

## Santa Monica Airport Monthly Operations Report

### September 2023

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#### **Table of Contents**

Introduction	Page 2
Aircraft Operations Data	Page 2
Voluntary Night Arrival Curfew	Page 7
Curfew Violations	Page 8
Aircraft Deviations	Page 8
Noise Management Briefings	Page 8
Noise Violations	Page 9
Aircraft Noise Complaints	Page 10

#### **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)

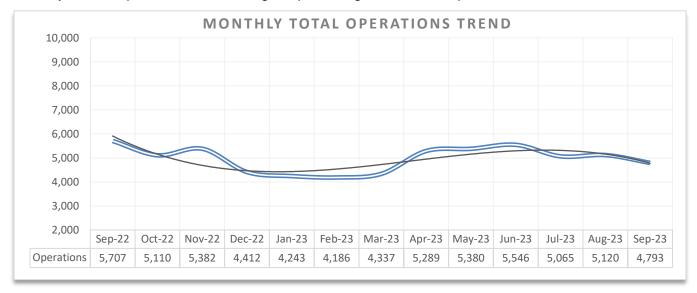
#### I. Introduction

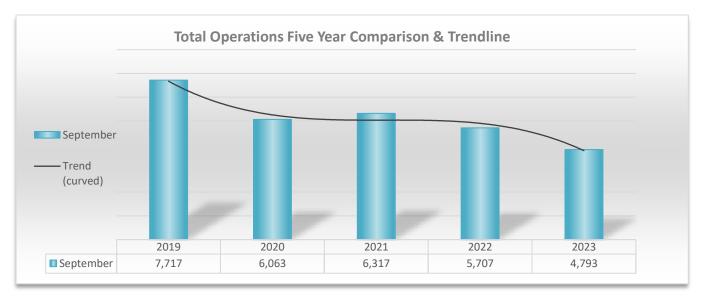
This report has been prepared to inform the Airport Commission and the general public regarding the Santa Monica Airport's Noise Management Program. The report provides details on aircraft operations (aircraft operation is defined as one takeoff or one landing), noise violations, deviations to the fly neighborly program, and curfew violations for the month of September 2023.

#### II. Aircraft Operations Data

The total number of aircraft operations recorded during the month of September 2023 was 4,793, which represents a 16% decrease from the 5,707 operations recorded during September 2022. Approximately 18% of the operations were instrument flights (IFR transient), 40% were local flights (VFR local operations), and 42% were itinerant flights (VFR transient). The official total traffic count is recorded by the Federal Aviation Administration (FAA) control tower. The FAA's traffic record is included under Attachment A.

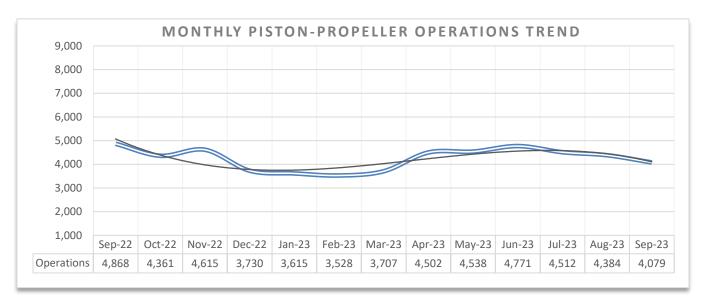
Breakdowns of the total operations grouped by aircraft type and a graph for each type indicating each monthly aircraft operations trend during the preceding twelve-month period are as follows.





#### Piston-propeller Aircraft Operations

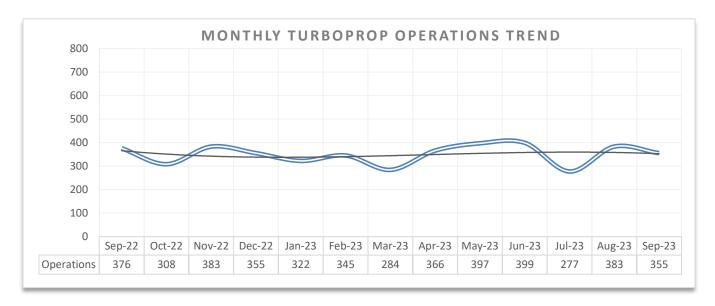
There were approximately 4,079 piston-propeller aircraft operations recorded, comprising about 85% of the total operations. Piston-propeller aircraft operations for September 2023 decreased 16% from the 4,868 piston-propeller aircraft operations recorded during September 2022.

