

QUARTERLY NOISE REPORT

For:
California Department of Transportation

1st Quarter 2016
January 1 – March 31, 2016



SAN DIEGO
INTERNATIONAL AIRPORT

LET'S **GO.**

Airport Noise Mitigation

July 20, 2016



QUARTERLY NOISE REPORT
For the Period
January 1 through March 31, 2016

The California Department of Transportation, Division of Aeronautics, granted a Variance from the requirements of Section 5012, Chapter 2.5, Subchapter 6, Title 21, of the California Administrative Code to the San Diego County Regional Airport Authority for the operation of San Diego International Airport on May 8th, 2012.

This Quarterly Report for the 1st Quarter of 2016 was prepared by Airport Noise Mitigation at San Diego International Airport, in accordance with the Airport Noise Standards, State of California.

A handwritten signature in black ink, appearing to read "Keith Wilschetz". The signature is written in a cursive style and is positioned above a horizontal line.

Keith Wilschetz
Director, Airport Planning & Noise Mitigation

A handwritten signature in black ink, appearing to read "Thella F. Bowens". The signature is written in a cursive style and is positioned above a horizontal line.

Thella F. Bowens
President / CEO

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Summary of Statistical Information for the California Department of Transportation

1. Size of Noise Impact Area as defined in the Noise Standards (California Code of Regulations, Title 21, Chapter 2.5, Subchapter 6):
Noise Impact Area = 0.694 sq. miles; Military Noise Impact Area = 0.113 sq. miles

2. Estimated number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:
9,066* (QHP Insulated = 3,370)

3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:
18,275* (QHP Insulated = 8,425)

4. Identification of the aircraft type having the highest takeoff noise level operating at SDIA, together with the estimated number of operations by this aircraft type during the calendar quarter reporting period:
McDonnell-Douglas MD-80 Series (Stage 3): 18

5. Total number of aircraft operations during the calendar quarter:
46,067

6. Number of Air Carrier operations by aircraft certified under Federal Aviation Regulations (FAR) Part 36:
40,843

7. Percentage of Air Carrier operations by aircraft certificated under FAR Part 36, Stage III:
100%

8. Estimated number of operations by Commuter aircraft during the calendar quarter:
2,786

9. Estimated number of operations by General Aviation aircraft during the calendar quarter:
2,219

10. Estimated number of operations by Military aircraft during the calendar quarter:
219

Form DOA 617, 10/89

* Population and dwelling unit calculations are based upon 2010 Census Block Boundary Data, which is an update to the calculations done since the publication of the 1st Quarter 2015 Report that are based upon 2000 Census Tract Data.

Aircraft Noise Measurements

Using data generated from the Airport Noise and Operations Monitoring System (ANOMS) and Geographic Information System (GIS), Airport Noise Mitigation determined that the Noise Impact Area (N.I.A.) and the Federal Military Impact Area (M.I.A.) within the 65 dB Community Noise Equivalent Level (CNEL) contour for the period between April 1, 2015 to March 31, 2016 to be 0.694 square miles (444.2 acres) and 0.113 square miles (85.1 acres), respectively. As compared to the period between April 1, 2014 to March 31, 2015, the Noise Impact Area increased by 0.208 square miles and the Federal Military Noise Impact Area decreased by 0.083 square miles.

Table 1

Change in N.I.A. and M.I.A.

April 1, 2015 to March 31, 2016	April 1, 2014 to March 31, 2015	Change
0.694	0.486	0.208
0.113	0.196	-0.083

A summary of the quarterly and annual CNEL data is shown on the following page within Table 2. Appendix A: Aircraft Noise Monitoring System contains Remote Monitoring Terminals (RMTs) thresholds and Daily/Monthly CNEL Logs.

The contours were prepared using Harris Miller Miller & Hanson Inc.'s (HMMH) RealContours software. The N.I.A. & M.I.A. were determined using GIS analysis. Use of GIS technology allowed direct counting of individual parcels within the N.I.A. The modeling methodology fulfills the requirements of the State of California, Title 21, California Noise Standards. A review of measured and modeled noise levels indicate good agreement between several key measurement locations.

Additionally, the 65 dB Community Noise Equivalent Level (CNEL) contours for the period between April 1, 2015 to March 31, 2016 compared to the period between April 1, 2014 to March 31, 2015 accompanies this report as an attachment.

Table 2**Quarterly and Annual CNEL Data**

RMT #	Annual CNEL (dB)¹	Quarter CNEL (dB)²
1	71.1	70.8
2	66.6	66.4
3	*	*
4	*	*
6	67.4	69.2
7	75.3	75.2
9	68.0	67.9
10	63.6	63.5
11	71.6	71.4
12	62.1	62.3
13	64.1	65.2
14	65.4	65.7
16	64.9	65.2
17	65.2	65.0
18	61.3	61.6
19	62.1	63.1
20	61.6	61.8
21	58.3	58.3
22	64.7	65.1
23	63.4	64.3
24	64.4	64.3
25	62.3	62.3
26	64.8	63.6

¹ = For the period April 1, 2015 through March 31, 2016

² = For the period January 1, 2016 through March 31, 2016

Note 1: RMTs #5, #8 and #15 are no longer operational since the noise impact boundary has decreased in size.

Note 2: RMTs #3 and 4 were offline during this time period due to mechanical, electrical and/or communication issues.

Aircraft Operations

The following table contains statistics of aircraft operations based upon the Federal Aviation Administration (FAA) Air Traffic Control Tower (ATCT) counts at San Diego International Airport (SAN).

Table 3

SAN ATCT Counts

Operations	1st Quarter 2016	1st Quarter 2015	Increase / Decrease	Percent Change
Air Carrier	40,843	37,775	3,068	8.12%
Air Taxi	2,786	6,101	-3,315	-54.34%
General Aviation	2,219	2,352	-133	-5.65%
Military	219	129	90	69.77%
Total	46,067	46,357	-290	-0.63%

For questions on how the FAA ATCT conducts their air traffic counts, please visit the following website: <http://www.faa.gov/documentLibrary/media/Order/FAC.pdf> and see "Chapter 9".

Quarterly Operations Survey Report

The Quarterly Operations Survey Report for San Diego International Airport (SDIA) encompasses the 1st Quarter of 2016. The data used to compile this report was gathered during 24-hour periods on February 9-11, 2016.

Table 5, Quarterly Operations Survey - Arrivals, identifies the loudest 25% of the aircraft arriving at SDIA, as measured at Remote Monitoring Terminal (RMT) #1, which is located approximately one (1.0) mile from the arrival end of Runway 27. During the 1st Quarter 2016 Operations Survey, an average of 226 daily air carrier arrival operations was conducted. Therefore, the loudest 25% of these arrivals totaled approximately 57. These commercial service jet aircraft are listed by Aircraft Type, Single Event Noise Exposure Level (SENEL), Airport Origin, Flight Number and Date/Time.

Table 6, Quarterly Operations Survey - Departures, identifies the loudest 25% of the aircraft departing from SDIA, as measured at Remote Monitoring Terminal (RMT) #7, which is located approximately one-half (0.5) mile from the departure end of Runway 27. During the 1st Quarter 2016 Operations Survey, an average of 226 daily air carrier departure operations was conducted. Therefore, the loudest 25% of these departures totaled approximately 57. These commercial service jet aircraft are listed by Aircraft Type, Single Event Noise Exposure Level (SENEL), Airport Destination, Flight Number and Date/Time.

The average Single Event Noise Exposure Level (SENEL) of the loudest 25% of the 1st Quarter 2016 Operations Survey is as follows:

Table 4

Single Event Noise Exposure Level (SENEL) Comparison

	February 9-11, 2016	February 10-12, 2015	Change (dB)
Departures	98.6	98.3	0.3
Arrivals	93.0	93.4	-0.4

Note: The calculation methodology has changed since the publication of the 1st Quarter 2015 Report. The new calculation methodology identifies the loudest 25% of aircraft without averaging the noise levels from the same flight numbers within that time period.

Table 7, Air Carrier Operations Mix by Time of Day and Runway Use, represents the 453 daily operations, which is greater than the 430 daily operations recorded during the 1st Quarter of 2015.

