ITEM 5

Santa Monica Airport

Noise Management Program

June 2012 Report

City of
Santa Monica™

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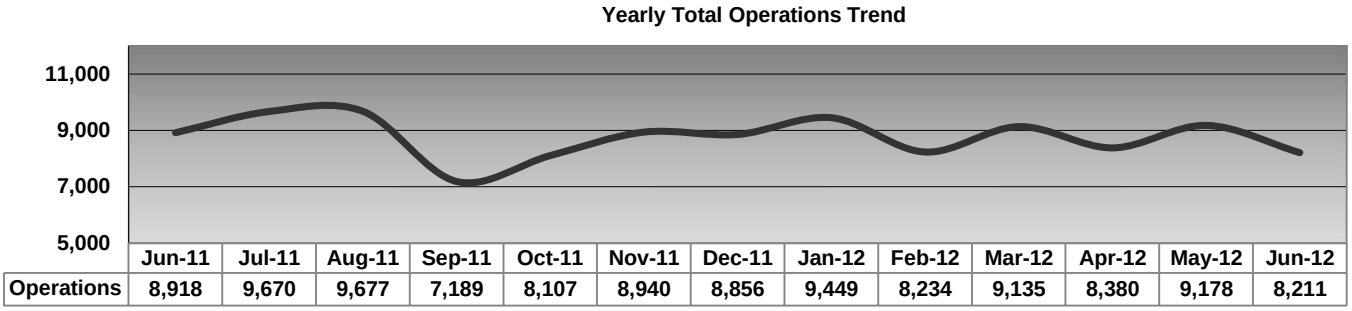
I. Introduction

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, aircraft and helicopter deviations, and curfew departures for the month of June 2012.

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 June 2012 was 8,211; which represents an 8% decrease from the 8,918 operations recorded during June 2011. Approximately 28% of the operations were instrument flights (IFR transient), 26% were local flights (VFR local operations), and 46% itinerant flights (VFR transient). The total traffic count is recorded by the FAA control tower. See attachment A for the Airport Traffic Record.

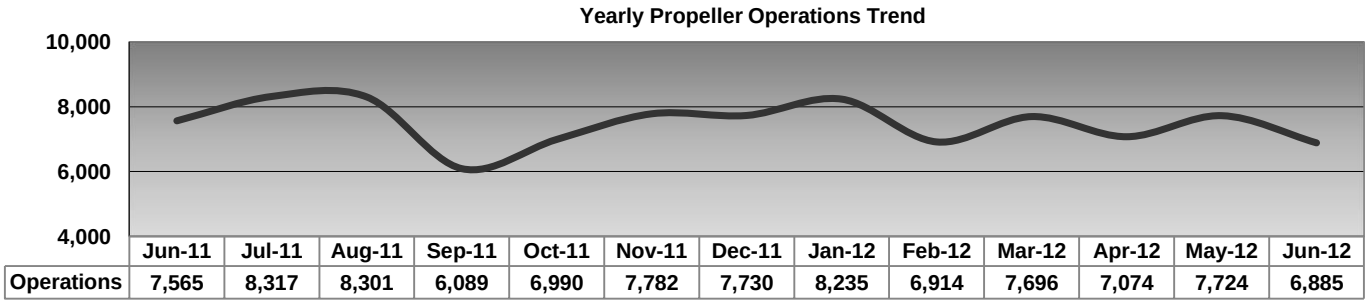


	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Operations	8,918	9,670	9,677	7,189	8,107	8,940	8,856	9,449	8,234	9,135	8,380	9,178	8,211

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

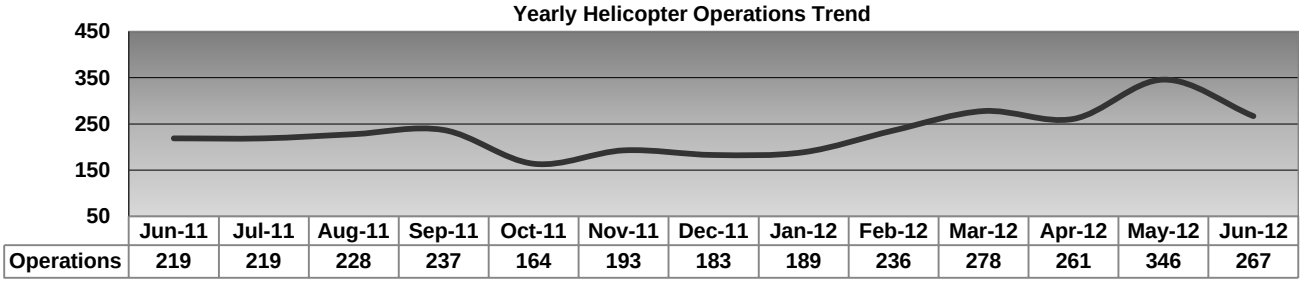
There were approximately 6,885 propeller aircraft operations, comprising approximately 84% of the total operations. Propeller aircraft operations for June 2012 decreased 9% from the 7,565 propeller aircraft operations recorded during June 2011.



