

# Santa Monica Airport Monthly Operations Report

**March 2022** 

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#### **ATTACHMENT A**

Airport Traffic Record

#### **ATTACHMENT B**

Registered Noise Levels during Voluntary Night Arrivals

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#### **ATTACHMENT D**

Aircraft Noise Violations

#### ATTACHMENT E

Location of Noise Remote Monitoring Stations (RMS)

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Single Event Noise Exposure Level (SENEL)

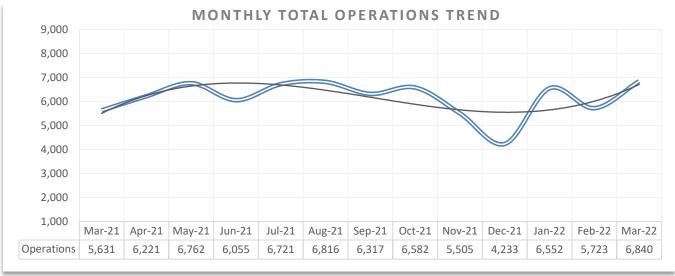
#### I. Introduction

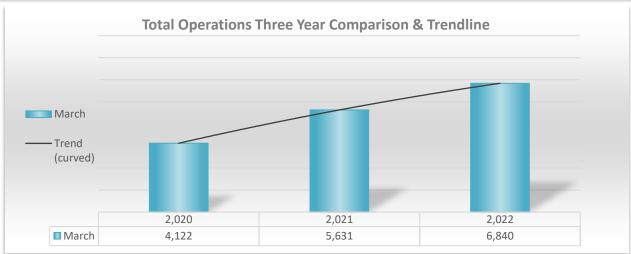
This report has been prepared to inform the Airport Commission and the general public regarding the Santa Monica Airport's Noise Management Program. The report provides details on aircraft operations (aircraft operation is defined as one takeoff or one landing), noise violations, deviations to the fly neighborly program, and curfew violations for the month of March 2022.

#### II. Aircraft Operations Data

The total number of aircraft operations recorded during the month of March 2022 was 6,840 which represents a 21% increase from the 5,631 operations recorded during March 2021. Approximately 12% of the operations were instrument flights (IFR transient), 43% were local flights (VFR local operations), and 45% 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.

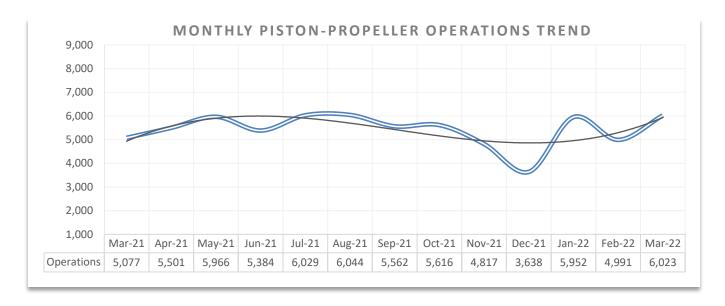
Breakdowns of the total operations grouped by aircraft type, along with a graph for each type indicating each monthly aircraft operations trend during the preceding 12-month period is as follows.

