

Santa Monica Airport
Noise Management Program
August 2015 Report



City of
Santa Monica™

Report prepared by:

Stelios Makrides
Airport Manager
stelios.makrides@smgov.net
310-434-2693

Diana Hernandez
Airport Operations Analyst
diana.hernandez@smgov.net
310-458-8759

Daniel Quezada
Airport Operations Specialist
daniel.quezada@smgov.net
310-434-2665

Santa Monica Airport
3223 Donald Douglas Loop South
Santa Monica, CA 90405
310.458.8692 • www.santamonicaairport.org

Table of Contents

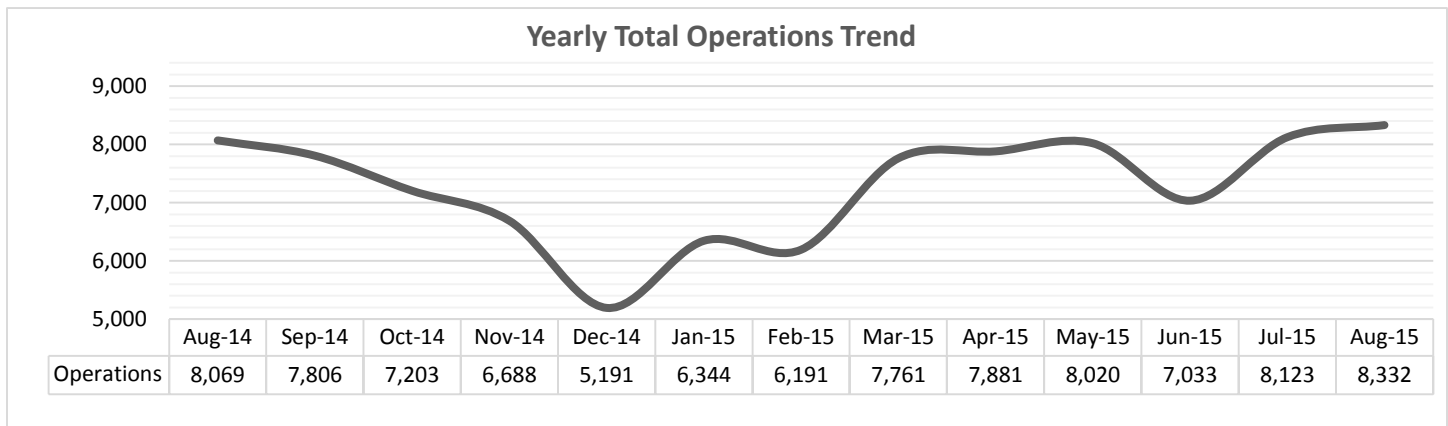
Introduction.....	Page 1
Aircraft Operations Data.....	Pages 1 & 2
Voluntary Night Arrival Curfew.....	Page 3
Aircraft Deviations.....	Page 3
Noise Management Briefings.....	Page 3
Curfew Violations.....	Page 3
Noise Violations.....	Page 4
Aircraft Noise Complaints.....	Page 5
ATTACHMENT A	
Airport Traffic Record	
ATTACHMENT B	
Registered Noise Levels during Voluntary Night Arrivals	
ATTACHMENT C	
Curfew Violations	
ATTACHMENT D	
Aircraft Noise Violations	
ATTACHMENT E	
Location of Noise Remote Monitoring Stations (RMS)	
ATTACHMENT F	
Single Event Noise Exposure Level (SENEL)	

I. Introduction

This report has been prepared in an effort to inform the Airport Commission and the public regarding the Santa Monica Airport's Noise Management Program. The report provides details on aircraft operations, noise violations, airplane and helicopter deviations, and curfew departures for the month of August 2015.

II. Aircraft Operations Data

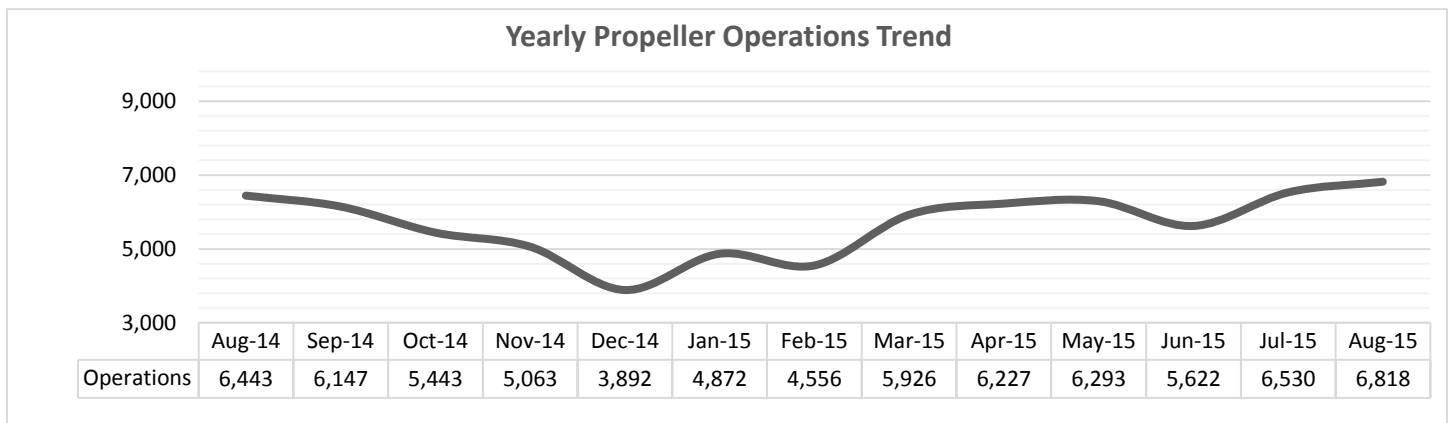
The total number of aircraft operations (*aircraft operation is defined as one takeoff or one landing*) recorded during the month of August 2015 was 8,332; which represents a 3% increase from the 8,069 operations recorded during August 2014. Approximately 22% of the operations were instrument flights (IFR transient), 26% were local flights (VFR local operations), and 52% itinerant flights (VFR transient). The total traffic count is recorded by the FAA control tower. See attachment A for the Airport Traffic Record.