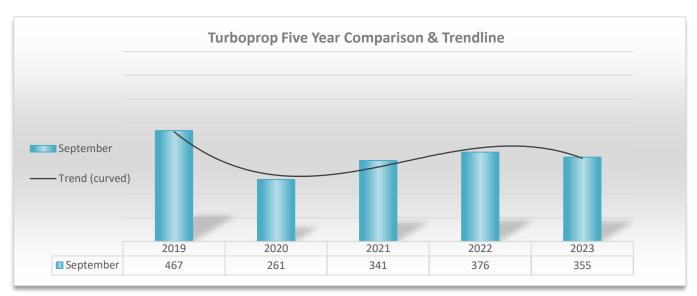




#### **Turboprop Operations**

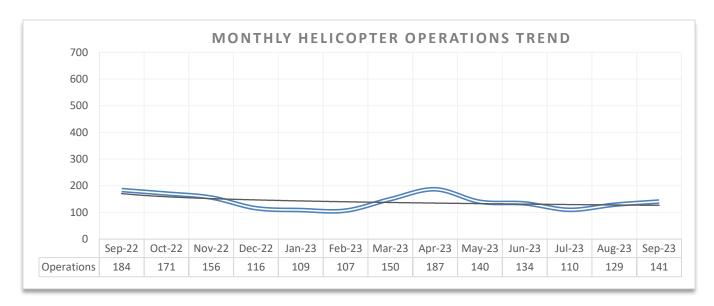
The difference between a turboprop and piston-propeller aircraft is simply their type of engine. Turboprops have one or more turbine engines, while piston-propeller aircraft have one or more reciprocating piston engines. Of the total monthly aircraft operations for September 2023, approximately 355 were by turboprop aircraft, comprising around 7% of the total operations. Turboprop aircraft operations decreased by approximately 6% from the 376 operations recorded during September 2022.

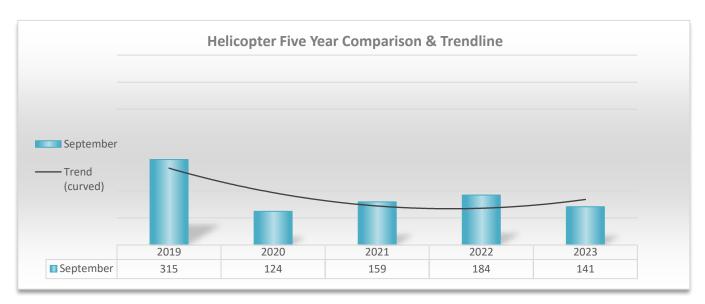




#### **Helicopter Operations**

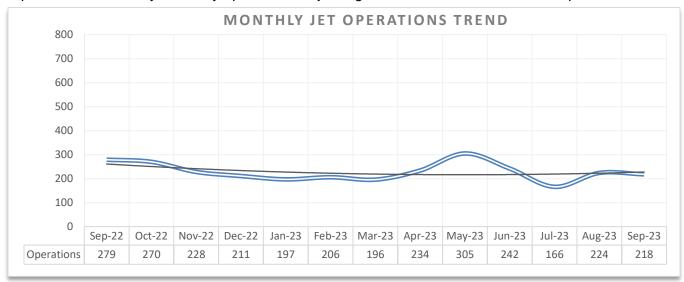
Of the monthly aircraft operations for September 2023, approximately 141 operations are attributed to helicopters, comprising about 3% of the total operations. Helicopter operations during September 2023 decreased by approximately 23% from the 184 helicopter operations recorded in September 2022.



