# Santa Monica Airport

# **Monthly Operations Report**

# **April 2020**



Santa Monica<sup>™</sup>

Report prepared by:

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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)

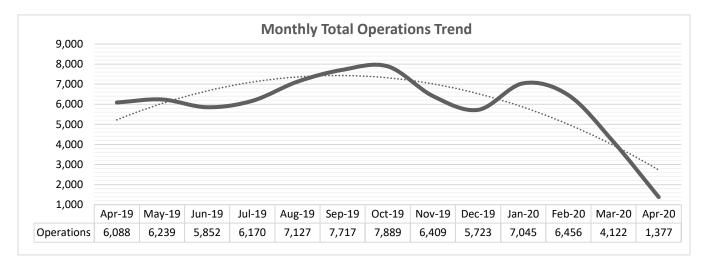
ATTACHMENT F Single Event Noise Exposure Level (SENEL)

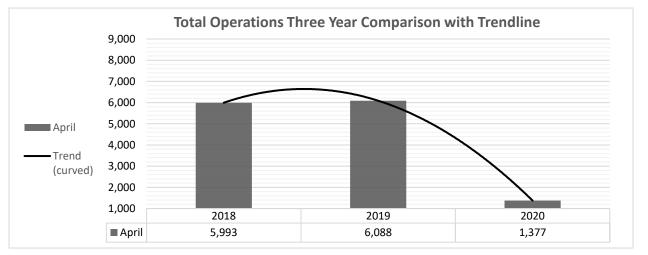
#### I. Introduction

This report has been prepared to inform the Airport Commission and the general public regarding the Santa Monica Airport's Noise Management Program. The report provides details on aircraft operations data, noise violations, airplane and helicopter deviations, and curfew departures for the month of April 2020.

#### II. Aircraft Operations Data

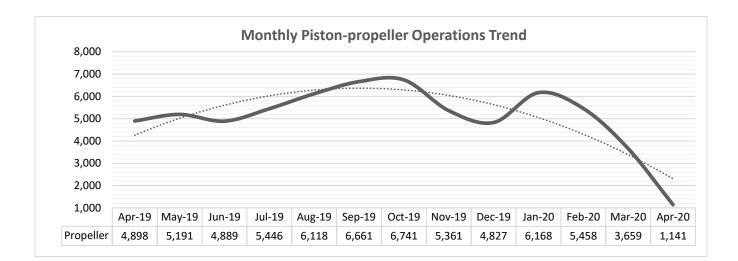
The total number of aircraft operations (aircraft operation is defined as one takeoff or one landing) recorded during the month of April 2020 was 1,377 which represents a 77% decrease from the 6,088 operations recorded during April 2019. Approximately 21% of the operations were instrument flights (IFR transient), 16% were local flights (VFR local operations), and 62% were 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.

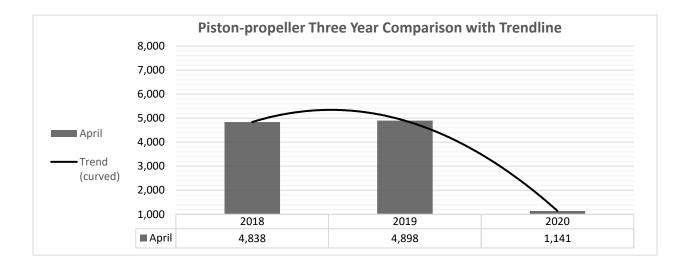




#### Piston-propeller Aircraft Operations

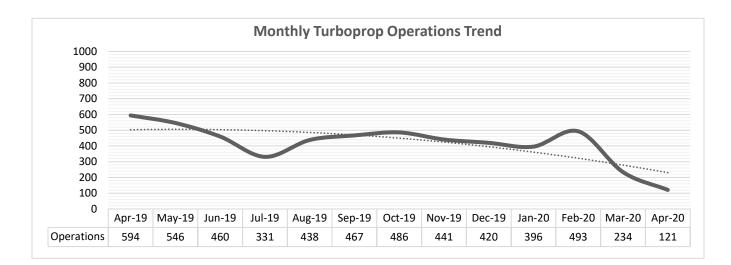
There were approximately 1,141 piston-propeller aircraft operations, comprising approximately 83% of the total operations. Piston-propeller aircraft operations for April 2020 decreased 77% from the 4,898 piston-propeller aircraft operations recorded during April 2019.