Following are breakdowns of the total operations grouped by aircraft type along with a graph for each type indicating each monthly aircraft operations trend during the preceding 12 month period.

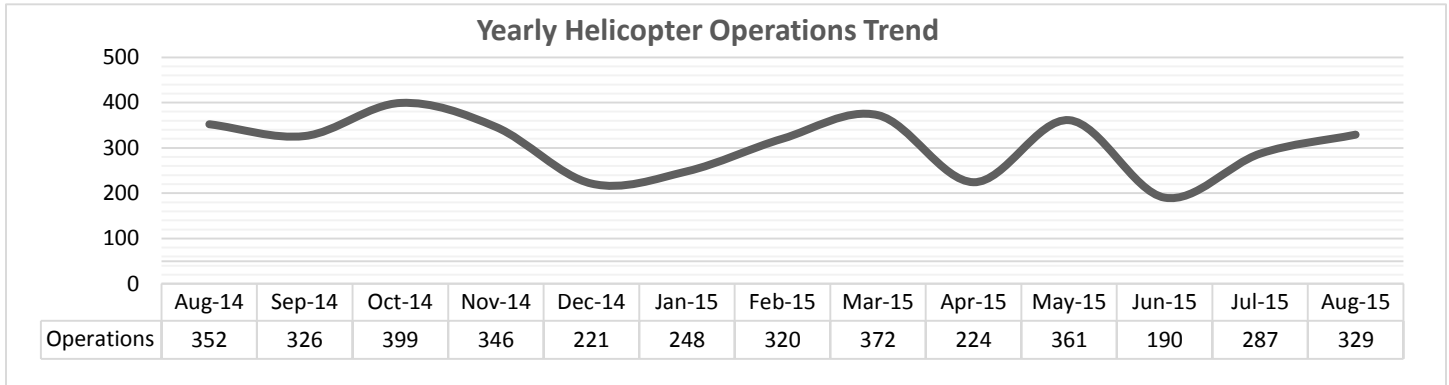
Propeller Aircraft Operations

There were approximately 6,818 propeller aircraft operations, comprising approximately 82% of the total operations. Propeller aircraft operations for August 2015 increased 6% from the 6,443 propeller aircraft operations recorded during August 2014.



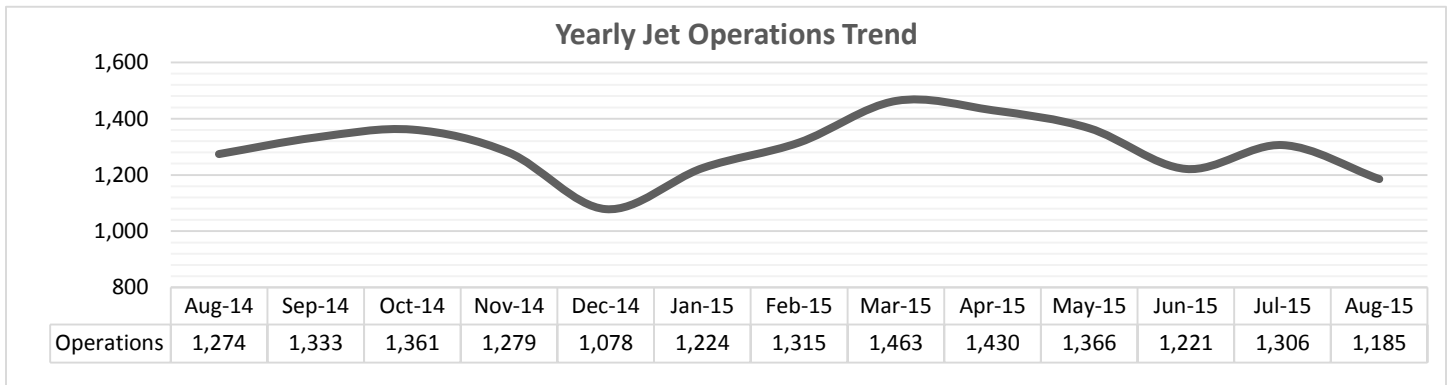
Helicopter Operations

Of the monthly aircraft operations for August 2015, there were approximately 329 helicopter operations, comprising approximately 4% of the total operations. Helicopter operations for August 2015 decreased 7% from the 352 helicopter operations recorded in August 2014.

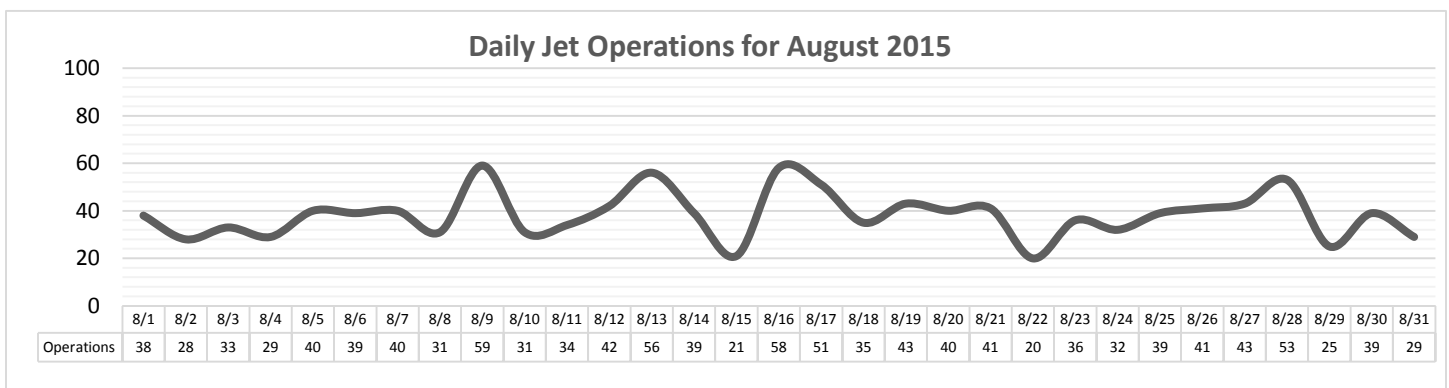


Jet Aircraft Operations

Of the monthly aircraft operations for August 2015, there were approximately 1,185 jet aircraft operations, comprising approximately 14% of the total operations. Jet aircraft operations for August 2015 decreased 7% from the 1,274 jet aircraft operations recorded during August 2014.