Table 5

Quarterly Operations Survey - Arrivals (RMT #1 from February 9-11, 2016)

* = Missed Approach

Aircraft Type	SENEL (dB)	Arriving From	Flight Number	Date and Time
MD10	98.4	MEM	FDX1422	2/9/2016 5:56 AM
DC10	97.9	IND	FDX1754	2/11/2016 5:30 AM
DC10	97.8	MEM	FDX906	2/10/2016 4:51 PM
DC10	97.4	MEM	FDX1422	2/11/2016 5:20 AM
B739*	96.9	ORD	UAL395	2/10/2016 6:04 PM
DC10	96.9	IND	FDX3713	2/11/2016 5:00 PM
MD10	96.7	MEM	FDX1422	2/10/2016 5:59 AM
DC10	96.3	IND	FDX3713	2/10/2016 5:10 PM
MD10	95.6	IND	FDX1754	2/9/2016 5:14 AM
DC10	95.2	MEM	FDX906	2/9/2016 5:14 PM
MD11	95.1	MEM	FDX906	2/11/2016 4:48 PM
DC10	94.9	IND	FDX3713	2/9/2016 5:41 PM
MD10	94.6	IND	FDX1754	2/10/2016 5:50 AM
B733	93.8	DEN	SWA4	2/10/2016 3:53 PM
B772	93.7	EGLL	BAW44N	2/9/2016 4:44 PM
B753	93.3	ATL	DAL2372	2/11/2016 7:27 PM
B733	93.3	OAK	SWA1624	2/11/2016 7:31 PM
B772	93.0	EGLL	BAW44N	2/10/2016 5:02 PM
B738	92.9	MIA	AAL2245	2/9/2016 11:16 PM
B733	92.6	PHX	SWA2382	2/10/2016 6:18 AM
B733	92.6	SMF	SWA1976	2/10/2016 2:31 PM
B733	92.5	LAS	SWA1783	2/9/2016 6:59 AM
B733	92.4	PHX	SWA2382	2/9/2016 6:17 AM
B763	92.4	SDF	UPS2922	2/10/2016 5:28 PM
B733	92.3	PHX	SWA2382	2/9/2016 6:26 AM
B739	92.3	ATL	DAL1328	2/9/2016 6:53 PM
B763	92.3	ATL	DAL1328	2/11/2016 5:49 PM
B762	92.2	PHX	GTI505	2/9/2016 8:37 AM
B763	92.0	SDF	UPS2922	2/9/2016 5:55 PM
B738	92.0	PHOG	ASA806	2/11/2016 7:48 PM
B738	91.9	PDX	ASA572	2/9/2016 2:47 PM
B739	91.9	ORD	UAL395	2/9/2016 6:00 PM
B738	91.9	DFW	AAL1214	2/9/2016 6:01 PM
B733	91.8	ABQ	SWA345	2/9/2016 9:07 AM
B762	91.8	PHX	GTI505	2/11/2016 8:05 AM
B739	91.8	SEA	ASA496	2/11/2016 9:40 PM
B733*	91.7	LAS	SWA1138	2/9/2016 3:29 PM
B762	91.7	PHX	GTI505	2/10/2016 7:49 AM
A321	91.7	PHL	AAL807	2/10/2016 10:44 PM

Table 5 Continued

Quarterly Operations Survey - Arrivals (RMT #1 from February 9-11, 2016)

Aircraft Type	SENEL (dB)	Arriving From	Flight Number	Date and Time
B753	91.7	ATL	DAL1692	2/11/2016 9:46 AM
B738	91.7	LAS	SWA209	2/11/2016 8:08 PM
A321	91.6	DFW	AAL1194	2/9/2016 4:34 PM
B734	91.6	BFL?	RPN458	2/9/2016 9:27 PM
B738	91.6	PDX	ASA552	2/9/2016 10:23 PM
B763	91.6	SDF	UPS922	2/10/2016 4:55 AM
B739	91.6	IAH	UAL1782	2/10/2016 10:15 AM
B738	91.6	PHNL	ASA892	2/10/2016 11:30 PM
B738	91.6	SEA	ASA490	2/11/2016 1:36 PM
B738	91.5	ORD	AAL1296	2/9/2016 1:46 PM
B738	91.5	PHLI	ASA858	2/10/2016 7:03 PM
B753	91.5	SLC	DAL1909	2/11/2016 10:40 PM
B763	91.4	SDF	UPS922	2/9/2016 4:54 AM
B733*	91.4	PHX	SWA2382	2/11/2016 6:20 AM
B772	91.4	EGLL	BAW44N	2/11/2016 4:58 PM
B739	91.4	ORD	UAL395	2/11/2016 7:00 PM
B738	91.4	ORD	AAL122	2/11/2016 10:00 PM
B733	91.4	LAS	SWA321	2/11/2016 10:16 PM

Table 6

Quarterly Operations Survey - Departures (RMT #7 from February 9-11, 2016)

Aircraft Type	SENEL (dB)	Departing To	Flight Number	Date and Time
B772	101.8	EGLL	BAW72A	2/11/2016 7:57 PM
B772	101.1	EGLL	BAW9602	2/11/2016 10:19 PM
DC10	100.9	IND	FDX3613	2/10/2016 7:34 AM
A321	100.8	PHL	AAL648	2/11/2016 10:42 PM
B739	99.7	ATL	DAL1592	2/10/2016 6:46 AM
A321	99.6	CLT	AAL579	2/9/2016 10:48 PM
B739	99.6	EWR	UAL1610	2/11/2016 10:44 PM
B738	99.5	PHOG	ASA829	2/10/2016 7:43 AM
B739	99.4	ATL	DAL1592	2/9/2016 6:36 AM
B738	99.4	DTW	DAL833	2/9/2016 12:12 PM
A332	99.4	PHNL	HAL15	2/10/2016 11:02 AM
DC10	99.3	MEM	FDX821	2/10/2016 7:41 AM
B738	99.1	JFK	DAL2404	2/11/2016 7:09 AM
B739	99.0	BOS	ASA798	2/9/2016 8:42 AM
B772	99.0	EGLL	BAW72A	2/9/2016 7:39 PM
B738	99.0	JFK	DAL2404	2/10/2016 6:52 AM
B739	99.0	ORD	UAL555	2/10/2016 10:44 AM
B739	99.0	ATL	DAL1592	2/11/2016 6:46 AM
MD10	98.9	IND	FDX1654	2/9/2016 7:54 PM
B739	98.9	ATL	DAL1792	2/10/2016 10:39 PM
A321	98.9	CLT	AAL579	2/11/2016 10:48 PM
A321	98.8	CLT	AAL579	2/10/2016 10:54 PM
B738	98.8	BOS	ASA798	2/11/2016 8:41 AM
B739	98.6	ORD	UAL555	2/9/2016 10:25 AM
A332	98.6	PHNL	HAL15	2/11/2016 10:46 AM
B738	98.4	PHNL	ASA895	2/10/2016 11:32 AM
DC10	98.4	MEM	FDX821	2/11/2016 7:17 AM
B739	98.4	JFK	DAL2455	2/11/2016 12:37 PM
B739	98.3	ORD	UAL307	2/10/2016 6:42 AM
B739	98.3	IAH	UAL1856	2/10/2016 7:08 AM
B739	98.3	SEA	ASA493	2/11/2016 8:04 AM
B738	98.2	PHOG	ASA829	2/9/2016 8:15 AM
A321	98.2	PHL	AAL458	2/9/2016 8:56 AM
A332	98.2	PHNL	HAL15	2/9/2016 10:21 AM
B739	98.2	ATL	DAL1692	2/9/2016 11:14 AM
B739	98.2	ATL	DAL1692	2/10/2016 11:24 AM
B738	98.2	PHKO	ASA865	2/11/2016 7:27 AM
A321	98.2	PHL	AAL458	2/11/2016 8:54 AM
MD10	98.2	IND	FDX1654	2/11/2016 7:54 PM

Table 6 Continued

Quarterly Operations Survey - Departures (RMT #7 from February 9-11, 2016)

Aircraft Type	SENEL (dB)	Departing To	Flight Number	Date and Time
B739	98.1	IAH	UAL1879	2/10/2016 1:24 PM
A321	98.0	CLT	AAL487	2/10/2016 11:33 AM
DC10	98.0	MEM	FDX1222	2/10/2016 7:41 PM
B739	98.0	ORD	UAL307	2/11/2016 6:55 AM
A321	98.0	CLT	AAL487	2/11/2016 11:32 AM
B739	98.0	EWR	UAL1150	2/11/2016 2:47 PM
DC10	97.9	MEM	FDX821	2/9/2016 7:37 AM
B738	97.9	JFK	AAL94	2/9/2016 8:02 AM
DC10	97.8	IND	FDX3613	2/11/2016 7:30 AM
B738	97.8	JFK	AAL94	2/11/2016 7:59 AM
B738	97.7	PHLI	ASA857	2/9/2016 10:31 AM
B739	97.7	IAH	UAL1588	2/10/2016 11:55 AM
B739	97.7	DTW	DAL833	2/10/2016 12:17 PM
B763	97.7	ATL	DAL1792	2/11/2016 10:30 PM
B738	97.7	ORD	AAL122	2/11/2016 11:08 PM
B739	97.6	ORD	UAL1882	2/9/2016 6:47 AM
B738	97.6	JFK	AAL94	2/10/2016 7:58 AM
A321	97.5	DFW	AAL606	2/9/2016 12:48 PM

