

# SAN DIEGO COUNTY REGIONAL AIRPORT AUTHORITY

## **AIRPORT NOISE ADVISORY COMMITTEE (ANAC)**

**MEETING AGENDA**  
**Wednesday, August 16, 2017, 4:00 p.m.**

**UPSES Portuguese Hall**  
**2818 Avenida De Portugal, San Diego, CA 92106**

---

1. Welcome and Introductions
2. Presentation Items
  - a. Quieter Home Program Update
  - b. Missed Approach Statistics
  - c. Early Turn Statistics
  - d. Gate/Altitude Analysis
  - e. Curfew Violation Review Panel (CVRP) Statistics
  - f. Noise Complaint Statistics
  - g. Fly Quiet Report – 2<sup>nd</sup> Quarter 2017
  - h. La Jolla Noise Monitoring Methodology– Paul Dunholter, BridgeNet International
  - i. July 19, 2017 Subcommittee Update
3. Public Comment
4. Action Items
  - a. Approval of June 21, 2017, Meeting Minutes
5. Next Meeting: October 18, 2017
6. Adjourn

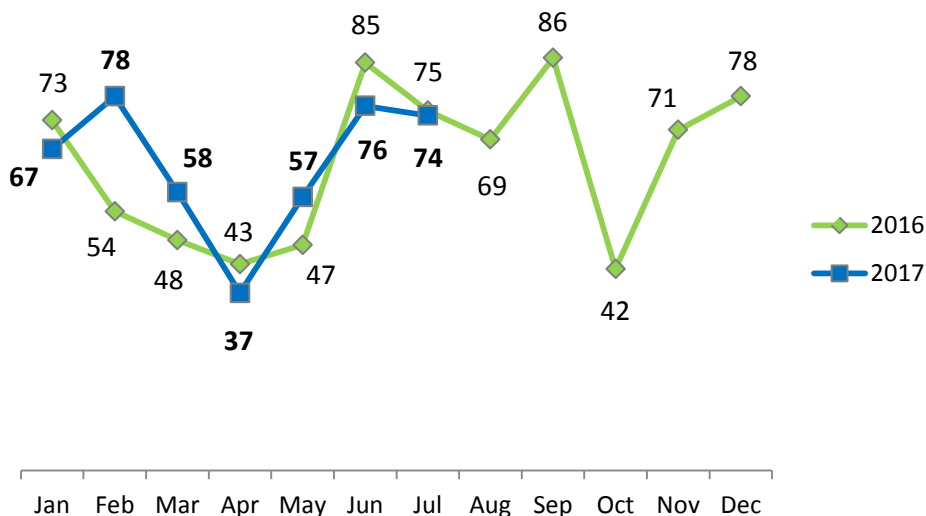
PROGRAM STATISTICS	
Applicants / Homes on the Wait List	666/1,413
Homes Completed in June & July 2017	0
Estimated Homes to Complete in CY 2017	20
Total Homes Completed (through July 31, 2017)	3,453

## Updates

### PROGRAM IS MOVING FORWARD!!

- **8.12** – Awarded in July. Pre-construction activities underway.
- **9.1** – Advertised for bid on 8/1/17.
- Projects submitted for FAA review:
  - **8.10** – Designs approved. Request to advertise for bid 8/4/17.
  - **8.11** – Designs submitted on 8/2/17.
- Pending Projects:
  - **9.2** – Non-Historic, SF and MF, 40 units.
  - **9.3** – Non-Historic, SF and MF, 35 units.
  - **9.4** – Non-Historic, SF and MF, 25 units.
  - **9.5** – New group of (Historic) homes pending for 9/5/17

## Missed Approaches by Month



## Compliance with FAA Noise Dots

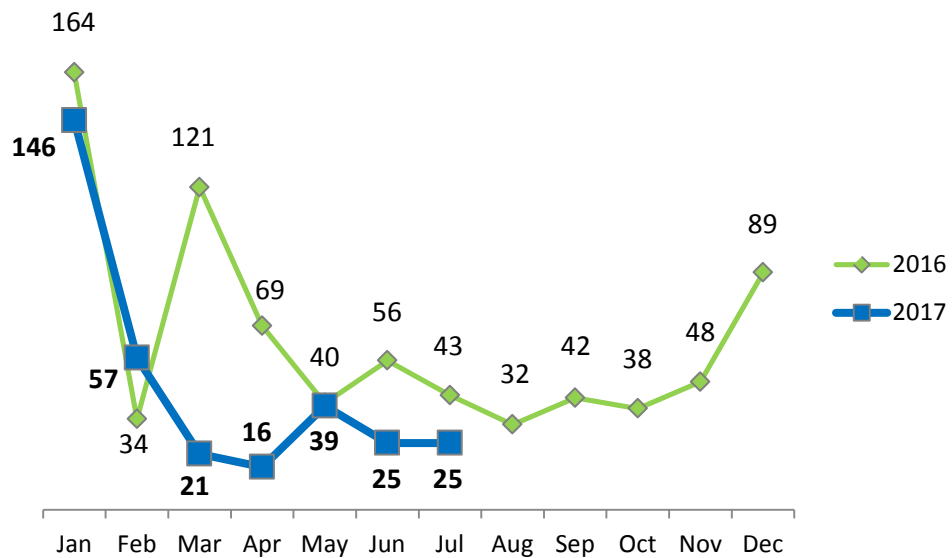
Month	Compliant	Non-Compliant	East of Airport
June, 2017	39	20	17
July, 2017	50	17	7

YEAR	Total Missed Approaches	Total Arrivals	% of Total Arrivals that are Missed Approaches
2012	692	93,126	0.7
2013	659	93,985	0.7
2014	637	95,881	0.7
2015	748	96,856	0.8
2016	771	98,566	0.8
2017	447*	59,804**	0.7