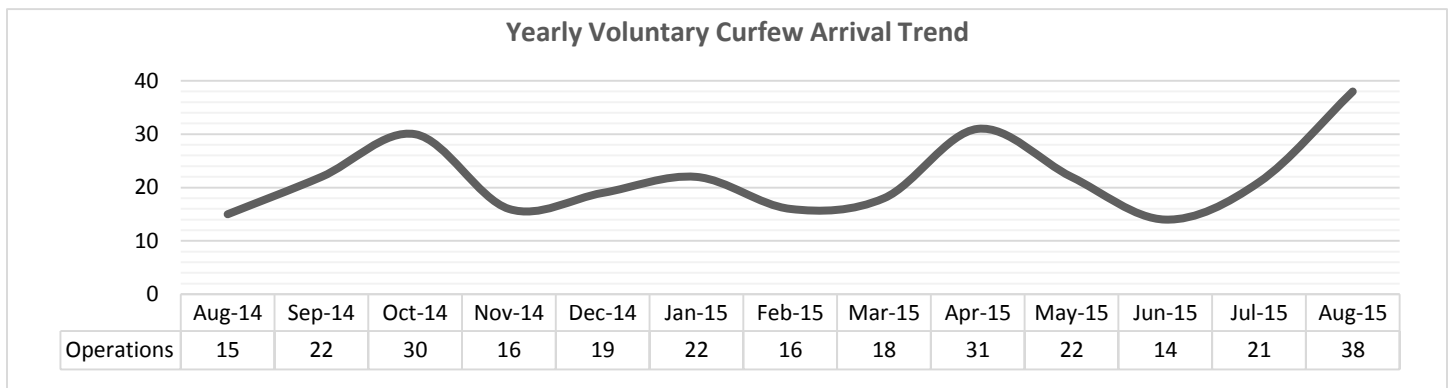
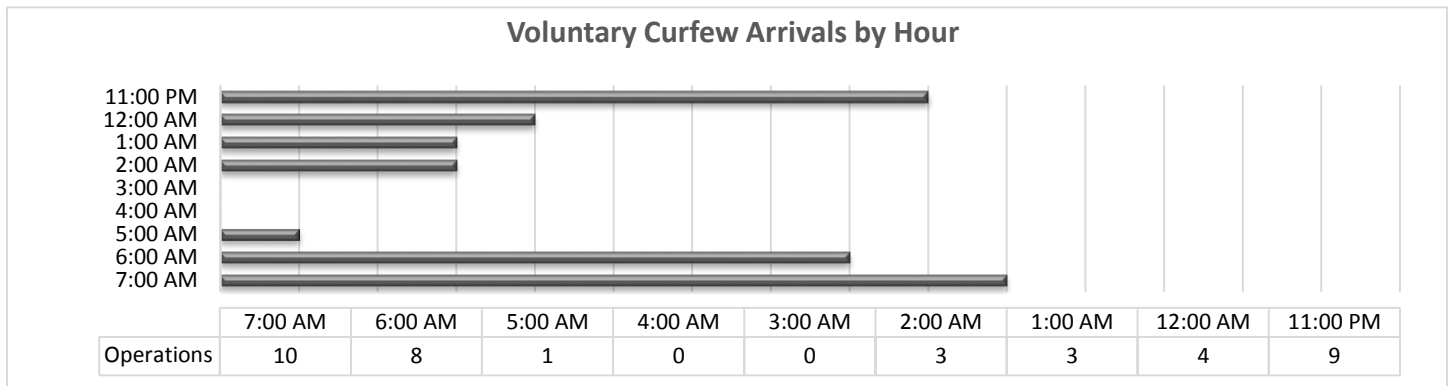


Daily jet operations vary significantly from day to day. Jet operations for the month of August 2015 averaged 40 per day. The line graph below represents the daily operations for jet driven aircraft for the month of August 2015.



III. Voluntary Arrival Curfew

During the month of August 2015, Airport Staff logged a total of 38 aircraft arrivals during the Voluntary Arrival Curfew (VAC) (11:00 p.m. to 7:00 a.m. weekdays, 11:00 p.m. to 8:00 a.m. weekends/holidays). The graph below depicts the number of arrivals for each VAC hour during the month of August 2015. For a listing of aircraft arrivals during the night hours, see attachment B.



IV. Deviations from Requested Noise Management Flight Paths

Santa Monica Airport requests that arriving and departing aircraft follow certain flight paths for Noise Management. Aircraft that are observed to be operating outside of the requested flight paths are contacted and counseled of the proper Noise Management procedures. During the month of August 2015 airport staff spent several hours observing aircraft adherence to the requested noise management procedures. Staff contacted those aircraft operators observed to be deviating from established VFR procedures, requesting compliance with the Airport's Recommended Noise Management Procedures.

V. Noise Management Briefings

Most aircraft are capable of meeting the 95.0 dBA maximum SENEL limit with changes in pilot technique or aircraft operating weight. The goal of the Santa Monica Airport's Noise Management Program is to communicate methods or techniques, which will lower aircraft noise levels, which in turn will minimize the impact of aircraft operations to the surrounding community.