Table 7

Air Carrier Operations Mix by Time of Day and Runway Use

These numbers are the averages for operations for February 9-11, 2016

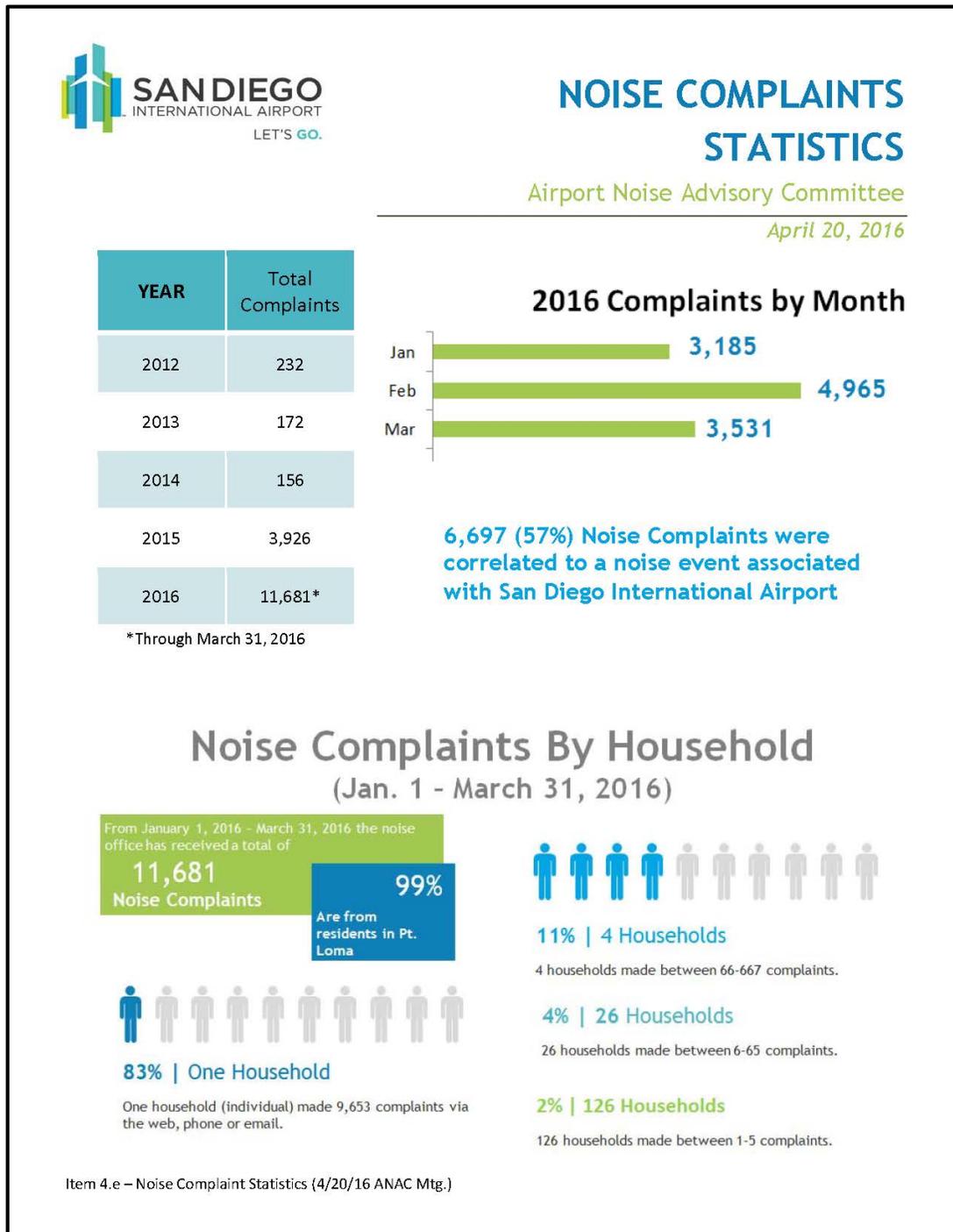
Aircraft Type	Runway 27						Runway 09						Total
	Arrivals			Departures			Arrivals			Departures			
	700	1900	2200	700	1900	2200	700	1900	2200	700	1900	2200	
	--	--	--	--	--	--	--	--	--	--	--	--	
	1859	2159	659	1859	2159	659	1859	2159	659	1859	2159	659	
A319	9	1	2	9	2	1							24
A320+	21	7	3	24	2	3							60
A330+			1	1									2
B712			1			1							2
B737+	93	27	18	106	18	15							276
B757+	4	1	2	4	1	1							13
B767+	2			1	1								4
B777+	1				1								2
B787+	1			1									2
DH8D	2			2									4
DC10	1		1	2	1								4
E170/175/190	13	4	1	13	2	2							35
MD10			1		1								2
MD90		1		1		1							3
RJ+	8	1	1	7	2								19
Total	155	41	30	171	32	24	0	0	0	0	0	0	453

Note 1: The use of a "+" sign after an aircraft model designation means "and all succeeding series aircraft." The designation of "Q" signifies a hush kitted aircraft. RJ+ = All forms/types of Regional Jets operated as "commercial service" flights; Includes CRJ2/7/9, E120/35/40/45

Aircraft Noise Complaints

During the 1st Quarter of 2016, Airport Noise Mitigation received a total of 11,681 complaints. Where possible, each complaint is correlated with a specific flight and examined for its validity. Those flights that indicate a possible violation of the Airport Use Regulations, Time of Day Restrictions, are investigated and appropriate enforcement action is taken.

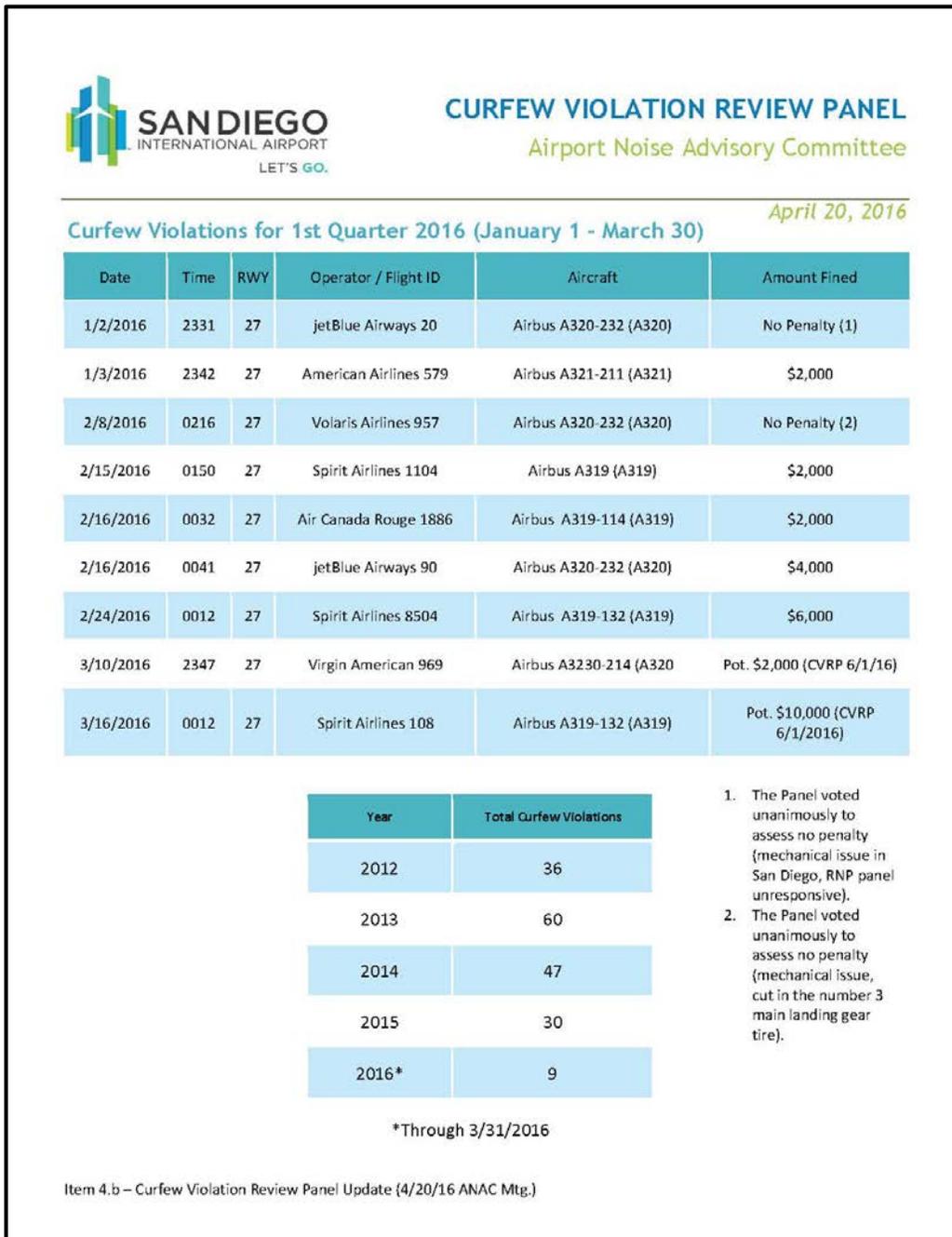
The following figure depicts the residential vicinity in relation to the airport and the number of complaints received during the 1st Quarter of 2016. The 11,681 complaints recorded during the 1st Quarter of 2016 reflects an increase of 11,659 from the 22 recorded during the 1st Quarter of 2015.