	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Operations	7,565	8,317	8,301	6,089	6,990	7,782	7,730	8,235	6,914	7,696	7,074	7,724	6,885

Helicopter Operations

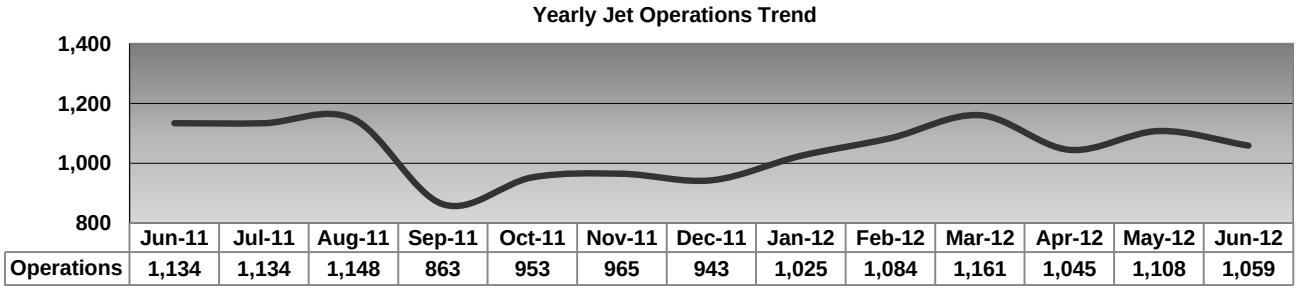
Of the monthly aircraft operations for June 2012, there were approximately 267 helicopter operations, comprising approximately 3% of the total operations. Helicopter operations for June 2012 increased 22% from the 219 recorded in June 2011.



	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Operations	219	219	228	237	164	193	183	189	236	278	261	346	267

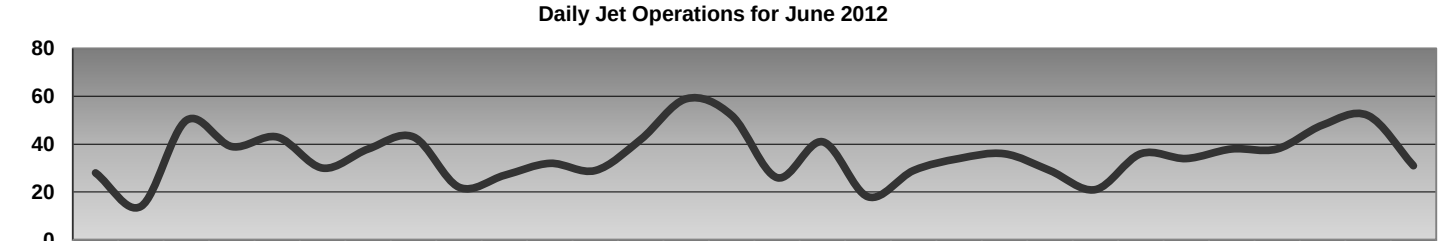
Jet Aircraft Operations

Of the monthly aircraft operations for June 2012, there were approximately 1,059 jet aircraft operations, comprising approximately 13**%** of the total operations. Jet aircraft operations for June 2012 decreased 7% from the 1,134 jet aircraft operations recorded during June 2011.