VI. Authorized Departures & Curfew Violations

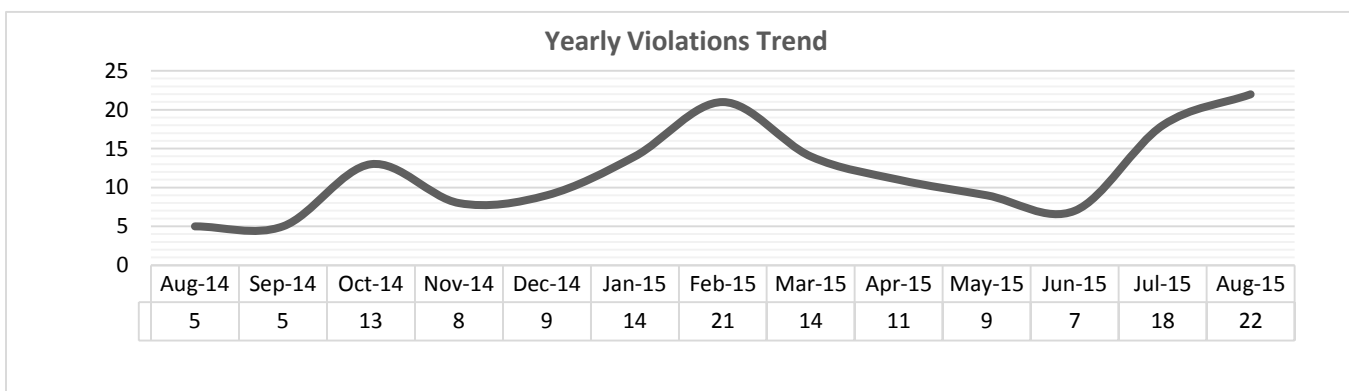
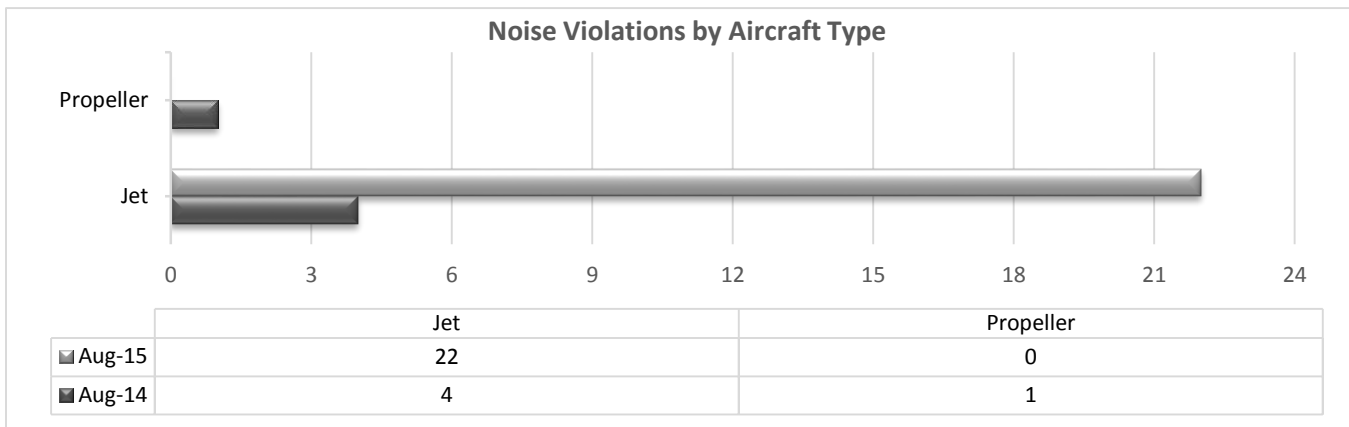
The night departure curfew prohibits takeoffs or engine start-ups between 11 p.m. and 7 a.m. Monday through Friday, or until 8 a.m. on weekends and holidays. Exceptions are allowed for bona fide medical or public safety emergencies. During the month of August 2015, there was one authorized curfew departure and no curfew violations. See Attachment C.

VII. Noise Violations

As a result of the Santa Monica Airport Agreement between the City of Santa Monica and the FAA in 1984, no aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing on August 1, 1985. The only Remote Monitoring Stations (RMS) that can be used for the enforcement of the 95.0 dBA SENEL are RMS 1 and RMS 2. These monitors are located 1,500 feet from each end of the runway. (See Attachment E for the location of RMS 1 & RMS 2 and Attachment F for the definition of SENEL).

A violation occurs when an aircraft exceeds 95.0 dBA Single Event Noise Exposure Level. During the month of August 2015, there were 22 noise violations, an increase of 340% from the 5 noise violations recorded during August 2014. A summary of noise violations for August 2015 are listed on attachment D.

Of the 8,332 aircraft operations recorded during the month of August 2015, 99.7% were in compliance with Santa Monica Airport's noise ordinance. The noise violations listed in the graph below were registered at RMS sites 1 or 2 and do not include exempt medical emergency operations.

