



Santa Monica Airport Monthly Operations Report

September 2022

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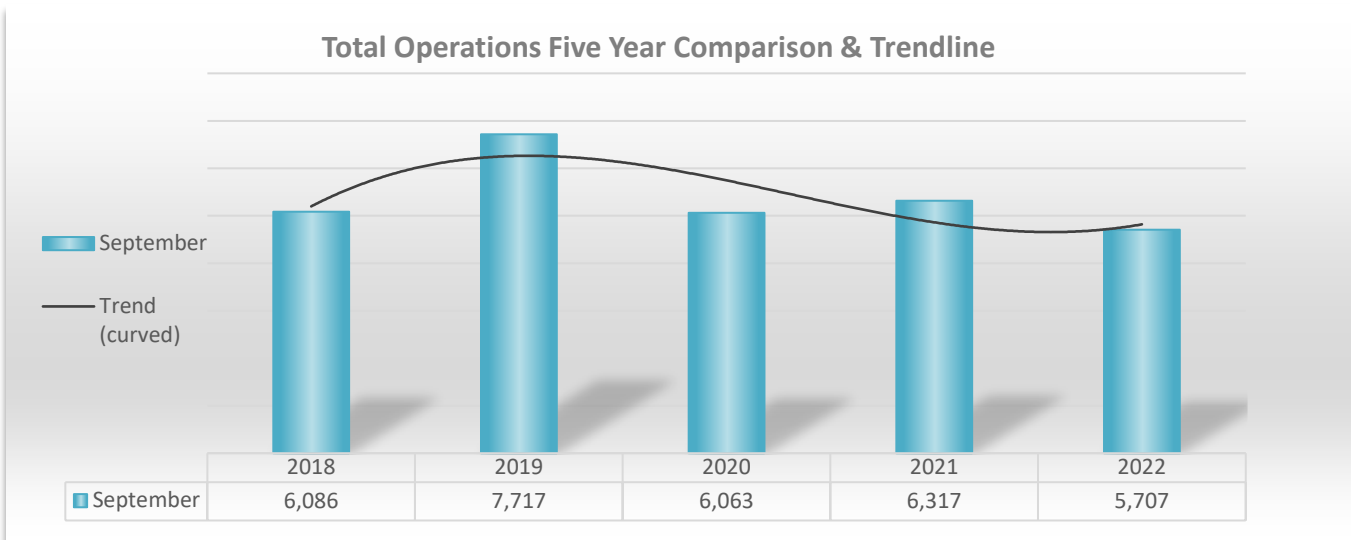
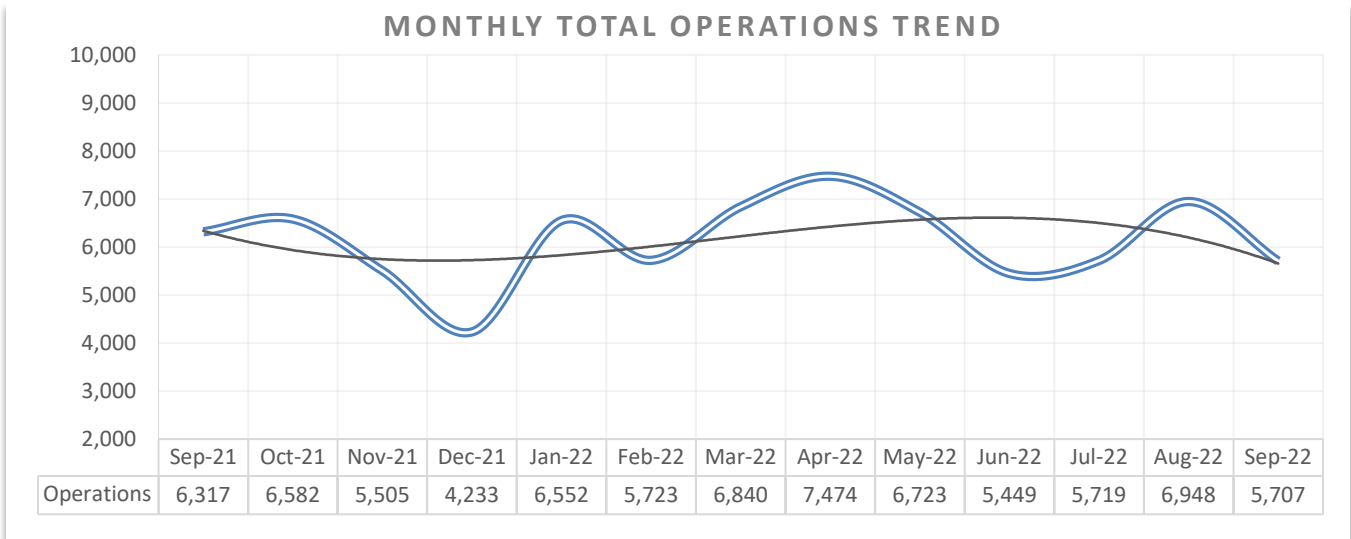
I. Introduction

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 2022.