Enforcement Actions

The Airport Use Regulations at San Diego International Airport establish Time of Day Restrictions for all operators. Airport Noise Mitigation monitors operator compliance with these Airport Use Regulations. Any infraction is reported to the Curfew Violation Review Panel (Panel), which is a separate body. The Panel examines data and documentation collected regarding alleged violations of the Time of Day (Noise Curfew) Restrictions, and makes recommendations to the Director, Airport Noise Mitigation, for the disposition of incidents.

The following figure is a summary of 1st Quarter of 2016 Final Enforcement Actions. The 9 curfew violations recorded during the 1st Quarter of 2016 reflects a decrease of 3 from the 12 curfew violations recorded during the 1st Quarter of 2015.



Residential Sound Insulation Program

Per the requirements of San Diego International Airport's Variance agreement, the following figure is provided to serve as an update on the Residential Sound Insulation Program (RSIP), also known as the Quieter Home Program (QHP), the Airport sponsored sound insulation program. To date, the Quieter Home Program has established eight eligibility boundaries. The eight boundaries are the Pilot/Phase 1A Boundary, the Phase 1B Boundary, the Phase 1C Boundary, the Supplemental Expansion Boundaries 1, 2, & 3, the 2014 NEM 68 dB CNEL boundary, and the 2014 NEM 67 dB CNEL boundary. Within each boundary there have been subsets, called phases and groups.



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QUIETER HOME PROGRAM

Airport Noise Advisory Committee

April 20, 2016

PROGRAM STATISTICS

Applicants / Homes on the Wait List	670/1,371
Homes Completed in 1st Quarter 2016	53
Estimated Homes to Complete in CY 2016	196
Total Homes Tested Ineligible (<45 dB)	25

AIP Handbook & Allowable Treatments

- Continued delay with FAA over eligible vs. ineligible treatments now includes maximum allowable spending on eligible electrical work (\$1,000).
- Considering Program policy changes to address FAA restrictions.
- Working on separating project groups to bid new work.
- Of the homes that tested below 45 dB, existing windows and doors were sealed tight and provided noise level reduction similar to QHP products.
- Of the homes that tested below 45 dB, all non-historic, in Pt. Loma, most around Plumosa Park neighborhoods.

Item 4.a – Quieter Home Program Update (4/20/16 ANAC Mtg.)

Airport Noise Advisory Committee (ANAC)

The following seven pages contain a copy of the January 20, 2016 meeting minutes and roster of current members.

The information regarding the Airport Noise Advisory Committee (ANAC) can also be found on the Airport Authority's website: <http://www.san.org/Airport-Projects/Airport-Noise-Mitigation#333293-airport-noise-advisory-committee>.



Airport Noise Advisory Committee

Date | time 1/20/2016 4:00 PM

Meeting called to order by: Jennifer Lilley

In Attendance

<u>Name</u>	<u>Affiliation</u>	<u>In Attendance?</u>
John Bennett	County of San Diego	Yes
Captain (Ret.) Jack Bewley	Airline Pilot (Retired)	Yes
Bret Freeman/Brad Davis	FAA Representative	Yes
Carl "Rick" Huenefeld	MCRD	Yes
Conrad Wear	San Diego City Council, District 2	Yes
Susan Ranft	Downtown Community Planning Council	Yes
Vacant	Midway/Pacific Highway Community Planning Board	No
David Swarens	Greater Golden Hill Community Planning Committee	Yes
Deborah Watkins	Mission Beach Precise Planning Board	No*
Paul Webb	Peninsula Community Planning Board	Yes
Tom Gawaronski	Ocean Beach Planning Board	Yes
Victoria White	City of San Diego	No*
Lee Steuer	Congresswoman Susan Davis	Yes
Victor Avina	County Supervisor Greg Cox	Yes
Kirk Hanson	Community at Large	Yes
Hugo Carmona	Congressman Scott Peters	Yes
Chris Cole	Uptown Planners	Yes
Justin Cook	Acoustician	Yes
Grady Boyce	Airline Representative	Yes
Authority Staff	Keith Wilschetz, Sjohnna Knack, Garret Hollarn, Craig Mayer	
Jennifer Lilley	Facilitator/Lilley Planning Group	

*Members contacted staff ahead of the meeting and are considered "excused"

1. Welcome and Introductions

Jennifer Lilley, Facilitator, began the meeting and asked that ANAC members introduce themselves. Ms. Lilley welcomed the members and public and reminded everyone of the procedures of the meeting. She introduced Congressman Scott Peters who addressed the committee and public. Congressman Peters thanked the panel and community for allowing him to speak at the meeting; he gave a brief comment on FAA's H.R. 3965 Community Accountability Act of 2015, which is to improve the process for establishing and revising flight paths and procedures. Congressman Peters informed the committee and public that several outreach measures were made, (i.e. meeting with TRACON, a letter was sent to Mr. Huerta, FAA Administrator regarding the community's concern).

one. As in the past, we will continue to meet with the airlines to find ways to be a better neighbor. Ms. Knack informed members that the information can be found in the meeting package, it also can be found on line.

Question from ANAC: Mr. Cole noticed that in the past presentation that some airlines were not penalized. Is it because of the reason behind the violation?

Ms. Lilley explained especially for the audience not aware of the CVRP process that a violation is not a penalty until presented to the Panel. There it is determined if a violation did occur. There are mitigating factors considered such as safety issues, like mechanical or weather or other circumstances that may merit the violation to not be penalized. Ms. Knack added that the penalty structure is \$2,000 for 1st, \$6,000 for 2nd, \$10,000 for third and a multiplier is added in the six month occurrence. Ms. Knack further explained the whole process of CVRP.

Flight Operation Statistics – Ms. Knack presented updated flight operation statistics. Ms. Knack gave a brief explanation of a Missed Approach (MA), is also referred to as a “go-around”, as when an airplane cannot complete its landing and is required to make another attempt. Some of the reasons for a MA is inclement weather, debris on runway and aircraft separation. Ms. Knack referred to the presentation slide for MAs showing that at year end it has ended at the highest level, further noting the fact that a MA is not considered a curfew violation since it is not considered a departure. October showed a high amount of 72, likely due to weather, and dropped down in November and December. Ms. Knack informed the committee of another contributing factor in which the FAA is required to certify some of the equipment, namely the instrument landing system, that requires an aircraft to certify it. 52 of Missed Approaches were from aircraft certifying the equipment.

She defined early turns (ET) as which used by the Airport Authority since the mid 90's which is established from the Red Dot Agreement, which is the voluntary agreement initiated by Cong. Brian Bilbray. It is a point, about two and a half miles short of the 295 heading, and another at the 265 heading. Any aircraft that turns before reaching the dot, or stays within the corridor but comes back around flying below 6,000 feet, would be considered an early turn.

It was noted that a record number of ETs were entered in the year at 395. Data analysis showed high numbers of 67 in November and 76 in December. ETs can turn right over Mission Beach, or left over the Pt. Loma Peninsula. Over 70% of ETs went over Mission Beach. Information in collaboration with the FAA will be provided on a weekly basis to try to reduce the number by next week.

Question from ANAC: Mr. Cole asked if the normal altitude followed or a different bearing for an Early Turn.

Ms. Knack responded that there are only few aircrafts that go straight out and turn around below 6,000 feet. Although it has happened in the past, average altitude over the peninsula is over 9,000 feet.

Question from ANAC: Mr. Swarens questioned if there is any correlation between Missed Approaches and Early Turns.

Mr. Davis, representative from FAA responded that there could be a relationship but different variances. Early Turns are more prominently determined by traffic and weather; and their task is to provide safe, orderly and expeditious air traffic. But things can change, orderly means complying with procedures FAA has placed in relation to air traffic which also involves being a good neighbor by meeting the Red Dot Agreement. As for the 6,000 feet, no matter what the altitude is aircraft will stay clear of the noise dots.