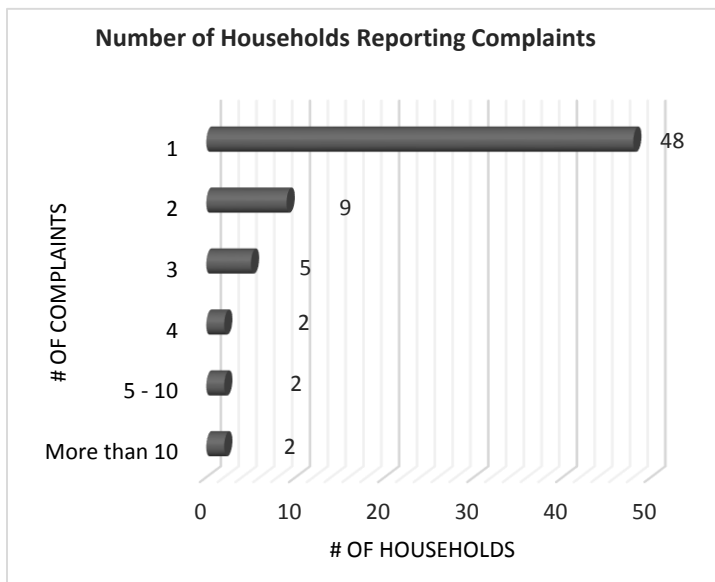
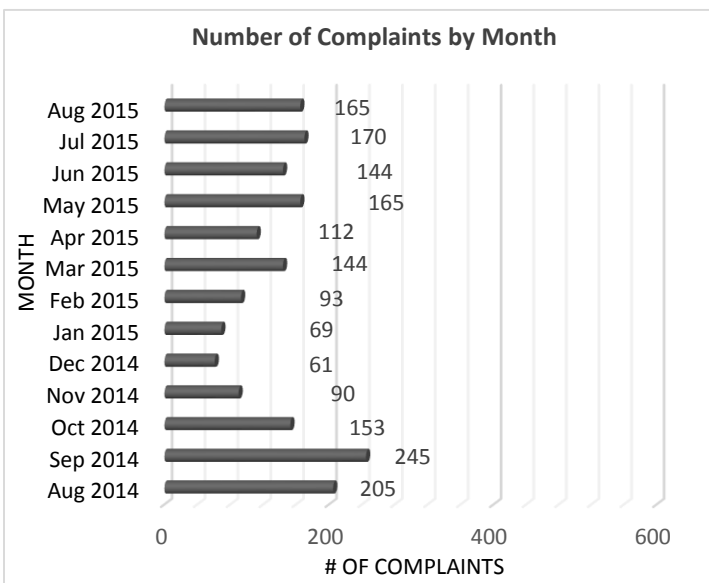
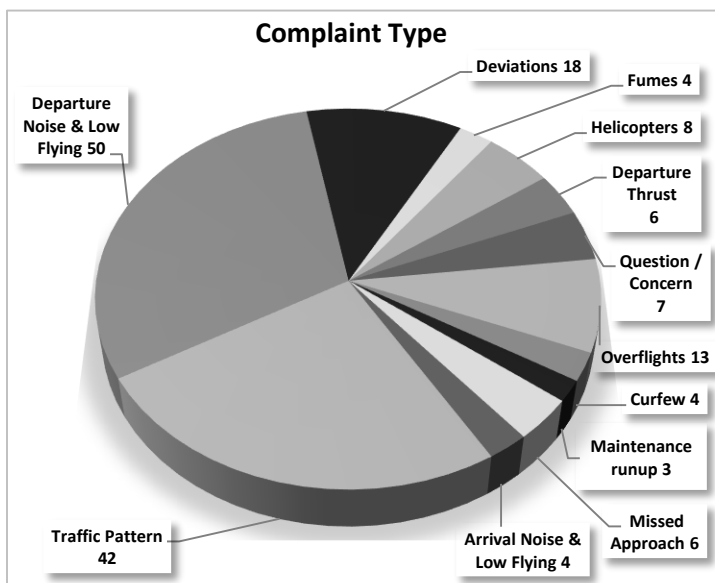


Violations Breakdown by Decibel Level

Aircraft & SENEL	95.1 to 95.9	96.0 to 96.9	97.0 to 97.9	98.0 to 98.9	99.0 to 99.9	100.0 to 104.9	105.0+	Total	%
Jet	9	6	1	3	2	1	0	22	100%
Propeller	0	0	0	0	0	0	0	0	0%
Helicopter	0	0	0	0	0	0	0	0	0%
Total:	9	6	1	3	2	1	0	22	
%	41%	27%	5%	14%	9%	5%	0%		100%

VIII. AIRCRAFT RELATED COMPLAINTS

During August of 2015, Airport Noise Management staff received a total of 165 inquiries from 68 different residences. These inquiries were investigated and proper actions were taken in accordance with the Airport's "Fly Neighborly Program" and the City of Santa Monica's "Noise Code". The following charts provide a breakdown of the complaints received during August 2015.



ATTACHMENT A

AIRPORT TRAFFIC RECORD <small>Mail ORIGINAL of this form to Washington Office, APO-110, thru Regional Air Traffic Division.</small>	FACILITY NAME Santa Monica ATCT	LOCATION Santa Monica , California	8/2015 <small>(1-2) (3-4)</small> MO. YR.	SMO <small>(5-9)</small> LOC ID						
(10-1) FACILITY TYPE ("X" ONE) (11) <div style="display: flex; align-items: center; margin-top: 5px;"> <div style="margin-right: 10px;"> APPROACH CONTROL TOWERS </div> <div style="font-size: 2em; margin-right: 10px;">}</div> <div style="display: flex; flex-direction: column; gap: 5px;"> <input type="checkbox"/> B. RADAR <input type="checkbox"/> C. LIMITED RADAR <input type="checkbox"/> D. NON-RADAR </div> <div style="margin-left: 20px; margin-top: 10px;"> <input checked="" type="checkbox"/> E. VFR TOWER <input type="checkbox"/> G. CONTRACT TOWER <small>(Continue on reverse)</small> </div> </div> <p style="font-size: 0.8em; margin-top: 5px;">(also submit FAA Form 7230-26)</p>		FACILITY TYPE CHANGED (12) <input type="checkbox"/> YES	IF DAILY HOURS OF OPERATION HAVE CHANGED, ENTER NEW HOURS HRS. 10 THS →							
AIRPORT OPERATIONS COUNT										
	ITINERANT					LOCAL			TOTAL OPERATIONS	SPECIAL USE (47-51)
DAY (15-16)	AC (17-21)	AT (22-26)	GA (27-31)	MIL (32-36)	TOTAL ITINERANT	CIVIL (37-41)	MILITARY (42-46)	TOTAL LOCAL		
1	0	20	169	0	189	60	0	60	249	249
2	0	11	166	0	177	44	0	44	221	470
3	0	18	181	0	199	83	0	83	282	752
4	0	18	192	0	210	66	0	66	276	1028
5	0	23	176	0	199	97	0	97	296	1324
6	0	34	178	0	212	93	0	93	305	1629
7	0	29	176	0	205	145	0	145	350	1979
8	0	13	165	0	178	25	0	25	203	2182
9	0	36	148	0	184	31	0	31	215	2397
10	0	17	209	0	226	112	0	112	338	2735
11	0	13	173	0	186	67	0	67	253	2988
12	0	16	174	0	190	65	0	65	255	3243
13	0	28	186	0	214	88	0	88	302	3545
14	0	21	193	0	214	47	0	47	261	3806
15	0	21	209	0	230	63	0	63	293	4099
16	0	42	178	0	220	17	0	17	237	4336
17	0	29	128	0	157	106	0	106	263	4599
18	0	14	138	0	152	91	0	91	243	4842
19	0	17	149	0	166	118	0	118	284	5126
20	0	28	200	0	228	79	0	79	307	5433
21	0	23	149	0	172	71	0	71	243	5676
22	0	7	137	0	144	41	0	41	185	5861
23	0	21	182	0	203	24	0	24	227	6088
24	0	14	155	0	169	23	0	23	192	6280
25	0	22	165	0	187	115	0	115	302	6582
26	0	20	202	0	222	67	0	67	289	6871
27	0	22	206	0	228	92	0	92	320	7191
28	0	40	200	0	240	113	0	113	353	7544
29	0	19	195	0	214	46	0	46	260	7804
30	0	25	231	0	256	49	0	49	305	8109
31	0	21	143	0	164	59	0	59	223	8332
TOTAL	0				6135	2197	0	2197	8332	