	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Operations	1,134	1,134	1,148	863	953	965	943	1,025	1,084	1,161	1,045	1,108	1,059

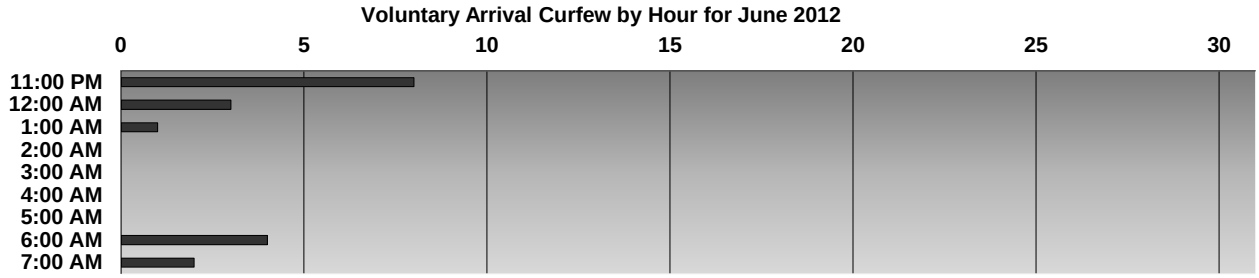
Jet operations vary significantly from day to day and often change with local civic & entertainment events and varying weather conditions. There are however, certain patterns which develop over time providing staff a better understanding of what to anticipate on a daily & weekly basis. Closely examining the daily operations of aircraft allows staff to make adjustments to their daily activities in working with the flying public and neighboring communities. Daily jet operations for the month of June 2012 averaged 34 per day. The line graph below represents the daily operations for jet driven aircraft for the month of June 2012.



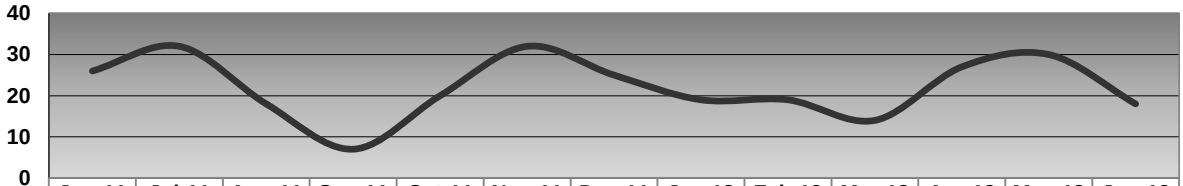
	6/1	6/2	6/3	6/4	6/5	6/6	6/7	6/8	6/9	6/10	6/11	6/12	6/13	6/14	6/15	6/16	6/17	6/18	6/19	6/20	6/21	6/22	6/23	6/24	6/25	6/26	6/27	6/28	6/29	6/30
Series1	28	14	50	39	43	30	38	43	22	27	32	29	42	59	52	26	41	18	29	34	36	29	21	36	34	38	38	48	52	31

III. Voluntary Arrival Curfew

During the month of June 2012, Airport Staff logged a total of 18 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 June 2012. For a listing of aircraft arrivals during the night hours, see attachment B.



	7:00 AM	6:00 AM	5:00 AM	4:00 AM	3:00 AM	2:00 AM	1:00 AM	12:00 AM	11:00 PM
Operations	2	4	0	0	0	0	1	3	8



	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12
Operations	26	32	18	7	20	32	25	19	19	14	27	30	18

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 June 2012 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 flight tracks, 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. Curfew Violations

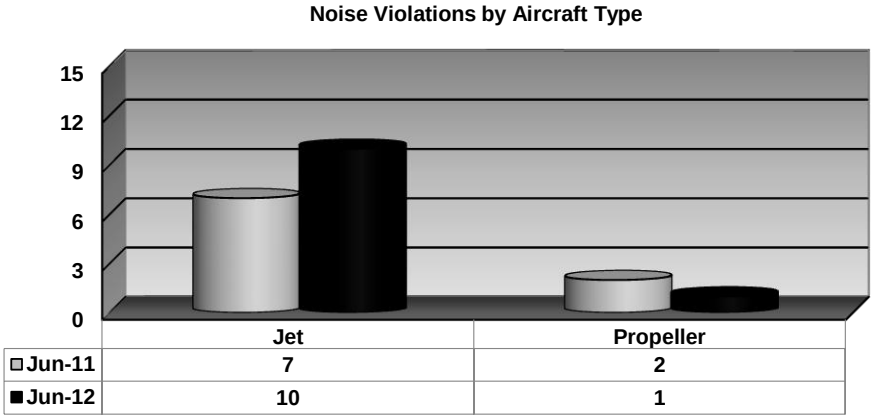
The night departure curfew prohibits takeoffs or engine startups between 11pm and 7am Monday through Friday, or until 8am on weekends and holidays. Exceptions are allowed for bona fide medical or public safety emergencies. During the month of June 2012 there were four authorized curfew departures and no curfew violations.