Mr. Swarens stated that the question does not have to do with altitudes but a comparison on both the materials. Mr. Davis explained that weather may cause an aircraft to do a missed approach, but that does not necessarily mean it would also result in an early turn. He did mention that one of the intentions is to work with the Noise Office to review it on a weekly basis to have a better look at it. Mr. Boyce pointed out that it is a different mode of operation between departures and arrival; missed approaches are highly dynamic procedures while in early turns can be affected by environmental factors and are separated by events and not be correlation.

Question from ANAC: Mr. Avina asked about the significance of the 6,000 feet.

Mr. Hollarn stated that this is based on a technical perspective whether it will be an issue on the noise perspective versus a traffic separation issue and it was an ATC agreement that 6,000 feet will be the limit which will allow them to separate airplanes and not be restrictive.

Question from ANAC: Mr. Huenefeld noted that the numbers are worse than before, and maybe about 30% worse than the prior year. It was requested that on the next meeting an in-depth analysis be presented on the reason for the high numbers in the three criteria: curfew violations, Early Turns and Missed Approaches. Present on what is being done to deal with it. Mr. Swarens also added to the report the actual number of carriers, actual flight plus the passenger loads and Mr. Carmona asked with the increase in number of Early Turns, to add if it is weather related or otherwise.

Complaint Statistics – Ms. Knack presented an update on noise complaints. There was an increase in noise complaints in the fourth quarter, averaging from one or two complaints a day to 30-50 complaints a day, which started around late September. She pointed out that 90% of the complaints are from the Point Loma area, a total 3,623 for the 4th quarter, and 55% of the complaints, or about 1,993, came from one household. A total of 289 households made complaints and the complaints were consistently about things like, increase over flight over the peninsula, low flying aircraft, not meeting the Red Dot Agreement, and not following the LOWMA waypoint.

Question from ANAC: Mr. Carmona asked about noise measurement and how it is being collected by the Airport Authority and will there be a re-analysis or any updates on it.

Ms. Knack responded that a portable noise measurement was recently conducted and will be discussed later in the presentation.

Comment from ANAC: Mr. Webb apologized for the comment made by a member from his community from the last meeting stating that the noise complaints were not accurate and the Airport Authority is not communicating the true number of noise complaints.

Ms. Knack appreciated the comment and acknowledged her staff who are taking all of the complaints from listening to voice mails, reading emails and monitoring the Webtrak system, but because of the high volume have not had the opportunity to respond to all. However, all are being downloaded and inputted in the Airport Noise Operational Monitors for follow up responses.

Question from ANAC: Mr. Huenefeld asked if any of the complaints are correlated with Early Turns or Missed Approaches where it could be understood that something is happening outside of the threshold of normal operations.

Some of the complaints can be correlated according to Ms. Knack. We do not have the exact numbers as of now, but will be able to provide the information at the next meeting.

Per ANAC members request from last meeting, Ms. Knack presented the results conducted on 11 year flight operations analysis from 2005 to 2015. Information was gathered by the noise monitoring system from the 265⁰ heading to the tip of the peninsula. The analysis is from the operation on the airport and peninsula operation, type of aircraft, altitudes and noise levels. She explained how the average total numbers of operations were achieved, for altitudes, the only one that was looked at were jets because propeller aircrafts are required because of their size, which are smaller, slower and turn early and flies lower, the next statistics was on aircraft type. Ms. Knack turned over the rest of the presentation to Mr. Cook.

Prior to his presentation, Ms. Knack explained that the noise measurement are the typical standard average community noise equivalent level which is a metric that is set for aircraft operations on a 24 hour bases and penalizes events of the noisiest noise. FAA utilizes this metric and requires the airport to use in regards to present environmental documentation. Mr. Cook gave his presentation regarding portable noise measurement that was conducted on the wooded area. Mr. Cook informed the committee that two tasks have been asked to be identified, one was to measure noise levels at the western side of Point Loma and two was to measure noise levels to determine low frequency noise on the ground. For the first task, three locations were picked which were PLNU,

Appendix A

Airport Noise Monitoring System

Appendix A1

Remote Noise Monitoring Terminal (RMTs) Thresholds

RMT #	SENEL Day Threshold (dB)	Duration (sec)	SENEL Evening Threshold (dB)	Duration (sec)	SENEL Night Threshold (dB)	Duration (sec)
1	73*	9	73	9	72*	10
2	63	10	60	12	58	14
3	74*	9	73	10	72*	10
4	64*	10	63	12	60*	12
6	68*	8	67	9	65*	10
7	65	12	63	12	62	15
9	68*	8	67	9	65*	10
10	65*	8	62	12	60*	13
11	65*	12	63	13	60*	15
12	64*	10	62	12	60*	14
13	65*	8	62	12	60*	13
14	65*	10	62	12	60*	13
16	67*	8	66	9	65*	10
17	64	9	62	12	58	15
18	65	8	65	8	62	12
19	64*	8	64	8	63*	8
20	62	11	62	11	60	13
21	60	10	58	12	55	18
22	65	8	63	10	60	12
23	65*	8	63	10	60*	12
24	65*	8	65	8	63*	10
25	65*	10	62	10	60*	12
26	65*	10	64	12	62*	14

KEY:

Day	=	From 7:00 a.m. to 6:59 p.m. (* = change occurs at 0500L)
Evening	=	From 7:00 p.m. to 9:59 p.m.
Night	=	From 10:00 p.m. to 6:59 a.m. (* = change occurs at 0500L)

Note 1: RMTs #1 and #3 high threshold levels are due to high freeway and/or construction noise.

Note 2: Noise monitors comply with all applicable settings as specified in the California Noise Standards (Title 21). Noise events must meet both threshold criteria to be considered for further review.

Appendix A2

Daily/Monthly CNEL Levels – January 2016

* Not in Service

Day	RMT 1	RMT 2	RMT 3	RMT 4	RMT 6	RMT 7	RMT 9	RMT 10	RMT 11	RMT 12	RMT 13
1	68.6	64.3	*	*	67.7	74.8	66.6	61.7	70.0	59.7	62.8
2	70.7	66.4	*	*	69.0	75.7	66.4	63.1	71.3	63.5	64.4
3	70.6	66.6	*	*	70.2	77.0	68.5	64.9	72.7	63.1	65.5
4	71.4	66.8	*	*	69.8	76.8	66.7	62.9	73.1	63.2	67.0
5	71.7	67.7	*	*	69.8	75.3	68.5	*	71.4	63.1	64.0
6	72.2	67.5	*	*	69.3	74.5	68.8	63.1	70.3	62.8	63.5
7	72.6	68.3	*	*	71.0	73.5	69.2	64.5	69.7	64.1	63.6
8	72.0	67.0	*	*	68.6	75.3	65.9	62.8	71.1	62.3	63.3
9	70.0	65.3	*	*	67.2	74.9	62.6	62.3	70.7	61.7	63.0
10	70.7	66.1	*	*	68.4	75.9	65.6	58.8	71.9	60.9	63.5
11	70.2	65.1	*	*	68.2	74.6	69.3	62.0	70.7	61.9	62.6
12	71.1	65.6	*	*	68.4	73.6	67.4	61.1	69.3	61.2	60.8
13	71.9	66.9	*	*	68.4	73.5	68.1	62.8	69.2	62.0	61.8
14	72.2	67.9	*	*	70.1	75.7	67.3	66.1	71.5	63.0	64.2
15	72.0	67.3	*	*	68.9	76.7	67.5	63.3	72.6	62.6	63.8
16	69.7	65.2	*	*	67.4	75.4	61.1	60.9	71.4	61.7	62.3
17	70.3	65.7	*	*	68.0	75.2	67.3	62.7	71.0	60.6	62.8
18	71.4	66.4	*	*	68.6	75.6	64.1	63.3	71.3	61.7	63.9
19	73.2	67.6	*	*	68.3	74.5	63.7	62.1	70.6	61.4	63.4
20	70.9	66.1	*	*	68.2	74.7	66.7	59.6	70.5	61.0	62.7
21	69.8	65.0	*	*	67.6	76.2	65.8	62.2	72.1	60.7	63.5
22	70.5	65.3	*	*	68.3	76.2	67.1	63.2	72.7	61.8	63.3
23	69.3	65.4	*	*	66.9	74.1	64.6	58.4	70.3	61.3	62.3
24	69.8	65.3	*	*	67.8	74.5	67.7	62.1	70.6	60.7	62.7
25	70.4	65.2	*	*	68.7	74.3	67.7	63.1	70.2	61.5	62.4
26	69.6	64.6	*	*	68.1	73.6	64.2	63.6	69.4	61.1	60.5
27	69.4	64.2	*	*	67.1	72.9	64.2	60.8	68.2	60.2	59.4
28	71.3	66.1	*	*	68.9	74.7	68.4	63.1	70.3	61.9	62.0
29	71.7	66.4	*	*	68.3	75.2	67.4	63.3	71.0	62.3	63.1
30	68.8	64.0	*	*	66.7	75.2	67.7	60.5	70.7	60.0	62.3
31	72.3	68.9	*	*	71.1	74.1	72.9	63.7	70.4	64.4	64.6
Month	71.5	66.8	*	*	69.2	75.6	67.8	63.1	71.5	62.5	63.8