ATTACHMENT A

THIS SIDE FOR USE BY VFR TOWERS ONLY (ALL Approach Control Terminals MUST use FAA Form 7230-26)					ALL VFR Towers recording Instrument Operations on this side MUST COMPLETE		8/2015 (1-2) (3-4) MO. YR.	SMO (5-9) LOC ID	ADP CONTROL 10-4
INSTRUMENT OPERATIONS						REMARKS			
DAY	AC	AT	GA	MILITARY	TOTAL (10 - E) (14 - I)				
1	0	18	34	0	(16-19)	52			
2	0	11	38	0	(20-23)	49			
3	0	17	33	0	(24-27)	50			
4	0	14	30	0	(28-31)	44			
5	0	23	28	0	(32-35)	51			
6	0	28	32	0	(36-39)	60			
7	0	29	32	0	(40-43)	61			
8	0	13	41	0	(44-47)	54			
9	0	36	41	0	(48-51)	77			
10	0	17	44	0	(52-55)	61			
11	0	11	43	0	(56-59)	54			
12	0	16	46	0	(60-63)	62			
13	0	21	41	0	(64-67)	62			
14	0	19	31	0	(68-71)	50			
15	0	18	18	0	(72-75)	36			
16	0	42	31	0	(76-79)	73			
						(14-2)			
17	0	29	41	0	(16-19)	70			
18	0	14	47	0	(20-23)	61			
19	0	17	53	0	(24-27)	70			
20	0	25	44	0	(28-31)	69			
21	0	23	59	0	(32-35)	82			
22	0	7	34	0	(36-39)	41			
23	0	20	39	0	(40-43)	59			
24	0	14	40	0	(44-47)	54			
25	0	22	30	0	(48-51)	52			
26	0	18	37	0	(52-55)	55			
27	0	22	45	0	(56-59)	67			
28	0	34	35	0	(60-63)	69			
29	0	16	28	0	(64-67)	44			
30	0	19	37	0	(68-71)	56			
31	0	20	37	0	(72-75)	57			
TOTAL	0	633	1169	0		1802			
	(17-21)	(22-26)	(27-31)	(32-36)					
FACILITY USE									

ATTACHMENT B
Registered Noise Levels for Night Arrival Curfew
11 pm and 7 am Weekdays
11 pm and 8 am Weekends

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ENGINE
8/2/15	7:58	N518GH	C25B	21	86.9	2	LA MUSE PARTNERS LLC	J
8/3/15	23:13	N8258S	PA28	21	DNR	2	SKYWARD AVIATION INC	P
8/4/15	6:37	N29PG	DA40	21	DNR	2	PATRICK GROVES	P
8/5/15	6:38	N47HF	C56X	21	86.5	2	AVIATION CONSULTANTS INC	J
8/5/15	6:40	N560MR	C560	21	85.80	2	CITATION ASSOCIATES INC	J
8/6/15	23:07	N5114U	C172	21	74.50	2	SANTA MONICA AVIATION	P
8/8/15	1:08	N8258S	PA28	21	DNR	2	SKYWARD AVIATION INC	P
8/8/15	2:55	N575JS	E50P	3	88.90	1	JETSUITE	J
8/9/15	6:49	N782TP	BE40	21	83.6	2	SKYLIGHT AIR CHARTER LLC	J
8/9/15	7:38	N109EX	A109	21	DNR	2	HELINET CORPORATION	H
8/9/15	7:40	N258MS	H25B	21	88.8	2	MCS LEASING INC	J
8/10/15	0:04	N2902S	PA28	21	DNR	2	PROTEUS AIR SERVICES	P
8/11/15	0:20	N29AF	C172	21	DNR	2	AMERICAN FLYERS	P
8/11/15	23:36	N29AF	C172	21	DNR	2	AMERICAN FLYERS	P
8/12/15	23:04	N747CA	C421	21	85.1	2	ACTION AIR EXPRESS	P
8/15/15	0:29	N400JW	P28A	21	DNR	2	PROTEUS AIR SERVICES	P
8/15/15	1:59	N747CA	C421	21	85.7	2	ACTION AIR EXPRESS	P
8/15/15	2:20	N53512	SR22	21	82.1	2	STEVEN RAPP	P
8/15/15	7:30	N5537R	C172	21	DNR	2	NABIH BALADY	P
8/15/15	23:47	N579VW	SR20	21	DNR	2	MATTOS LLC	P
8/16/15	1:15	N582JS	E50P	21	80.9	2	JETSUITE	J
8/16/15	7:55	N214BM	GLF4	21	89.9	2	N214BM LLC	J
8/19/15	6:45	N581JS	E50P	21	82.4	2	JETSUITE	J
8/19/15	6:57	N395MB	B350	21	87.9	2	ADVANCED AIR LLC	T
8/19/15	23:58	N581JS	E50P	21	84.0	2	JETSUITE	J
8/21/15	6:57	N395RC	BE30	21	87.2	2	ADVANCED AIR LLC	T
8/22/15	7:44	N8621Q	BE35	21	75.9	2	KENNETH GROSSMAN	P
8/22/15	23:03	N2092L	P28A	21	DNR	2	SKYWARD AVIATION INC	P
8/22/15	23:07	N581JS	E50P	21	82.1	2	JETSUITE	J
8/23/15	7:38	N779QS	CL30	21	85.2	2	NETJETS INC	J
8/24/15	5:57	N782TP	BE40	21	85.1	2	SKYLIGHT AIR CHARTER LLC	J
8/25/15	6:03	N36HG	BE35	21	79.8	2	PACIFICA REAL ESTATE SERVICES	P
8/29/15	2:05	N999VX	SR22	21	80.9	2	PHD VENTURES INC	P
8/29/15	7:33	N109EX	A109	21	DNR	2	PRIME HEALTHCARE AIR TRANSPORTATION	H
8/29/15	7:49	N6122A	C210	3	79.0	1	DALLAS PRICE	P
8/29/15	23:18	N4465F	CRUZ	21	DNR	2	SANTA MONICA FLYERS	P
8/30/15	0:01	N53512	SR22	21	72.1	2	STEVEN RAPP	P
8/30/15	7:20	N120DE	EC20	21	81.9	2	BROOKLINE SERVICES LLC	H