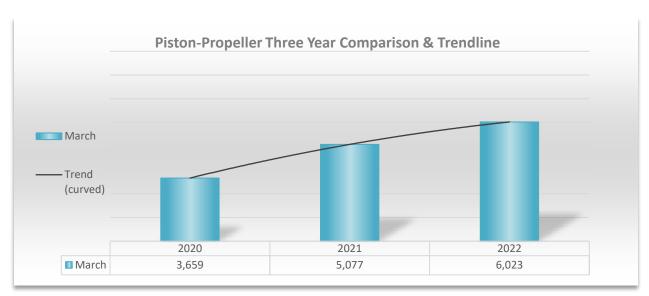




#### Piston-propeller Aircraft Operations

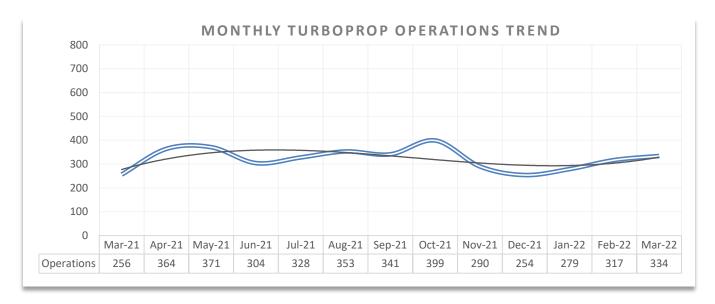
There were approximately 6,023 piston-propeller aircraft operations recorded, comprising approximately 88% of the total operations. Piston-propeller aircraft operations for March 2022 increased 19% from the 5,077 piston-propeller aircraft operations recorded during March 2021.

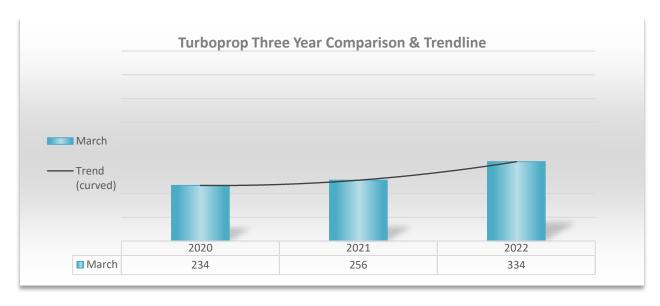




#### **Turboprop Operations**

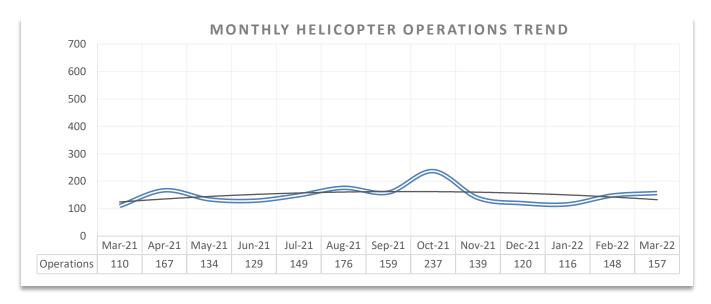
The difference between a turboprop and piston-propeller aircraft is simply their engine type. Turboprops have one or more turbine engines, while piston-propeller aircraft have one or more reciprocating piston engines. Of the total monthly aircraft operations for March 2022, approximately 334 were by turboprop aircraft, comprising approximately 5% of the total operations. Turboprop aircraft operations increased approximately 30% from the 256 operations recorded during March 2021.

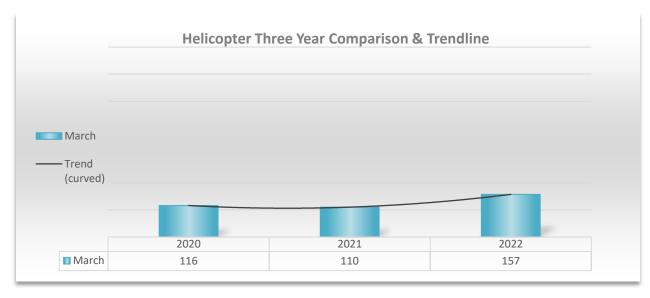




#### **Helicopter Operations**

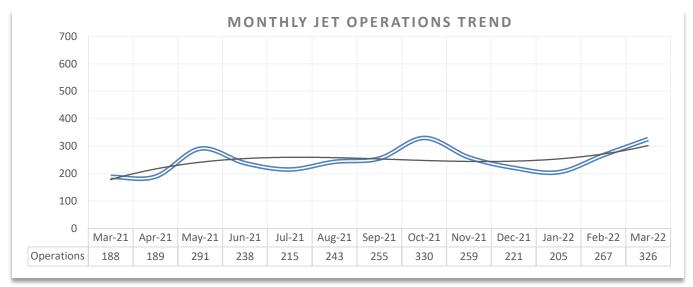
Of the monthly aircraft operations for March 2022, approximately 157 operations are attributed to helicopters, comprising approximately 2% of the total operations. Helicopter operations during March 2022 increased approximately 43% from the 110 helicopter operations recorded in March 2021.