\* Through July 31, 2017

\*\* Estimated Through July 31, 2017

## Early Turns by Month

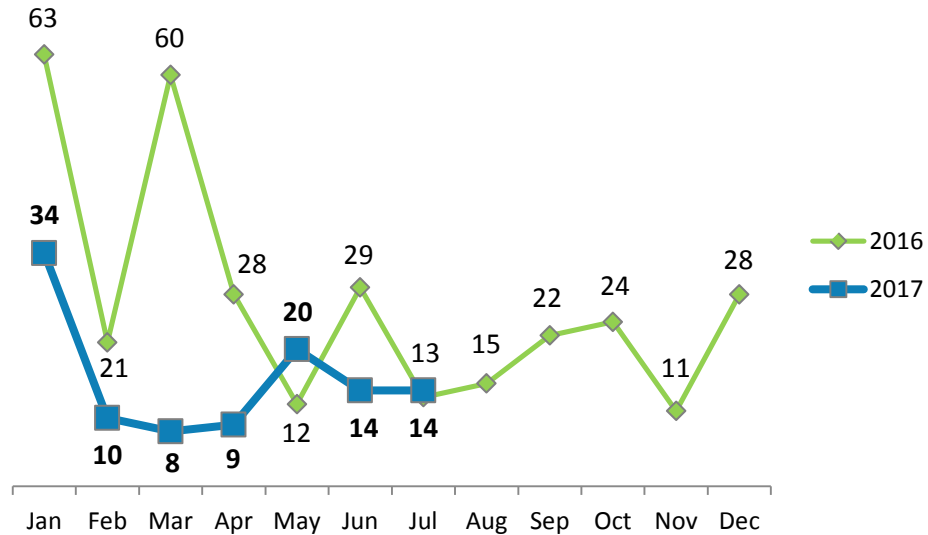


## Historical vs. Current Data

<u>YEAR</u>	<u>Below 6,000 (ft.)</u>	<u>All altitudes</u>
<b>2012</b>	316	538
<b>2013</b>	200	829
<b>2014</b>	338	1,105
<b>2015</b>	467	1,293
<b>2016</b>	559	776
<b>2017</b>	277*	329*

\*Through July 31, 2017

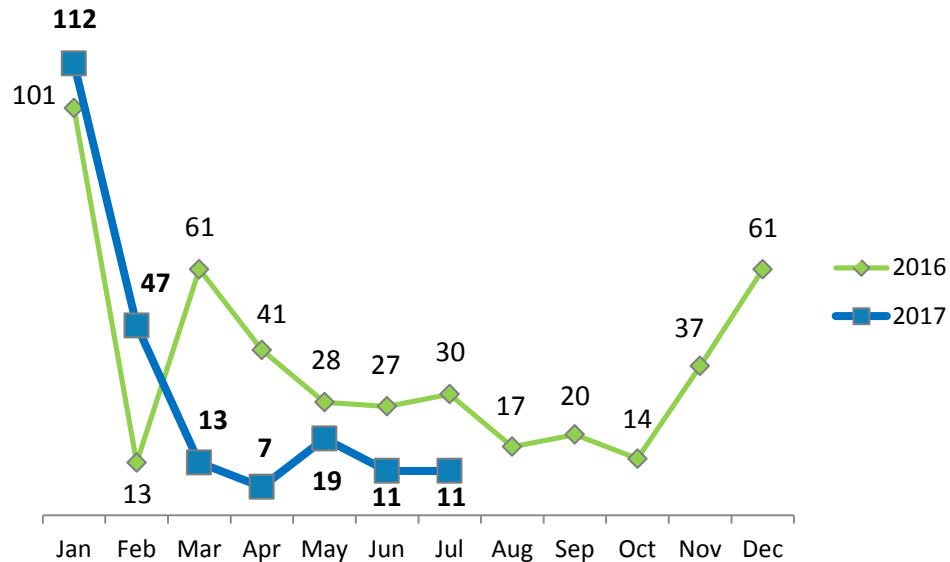
## Over Point Loma



## Early Turns by Operator (June – July, 2017)

<u>Count</u>	<u>Airline</u>	<u>Aircraft</u>
9	American Airlines	A321, B738, B752
6	General Aviation	--
3	Delta Air Lines	B739, B752
3	Southwest Airlines	B737
1	Allegiant Air	A319
1	Alaska Airlines	B738
1	Edelweiss Air	A343
1	Frontier Airlines	A320
1	jetBlue	A320
1	United Airlines	A319
1	UPS	B763

## Over Mission Beach

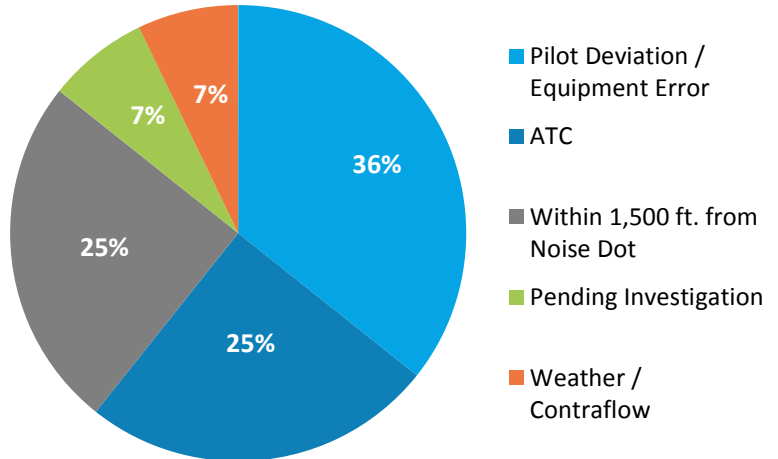


## Early Turns by Operator (June – July, 2017)

Count	Airline	Aircraft
12	General Aviation	--
3	American Airlines	B738
2	Southwest Airlines	B737
1	Alaska Airlines	B739
1	Delta Air Lines	B752
1	Frontier Airlines	A320
1	Japan Airlines	B788
1	Virgin America	A320