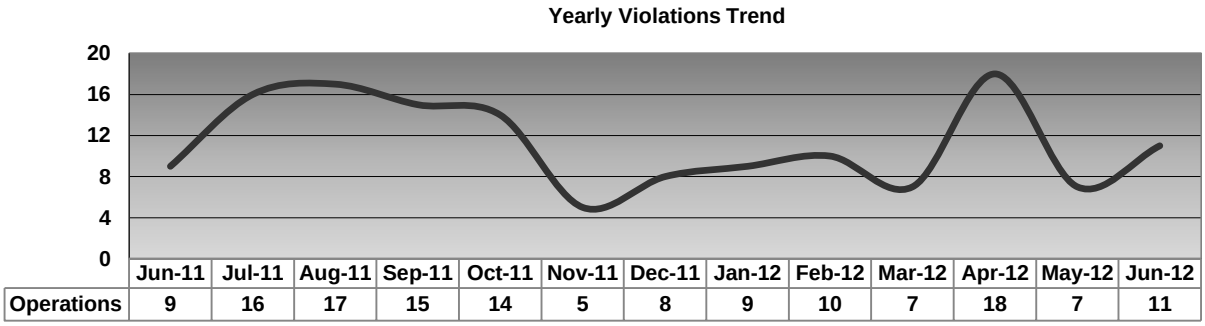
VII. Noise Violations

As result of an agreement between the City of Santa Monica and the Federal Aviation Administration (FAA), an Aircraft Noise Ordinance was established setting a maximum noise level of 95.0 dBA Single Event Noise Exposure Level (SENEL) measured at two Remote Monitoring Stations (RMS) 1,500 feet from each end of the runway. *(See Attachment E for the location of RMS01 & RMS02 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 June 2012, there were 11 noise violations, an increase of 22% from the 9 noise violations recorded during June 2011. A summary of noise violations for June 2012 is listed on attachment D.

Of the 8,211 aircraft operations recorded during the month of June 2012, 99.9% were in compliance with Santa Monica Airport's noise ordinance. The noise violations listed in the graph below were registered at RMS sites 1 and 2 and do not include exempt medical emergency operations.