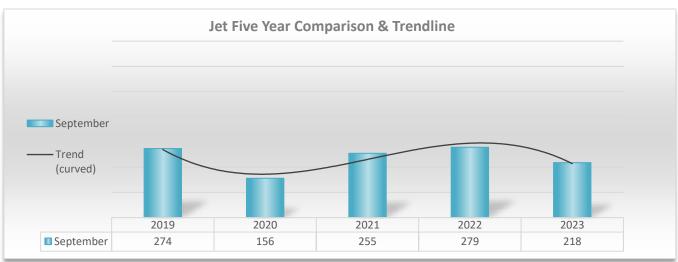


#### Jet Aircraft Operations

In September of 2023, there were approximately 218 jet operations recorded, encompassing around 5% of the total operations. Jet operations for September decreased by 22% from the 279 jet aircraft operations recorded during September 2022. Daily jet operations vary significantly day over day. During the month of September 2023, jet aircraft averaged 7 operations per day. The bar graph below represents the monthly and daily operations for jet-engined aircraft for the month of September 2023.

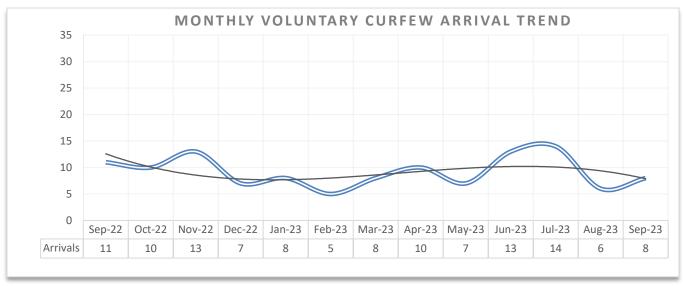


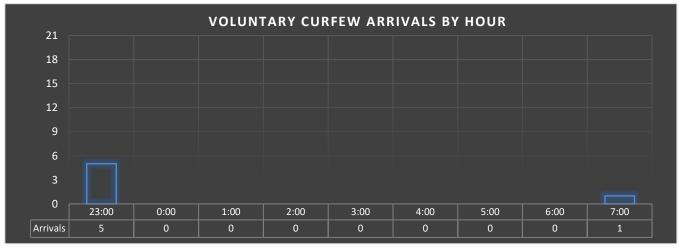


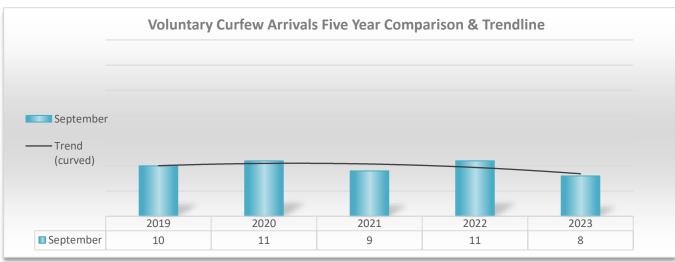


#### III. Voluntary Arrival Curfew

During the month of September 2023, Airport Staff logged a total of 8 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 September 2023. For a listing of aircraft arrivals during the night hours, see Attachment B.







#### 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 September 2023, there were no authorized departures during curfew hours, and no departure curfew violation. For more details, refer to 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 informed of the proper Noise Management procedures. During the month of September 2023, 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 deviate due to weather, traffic or are 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 that will lower aircraft noise levels, which will minimize the impact of aircraft operations on the surrounding community.

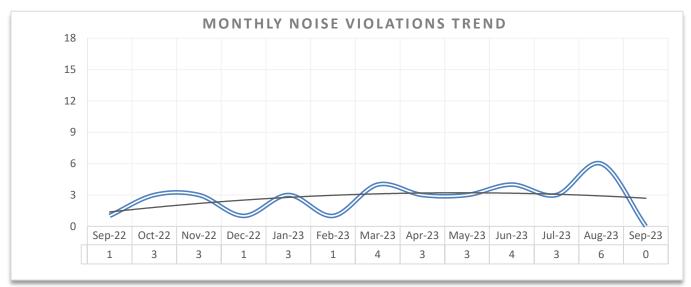
#### VII. Noise Violations

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 September 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 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.