ATTACHMENT C
(Authorized Departures & Curfew Violations)

Authorized Curfew Departures

DATE	TIME	NUMBER	TYPE	OPERATION	RUNWAY
8/8/15	7:26	N453AM	LJ35	LIFE FLIGHT	21

Curfew Violations

NONE

**ATTACHMENT D
(Aircraft Noise Violations)**

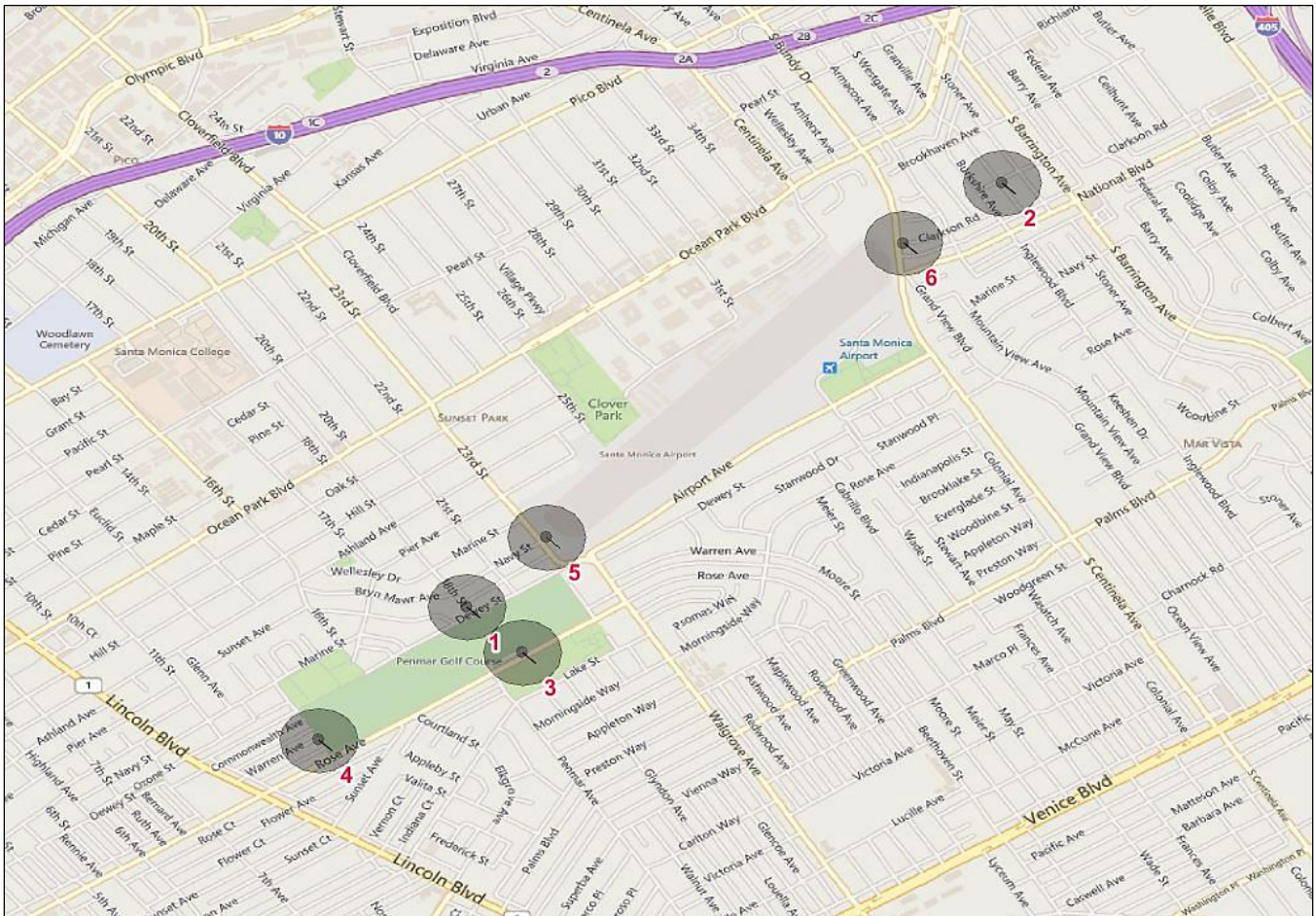
AIRCRAFT ENGINE CATEGORY LEGEND

(J) = Jet, (P) = Single-Engine prop,
(T) = Turbo-Prop, (H) = Helicopter

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ACTION	ENGINE
8/4/15	11:28	N362QS	C680	21	96.4	1	NET JETS AVIATION INC	WARNING	J
8/6/15	20:56	N590F	F900	21	99.6	1	VOLO AVIATION	WARNING	J
8/9/15	8:29	N685DC	F900	21	103.3	1	DISCOVERY COMMUNICATIONS LLC	WARNING	J
8/9/15	8:31	N782TP	BE40	21	95.70	1	SILVER AIR	WARNING	J
8/9/15	11:31	N258MS	H25B	21	96.5	1	SCHUBACH AVIATION	WARNING	J
8/9/15	13:00	N777RF	FA10	21	95.6	1	EDGINGTON TRANSPORT LLC	WARNING	J
8/9/15	16:18	N2FQ	FA50	21	98.3	1	FG AVIATION LLC	WARNING	J
8/12/15	16:37	C-GOAG	F900	21	96.4	1	SUNWEST HOME AVIATION LTD	WARNING	J
8/12/15	16:51	N75WP	C560	21	95.7	1	SALT RIVER PROJECT AGRIC IMPROVEMENT & POW	WARNING	J
8/13/15	21:13	N743QS	G200	21	96.8	1	NET JETS AVIATION INC	\$2,000	J
8/14/15	7:38	N515JM	H25B	21	98.1	1	ACP JETS / JET I LLC	\$2,000	J
8/16/15	20:30	N720DF	FA10	21	99.7	1	MAULE GROUP L.L.C.	WARNING	J
8/17/15	9:59	N707RK	PRM1	21	95.3	1	PREMIER 1A PARTNERS LLC	WARNING	J
8/17/15	15:28	VH-TGQ	PRM1	21	96.8	1	TWC LOGISTICS PTY	WARNING	J
8/18/15	11:12	N417MH	C25A	21	97.4	1	DELTA PRIVATE JETS	\$2,000	J
8/18/15	15:34	N826RP	GLF4	21	95.5	1	26 NORTH AVIATION INC / UNITED GROUP AVIATION	WARNING	J
8/20/15	12:09	C-FBDS	C550	21	96.1	1	B.D.K. AIR LTD	WARNING	J
8/21/15	9:58	N910FL	E135	21	95.8	1	FLIGHT OPTIONS	\$2,000	J
8/24/15	7:26	N986BL	LJ45	21	95.1	1	WAL-MART STORES INC	WARNING	J
8/27/15	15:41	N838LJ	H25B	21	98.2	1	GALVIN FLYING SERVICES INC / MCCKC LLC	WARNING	J
8/28/15	14:41	C-GMSO	E55P	21	95.1	1	FLIGHTPATH CHARTER AIRWAYS INC.	WARNING	J
8/29/15	12:21	N473K	F2TH	21	95.1	1	MENDOTA AIRCRAFT MANAGEMENT	WARNING	J

ATTACHMENT E Location of Remote Noise Monitoring Stations (RMS)