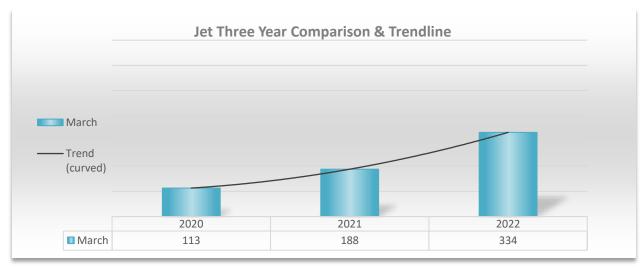


#### Jet Aircraft Operations

In March of 2022, there were approximately 326 jet operations recorded, encompassing approximately 5% of the total operations. Jet operations for March increased 73% from the 188 jet aircraft operations recorded during March 2021. Daily jet operations vary significantly day over day. During the month of March 2022, jet aircraft averaged 11 operations per day. The bar graph below represents the monthly and daily operations for jet engine driven aircraft for the month of March 2022.

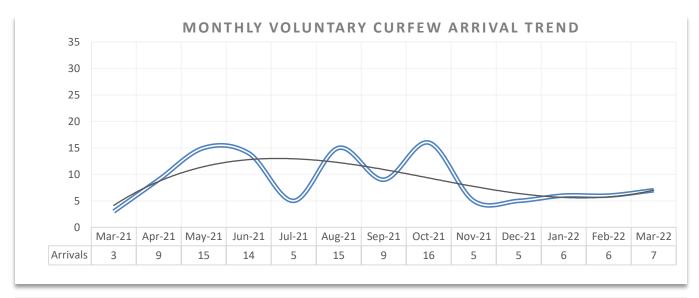


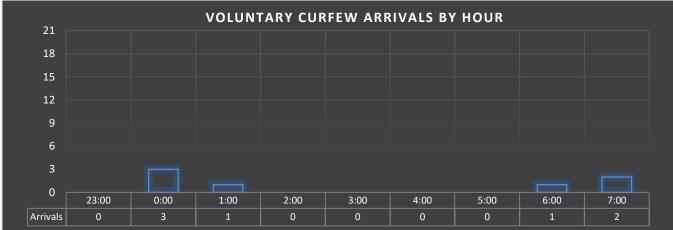


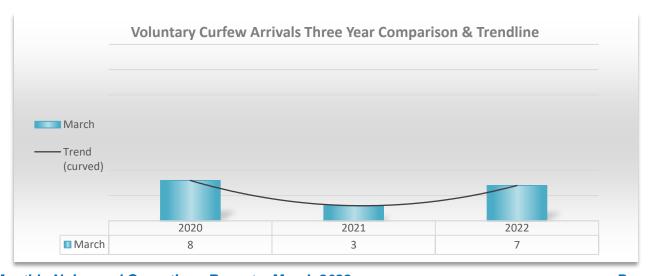


#### III. Voluntary Arrival Curfew

During the month of March 2022, Airport Staff logged a total of 7 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 March 2022. 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 March 2022, there were no authorized departures during curfew hours, and no curfew violations. 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 advised of the proper Noise Management procedures. During the month of March 2022 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.