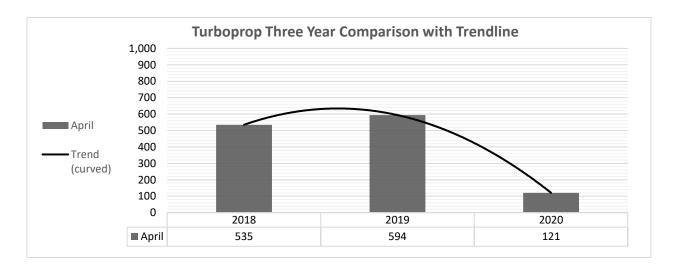




#### Turboprop Operations

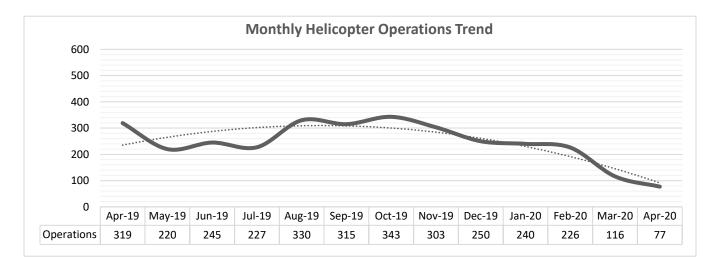
The difference between a turboprop and piston-propeller aircraft is simply the type of engine. Turboprops have one or more turbine engines, while piston-propeller aircraft have one or more reciprocating piston engines. Of the total monthly aircraft operations for April 2020, approximately 121 were by turboprop aircraft, comprising approximately 9% of the total operations. Turboprop aircraft operations decreased approximately 80% from the 594 operations recorded during April 2019.

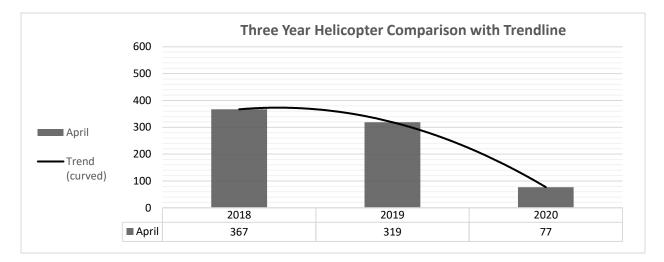




#### Helicopter Operations

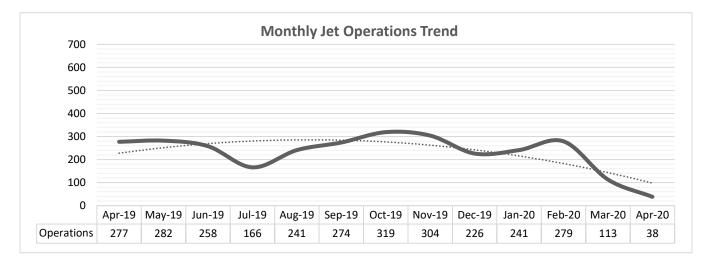
Of the monthly aircraft operations for April 2020, approximately 77 operations were from helicopters, comprising approximately 6% of the total operations. Helicopter operations for April 2020 decreased 76% from the 319 helicopter operations recorded in April 2019.



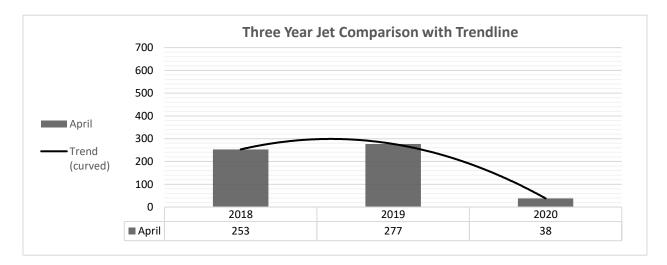


#### Jet Aircraft Operations

In April of 2020, there were approximately 38 jet operations, comprising approximately 3% of the total operations. Jet operations for April 2020 decreased 86% from the 277 jet aircraft operations recorded during April 2019. Daily jet operations significantly vary day over day. Jet operations for the month of April 2020 averaged 1 per day. The bar graph below represents the daily operations for jet driven aircraft for the month of April 2020.