## Over Point Loma (E.T.L)

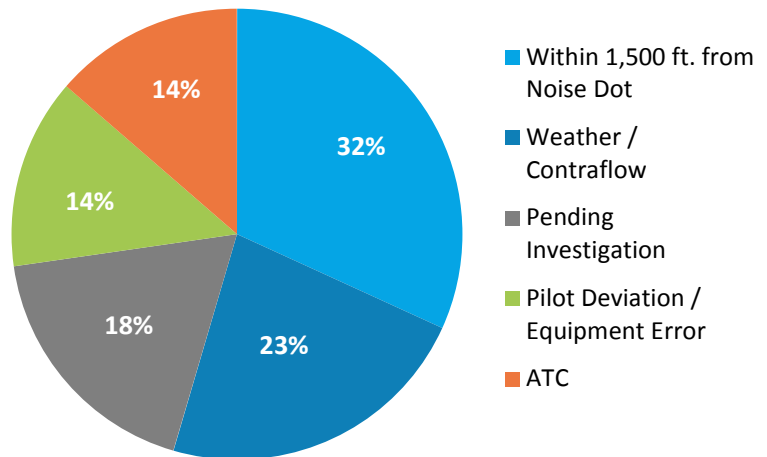
Reason	Count	%
Pilot Deviation / Equipment Error	10	36%
ATC	7	25%
Within 1,500 ft. from Noise Dot	7	25%
Pending Investigation	2	7%
Weather / Contraflow	2	7%
<b>TOTAL</b>	<b>28</b>	<b>100%</b>

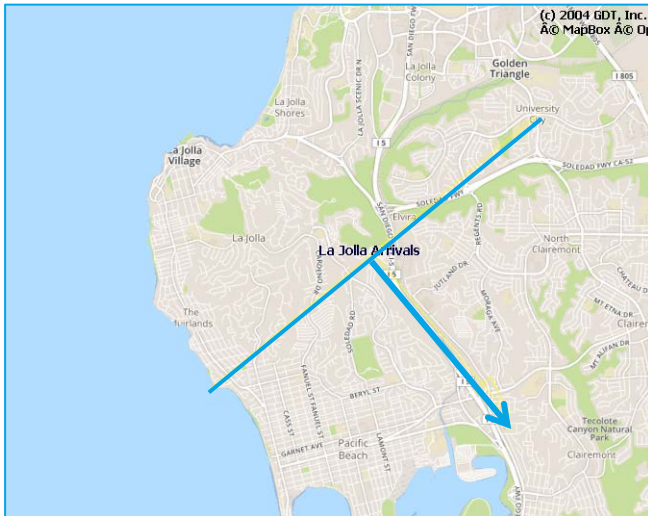


54% of Left Early Turns were above 6,000 ft.

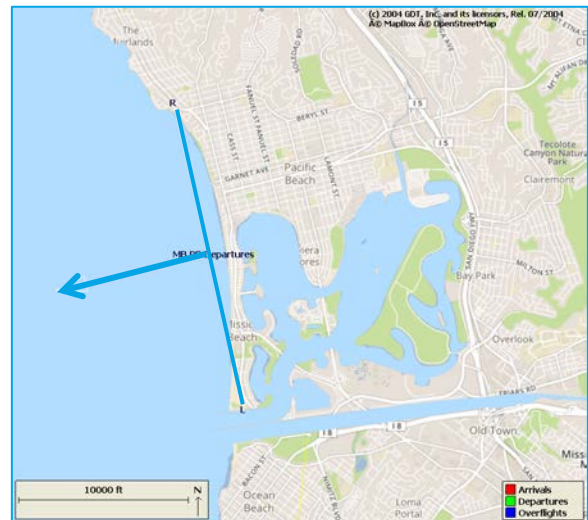
## Over Mission Beach (E.T.R)

Reason	Count	%
Within 1,500 ft. from Noise Dot	7	32%
Weather / Contraflow	5	23%
Pending Investigation	4	18%
Pilot Deviation / Equipment Error	3	14%
ATC	3	14%
<b>TOTAL</b>	<b>22</b>	<b>100%</b>



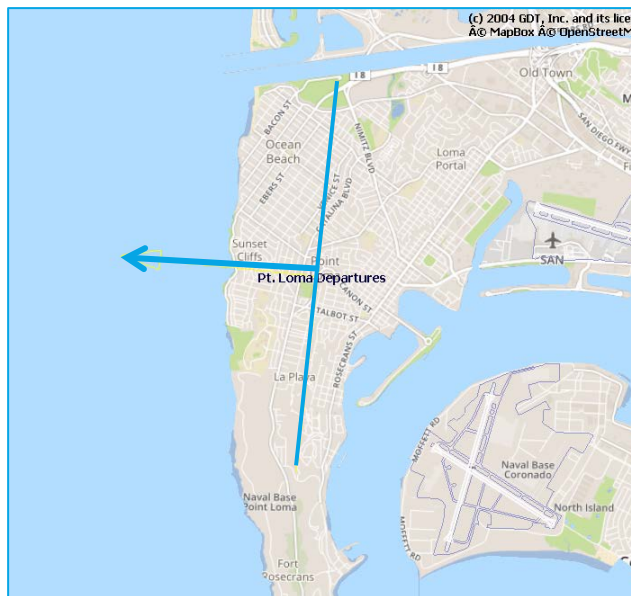


La Jolla Arrivals



Mission Beach Departures

Pt. Loma Departures



Location	Pre-Metroplex Altitude (ft. AGL)	Post-Metroplex Altitude (ft. AGL)
La Jolla (SAN Arrivals)	7,781	8,036
La Jolla (Other Airports)	2,283	2,615
Pt. Loma Departures	1,759	1,836
Mission Beach Departures	2,455	2,464



