year's Economic Impact Study found that through direct and induced economic impact, we contributed about $12 billion annually. There's been exceptional growth in demand over the last five years. The economy is good, air fares are low, and specifically in San Diego, carriers like Alaska and Southwest are competing for market share.
- Should the Authority Board approve it, the ADP is seeking to create a more comfortable, modern and efficient terminal. Major components may include:
    - An on-airport entry roadway, taking traffic off of Harbor Drive as far east as Laurel, and putting it on airport property.
    - A dual-level roadway, which would reduce congestion, comparable to Terminal 2. This would connect to a new 30-gate terminal, replacing Terminal 1.
    - A parking plaza to accommodate the removal of the east terminal parking.
    - New Taxiway Alpha to provide efficiency on the airside, by getting aircraft from gates to the end of the runway efficiently.
    - Although not part of the project, space is being preserved to eventually connect to an intermodal transit center, which has been in SANDAG's regional transportation plan for years, it may include high-speed rail, trolleys, Amtrak Coaster, and some level of pedestrian bridge, and north side passenger processing.
- Over the last 5-6 months, there have been some physical refinements made based on the comments received on the draft EIR. The parking plaza has been reduced from 7,500 stalls to 5,500, which is about a 650 net-positive parking increase.

- The structure size and footprint of the parking plaza were reduced to designate a transit station area. The physical layout of ADP has been changed in order to accept whatever technology SANDAG and the region decides is appropriate.
- Another physical change that was made was to reserve the right-of-way for on-airport exit lanes, to support future broader roadway improvements.
- The consultants are in the process of developing a new forecast for aviation growth, working with the FAA to update the numbers from the last forecast which was done in 2012. There are no final results; data is still being analyzed. This updated forecast will be used to run new noise contours in the EIR.
- When complete, the Airport Authority will recirculate a draft EIR, with a public comment period. The final EIR will go to the board for possible certification.

Forecast and Capacity

Nick Johnson, President, Johnson Aviation presented on forecast and capacity.

- He reiterated that the single runway limits operational capacity.
- He defined "an operation" as one arrival or one departure.
- The summer of 2018 showed that capacity is already fast approaching the limit of 50 operations per hour.
- Annual operational capacity since 1990 has seen ebbs and flows. Looking at the last five years, there has been incredible growth in terms of the numbers of operations. The underlying driver of the forecast is the economy of San Diego.
- The FAA's forecast is unconstrained and doesn't reflect issues like single runway, specific facilities, and policy limits. Our forecast has been submitted to the FAA for review. Response is expected within the next 30-45 days.
- Looking at a constrained forecast, there are things the airlines will consider like adjusting their schedule, working on filling flights to capacity, and responding to supply and demand.
- From a big-picture perspective, constrained airports may be slot controlled by the FAA.
- Simulation modeling is being done, looking at various demand levels, so that the noise analysis can be run. That information will then be used to model the future noise as part of the analysis.

Noise Analysis and Modeling

Mary Ellen Eagan, President HMMH, presented on noise analysis and modeling, covering 1) overview of critical noise metrics used in the documentation; 2) the difference between NEPA and CEQA Noise impact thresholds; 3) process of the analysis.

- There are two critical noise metrics used in both NEPA and CEQA analysis;
    1. Single Event Noise Equivalent Level, SENEL, referring to graphic in presentation showing the sound exposure over one minute.
    2. Community Noise Equivalent Level, CNEL, a 24-hour measure of noise exposure. In California, using the CNEL, a penalty assessed for operations that takes place in the evening (7-10 pm) or nighttime (10 pm – 7 am).
- NEPA is the FAA process from the National Environmental Policy Act of 1970, requiring that any time there is a federal action at an airport, the FAA must undertake this process; in many cases, they have the airport undertake the process on their behalf.
- Federal action would involve a change to the airport layout plan. FAA provides a number of guidance documents for this process.

- The threshold of significance was determined by the Federal Interagency Committee on Noise, stating that in an area where aircraft noise is 65 dB, areas that have a change in noise of 1.5 dB or more are considered to have significant impact.
- CEQA, California Environmental Quality Act is modeled after NEPA, but the significance effects are determined more locally, and are more general regarding protecting the environment and minimizing impact.
- A critical distinction between NEPA and CEQA is the FAA requires that you compare project impacts to a no-action impact; what would happen in five years, whether or not any changes were made.
- CEQA impacts are compared against the baseline or existing condition. The interpretation taken from previous projects identified a number of significant impact criteria; not only is it a 1.5 dB change baseline to future, but anything within the 65 CNEL contour; areas that have a 3 dB increase between 60 and 65 contour; substantial increase in noise exposure or the amount of time the aircraft is exposed; and a substantial increase in the number of nighttime flights.
- The process used is to define noise modeling scenarios, the baseline and the future years; collect and refine the data; run the contours using a model called The Aviation Environmental Design Tool, the FAA required model; analyze the impacts and document the results.
- Much of the data exists from prior analyses. Aircraft operations will be the main change. The baseline and forecast years will be updated from 2012. Aircraft noise and performance characteristics will reflect newer fleet, runway and flight track utilizations will be re-determined based on a more current sampling of data.
- The main focus will be developing representative flight tracks. An average annual day on what's required for the model input, reflecting the fleet mix, percent use of each runway, and percent use of each flight track on each runway. That will be adjusted to the official FAA tower count or approved forecast.

Question from ANAC:

Davis Swarens asked for clarification on difference between no project and no action, with regards to CEQA analysis.

Brandon Reed said under CEQA, everything in the initial and recirculated draft EIR will compare the project at different points in the future to 2018 conditions.

Ms. Eagan said no action and no project are the same, except that with the FAA comparison, you look at 2025 no action versus 2025 with the project. Under CEQA, you look at 2018 baseline against 2025 with project.