II. Aircraft Operations Data

The total number of aircraft operations recorded during the month of September 2022 was 5,707, which represents a 10% decrease from the 6,317 operations recorded during September 2021. Approximately 15% of the operations were instrument flights (IFR transient), 37% were local flights (VFR local operations), and 48% 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.

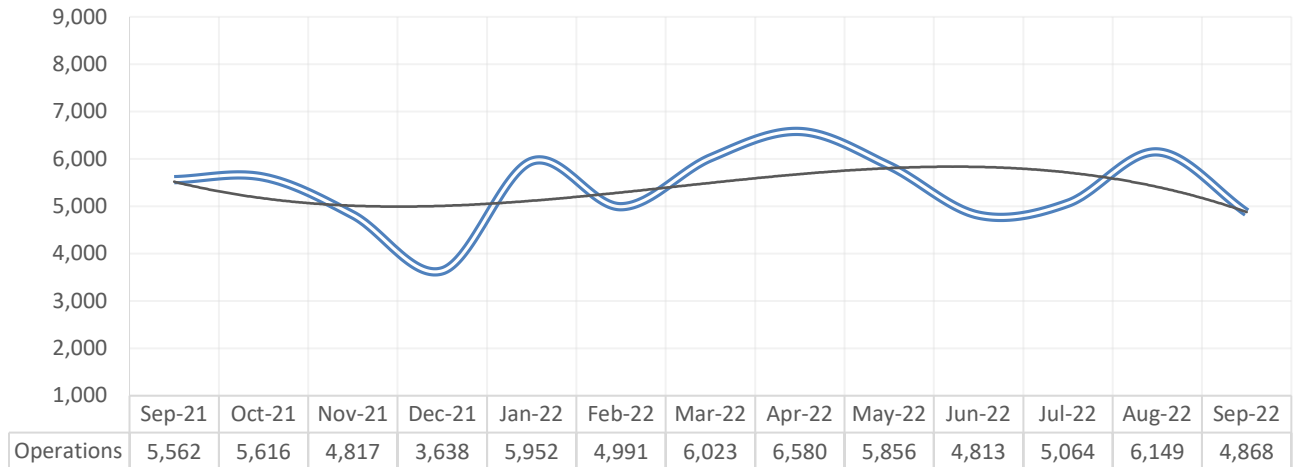
Breakdowns of the total operations grouped by aircraft type and a graph for each type indicating each monthly aircraft operations trend during the preceding 12-month period are as follows.



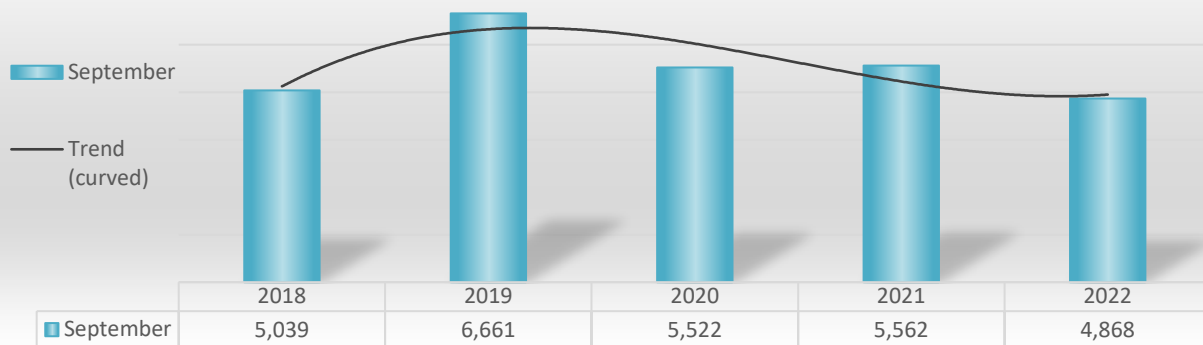
Piston-propeller Aircraft Operations

There were approximately 4,868 piston-propeller aircraft operations recorded, comprising approximately 85% of the total operations. Piston-propeller aircraft operations for September 2022 decreased 12% from the 5,562 piston-propeller aircraft operations recorded during September 2021.