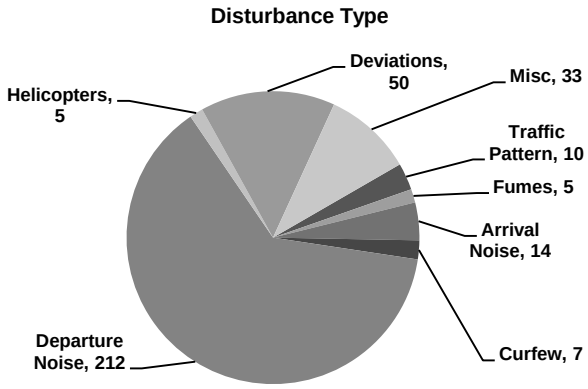


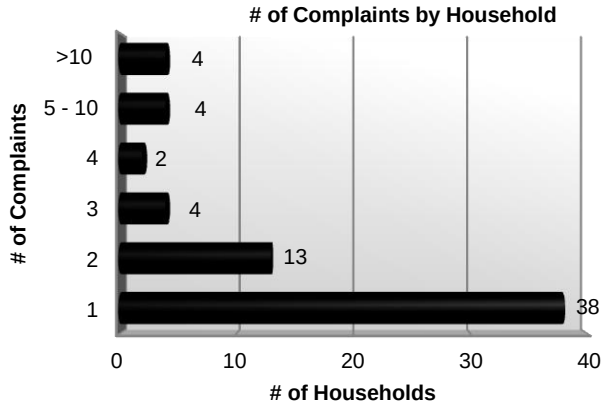


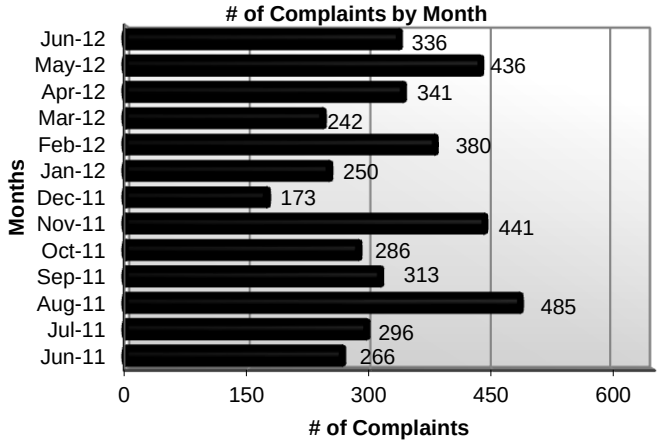
Aircraft & SENEL	95.1 to 95.9	96.0 to 96.9	97.0 to 97.9	98.0 to 98.9	99.0 to 99.9	100.0 to 104.9	105.0+	Total	%
Jet	3	3	0	2	2	0	0	**10**	**91%**
Propeller	1	0	0	0	0	0	0	**1**	**9%**
Helicopter	0	0	0	0	0	0	0	**0**	**0%**
Total:	**4**	**3**	**0**	**2**	**2**	**0**	**0**	**11**	
%	**36%**	**27%**	**0%**	**18%**	**18%**	**0%**	**0%**		**100%**

VIII. AIRCRAFT NOISE COMPLAINTS

During June 2012, Airport Noise Management staff received a total of 336 inquiries from 65 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 June 2012.







ATTACHMENT A

AIRPORT TRAFFIC RECORD	FACILITY NAME	LOCATION	6/2012	SMO
Mail ORIGINAL of this form to Washington Office, APO-110, thru Regional Air Traffic Division.	Santa Monica ATCT	Santa Monica , California	(1-2) (3-4) MO. YR.	(5-9) LOC ID

(10-1) (11) FACILITY TYPE ("X" ONE)

APPROACH CONTROL TOWERS
- [ ] B. RADAR
- [ ] C. LIMITED RADAR
- [ ] D. NON-RADAR

(also submit FAA Form 7230-26)

- [X] E. VFR TOWER
- [ ] G. CONTRACT TOWER

(Continue on reverse)

FACILITY TYPE CHANGED (12) [ ] YES

IF DAILY HOURS OF OPERATION HAVE CHANGED, ENTER NEW HOURS → HRS. 10THS (77-78) (79)

AIRPORT OPERATIONS COUNT

	ITINERANT					LOCAL			TOTAL	SPECIAL
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	OPERATIONS	USE (47-51)
1	0	11	198	0	209	13	0	13	222	222
2	0	12	127	0	139	62	0	62	201	423
3	0	22	212	0	234	56	0	56	290	713
4	0	26	175	0	201	84	0	84	285	998
5	0	24	171	0	195	52	0	52	247	1245
6	0	14	132	0	146	144	0	144	290	1535
7	0	13	167	0	180	67	0	67	247	1782
8	0	24	233	0	257	149	0	149	406	2188
9	0	9	212	0	221	83	0	83	304	2492
10	0	18	203	0	221	58	0	58	279	2771
11	0	14	119	0	133	10	0	10	143	2914
12	0	14	117	0	131	0	0	0	131	3045
13	0	18	157	0	175	31	0	31	206	3251
14	0	32	177	0	209	77	0	77	286	3537
15	0	27	190	0	217	139	0	139	356	3893
16	0	19	149	4	172	48	0	48	220	4113
17	0	20	136	0	156	1	0	1	157	4270
18	0	14	81	0	95	0	0	0	95	4365
19	0	15	137	0	152	25	0	25	177	4542
20	0	26	201	0	227	150	0	150	377	4919
21	0	21	128	0	149	0	0	0	149	5068
22	0	16	208	0	224	87	0	87	311	5379
23	0	16	216	0	232	72	0	72	304	5683
24	0	13	275	0	288	62	0	62	350	6033
25	0	8	217	0	225	102	0	102	327	6360
26	0	11	223	0	234	136	0	136	370	6730
27	0	13	262	0	275	99	0	99	374	7104
28	0	23	187	0	210	159	0	159	369	7473
29	0	22	233	0	255	147	0	147	402	7875
30	0	17	274	0	291	45	0	45	336	8211
31	0	0	0	0	0	0	0	0	0	8211
TOTAL	0				6053	2158	0	2158	8211	

FAA Form 7230-1 (8-78) SUPERSEDES PREVIOUS EDITION AND FAA FORM 7230-11 RIS: AT 7230-99

ATTACHMENT A
(Airport Traffic Record)