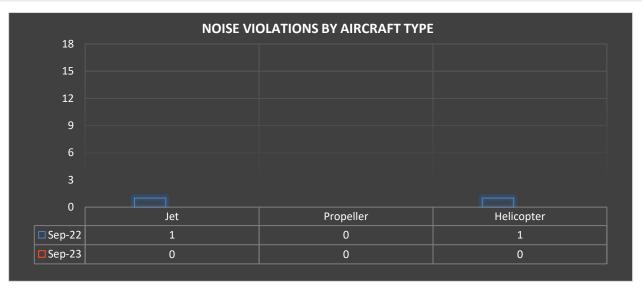
A violation occurs when an aircraft exceeds 95.0 dBA SENEL. During the month of September 2023, there were no noise violations recorded, a 100% increase compared to only 1 noise violation recorded during September 2022. A summary of noise violations for September 2023 is listed in Attachment D. Of the 4,793 aircraft operations recorded during the month of September 2023, **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 noise exceedances due to extraneous factors (loss of power, the need to avoid other aircraft, or unusual weather conditions); nor do they include exempt or medical emergency aircraft operations.

Violations Breakdown by Decibel Level

		V 10	nationic Bro	anaown by	DOGIDOI EO	701		
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
Propeller	0	0	0	0	0	0	0	0
Helicopter	0	0	0	0	0	0	0	0
Total:	0	0	0	0	0	0	0	0

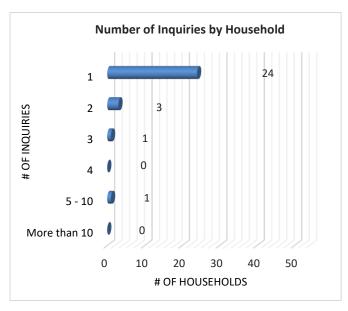


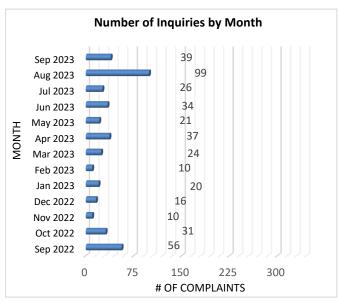


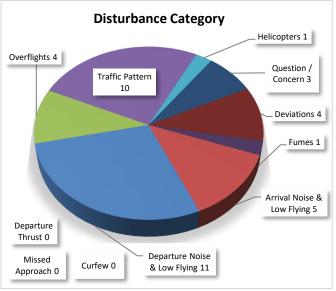


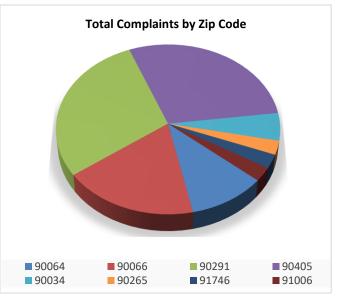
#### VIII. Aircraft Related Inquiries

During the month of September 2023, 29 individual households logged a total of 39 reports regarding 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 September 2023.