- RMS – 1** 18th Street, Between Dewey Street & Navy Street, Santa Monica
- RMS – 2** Sardis Street and Granville Street, West Los Angeles
- RMS – 3** Penmar Golf Course, 1233 Rose Avenue, Venice
- RMS – 4** West end of Penmar Golf Course on Warren Avenue, Venice
- RMS – 5** 23rd Street & Navy Street, Santa Monica
- RMS – 6** Bundy Ave & Clarkson Road/Ct, West Los Angeles



Note: ONLY Remote Monitoring Stations 1 & 2 are used for the Enforcement of the 95.0 dBA Single Event Noise Exposure Level (SENEL) maximum allowable noise level.

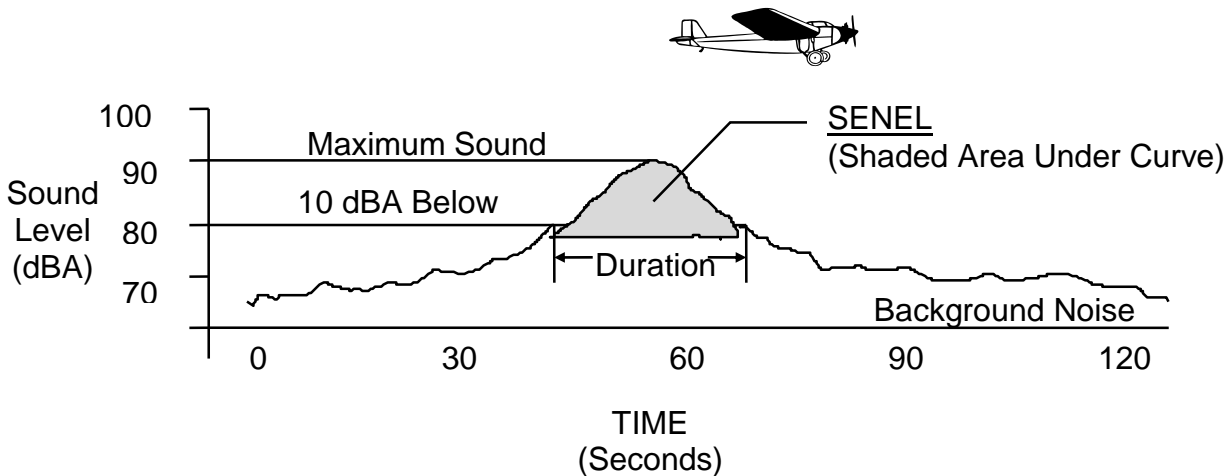
ATTACHMENT F (Single Event Noise Exposure Level)

Definition of Single Event Noise Exposure Level (SENEL)

As a result of an agreement between the City of Santa Monica and the FAA, an Airport Ordinance was established setting a maximum noise level of 95.0 dBA Single Event Noise Exposure Level (SENEL) measured at noise monitor sites 1,500 feet from each end of the runway.

As an aircraft approaches each noise monitor, the sound of the aircraft begins to rise above the threshold level. The closer the aircraft gets, the louder it is until the aircraft is at its closest point directly overhead. As the aircraft passes, the noise level decreases until the sound settles below the threshold level. Such a history of a flyover is plotted in the graph below. The highest noise level reached during the flyover is called the "Maximum Noise Level", or LMax. Referring to the same graph, the area within 10 dB of the LMax is the area from which the SENEL is computed. This metric takes into account the maximum noise level and the duration of the event. The SENEL value is always higher than the LMax value for aircraft events.

Single Event Noise Exposure Level (SENEL)



A-WEIGHTED SOUND LEVEL (dBA) – The sound pressure level in decibels as measured on a sound level meter using the A-Weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. It is a numerical method of rating human judgment of loudness.