# CURFEW VIOLATION REVIEW PANEL

Airport Noise Advisory Committee

August 16, 2017

## Curfew Violations for June - July 2017

Date	Time	Flight ID	Aircraft	Penalty Status
6/1/2017	1:15	jetBlue 530	A320	local mechanical; engine bleed issue
6/3/2017	0:13	American Airlines 584	A321	\$2,000
6/3/2017	23:32	jetBlue 20	A320	local mechanical, fuel system issue
6/5/2017	23:55	Spirit 189	A319	\$ 10,000
6/16/2017	23:40	American Airlines 1275	B738	local weather; contraflow operations
6/16/2017	23:41	American Airlines 385	B738	local weather; contraflow operations
6/20/2017	23:40	Delta Air Lines 1792	B739	local weather; contraflow operations
6/20/2017	23:42	Alaska Airlines 785	B738	local weather; contraflow operations
6/20/2017	23:44	American Airlines 584	A321	local weather; contraflow operations
6/20/2017	23:45	American Airlines 654	A321	local weather; contraflow operations
6/20/2017	23:47	jetBlue 90	A321	local weather; contraflow operations
6/21/2017	23:39	American Airlines 654	A321	local weather; contraflow operations
6/21/2017	23:41	United Airlines 586	B739	local weather; contraflow operations
6/21/2017	23:42	Alaska Airlines 785	B739	local weather; contraflow operations
6/21/2017	23:43	jetBlue 20	A320	local weather; contraflow operations
6/29/2017	0:15	American Airlines 654	A321	local damage to aircraft from jetbridge

6/29/2017	0:33	jetBlue 530	A320	\$50,000
6/30/2017	23:52	American Airlines 385	B738	\$ 6,000
7/18/2017	23:36	Virgin America 8001	A320	CVRP 10/4/2017
7/23/2017	23:40	American Airlines 654	A321	CVRP 10/4/2017

### Annual Curfew Violations

Year	Total Curfew Violations
2013	60
2014	47
2015	55
2016	84
2017	38*

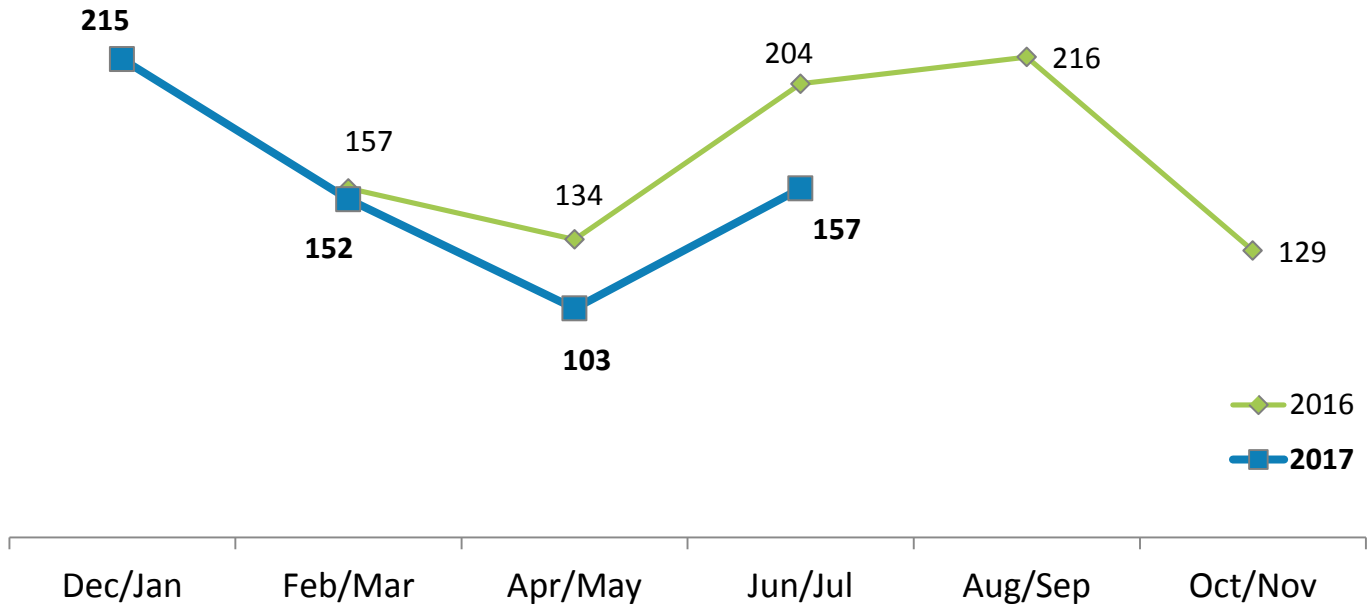
\*Through July 31, 2017

### Annual Fines Assessed

Year	Fines Assessed
2013	\$ 166,000
2014	\$ 178,000
2015	\$ 152,165
2016	\$ 564,000
2017	\$ 296,000*