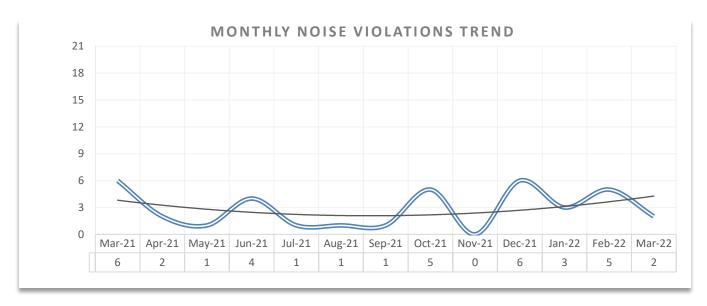
#### VII. Noise Violations

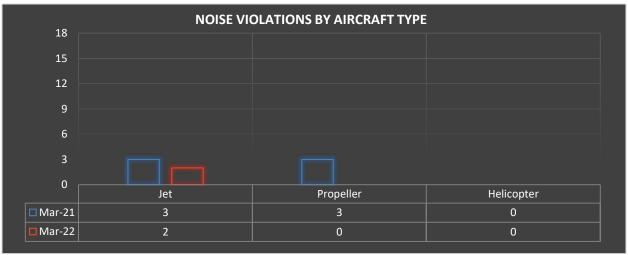
Santa Monica Airport enforces a maximum noise limit as approved by City Ordinance adopted in 1985. The Santa Monica Municipal Code section 10.04.04.060 states that "No aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing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

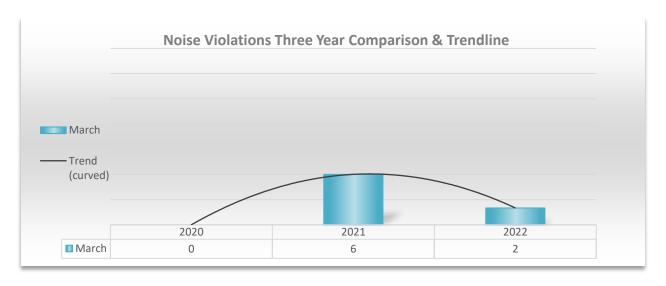
A violation occurs when an aircraft exceeds 95.0 dBA SENEL. During the month of March 2022, there were 2 noise violations recorded which represent a decrease of 67% from the 6 noise violations recorded during March 2021. A summary of noise violations for March 2022 is listed on attachment D. Of the 6,840 aircraft operations recorded during the month of March 2022, 99.9% 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 from 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

Violationo Broakdown by Boolbot 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	1	1	0	0	0	0	0	2	100%			
Propeller	0	0	0	0	0	0	0	0	0%			
Helicopter	0	0	0	0	0	0	0	0	0%			
Total:	1	1	0	0	0	0	0	2				
%	50%	50%	0%	0%	0%	0%	0%		100%			

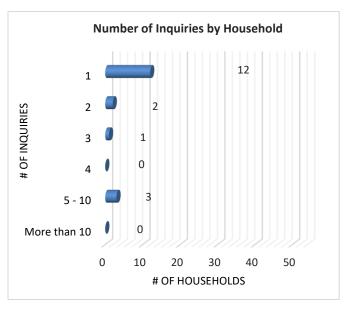


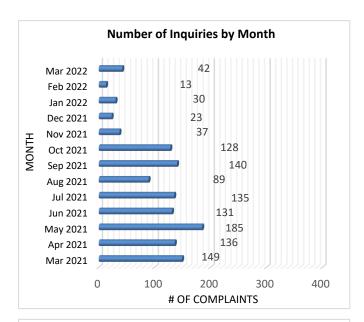


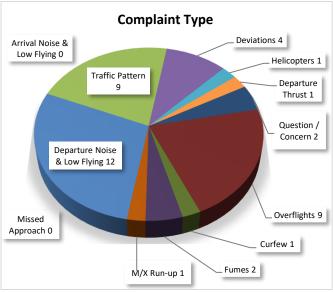


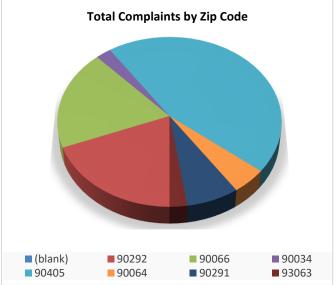
#### VIII. Aircraft Related Inquiries

During the month of March of 2022, 18 individual households logged a total of 42 reports pertaining 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 March 2022.