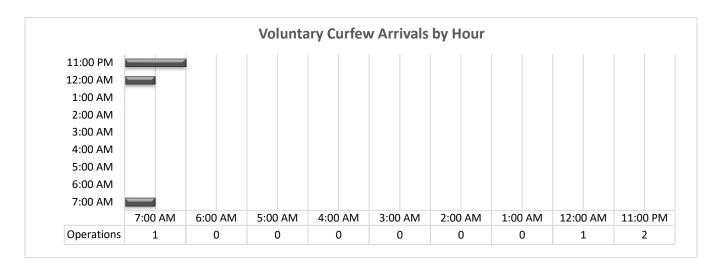


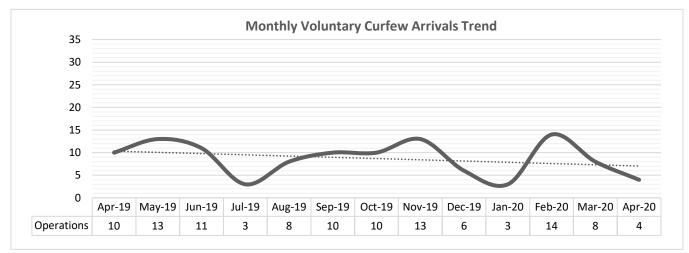


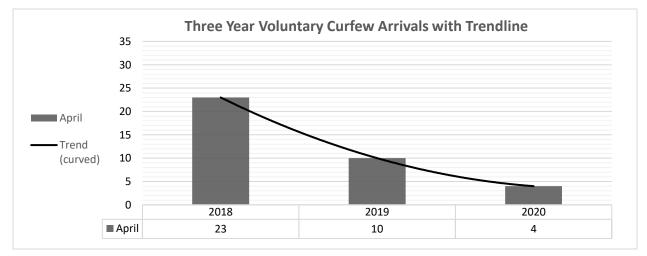
Monthly Noise and Operations Report – April 2020

### III. Voluntary Arrival Curfew

During the month of April 2020, Airport Staff logged a total of 4 aircraft arrivals during the Voluntary Arrival Curfew (VAC), which mirrors the mandatory departure curfew hours of 11:00 p.m. to 7:00 a.m. on weekdays, and 11:00 p.m. to 8:00 a.m. on weekends. The graph below depicts the number of arrivals for each VAC hour during the month of April 2020. For a listing of aircraft arrivals during the night hours, see Attachment B.







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#### **IV.** 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. Exceptions are allowed for bona fide medical emergencies or public safety operations. During the month of April 2020, there were no authorized departures during curfew hours, and no departure curfew violations. For more details see Attachment C.

#### V. Deviations from Recommended VFR Noise Management Procedures

Santa Monica Airport requests that arriving and departing VFR aircraft follow certain flight patterns for Noise Management. Aircraft that are observed to be operating outside of the requested flight patterns are contacted and advised of the proper Noise Management procedures. During the month of April 2020 airport staff spent several hours analyzing 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. Operators who deviated due to weather, traffic or given a mandatory instruction from Air Traffic Control are not contacted by staff.

#### VI. Noise Management Briefings

Many 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.