\*Through July 31, 2017

## Household Complaints

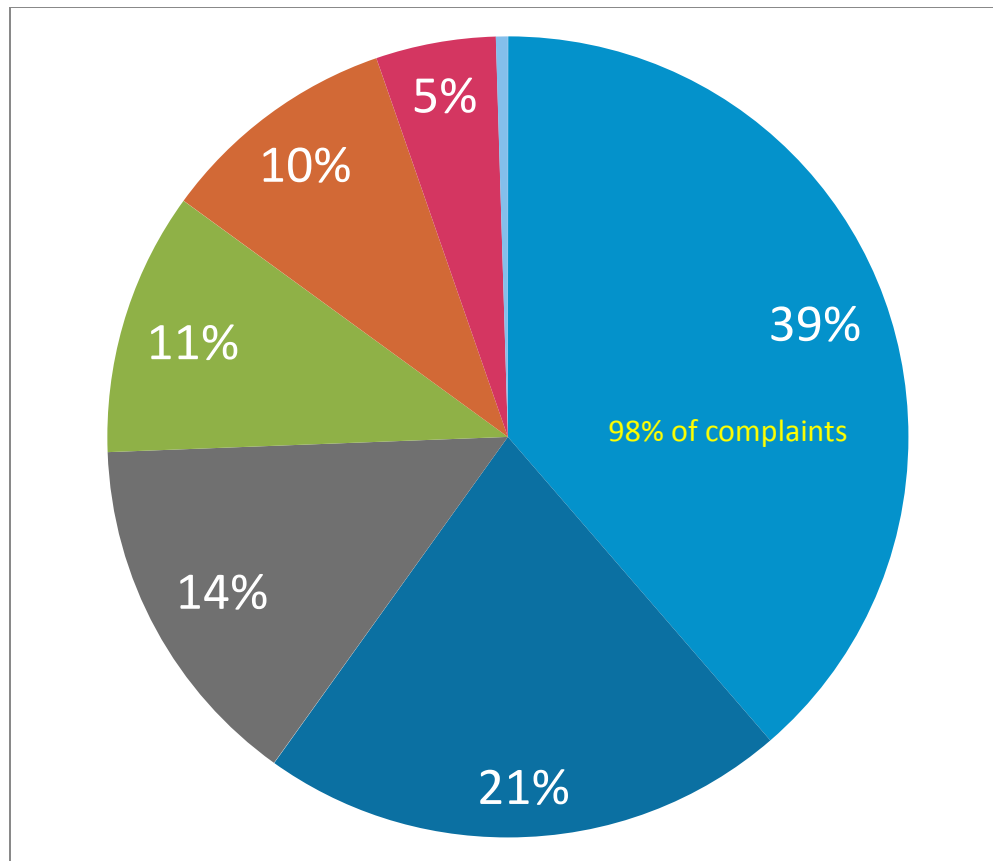









73% of complaints came from 8 households

Through July 31, 2017

Neighborhood	Number of Households
Loma Portal	27
La Jolla	18
Point Loma Heights	15
Wooded Area	15
La Jolla Mesa	14
Sunset Cliffs	9
Mission Beach	8
Ocean Beach	8
Bird Rock	7
Fletridge	6
La Jolla Shores	6
La Playa	5
Liberty Station	4
Other (<3 households )	15
<b>Total</b>	<b>157</b>

## Breakdown of Complaint Reasons by Household June - July 2017



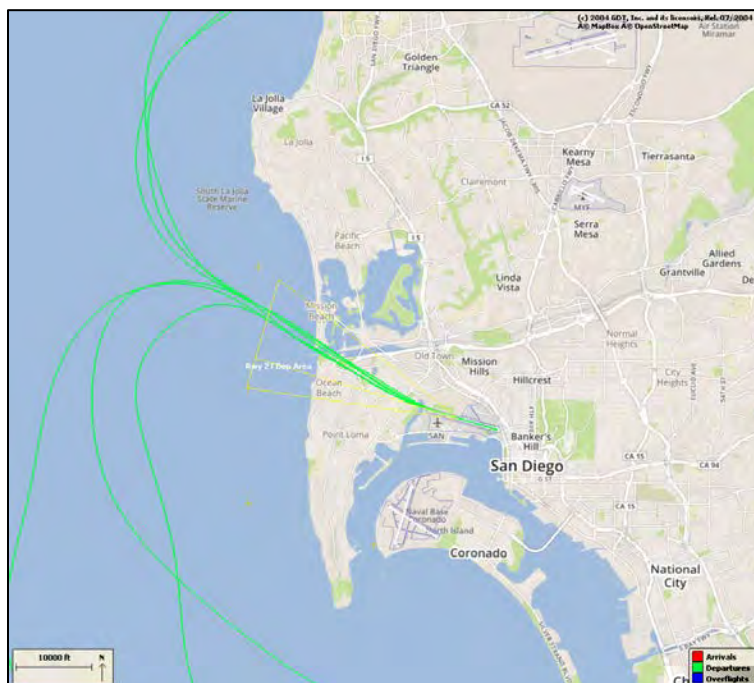
Color							
Reason	Loud Aircraft	Curfew Violation	Suspected Off-Course	Low Flying	Increased Flight Volume	Early Turn	Missed Approach
Number of Households*	80	44	30	22	20	10	1

\*Households may have had multiple complaint reasons and could be listed in multiple categories.