#### **ATTACHMENT A**

AIRPOR'	T TRAFFIC	RECORD		FACILITY N	NAME	LOCATION		03 / 22	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	ia	MO. YR.	LOC ID	
(10-1)	FACILITY'	TYPE ("X" (	ONE)					FACILITY	IF DAILY HO	URS	
(11)							TYPE	OF OPERATION			
	APPROACH		B. RADAR					CHANGEL	HAVE CHANGED,		
	CONTROL	$\rangle \square$	C. LIMITED	RADAR	Х	E. VFR TOW	/ER	(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	30-26)						(77-78) (79)	
				AIRPO	RT OPERATION	NS COUNT					
		ITIN	ERANT				LOCAL				
									TOTAL	SPECIAL	
DAY	AC	AT	GA	MIL	TO TAL	CIVIL	MILITARY	TO TAL	OPERATIONS	USE	
(15-16)	(17-21)	(22-26)	(27-31)	(32-36)	ITINERANT	(37-41)	(42-46)	LOCAL		(47-51)	
1	0	3	101	0	104	130	0	130	234	234	
2	0	10	136	0	146	164	0	164	310	544	
3	0	10	94	0	104	126	0	126	230	774	
4	0	18	96	0	114	48	0	48	162	936	
5	0	7	56	0	63	33	0	33	96	1032	
6	0	13	165	0	178	75	0	75	253	1285	
7	0	10	107	0	117	108	0	108	225	1510	
8	0	12	112	0	124	103	0	103	227	1737	
9	0	9	125	0	134	77	0	77	211	1948	
10	0	5	122	0	127	54	0	54	181	2129	
11	0	9	138	2	149	114	0	114	263	2392	
12	0	3	165	0	168	70	0	70	238	2630	
13	0	31	122	0	153	90	0	90	243	2873	
14	0	14	90	0	104	119	0	119	223	3096	
15	0	23	96	0	119	93	0	93	212	3308	
16	0	11	124	0	135	110	0	110	245	3553	
17	0	13	125	0	138	232	0	232	370	3923	
18	0	12	152	3	167	109	0	109	276	4199	
19	0	9	101	0	110	50	0	50	160	4359	
20	0	22	85	0	107	8	0	8	115	4474	
21	0	2	103	0	105	120	0	120	225	4699	
22	0	13	164	0	177	123	0	123	300	4999	
23	0	18	172	0	190	83	0	83	273	5272	
24	0	14	106	0	120	112	0	112	232	5504	
25	0	14	114	0	128	34	0	34	162	5666	
26	0	5	121	0	126	39	0	39	165	5831	
27	0	13	114	0	127	88	0	88	215	6046	
28	0	3	11	0	14	23	0	23	37	6083	
29	0	6	137	0	143	134	0	134	277	6360	
30	0	6	106	0	112	58	0	58	170	6530	
31	0	4	95	0	99	211	0	211	310	6840	
TOTAL	0	342	3555	5	3902	2938	0	2938	6840		

#### ATTACHMENT A

						ALL VFR Towers recording				
					Instru	ıment Oper	rations	03/22	SMO	ADP
	(ALL Approach Control Terminals					is side		(1-2) (3-4)		CONTROL
	MUST us	se FAA For			MUS'	T COMPLE	T	MO. YR.	LOC ID	10-4
		INSTRUME	ENT OPERAT	TIONS	1	TOTAL	REMARKS			
DAY	AC	AT	GA	MILITARY		(10 - E) (14 - 1)				
1	0	2	11	0	(16-19)	13				
2	0	10	22	0	(20-23)	32				
3	0	9	20	0	(24-27)	29				
4	0	13	15	0	(28-31)	28	]			
5	0	7	17	0	(32-35)	24				
6	0	7	34	0	(36-39)	41	]			
7	0	6	11	0	(40-43)	17	]			
8	0	8	13	0	(44-47)	21	]			
9	0	6	25	0	(48-51)	31	1			
10	0	3	16	0	(52-55)	19	1			
11	0	9	23	0	(56-59)	32	1			
12	0	2	17	0	(60-63)	19	]			
13	0	7	14	0	(64-67)	21				
14	0	9	5	0	(68-71)	14				
15	0	11	9	0	(72-75)	20				
16	0	6	14	0	(76-79)	20	]			
						(14-2)				
17	0	10	13	0	(16-19)	23	1			
18	0	13	24	0	(20-23)	37	1			
19	0	8	19	0	(24-27)	27	1			
20	0	20	23	0	(28-31)	43	]			
21	0	2	6	0	(32-35)	8	]			
22	0	9	10	0	(36-39)	19				
23	0	17	16	0	(40-43)	33	]			
24	0	13	16	0	(44-47)	29				
25	0	8	26	0	(48-51)	34	]			
26	0	8	53	0	(52-55)	61				
27	0	9	23	0	(56-59)	32				
28	0	1	8	0	(60-63)	9	]			
29	0	6	22	0	(64-67)	28				
30	0	4	28	0	(68-71)	32	]			
31	0	4	50	0	(72-75)	54	]			
TOTAL	0	247	603	0		850	]			
	(17-21)	(22-26)	(27-31)	(32-36)						
FACILITY USE							<u> </u>			