FOR USE BY VFR TOWERS ONLY (ALL Approach Control Terminals MUST use FAA Form 7230-26)	*Instrument Operations on this side MUST COMPLETE*	6/2012 (1-2) (3-4) MO. YR.	SMO (5-9) LOC ID	ADP CONTROL 10-4

INSTRUMENT OPERATIONS

DAY	AC	AT	GA	MILITARY		TOTAL (10-E) (14-1)
1	0	11	70	0	(16-19)	81
2	0	12	36	0	(20-23)	48
3	0	22	55	0	(24-27)	77
4	0	26	175	0	(28-31)	201
5	0	24	45	0	(32-35)	69
6	0	14	27	0	(36-39)	41
7	0	13	44	0	(40-43)	57
8	0	24	51	0	(44-47)	75
9	0	9	38	0	(48-51)	47
10	0	18	44	0	(52-55)	62
11	0	14	59	0	(56-59)	73
12	0	14	105	0	(60-63)	119
13	0	18	81	0	(64-67)	99
14	0	32	66	0	(68-71)	98
15	0	27	90	0	(72-75)	117
16	0	18	57	0	(76-79)	75
						(14-2)
17	0	20	102	0	(16-19)	122
18	0	14	63	0	(20-23)	77
19	0	15	60	0	(24-27)	75
20	0	26	52	0	(28-31)	78
21	0	21	67	0	(32-35)	88
22	0	16	60	0	(36-39)	76
23	0	16	35	0	(40-43)	51
24	0	13	40	0	(44-47)	53
25	0	8	40	0	(48-51)	48
26	0	11	48	0	(52-55)	59
27	0	13	37	0	(56-59)	50
28	0	23	41	0	(60-63)	64
29	0	22	51	0	(64-67)	73
30	0	17	33	0	(68-71)	50
31	0	0	0	0	(72-75)	0
TOTAL	0	531	1772	0		2303
	(17-21)	(22-26)	(27-31)	(32-36)		
FACILITY USE						
FACILITY USE						

REMARKS

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

6/3/12	6:51	N756XJ	C750	21	85.6	2	XOJET INC	J
6/5/12	23:34	954LA	AS350	21	DNR	2	LAW ENFORCEMENT	H
6/6/12	0:35	954LA	AS350	21	DNR	2	LAW ENFORCEMENT	H
6/6/12	1:09	954LA	AS350	21	DNR	2	LAW ENFORCEMENT	H
6/7/12	23:18	N311AF	S550	21	82.0	2	AERO FILM	J
6/10/12	23:18	N7670B	CL30	21	85.8	2	OB AIR LLC	J
6/12/12	6:58	N899SD	B200	21	90.5	2	LOYD'S AVIATION	TP
6/13/12	23:49	N3517S	C172	21	DNR	2	AMERIFLYERS OF TEXAS INC	SE
6/17/12	0:37	N200JF	BE33	21	76.5	2	PETER D DEL ROSSO	SE
6/24/12	23:09	N796SP	C172	21	DNR	2	OPENSKY AIRWAYS LLC	SE
6/26/12	6:13	N426FL	BE40	21	81.6	2	FLIGHT OPTIONS LLC	J
6/26/12	23:30	N2092L	PA28	21	DNR	2	SKYWARD AVIATION INC	SE
6/27/12	6:38	N3039X	F33A	21	DNR	2	ORTHOREDLANDS LEEASING LLC	SE
6/27/12	23:15	N7306Q	C182	21	72.4	2	AIR SPACERS INC FLYING CLUB	SE
6/27/12	23:30	N840TM	HAWKER 800XP	21	88.7	2	AIRCRAFT HOLDING COMPANY ONE LLC	J
6/30/12	0:27	N551LA	R44	21	DNR	2	LAW ENFORCEMENT	H
6/30/12	7:53	N569TC	RV7A	21	DNR	2	THEODORE J GABLIN	SE
6/30/12	7:56	N298XJ	HAWKER 800XP	21	85.7	2	XOJET INC	J

ATTACHMENT C
(Authorized Departures & Curfew Violations)

Authorized Curfew Departures

LIFEGUARD & PD DEPARTURES					
DATE	TIME	RWY	NUMBER	TYPE	OPERATION
6/5/12	23:04	21	LASD70	AS350	LAW ENFORCEMENT
6/5/12	23:42	3	LASD70	AS350	LAW ENFORCEMENT
6/6/12	0:39	21	LASD70	AS350	LAW ENFORCEMENT
6/6/12	1:12	21	LASD70	AS350	LAW ENFORCEMENT