**84% of complaints came from a non-Authority application which selects "Loud Aircraft" for the reason.**

## Top Noise Concerns

Date/Time	Noise Event	Complaints
6/20/17 @ 11:47 p.m.	JBU 90, Curfew Violation, no penalty, contra-flow in effect due to weather. Liberty Station(3), Loma Portal (4), Mission Beach (1), Point Loma Heights (1)	10
6/21/17 @ 11:39 p.m.	AAL 654, Curfew Violation, no penalty, contra-flow in effect due to weather. Liberty Station (1), Loma Portal (4), Ocean Beach (1), Mission Beach (1), Point Loma Heights (2), La Jolla (1).	10
6/20/17 @ 11:40 p.m.	DAL 1792, Curfew Violation, no penalty, contra-flow in effect due to weather. Liberty Station (3), Loma Portal (4), Mission Beach (1), La Jolla Mesa (1).	9
6/20/17 @ 11:44 p.m.	AAL 654, Curfew Violation, no penalty, contra-flow in effect due to weather. Liberty Station (3), Loma Portal (4), Mission Beach (1), La Jolla (1).	9
6/21/17 @ 11:41 p.m.	UAL 238, Curfew Violation, no penalty, contra-flow in effect due to weather. Liberty Station (1), Loma Portal (3), Ocean Beach (1), Mission Beach (1), La Jolla (1).	9
6/21/17 @ 11:42 p.m.	ASA 785, Curfew Violation, no penalty, contra-flow in effect due to weather. Liberty Station (1), Loma Portal (3), Ocean Beach (1), Mission Beach (1), La Jolla (1).	9





# SAN DIEGO INTERNATIONAL AIRPORT

## AIRPORT NOISE MITIGATION

August 7, 2017

# Fly Quiet Report

*2<sup>nd</sup> Quarter 2017*

### Prepared by:

Sjohnna Knack  
Program Manager, Airport Noise Mitigation  
Planning & Environmental Affairs  
San Diego County Regional Airport Authority



## 1.0 Summary of 2<sup>nd</sup> Quarter 2017 Report

Each quarter, the Airport Noise Mitigation Office will publish this report that will outline the trends on how quietly each operator is flying in and out of San Diego International Airport (SDIA). In Section 2.0 you will find a detailed description of the elements within the Fly Quiet Program.

Specific trends that were observed in this report include:

- Overall scores have improved because of the decrease in early turns due to:
  - Implementation and strict adherence to the NextGen Southern California Metroplex procedures.
  - Early turns due to weather conditions not being counted as the pilots are being given specific instructions by ATC that must be followed for safety reasons.
- Frontier Airlines improved their curfew violations score from last quarter; they cancelled two flights to avoid violating curfew.
- JetBlue Airways and Spirit Airlines decreased their overall score by having more curfew violations and early turns than the previous quarter.
- Delta Air Lines and United Airlines increased their overall score by 8 and 11 points, respectively, by decreasing early turns, canceling flights to avoid breaking curfew and changes in fleet.
- British Airways increased their overall score by utilizing Boeing 777 aircraft instead of the Boeing 747 aircraft. Similarly Hawaiian Airlines has switched from the Boeing 767 to the Airbus 330.

## 2.0 Fly Quiet Program Description

The purpose of the San Diego International Airport's (SDIA) Fly Quiet Program is to encourage individual commercial operators to operate as quietly as possible in the San Diego area by acknowledging those operators that attempt to follow the noise abatement goals of the airport. The program creates a participatory atmosphere of the operators working with the airport and community to actively reduce noise by grading an operator's performance and by making the scores available to the public.

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 operate 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
- Early Turns
- Fleet Noise Quality



### 2.3.1 Curfew Violations

SDIA has an existing curfew violations system in place as part of the Airport Use Regulations that 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. Stage 2 aircraft departures are restricted from 10:00 p.m. to 7:00 a.m. Any aircraft may arrive at SDIA 24 hours a day.

While the authority to control aircraft in flight at airports lies solely with the FAA, prior to 1990 airports could adopt regulations to restrict hours of operations for certain aircraft types or for the airport as a whole. SDIA's curfew violations system was developed in 1989. The program 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: \$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 six calendar months, starting in January and July. The Fly Quiet Program will formalize working with the operators to reduce the number of curfew violations of departing aircraft. The airport's noise monitoring system documents which operator and aircraft type depart between the curfew times, so the point value can be accurately assigned 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:

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.

Number of Curfew Violations that are Not Penalized (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.

Additionally, 1 point will be added to any operator's score that cancelled a flight in order to avoid violating curfew.

### 2.3.2 Early Turns (FAA Noise Dots)

Aircraft departing SDIA using Runway 27 are asked to fly runway heading until reaching a defined distance in an attempt to keep aircraft from making extraneous noise, over residential areas, while turning. These areas are defined as the FAA Noise Dots. A corridor/gate was established based on the FAA Noise Dots and departing aircraft that do not pass through that corridor/gate, regardless of the time of day, are defined as turning early. The Fly Quiet Program will formalize working with the operators to reduce the number of early turns of departing aircraft.

#### Calculation of Rating

An operator that does not log any early turns during the time period is automatically assigned a score of 10 points. Every operator starts with a score of 10 points. Scores are then normalized based upon the number of early turns within 1,500 feet and greater than 1,500 feet from any noise dot and the percent of total operations by airline and then adjusted based upon the following.

- Subtract 0.5 Point Per Early Turn Within 1,500 Feet from Any Noise Dot.
- Subtract 1.0 Point Per Early Turn Greater Than 1,500 Feet from Any Noise Dot.

Missed approaches are not to be counted as early turns as 1) they are not departures; and 2) the pilots are being given specific instructions by ATC that must be followed for safety reasons. Early turns because of weather conditions are not to be counted as early turns as the pilots are being given specific instructions by ATC that must be followed for safety reasons.

### 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 operating quieter, new generation aircraft, while operators operating 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. 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 majority of the commercial aircraft fleet remains Stage 3.

The method used here bases an operator's Fleet Noise Quality Rating on established 14 CFR Part 36 noise certification data. For each aircraft type, Part 36 specifies allowable noise levels at three measurement locations: approach, departure, and sideline. 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 rating totals the difference between each aircraft's certified noise levels at all three measuring points and the Stage 3 standard for that weight and number of engines. Aircraft with the greatest number of decibels below Stage 3 threshold are rated the best.