Robert Bates asked if the curfew is factored into the CNEL metric measuring noise over 24-hour periods. He also asked regarding slot control, do airlines migrate to larger equipment with more capacity?

Curfew answer: Ms. Eagan said because there's less noise at night, there's less contribution during that portion, but still averaged over 24 hours.

Slot control answer: Nick Johnson said in some cases, yes. Getting to a slot program is a progression, moving closer and closer to that line of capacity. In Chicago, rather than have a slot regulation imposed, airlines self-regulated by shifting to larger aircraft. At La Guardia in New York where there is a slot program, aircraft size and seat capacity has gone down. By bringing the slot level down, the FAA brought delays down. The outcome of a slot program is about improving schedule reliability and reducing delays, and how it is implemented and the results will depend upon the market the airport is serving.

Mr. Kosmo asked if anything is being done in the revised EIR to address significant unavoidable impacts on surrounding communities? And when will CEQA studies be complete? Will the noise impact be recirculated data and conclusions to ANAC for comment before issuing the EIR?

Mr. Reed said the first task to complete is to update the forecast, which will inform the analysis, and as part of the CEQA process, there are mitigation measures that can be offered. It will probably take several months to get through those processes. The draft EIR will not be circulated to ANAC before, but circulated to the entire region when they go out for the comment period.

Chris Cole asked if the analysis takes into account the anticipated changes in flight patterns.

Mr. Reed said this project entails building a new terminal, not changing flight patterns, but using 2018 data as our baseline, the EIR and forecasts will have incorporated all of the post-Metroplex changes.

Matthew Price asked if there's a defined threshold for what awakens people at night?

Ms. Eagan says the analysis typically looks at a threshold level of sound exposure, SNEL computation, and looks at the number of people exposed to noise levels above that. Based on a recommendation by FICAN, that is 85 dB, which is about the level that awakens 15% of people indoors.

Mr. Price asked if the airport will be able to increase its capacity to the same degree and speed without the new terminal?

Angela Shafer-Payne said yes; it's more about how that increase is accommodated.

Mr. Price asked what increase in percent operations will we reach a significant level of impact?

Ms. Shafer-Payne said there could be an increase in passengers because of an increase in the size of aircraft coming in. The largest carrier today flies one type of aircraft. So, generally they consider 260,000 annual operations to be a point at which there will start to be consistent delay. At 280,000 operations, that delay is likely to be 15 minutes per operation. At actual capacity, 290,000 operations, there will be an unsustainable level of delay.

Mr. Price asked are those considerations put in the forecast?

Ms. Shafer-Payne said a constrained forecast takes into consideration limitations at the facility; an unconstrained forecast does not consider local conditions.

Anthony Bernal asked if changes in the parking structure will affect the EIR.

Mr. Reed said it could, but that won't be known until the results are seen. The intermodal transit center and designated transit station area are not actual components of the proposed project, but things that have been programmed in for when SANDAG decides to build them. As part of that process, those physical components would be analyzed in a separate environmental review.

David Swarens said that the media reported that the recirculation of the EIR was based on concerns relative to transit access. Other than updates of data to 2018, will there be other differences seen?

Mr. Reed said other things like being consistent with City's Climate Action Plan are being pursued.

Mr. Price said from ANAC perspective, seeing that the ADP will influence the increase in operations, there should be in the draft EIR some commentary on approaches in noise mitigation because of that expansion.

Mr. Reed said the proposed project will be compared to existing conditions. At no point are they comparing for significant threshold purposes the no project to the proposed project.

4. Public Comment

Kathy Austin, Mission Beach expressed her concerns over the increase in noise over South Mission Beach, especially over the last year. She wanted to know who to talk to for that flight path to be changed. She requested that they look at ways to modify the departure headings to reduce the impacts in her community.

Kelly Borsberry, Encanto lives right under the arrival path into San Diego Airport. He's noticed the increase in noise and he thinks it's due to the planes flying lower, and the increase of traffic coming into our city. He asked to have a sound meter at his home and wanted to know if planes can be moved to other airports.

Russell Moll, Mt. Soledad, expressed concerns about metroplex and the change in flight patterns, stating there needed to be better communication to let the public know what was happening. He felt that the flights should be dispersed so that everyone shared the noise. He also expressed concerns about his health and the impact the aircraft noise has on it.

Casey Schnoor, Ocean Beach/Point Loma, has been involved with this process since August 2015. He applauds the fact that ANAC has now been engaged with the EIR process because the first draft, ANAC was not considered. He felt that ANAC should be able to review and discuss the analysis. He feels that the ANAC Subcommittee efforts were not considered in the draft EIR. He said that the new terminal will increase capacity which will bring larger aircraft which are louder. He pointed out the number of future operations saying that in the next several years the new terminal would reach capacity.

Patty Davidson, Windansea Beach, continues to be concerned with the flight path changes. She is told that nothing has changed but based on her observations they have. She is hopeful for the efforts by the Flight Procedure Analysis there might be some relief. She is concerned there were no recommendations to help reduce arrival noise. She saw something about Kearny Mesa and there could be like 4.9 reduction in dB. She doesn't see a lot of people living in Kearny Mesa; maybe there are plans for later to take into consideration.

5. Next Meeting/Adjourn

Ms. Gantwerk announced that CAC and TAC will be tentatively meeting on May 23, to discuss the Flight Procedure Analysis and Part 150 pending FAA approval the forecasts. Public is welcome.

Next meeting is June 19, 2019. Missed approaches and flight procedures analysis and recommendations will be discussed at length. She asked if there are any concerns about the process of sending out member materials, opportunity for written questions, and no staff presentations all of the data.

Members agreed, so that process will continue.

Meeting was adjourned.