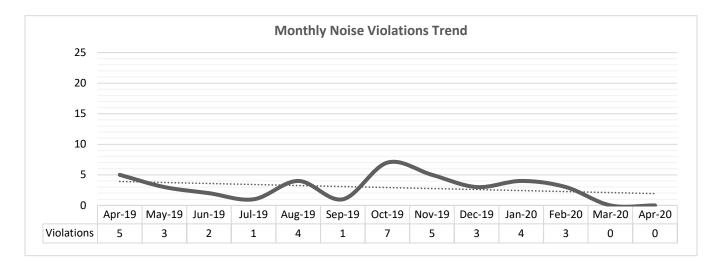
#### VII. Noise Violations

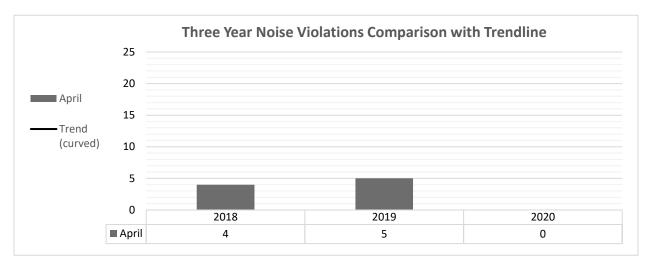
Santa Monica Airport enforces a maximum noise limit as approved by City Ordinance adopted in 1985. The Santa Monica Municipal Code section 10.04.04.060 states that "No aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing on April1, 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 approximately 2,200 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.

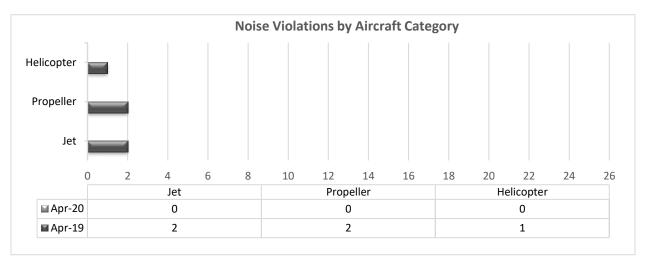
A violation occurs when an aircraft exceeds 95.0 dBA SENEL. During the month of April 2020, there were no noise violations recorded which represents a 100% decrease from the 5 noise violation recorded during April 2019. A summary of noise violations for April 2020 are listed on attachment D. Of the 1,377 aircraft operations recorded during the month of April 2020, 100% of the operations were in compliance with Santa Monica Airport's noise ordinance. The noise violations listed in the table below were registered at RMS sites 1 or 2 and do not include exempt or 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	0	0	0	0	0	0	0	0	0%
Propeller	0	0	0	0	0	0	0	0	0%
Helicopter	0	0	0	0	0	0	0	0	0%
Total:	0	0	0	0	0	0	0	0	
%	0%	0%	0%	0%	0%	0%	0%		0%

#### Violations Breakdown by Decibel Level



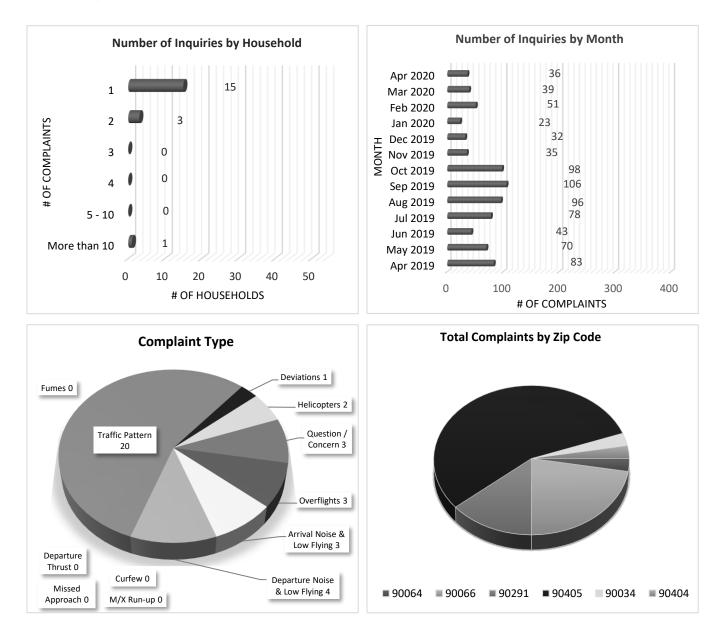




#### VIII. AIRCRAFT RELATED COMPLAINTS

During the month of April of 2020, 19 different households recorded a total of 36 reports related to aircraft operations. 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 inquiries noise management staff investigated during the month of April 2020.

At the request of the Airport Commission, staff began tracking inquiries caused by the Airbus A320 aircraft series. From the 3 overflight reports recorded during April of 2020, zero A320 overflights were attributed to these reports.