Similar to and consistent with 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.

### 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**

<b>B737-700 Aircraft</b>	<b>Takeoff (EPNdB)</b>	<b>Approach (EPNdB)</b>	<b>Sideline (EPNdB)</b>	<b>Total dB Below Stage 3 Limits</b>
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	<b>14.7</b>

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. Airline A has four different aircraft types in their fleet that operate at SDIA. The percent of total operations for each aircraft type is calculated based upon the total quarterly operations per aircraft type and the total number of operations for Operator A. The average certification values for each aircraft type are calculated from the Part 36 certification database for commercial aircraft and the resulting values are then calculated per aircraft type. The Fleet Noise Quality Sub Score is calculated by summing all of the resulting values per aircraft type.

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

<b>Operator A - Aircraft Types</b>	<b>Total Quarterly Operations</b>	<b>Percent of Total Operations</b>	<b>Average Total dB Below Stage 3 Limits</b>	<b>Resulting Value</b>
B733	3066	21.1%	9.4	21.1% * 9.4 = 1.99
B735	14	0.1%	11.3	0.1% * 11.3 = 0.01
B737	10046	69.2%	13.9	69.2% * 13.9 = 9.62
B738	1386	9.6%	12.5	9.6% * 12.5 = 1.19
Total	14512	100%	<b>Fleet Noise Quality Sub Score</b>	<b>12.8</b>

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 12.8 and therefore the operator's final Fleet Noise Quality score would be 4.

### 3.0 Reports






















The following pages contain the individual element reports for the 2<sup>nd</sup> Quarter of 2017 and the Fly Quiet Summary Reports for both the 2<sup>nd</sup> Quarter of 2017 and 1<sup>st</sup> Quarter of 2017 for comparison purposes. The Fly Quiet Summary Reports contains the total Fly Quiet score and ranking of the commercial operators.

Curfew Violations Report					
San Diego International Airport's Fly Quiet Program 2nd Quarter 2017 (April 1, 2017 - June 30, 2017)					Higher Number=Higher Score

Airline Code		Number of Operations	Percent of Total Operations	Number of Curfew Violations Penalized	Number of Curfew Violations Not Penalized	Curfew Violations Score
SWA		18,220	38.6%	0	0	10.0
FFT		828	1.8%	1	0	10.0
JAL		182	0.4%	0	0	10.0
HAL		186	0.4%	0	0	10.0
ROU		182	0.4%	0	0	10.0
WJA		166	0.4%	0	0	10.0
AAY		238	0.5%	0	0	10.0
AAL		4,608	9.8%	2	6	3.0
NKS		1,118	2.4%	3	0	5.0
UAL		4,676	9.9%	0	1	13.0
DAL		3,758	8.0%	0	1	11.0
ASA		4,130	8.7%	0	2	8.0
VRD		980	2.1%	0	0	10.0
BAW		182	0.4%	0	0	10.0
SCX		178	0.4%	0	0	10.0
JBU		874	1.8%	2	6	0.0
FDX		628	1.3%	0	0	10.0
UPS		226	0.5%	0	0	10.0
CPZ		1,620	3.4%	0	0	10.0
SKW		4,134	8.7%	0	0	10.0
GTI		132	0.3%	0	0	10.0
Non Scheduled Operators				1	0	-
<b>Total</b>		47,246	100%	9	16	-
<b>Average</b>		-	-	-	-	9.0

Operators Who Cancelled a Flight to Avoid a Curfew Violation
UAL - 4, AAL - 3, FFT - 2, DAL - 2 and NKS - 1






















Early Turns Report					
San Diego International Airport's Fly Quiet Program 2nd Quarter 2017 (April 1, 2017 - June 30, 2017)					Higher Number=Higher Score

Airline Code		Number of Operations	Percent of Total Operations	Number of Early Turns	Percent of Early Turns from Number of Departures	Early Turns Score
SWA		18,220	38.6%	6	0.1%	7.5
FFT		828	1.8%	0	0.0%	10.0
JAL		182	0.4%	0	0.0%	10.0
HAL		186	0.4%	0	0.0%	10.0
ROU		182	0.4%	0	0.0%	10.0
WJA		166	0.4%	0	0.0%	10.0
AAY		238	0.5%	0	0.0%	10.0
AAL		4,608	9.8%	4	0.2%	7.0
NKS		1,118	2.4%	0	0.0%	10.0
UAL		4,676	9.9%	3	0.1%	7.0
DAL		3,758	8.0%	0	0.0%	10.0
ASA		4,130	8.7%	2	0.1%	9.0
VRD		980	2.1%	0	0.0%	10.0
BAW		182	0.4%	0	0.0%	10.0
SCX		178	0.4%	0	0.0%	10.0
JBU		874	1.8%	2	0.5%	8.0
FDX		628	1.3%	0	0.0%	10.0
UPS		226	0.5%	0	0.0%	10.0
CPZ		1,620	3.4%	5	0.6%	7.5
SKW		4,134	8.7%	6	0.3%	7.0
GTI		132	0.3%	0	0.0%	10.0
Non Scheduled Operators				35	-	-
<b>Total</b>		47,246	100%	63	-	-
<b>Average</b>		-	-	-	-	9.2

Fleet Noise Quality Report					
San Diego International Airport's Fly Quiet Program 2nd Quarter 2017 (April 1, 2017 - June 30, 2017)					Higher Number=Higher Score