#### **ATTACHMENT A**

AIRPORT TRAFFIC RECORD				FACILITY NAME		LOCATION			09 / 23	SMO		
Mail ORIGINAL of this form to Washington Office,									(1-2) (3-4)	(5-9)		
APO-110,	thru Regional	Air Traffic D	ivision.	Santa Mon	ica ATCT	Santa Mon	ica , Californ	iia	a MO. YR. LOC ID			
(10-1)	FACILITY	TYPE("X"	ONE)				IF DAILY HO	IF DAILY HOURS				
(11)								TYPE	OF OPERATI	ON		
	APPROACH		B. RADAR				CHANGEI	D HAVE CHANGED,				
	CONTROL	$\rightarrow$	C. LIMITED	RADAR	х	E. VFR TOW	VER	(12)	ENTER NEW			
	TOWERS		D. NON-RAI	OAR		G. CONTRA	CT TOWER		HOURS	HRS. 10 THS		
					(Co	ntinue on rev	erse)	YES	<b>─</b>			
	<b>─</b> ► (a	lso submit F	AA Form 723	80-26)						(77-78) (79)		
				AIRPC	ORT OPERATION	NS COUNT						
	1	ITIN	ERANT				LOCAL					
		11111	LIC IIII				LOCAL		TOTAL	SPECIAL		
DAY	AC	AT	GA	MIL	TO TAL	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	11	91	0	102	86	0	86	188	188		
2	0	8	31	0	39	21	0	21	60	248		
3	0	9	87	0	96	61	0	61	157	405		
4	0	5	116	0	121	56	0	56	177	582		
5	0	11	54	0	65	92	0	92	157	739		
6	0	10	100	0	110	68	0	68	178	917		
7	0	16	107	0	123	108	0	108	231	1148		
8	0	8	108	0	116	46	0	46	162	1310		
9	0	10	118	0	128	58	0	58	186	1496		
10	0	14	104	0	118	72	0	72	190	1686		
11	0	7	74	0	81	78	0	78	159	1845		
12	0	14	111	0	125	90	0	90	215	2060		
13	0	9	85	0	94	115	0	115	209	2269		
14	0	12	96	0	108	26	0	26	134	2403		
15	0	6	99	0	105	62	0	62	167	2570		
16	0	6	55	0	61	22	0	22	83	2653		
17	0	10	56	0	66	50	0	50	116	2769		
18	0	4	98	0	102	43	0	43	145	2914		
19	0	12	79	0	91	53	0	53	144	3058		
20	0	7	87	0	94	32	0	32	126	3184		
21	0	18	81	0	99	84	0	84	183	3367		
22	0	10	115	2	127	97	0	97	224	3591		
23	0	7	103	0	110	22	0	22	132	3723		
24	0	9	92	0	101	55	0	55	156	3879		
25	0	8	63	0	71	20	0	20	91	3970		
26	0	14	87	4	105	49	0	49	154	4124		
27	0	7	77	1	85	46	0	46	131	4255		
28	0	11	70	0	81	94	0	94	175	4430		
29	0	7	68	0	75	128	0	128	203	4633		
30	0	6	62	0	68	92	0	92	160	4793		
31	0				0		0	0	0	4793		
TOTAL	0	286	2574	7	2867	1926	0	1926	4793			

#### **ATTACHMENT A**

ATTACHMENTA												
		THIS SIDE	1		ALL VFR Towers recording							
	FOR USE BY VFR TOWERS ONLY				Instrument Operations /02 SMO A						ADP	
		oach Contro			on this side			_	(1-2) (3-4)	(5-9)	CONTROL	
	MUST u	se FAA For			MUST COMPLETE				MO_YR.	LOC ID	10-4	
	l	INSTRUME	ENT OPERAT	ΓΙΟΝS	I	TOTAL	REMARKS					
DAY	AC	AT	GA	MILITARY		(10 - E) (14 - 1)						
1	0	7	24	0	(16-19)	31						
2	0	8	24	0	(20-23)	32						
3	0	5	17	0	(24-27)	22						
4	0	4	20	0	(28-31)	24						
5	0	11	27	0	(32-35)	38						
6	0	8	37	0	(36-39)	45						
7	0	14	16	0	(40-43)	30						
8	0	7	7	0	(44-47)	14						
9	0	8	10	0	(48-51)	18						
10	0	12	12	0	(52-55)	24						
11	0	3	6	0	(56-59)	9						
12	0	14	11	0	(60-63)	25						
13	0	6	29	0	(64-67)	35						
14	0	10	24	0	(68-71)	34						
15	0	6	41	0	(72-75)	47						
16	0	6	39	0	(76-79)	45						
						(14-2)						
17	0	10	38	0	(16-19)	48						
18	0	3	19	0	(20-23)	22						
19	0	7	24	0	(24-27)	31						
20	0	3	19	0	(28-31)	22	]					
21	0	10	31	0	(32-35)	41						
22	0	6	21	0	(36-39)	27						
23	0	5	17	0	(40-43)	22						
24	0	7	17	0	(44-47)	24						
25	0	7	15	0	(48-51)	22	1					
26	0	12	11	0	(52-55)	23	_					
27	0	7	10	0	(56-59)	17	]					
28	0	11	23	0	(60-63)	34	]					
29	0	7	30	0	(64-67)	37	]					
30	0	5	26	0	(68-71)	31	]					
31	0	0	0	0	(72-75)	0	]					
		1			1		•					