## ATTACHMENT A

AIRPORT TRAFFIC RECORD			FACILITY NA	ME	LOCATION			04 / 20	SMO	
Mail ORIGINA	AL of this form t	o Washington	Office,	_					(1-2) (3-4)	(5-9)
APO-110,	, thru Regional	Air Traffic Divis	ion.	Santa Moni	ca ATCT	Santa Moni	ca , Californ	ia	MO. YR.	LOC ID
(10-1) FACILITY TYPE ('X" ONE)								FACILITY	IF DAILY HOU	RS
(11)								TYPE	OF OPERATIO	N
	APPROACH	$\setminus \square$	B. RADAR					CHANGED	HAVE CHANG	ED,
	CONTROL		C. LIMITED R		X	E. VFR TOWE		(12)	ENTER NEW	
	TOWERS		D. NON-RAD	AR		G. CONTRAC			HOURS	HRS. 10 THS
		1 1 2 5 4			(C	ontinue on reve	rse)	YES		
	► (a	ulso submit FA	A Form 7230		PORT OPERATION	COLNT				(77-78) (79)
				AIKI	OKI OPEKA HON	SCOUNT				
		ITIN	ERANT				LOCAL			
									TOTAL	S PECIAL
DAY	AC	AT	GA	MIL	TOTAL	CIVIL	MILITARY	TOTAL	OPERATIONS	USE
(15-16)	(17-21)	(22-26)	(27-31)	(32-36)	ITINERANT	(37-41)	(42-46)	LOCAL		(47-51)
1	0	5	32	0	37	0	0	0	37	37
2	0	0	40	0	40	21	0	21	61	98
3	0	2	39	0	41	2	0	2	43	141
4	0	0	57	0	57	8	0	8	65	206
5	0	0	10	0	10	0	0	0	10	216
6	0	1	9	0	10	1	0	1	11	227
7	0	1	9	0	10	3	0	3	13	240
8	0	0	9	0	9	6	0	6	15	255
9	0	0	4	0	4	0	0	0 7	4	259
10 11	0	0	26 84	0	26 85	7	0	0	33 85	292 377
11	0	0	18	0	18	0	0	0	18	395
12	0	1	18	0	20	0	0	0	20	415
14	0	1	45	0	46	41	0	41	87	502
15	0	0	63	0	63	43	0	43	106	608
16	0	0	41	0	41	9	0	9	50	658
17	0	0	27	0	27	0	0	0	27	685
18	0	6	41	0	47	9	0	9	56	741
19	0	4	65	0	69	0	0	0	69	810
20	0	1	29	0	30	2	0	2	32	842
21	0	0	42	0	42	5	0	5	47	889
22	0	2	45	2	49	8	0	8	57	946
23	0	3	41	0	44	8	0	8	52	998
24	0	2	40	0	42	10	0	10	52	1050
25	0	0	73	0	73	9	0	9	82	1132
26	0	2	70	0	72	0	0	0	72	1204
27	0	2	29	2	33	29	0	29	62	1266
28	0	7	51	0	58	6	0	6	64	1330
29	0	5	20	0	25	0	0	0	25	1355
30	0	1	21	0	22	0	0	0	22	1377
31										

## ATTACHMENT A

		THIS SIDE			ALL VF	FR Tower.	s recording			
						Instrument Operations			SMO	ADP
					on this side			(1-2) (3-4)	(5-9)	CONTROL
	MUST us	UST use FAA Form 7230-26)			MUST	COMPLE	1	MO. YR.	LOC ID	10-4
		INSTRUM	ENT OPERATI	ONS	1	TOTAL	REMARKS			
DAY	AC	AT	GA	MILITARY		(10 - E) (14 - 1)	-			
1	0	3	4	0	(16-19)	7	_			
2	0	0	8	0	(20-23)	8	_			
3	0	0	7	0	(24-27)	7				
4	0	0	10	0	(28-31)	10				
5	0	0	6	0	(32-35)	6				
6	0	1	8	0	(36-39)	9				
7	0	1	3	0	(40-43)	4				
8	0	0	4	0	(44-47)	4				
9	0	0	3	0	(48-51)	3				
10	0	5	0	0	(52-55)	5				
11	0	1	14	0	(56-59)	15				
12	0	15	0	0	(60-63)	15				
13	0	1	13	0	(64-67)	14				
14	0	0	10	0	(68-71)	10				
15	0	0	9	0	(72-75)	9				
16	0	0	8	0	(76-79)	8				
						(14-2)				
17	0	0	5	0	(16-19)	5				
18	0	1	10	0	(20-23)	11				
19	0	0	16	0	(24-27)	16				
20	0	0	14	0	(28-31)	14				
21	0	0	6	0	(32-35)	6				
22	0	0	6	0	(36-39)	6				
23	0	3	9	0	(40-43)	12				
24	0	2	4	0	(44-47)	6				
25	0	0	7	0	(48-51)	7				
26	0	2	12	0	(52-55)	14				
27	0	2	5	1	(56-59)	8				
28	0	2	9	0	(60-63)	11	]			
29	0	5	22	0	(64-67)	27	]			
30	0	0	18	0	(68-71)	18	]			
31	0			0	(72-75)	0	]			
							1			
							1			