#### 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
3/3/22	6:48	N30GT	BE9T	21	81.6	2	CAL ASSET HOLDINGS LLC	Р
3/5/22	7:02	N505DE	FA50	21	85.9	2	MARINELLI PAUL T TRUSTEE	J
3/5/22	7:43	N354FX	E55P	21	86.0	2	FLEXJET LLC	J
3/11/22	1:07	N593EH	SR20	21	89.8	1	HYPERSCALE.DESIGN LLC	Р
3/15/22	0:17	N385MR	CRUZ	21	DNR	2	JONES ADAM R	Р
3/16/22	0:58	N796SP	C172	21	DNR	2	OPENSKY AIRWAYS LLC	Р
3/23/22	0:09	N8182M	P28R	21	77.1	2	ISSLAAM ABBASSI	Р

# ATTACHMENT C (Authorized Departures & Curfew Violations)

### **Authorized Curfew Departures**

NONE

#### **Curfew Violations**

NONE

# ATTACHMENT D (Aircraft Noise Violations)

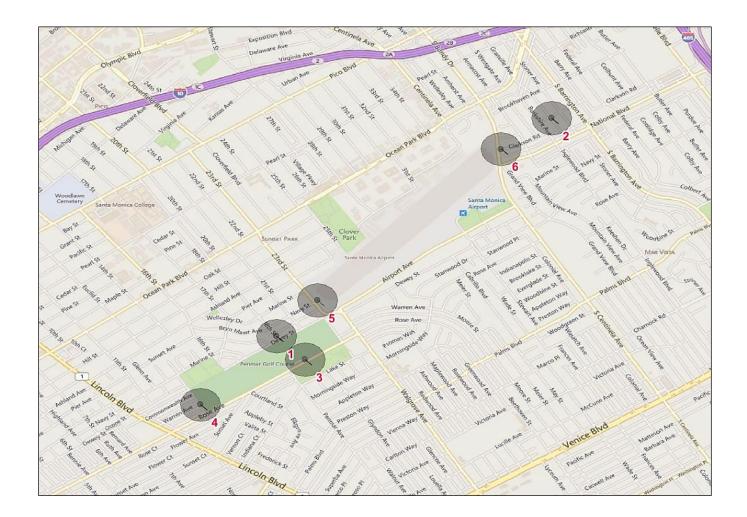
#### AIRCRAFT ENGINE CATEGORY LEGEND

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

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ACTION	ENGINE
3/19/22	15:47	N525SJ	C25C	21	95.2	1	SJ AVIATION LLC	WARNING	J
3/23/22	10:47	N615AJ	C560	3	96.7	2	PALOMA AIR LLC	WARNING	J

## 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.

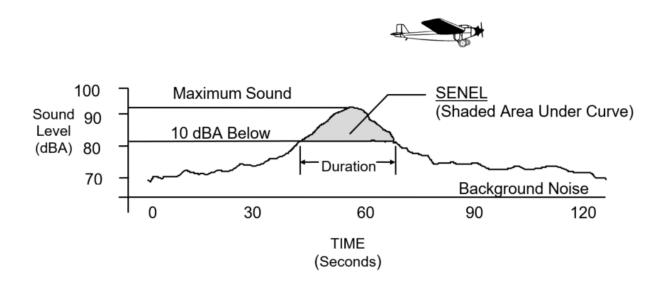
### ATTACHMENT F (Single Event Noise Exposure Level)

#### **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.