Appendix A2 Continued

Daily/Monthly CNEL Levels – January 2016

* Not in Service

Day	RMT 14	RMT 16	RMT 17	RMT 18	RMT 19	RMT 20	RMT 21	RMT 22	RMT 23	RMT 24	RMT 25	RMT 26
1	64.3	63.3	63.6	59.1	62.8	59.7	56.2	63.2	61.4	62.9	61.5	61.6
2	64.9	65.0	64.7	61.0	62.6	61.3	57.3	64.6	63.5	64.7	61.9	63.5
3	64.0	65.6	65.3	60.7	64.5	62.0	61.1	66.1	65.2	66.1	63.1	64.3
4	66.6	65.4	65.5	58.1	61.8	62.1	58.4	66.1	65.1	65.7	63.2	64.5
5	*	66.2	65.9	63.5	64.5	62.1	59.5	64.5	66.3	64.4	63.1	62.0
6	64.4	66.6	65.7	62.0	65.3	61.4	59.4	64.2	65.5	64.5	62.6	65.7
7	64.5	66.6	67.3	62.4	64.6	65.3	60.6	65.1	63.3	65.1	62.4	65.1
8	63.5	66.7	65.6	59.1	62.2	61.4	59.1	64.7	65.8	64.4	61.5	65.9
9	65.6	63.6	63.4	54.9	56.9	60.4	58.1	64.2	63.5	63.3	62.6	63.0
10	67.3	64.2	65.0	52.5	60.1	61.4	58.4	64.9	63.5	64.3	63.6	60.5
11	64.1	64.2	64.3	58.6	65.5	60.9	59.5	64.3	63.3	63.9	61.7	63.7
12	62.3	64.2	64.7	59.0	65.3	60.1	57.0	62.3	62.2	62.4	59.2	63.3
13	64.0	65.7	65.3	65.1	64.9	60.3	56.9	62.8	62.3	62.8	61.7	64.7
14	65.7	66.2	66.1	60.2	62.3	62.0	58.7	65.2	64.9	65.5	62.0	64.3
15	66.8	65.6	65.5	57.8	65.1	61.6	58.5	65.3	64.2	64.9	63.0	63.3
16	62.9	63.2	63.1	54.4	54.9	60.7	58.2	64.4	62.4	63.4	60.0	63.1
17	65.3	63.7	64.6	60.8	63.1	60.9	57.5	64.5	64.5	64.1	62.1	63.8
18	65.8	64.4	65.5	56.6	57.8	61.6	58.9	64.7	64.5	64.2	61.3	64.0
19	63.8	65.3	67.4	57.2	55.3	60.7	58.0	64.0	63.6	63.8	61.3	64.3
20	64.1	63.8	64.7	56.9	59.4	60.4	57.6	63.8	62.8	63.1	60.5	63.6
21	67.0	64.3	63.8	58.8	61.2	59.2	56.7	64.3	63.5	63.9	60.9	63.2
22	66.7	64.8	64.1	60.0	61.7	60.7	56.9	64.1	64.7	64.2	61.8	62.4
23	65.4	62.9	63.3	57.7	59.1	59.5	56.7	63.0	63.4	62.4	61.5	61.6
24	62.1	64.0	64.1	56.3	64.8	60.4	57.6	63.8	63.9	63.3	61.4	64.4
25	65.0	64.5	64.3	62.4	64.1	60.9	58.0	64.1	63.2	63.7	62.5	62.8
26	64.0	64.1	63.2	61.5	59.2	59.3	56.6	62.4	60.9	62.3	60.9	61.1
27	62.7	63.0	62.9	60.0	58.8	57.3	54.0	60.9	60.4	60.9	59.3	60.9
28	65.1	65.4	62.3	63.2	64.0	60.4	56.2	64.3	62.5	63.8	61.0	63.6
29	65.2	66.0	*	61.1	62.2	60.7	57.6	63.8	64.6	64.1	61.9	63.2
30	65.2	62.3	*	60.5	64.2	58.7	55.1	63.3	63.2	61.9	59.9	60.9
31	67.1	68.2	*	66.4	64.4	72.1	67.8	69.1	64.7	66.7	63.3	62.9
Month	65.4	65.5	65.4	61.1	63.4	62.9	59.6	65.0	64.3	64.6	62.3	64.0

Appendix A3

Daily/Monthly CNEL Levels - February 2016

* Not in Service

Day	RMT 1	RMT 2	RMT 3	RMT 4	RMT 6	RMT 7	RMT 9	RMT 10	RMT 11	RMT 12	RMT 13
1	70.2	66.7	*	*	69.9	72.2	68.3	66.4	68.9	62.3	62.9
2	70.1	65.4	*	*	68.4	74.1	65.7	62.2	69.6	61.4	62.2
3	69.7	65.5	*	*	68.2	73.4	62.7	52.7	69.7	61.9	63.5
4	69.7	64.6	*	*	68.2	72.6	63.9	*	68.7	60.6	63.6
5	69.4	64.4	*	*	68.4	72.7	67.4	*	69.1	61.0	63.8
6	65.5	62.8	*	*	66.1	72.2	61.7	*	69.2	58.4	62.9
7	61.2	60.8	*	*	66.5	72.2	64.2	*	68.0	56.9	62.1
8	65.3	63.1	*	*	68.0	72.9	67.4	*	69.3	60.5	63.9
9	66.9	63.8	*	*	67.3	72.1	66.6	*	68.2	60.5	62.3
10	67.0	63.9	*	*	67.4	72.6	64.5	*	69.1	61.3	62.7
11	68.5	64.7	*	*	68.2	73.9	66.3	*	69.8	60.4	63.8
12	69.7	64.8	*	*	68.3	75.0	67.4	*	71.0	61.4	64.7
13	68.0	63.5	*	*	67.5	75.0	67.3	*	71.8	60.9	65.4
14	68.8	64.1	*	*	67.4	74.5	67.5	*	71.1	60.7	64.6
15	68.0	64.6	*	*	67.9	74.2	68.0	*	70.4	60.9	64.7
16	69.1	65.0	*	*	69.1	74.8	67.5	*	71.0	61.4	65.1
17	70.3	65.8	*	*	68.6	74.6	68.4	*	71.2	62.1	65.5
18	71.7	67.3	*	*	69.1	74.9	66.2	*	71.8	62.9	66.3
19	72.0	67.3	*	*	69.0	74.2	68.4	*	70.7	62.8	66.0
20	68.9	64.8	*	*	68.0	74.5	67.5	*	70.8	61.1	65.7
21	69.3	65.2	*	*	68.1	74.5	67.6	*	70.8	60.4	65.5
22	69.2	64.9	*	*	68.2	74.3	68.4	*	70.8	61.1	65.2
23	69.2	64.0	*	*	69.0	74.4	67.2	*	71.0	61.4	64.4
24	67.3	63.7	*	*	68.4	73.1	66.0	*	69.7	62.5	64.1
25	68.8	65.0	*	*	67.9	74.0	65.2	*	69.9	60.7	64.1
26	71.1	66.4	*	*	68.5	74.3	67.0	*	70.6	61.4	65.0
27	68.6	64.3	*	*	67.3	74.4	69.6	*	70.3	61.2	65.0
28	69.3	64.8	*	*	66.8	73.7	66.0	*	70.6	59.9	64.7
29	69.5	63.9	*	*	68.0	75.3	66.8	*	72.0	60.8	66.3
Month	69.6	65.4	*	*	68.6	74.4	67.4	62.4	70.8	61.6	65.0