Curfew Violations

No Unauthorized Curfew Departures

ATTACHMENT D
(Aircraft Noise Violations)

AIRCRAFT ENGINE CATEGORY LEGEND

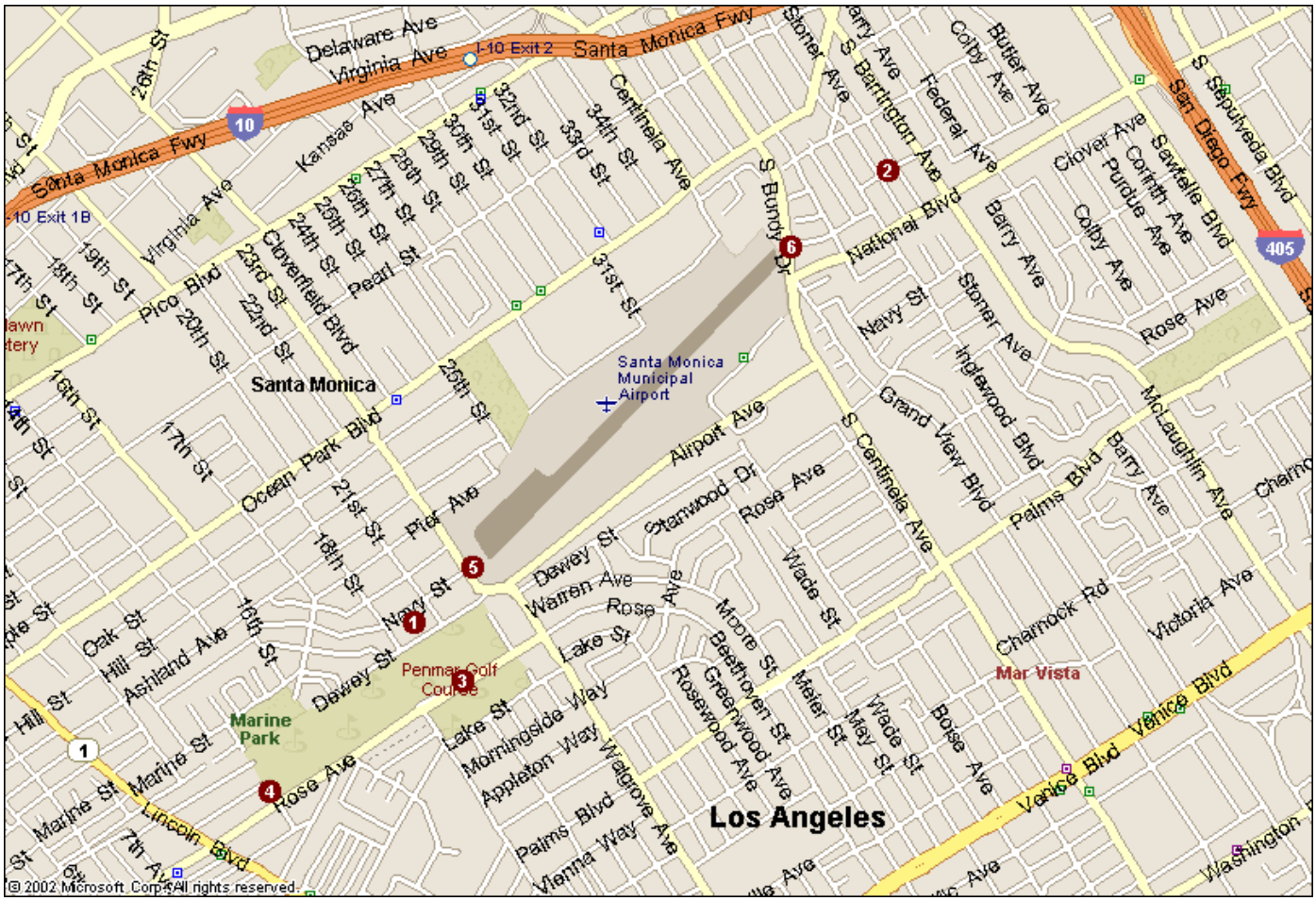
(J) = Jet, (ME) = Multi-Engine, (SE) = Single-Engine, (TP) = Turbo-Prop, (H) = Helicopter