TOTAL

FACILITY USE

(17-21)

229

(22-26)

645

(27-31)

0

(32-36)

874

# **ATTACHMENT B** Registered Noise Levels for Night Arrivals 11 p.m. to 7 a.m. Weekdays 11 p.m. to 8 a.m. Weekends

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ENGINE
9/2/23	23:10	N417C	C525	21	81.4	2	WING AND A PRAYER INC	J
9/3/23	2:38	N473PC	PC12	21	88.7	2	GERMAN PLATINUM AVIATION SVC	Т
9/4/23	23:16	N12VJ	SF50	21	78.6	2	CEI-VISION I LLC	J
9/5/23	6:42	N49LJ	LEG2	21	77.7	2	TAIL N49LJ	Р
9/13/23	23:09	N9378D	C172	21	78.4	2	SANTA MONICA FLYERS	Р
9/15/23	0:23	N333YY	SR20	21	75.4	2	RONALD MAXWELL	Р
9/15/23	23:32	N258JS	SR20	21	68.1	2	NATL BIOMECHANICS INSTITUTE LLC	Р
9/29/23	1:38	N4282F	C172	3	DNR	1	CHRISTOPHER THOMAS	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

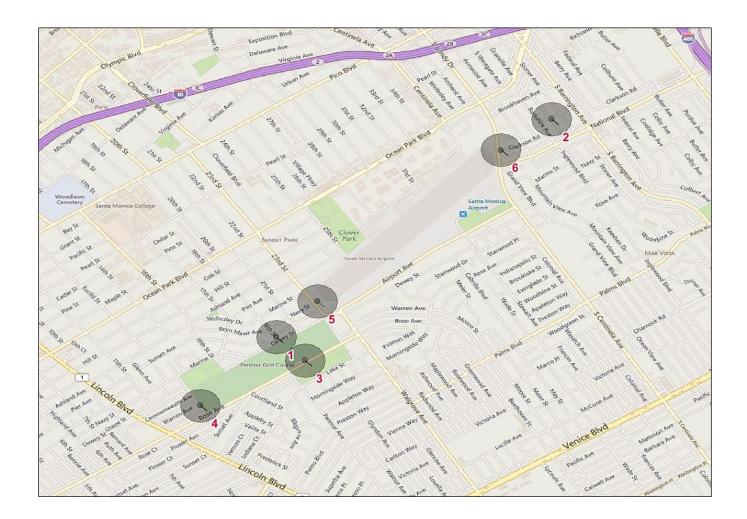
#### **NONE**

#### **Appealed Violations Update**

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ACTION	APPEAL OUTCOME
5/16/23	13:55	N70MC	BE36	21	96.6	1	EUREKA GROUP LLC	\$5,000	AFFIRMED

### 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 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.

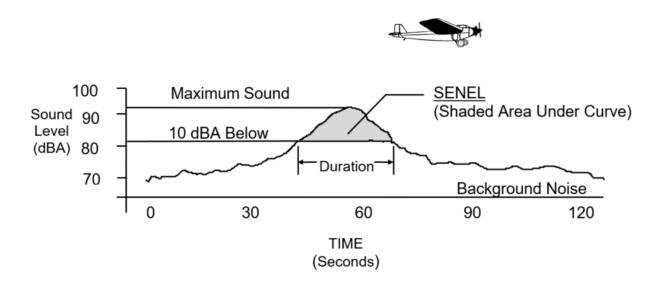
### ATTACHMENT F (Single Event Noise Exposure Level)

#### **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.