Appendix A3 Continued

Daily/Monthly CNEL Log – February 2016

* Not in Service

Day	RMT 14	RMT 16	RMT 17	RMT 18	RMT 19	RMT 20	RMT 21	RMT 22	RMT 23	RMT 24	RMT 25	RMT 26
1	61.9	65.0	65.5	61.2	61.6	65.9	58.3	64.9	65.3	64.4	61.8	64.4
2	64.3	64.4	64.0	59.6	62.3	60.2	57.4	64.0	62.4	63.1	61.6	63.1
3	64.7	64.4	64.3	55.7	57.4	59.9	57.0	64.0	61.0	62.9	61.5	62.7
4	63.2	64.1	63.8	58.3	58.7	58.9	56.2	62.5	61.1	62.2	60.5	62.2
5	63.8	65.9	62.7	64.2	62.9	58.3	55.5	63.8	63.2	62.6	59.8	60.9
6	63.9	62.3	61.0	55.9	58.8	57.7	54.7	62.0	61.1	61.0	59.9	60.3
7	62.3	59.9	59.9	57.7	62.0	56.1	52.6	60.9	60.4	60.3	58.0	58.8
8	64.1	63.2	62.0	63.6	63.0	58.2	56.1	62.8	61.5	62.5	60.8	60.3
9	63.0	63.4	62.5	62.0	62.0	57.8	54.6	61.3	60.6	61.1	60.0	61.1
10	63.0	63.9	62.5	61.0	60.2	57.5	56.4	61.8	60.3	61.2	59.3	61.5
11	63.4	64.9	63.3	61.4	62.2	59.7	54.5	62.7	61.3	62.5	60.1	61.7
12	65.3	64.6	63.6	68.7	61.6	59.8	56.2	64.0	63.9	63.2	60.9	61.4
13	65.5	62.9	62.2	60.1	61.2	59.5	54.9	64.4	67.8	62.9	59.9	61.0
14	65.8	63.1	63.4	62.4	62.9	59.9	56.6	63.6	62.8	61.8	61.6	62.1
15	64.5	63.7	60.3	59.5	64.6	59.4	55.8	63.8	63.1	62.8	61.0	62.7
16	65.3	64.4	*	59.8	65.5	59.8	56.5	64.2	62.3	63.4	61.5	62.3
17	65.6	64.7	*	58.9	65.2	60.1	56.7	65.3	63.2	64.1	61.5	63.1
18	66.2	65.5	*	57.6	56.9	61.6	58.6	65.8	63.7	64.5	63.3	64.5
19	65.7	66.0	*	64.1	60.6	61.4	58.1	64.9	65.2	64.5	62.7	63.8
20	65.3	63.2	*	64.2	64.7	60.7	57.3	64.5	64.2	64.0	61.9	62.4
21	65.6	63.6	*	60.2	62.3	60.8	57.6	64.5	63.4	63.3	62.2	63.1
22	65.1	63.8	*	60.3	62.9	60.5	57.5	64.3	62.1	63.4	61.6	62.4
23	64.4	63.6	*	63.5	62.3	59.5	55.1	63.4	61.9	62.8	59.9	61.0
24	64.2	62.8	*	61.7	59.2	59.2	55.9	63.3	62.3	62.4	60.7	60.9
25	64.4	64.5	*	62.3	57.0	59.3	56.1	63.2	64.0	62.5	62.1	61.7
26	64.8	65.0	*	62.4	62.7	60.1	56.1	63.9	64.5	63.5	61.7	63.8
27	65.2	62.4	*	63.6	64.2	59.9	56.9	64.7	63.2	62.9	61.9	60.8
28	64.7	63.3	*	57.3	61.6	59.5	56.0	63.6	63.7	62.8	61.0	62.5
29	66.4	62.4	*	59.8	60.5	59.5	55.4	65.5	64.6	63.6	60.7	61.1
Month	65.2	64.5	63.5	62.4	62.7	60.6	56.9	64.4	63.8	63.5	61.6	62.7

Appendix A4

Daily/Monthly CNEL Levels – March 2016

* Not in Service

Day	RMT 1	RMT 2	RMT 3	RMT 4	RMT 6	RMT 7	RMT 9	RMT 10	RMT 11	RMT 12	RMT 13
1	68.9	64.5	*	*	67.7	75.4	65.9	*	71.9	60.6	65.2
2	69.1	65.0	*	*	67.6	74.8	66.5	*	71.0	61.2	64.9
3	71.2	66.3	*	*	68.9	75.5	68.3	*	72.3	61.9	66.0
4	71.4	67.5	*	*	69.1	74.7	68.2	*	71.5	62.9	66.4
5	70.5	65.3	*	*	68.7	74.8	67.4	*	71.5	61.6	65.8
6	69.9	66.1	*	*	69.1	74.4	67.6	*	70.8	62.1	66.1
7	70.6	66.8	*	*	70.2	74.4	67.5	*	71.1	62.6	66.5
8	71.4	67.1	*	*	69.1	74.8	68.2	*	71.4	62.7	66.2
9	71.1	66.4	*	*	68.7	74.6	66.5	*	71.3	62.7	66.0
10	71.7	67.2	*	*	69.9	75.6	68.6	*	71.9	62.8	66.9
11	72.2	67.9	*	*	69.9	74.9	69.6	*	71.6	63.7	66.6
12	70.9	66.9	*	*	68.6	73.9	68.1	*	70.2	62.0	65.7
13	70.4	66.4	*	*	69.6	75.1	66.3	*	71.4	62.1	66.5
14	70.5	66.2	*	*	69.1	75.0	66.5	*	71.3	62.0	70.1
15	71.2	66.9	*	*	68.7	74.9	66.3	65.8	71.3	61.9	66.3
16	70.8	66.5	*	*	68.9	75.5	69.1	64.1	72.0	61.8	66.6
17	69.7	65.5	*	*	69.7	76.6	68.0	64.5	73.1	62.2	67.0
18	71.9	67.9	*	*	69.7	75.3	67.6	65.2	71.4	62.7	65.8
19	70.2	66.5	*	*	68.7	75.0	66.8	63.7	71.5	59.7	66.1
20	70.3	65.7	*	*	69.0	75.1	67.5	64.1	71.3	61.7	65.7
21	70.8	66.7	*	*	69.6	74.9	67.3	64.7	71.3	62.5	66.3
22	71.6	67.3	*	*	69.5	74.0	68.6	64.2	70.4	63.5	66.3
23	70.7	66.4	*	*	69.0	75.1	69.3	64.4	71.3	61.7	65.7
24	69.4	65.5	*	*	69.2	74.9	68.2	63.3	70.7	61.1	64.7
25	71.1	66.9	*	*	68.8	74.5	68.7	63.4	70.6	60.4	65.5
26	70.0	65.9	*	*	68.5	75.7	69.5	63.5	71.9	62.5	66.8
27	70.1	66.4	*	*	69.1	75.4	70.3	64.3	71.9	61.9	66.5
28	71.2	67.2	*	*	70.1	74.6	68.0	65.2	70.7	61.5	66.1
29	71.4	67.4	*	*	69.7	73.5	67.5	64.7	69.9	62.7	65.8
30	71.5	67.6	*	*	69.2	75.4	66.8	64.3	71.8	62.5	66.4
31	71.7	67.0	*	*	69.3	74.9	69.6	64.8	71.3	62.2	66.4
Month	71.3	67.1	*	*	69.7	75.5	68.5	64.9	71.9	62.6	66.8