DATE	TIME	NUMBER	TYPE	RWY	SEL	RMS	COMPANY NAME	ACTION	ENGINE
6/2/12	10:11	94RL	LJ35	21	96.4	1	CLASSIC AVIATION INC/LR35A LLC	WARNING	J
6/3/12	13:58	94RL	LJ35	21	96.1	1	CLASSIC AVIATION INC/LR35A LLC	WARNING	J
6/3/12	16:06	622PM	C650	21	99.3	1	CHANEN CONSTRUCTION INC/SUN A	WARNING	J
6/6/12	14:41	126MT	C560	21	98.6	1	WELLS CAPITAL LLC	WARNING	J
6/10/12	12:49	647JA	VELOCITY	21	95.1	1	DERRICK SCOTT	WARNING	SE
6/12/12	8:55	627HS	C550	21	95.3	1	EXEC 1 AVIATION/CENTRAL IOWA A	WARNING	J
6/13/12	13:13	286XJ	HAWKER 800XP	21	98.2	1	XOJET INC	$2,000	J
6/19/12	13:38	801WW	FALCON 2000 EX	21	96.5	1	JET AVIATION BUSINESS JETS	WARNING	J
6/23/12	12:48	1HE	C550	21	95.9	1	CONQUEST AIR LLC	WARNING	J
6/28/12	17:18	313HC	C560	21	95.3	1	ALICE ENVIRONMENTAL SERVICES	WARNING	J
6/30/12	9:20	298XJ	HAWKER 800XP	21	99.4	1	XOJET INC	$2,000	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



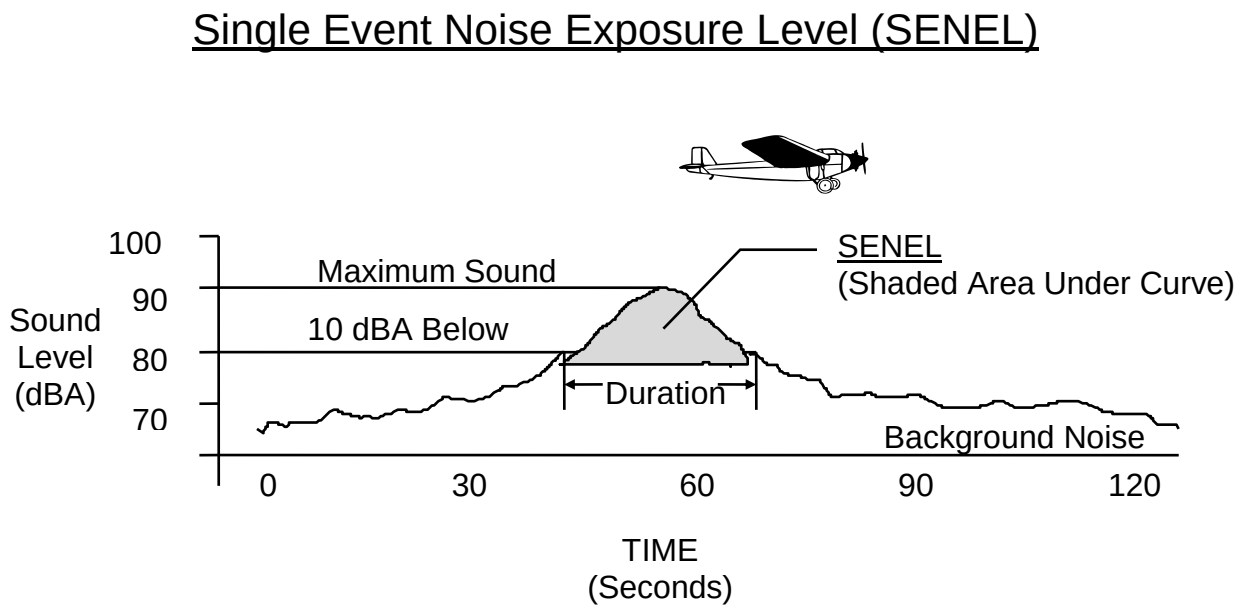
Note: ONLY Remote Monitoring Stations 1 & 2 are used for the Enforcement of the 95.0 dBA Single Event Noise Exposure Level (SENEL) maximum allowable noise level.

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.



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.