Airline Code		Number of Operations	Percent of Total Operations	Sub Score	Fleet Noise Quality Score
SWA		18,220	38.6%	12.5	4.0
FFT		828	1.8%	14.6	6.0
JAL		182	0.4%	23.7	10.0
HAL		186	0.4%	17.1	9.0
ROU		182	0.4%	11.2	3.0
WJA		166	0.4%	13.1	5.0
AAY		238	0.5%	15.0	7.0
AAL		4,608	9.8%	12.4	4.0
NKS		1,118	2.4%	18.7	10.0
UAL		4,676	9.9%	14.5	6.0
DAL		3,758	8.0%	15.2	7.0
ASA		4,130	8.7%	13.5	5.0
VRD		980	2.1%	15.7	7.0
BAW		182	0.4%	16.5	8.0
SCX		178	0.4%	13.1	5.0
JBU		874	1.8%	18.7	10.0
FDX		628	1.3%	13.3	5.0
UPS		226	0.5%	13.1	5.0
CPZ		1,620	3.4%	8.2	1.0
SKW		4,134	8.7%	9.5	1.0
GTI		132	0.3%	14.6	6.0
<b>Total</b>		47,246	100%	-	-
<b>Average</b>		-	-	14.5	5.9






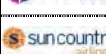














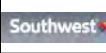
**Higher Number=Higher Score  
Summary Report Ranks by  
“Quietest” to “Loudest” Operator**

Summary Report							
San Diego International Airport's Fly Quiet Program							
2nd Quarter 2017 (April 1, 2017 - June 30, 2017)							
Airline Code	Number of Operations	Percent of Total Operations	Curfew Violations Score	Early Turns Score	Fleet Noise Quality Score	Total Fly Quiet Score	Ranking
JAL 	182	0.4%	10.0	10.0	10.0	30.0	1
HAL 	186	0.4%	10.0	10.0	9.0	29.0	2
DAL 	3,758	8.0%	11.0	10.0	7.0	28.0	3
BAW 	182	0.4%	10.0	10.0	8.0	28.0	3
VRD 	980	2.1%	10.0	10.0	7.0	27.0	5
AAV 	238	0.5%	10.0	10.0	7.0	27.0	5
SCX 	178	0.4%	10.0	10.0	7.0	27.0	5
UAL 	4,676	9.9%	13.0	7.0	6.0	26.0	8
FFT 	828	1.8%	10.0	10.0	6.0	26.0	8
GTI 	132	0.3%	10.0	10.0	6.0	26.0	8
NKS 	1,118	2.4%	5.0	10.0	10.0	25.0	11
FDX 	628	1.3%	10.0	10.0	5.0	25.0	11
UPS 	226	0.5%	10.0	10.0	5.0	25.0	11
WJA 	166	0.4%	10.0	10.0	5.0	25.0	11
ROU 	182	0.4%	10.0	10.0	3.0	23.0	15
ASA 	4,130	8.7%	8.0	9.0	5.0	22.0	16
SWA 	18,220	38.6%	10.0	7.5	4.0	21.5	17
CPZ 	1,620	3.4%	10.0	7.5	1.0	18.5	18
SKW 	4,134	8.7%	10.0	7.0	1.0	18.0	19
JBU 	874	1.8%	0.0	8.0	10.0	18.0	19
AAL 	4,608	9.8%	3.0	7.0	4.0	14.0	21



NOTE: THE FOLLOWING PAGE IS A  
CORRECTION TO THE 1<sup>ST</sup> QUARTER 2017  
FLY QUIET REPORT

**Higher Number=Higher Score  
Summary Report ranks by  
“Quietest” to “Loudest” operator**

Summary Report								
San Diego International Airport Fly Quiet Program								
1st Quarter 2017 (January 1, 2017 - March 31, 2017)								
Airline Code	Number of Operations	Percent of Total Operations	Curfew Violations Score	Early Turns Score	Fleet Noise Quality Score	Total Fly Quiet Score	Ranking	
JAL 	184	0.5%	10.0	9.5	10.0	29.5	1	
NKS 	692	1.9%	10.0	9.0	10.0	29.0	2	
AAY 	196	0.5%	10.0	10.0	7.0	27.0	3	
GTI 	134	0.4%	10.0	10.0	6.0	26.0	4	
HAL 	182	0.5%	10.0	9.5	6.0	25.5	5	
SCX 	156	0.4%	10.0	10.0	5.0	25.0	6	
WJA 	128	0.4%	10.0	10.0	5.0	25.0	6	
JBU 	788	2.2%	5.0	9.5	10.0	24.5	8	
VRD 	902	2.5%	10.0	7.0	7.0	24.0	9	
FDX 	616	1.7%	10.0	9.0	5.0	24.0	9	
ROU 	162	0.4%	10.0	10.0	4.0	24.0	9	
UPS 	230	0.6%	10.0	8.5	5.0	23.5	12	
FFT 	530	1.5%	4.0	10.0	9.0	23.0	13	
BAW 	176	0.5%	10.0	10.0	1.0	21.0	14	
DAL 	3,220	8.9%	11.0	3.0	6.0	20.0	15*	
ASA 	3,636	10.0%	7.0	8.0	5.0	20.0	15	
SKW 	792	2.2%	10.0	1.5	6.0	17.5	17	
AAL 	4,156	11.5%	11.0	2.0	4.0	17.0	18	
UAL 	4,204	11.6%	10.0	0.0	5.0	15.0	19	
SWA 	16,214	44.8%	10.0	0.0	4.0	14.0	20	
CPZ 	108	0.3%	10.0	2.5	1.0	13.5	21	

\* Note: 1Q2017 Fly Quiet Reports has been updated to reflect an error in the report dated June 9, 2017. The 1Q2017 report has been updated to include 3 Delta Flight cancellations to avoid breaking curfew.