Appendix A4 Continued

Daily/Monthly CNEL Log – March 2016

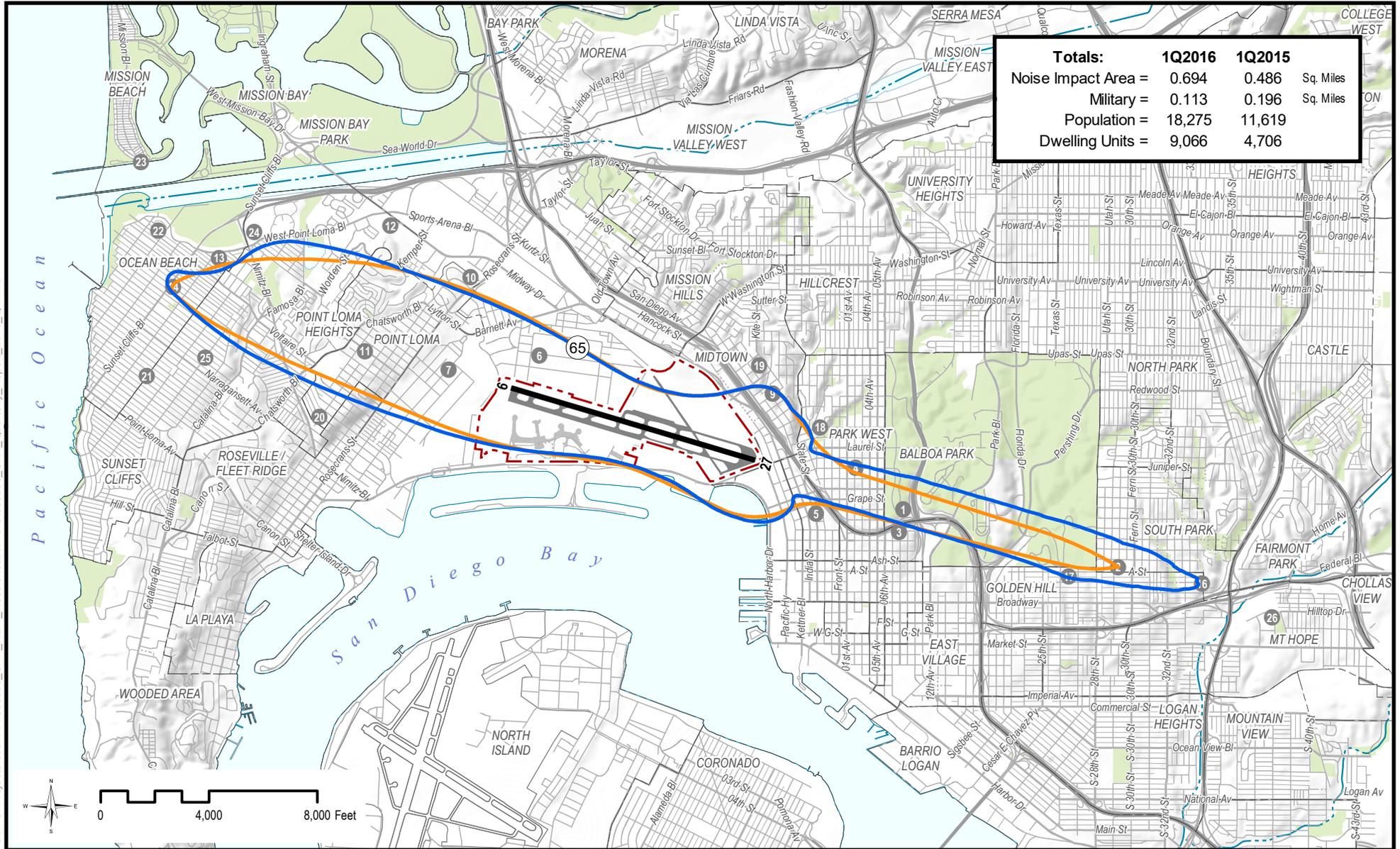
* Not in Service

Day	RMT 14	RMT 16	RMT 17	RMT 18	RMT 19	RMT 20	RMT 21	RMT 22	RMT 23	RMT 24	RMT 25	RMT 26
1	66.4	63.0	*	54.0	58.3	58.8	55.4	64.3	62.8	63.0	59.6	61.5
2	65.5	63.5	*	58.3	60.1	58.9	55.3	64.1	62.0	62.6	60.1	62.2
3	67.0	64.5	*	59.8	61.4	61.1	57.9	64.8	63.0	64.2	62.0	63.7
4	66.2	65.6	*	58.6	63.2	61.4	58.3	66.1	65.4	64.8	63.7	63.9
5	67.3	63.8	*	59.9	61.7	60.9	58.2	64.6	65.0	63.9	62.6	63.4
6	65.8	64.3	*	61.4	62.8	61.2	57.7	65.6	64.9	64.4	62.2	63.3
7	65.9	65.7	*	61.0	63.2	63.6	60.4	65.7	66.7	65.0	63.4	63.9
8	66.0	65.7	67.1	59.9	61.9	62.0	59.0	65.1	65.9	64.3	64.0	63.8
9	66.0	64.7	65.2	60.0	60.9	61.3	58.0	65.1	64.2	63.9	62.9	63.9
10	66.3	65.4	65.7	61.7	62.7	61.6	58.0	65.5	64.8	65.3	62.9	63.2
11	66.0	66.5	66.6	62.7	65.4	62.2	58.4	65.3	65.1	65.1	63.0	65.1
12	66.0	64.8	65.3	61.4	61.6	61.3	58.7	64.7	64.1	63.7	62.9	63.9
13	66.1	64.5	65.4	58.4	59.5	61.6	58.5	65.5	65.0	64.5	62.7	63.5
14	65.7	64.2	65.3	57.1	58.0	61.5	58.5	65.2	64.3	64.4	62.9	63.4
15	66.3	65.3	65.7	58.6	60.1	61.3	58.1	65.2	64.0	64.4	62.9	63.9
16	66.5	65.0	65.0	62.9	63.8	61.1	57.1	65.4	64.0	64.5	62.4	63.5
17	67.7	64.2	64.3	59.0	63.2	60.8	57.5	65.6	64.0	65.1	61.8	62.5
18	65.1	66.0	66.8	59.9	60.8	60.8	56.5	64.3	63.4	64.6	61.7	64.8
19	65.8	64.2	65.0	57.4	56.9	61.2	57.2	64.8	63.2	64.2	62.2	63.6
20	65.0	63.6	64.8	57.9	57.6	60.8	56.3	64.1	63.6	64.0	61.3	62.7
21	65.6	64.8	65.7	60.4	59.4	61.6	58.5	67.9	64.0	64.7	62.6	64.4
22	66.0	66.1	65.7	63.0	63.6	61.8	58.8	65.1	65.1	64.7	62.9	64.8
23	66.0	64.3	64.9	58.9	63.8	61.7	58.2	65.0	63.8	63.7	63.6	63.1
24	64.1	64.6	64.6	65.1	64.5	60.1	55.7	63.6	63.1	62.9	60.4	62.3
25	64.4	66.0	65.1	62.6	64.0	59.9	56.1	64.1	63.7	64.1	61.1	63.7
26	66.2	64.8	64.3	58.3	65.9	60.9	57.9	65.4	64.3	65.0	62.4	63.0
27	66.4	64.8	64.8	57.6	66.6	61.2	57.9	66.1	63.5	64.5	62.6	63.4
28	65.6	65.8	65.8	61.6	63.8	62.6	58.3	68.3	65.0	65.1	62.4	64.5
29	65.6	65.6	66.0	63.1	63.2	61.7	59.0	65.0	63.7	64.5	62.6	64.3
30	66.3	65.9	66.0	58.8	63.8	61.7	58.8	65.4	63.4	64.3	63.3	65.2
31	66.0	66.0	65.9	63.9	65.2	61.6	58.8	65.4	63.8	64.7	62.7	64.1
Month	66.5	65.5	66.0	61.2	63.3	61.8	58.5	65.9	64.8	64.9	63.0	64.2

Appendix B

ANOMS Commercial Flight Operations Mix - 1st Quarter 2016

Aircraft Type	Air Canada	Alaska	Allegiant	American	British Airways	Delta Air Lines	Frontier	Hawaiian	Japan	jetBlue	Seaport	SkyWest	Southwest	Spirit	Sun Country	United	Virgin America	Volaris	WestJet	Airborne/Atlas	FedEx	UPS	Total Arrivals	Total Operations
A306																					52		52	104
A310																					1		1	2
A319	89		26	11		53	152							422		177	51	6					987	1974
A320				19		312	31			326				195		256	425	36					1600	3200
A321				1393																			1393	2786
A330+						1		90															91	182
B712						136																	136	272
B733													1454										1454	2908
B734		248																					248	496
B736																			12				12	24
B737		52											5461	42	44				7				5606	11212
B738		755		662		312							1241	13	374				45				3402	6804
B739		454				242									999								1695	3390
B744					5																		5	10
B752				89		234										1					102		426	852
B753						17										1							18	36
B762																				64			64	128
B763				9		94														2	15	103	223	446
B777+					86																		86	172
B787+				1				90															91	182
CRJ2												264											264	528
CRJ7												567											567	1134
CRJ9												7											7	14
DC10																					115		115	230
E175						1139																	1519	3038
MD10																					43		43	86
MD11																					6		6	12
MD80+				9																			9	18
MD90						199																	199	398
Total	89	1509	26	2193	91	2739	183	90	90	326	0	1218	8156	617	55	1852	476	42	64	66	334	103	20319	40638
BE99																				69			69	138
C208											42										225		267	534
DH8D		229																					229	458
SW3/4																						55	55	110
Total	89	1738	26	2193	91	2739	183	90	90	326	42	1218	8156	617	55	1852	476	42	64	135	559	158	620	1240



Totals:	1Q2016	1Q2015	
Noise Impact Area =	0.694	0.486	Sq. Miles
Military =	0.113	0.196	Sq. Miles
Population =	18,275	11,619	
Dwelling Units =	9,066	4,706	

Path: G:\Projects\308XXX\308200_SAN_NEM_Recertification\GIS\308200_SAN_Quarterly_Report_2016_Q1.mxd



- 2016 1st Quarter 65 dB CNEL Contour
- 2015 1st Quarter 65 dB CNEL Contour
- Airport Property
- Runway
- RMT Site Location
- Roads
- River / Stream

Comparison of the 2015 and 2016 First Quarter 65 dB Community Noise Equivalent Level (CNEL) Contours