## ATTACHMENT B Registered Noise Levels for Night Arrivals 11 pm and 7 am Weekdays 11 pm and 8 am Weekends

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ENGINE
4/14/20	23:02	N427DP	P28A	21	DNR	2	CHARLIE ALPHA INC	Р
4/24/20	23:07	N1165W	M20P	21	67.3	2	GLOBAL NET DESIGNS LLC	Р
4/25/20	0:47	N315HP	SR22	21	78.5	2	N315HP LLC	Р
4/25/20	7:55	N3LW	SR22	21	DNR	2	KYLLAR LLC	Р

## ATTACHMENT C (Authorized Departures & Curfew Violations)

# Authorized Curfew Departures

NONE

## **Curfew Violations**

NONE

## ATTACHMENT D (Aircraft Noise Violations)

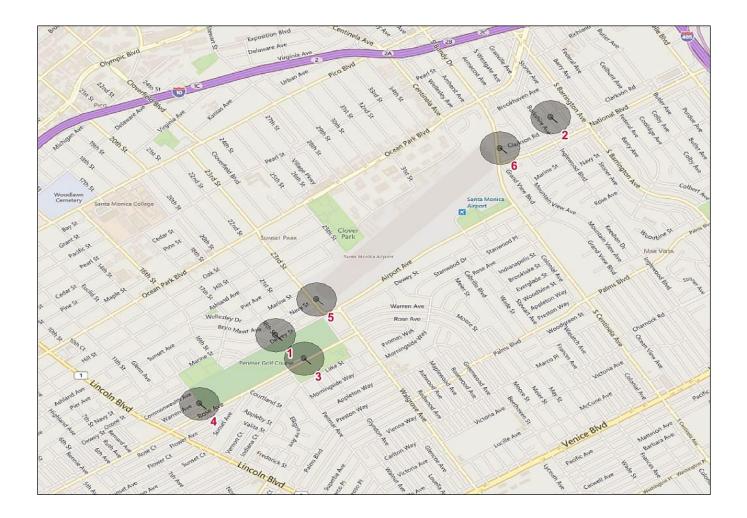
#### AIRCRAFT ENGINE CATEGORY LEGEND

(J) = Jet (P) = Piston-propeller(T) = Turboprop (H) = Helicopter

NONE

## ATTACHMENT E Location of Remote Noise Monitoring Stations (RMS)

- **RMS 1** 18<sup>th</sup> 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 23<sup>rd</sup> 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.

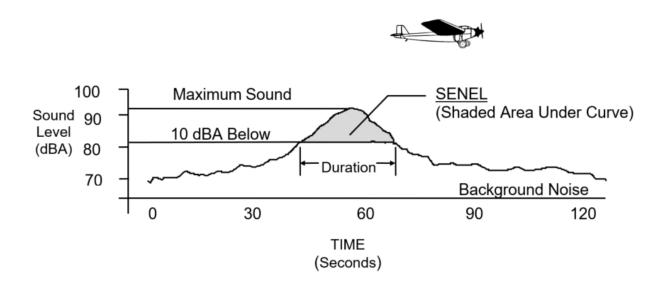
### ATTACHMENT F (Single Event Noise Exposure Level)

## **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 2,200 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.