MONTHLY PISTON-PROPELLER OPERATIONS TREND

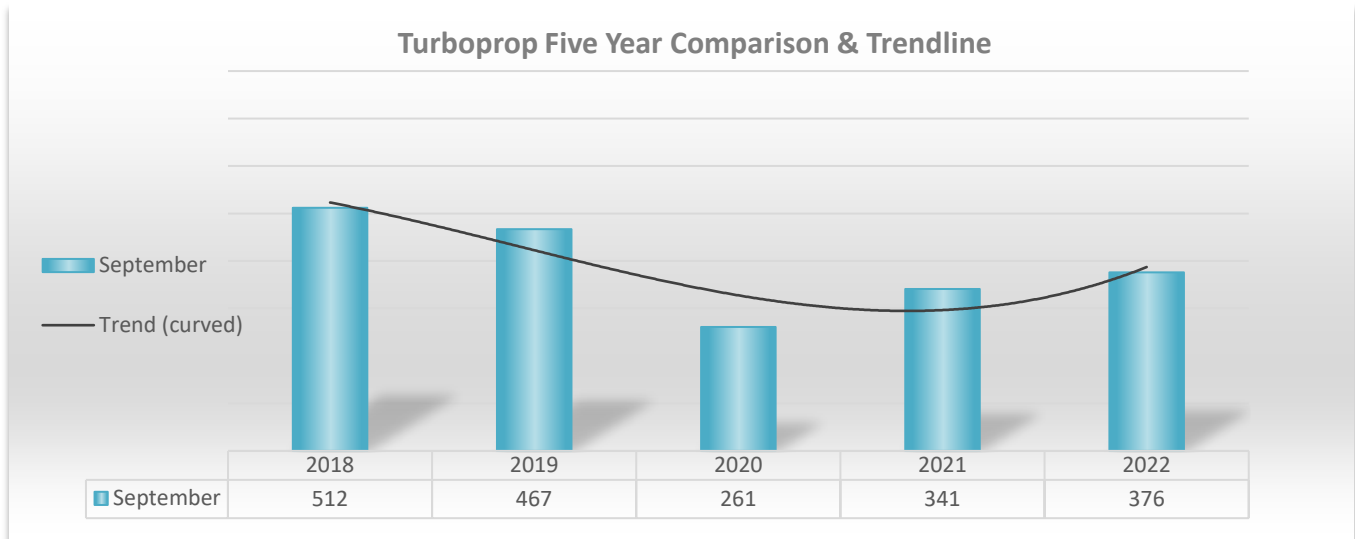
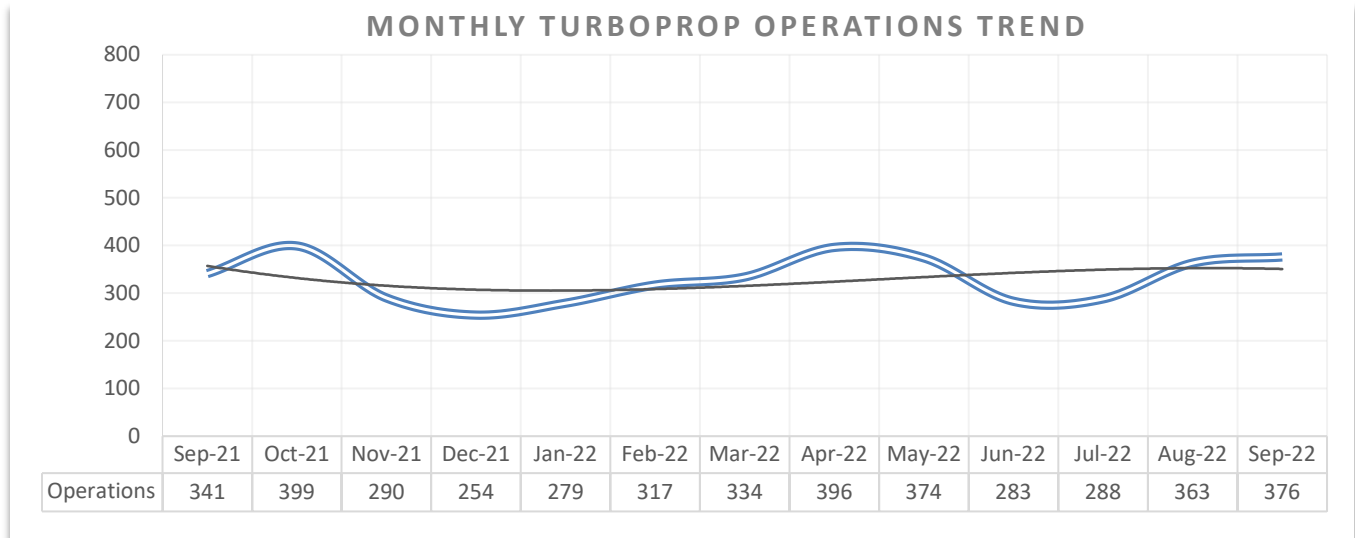


Piston-Propeller Five Year Comparison & Trendline



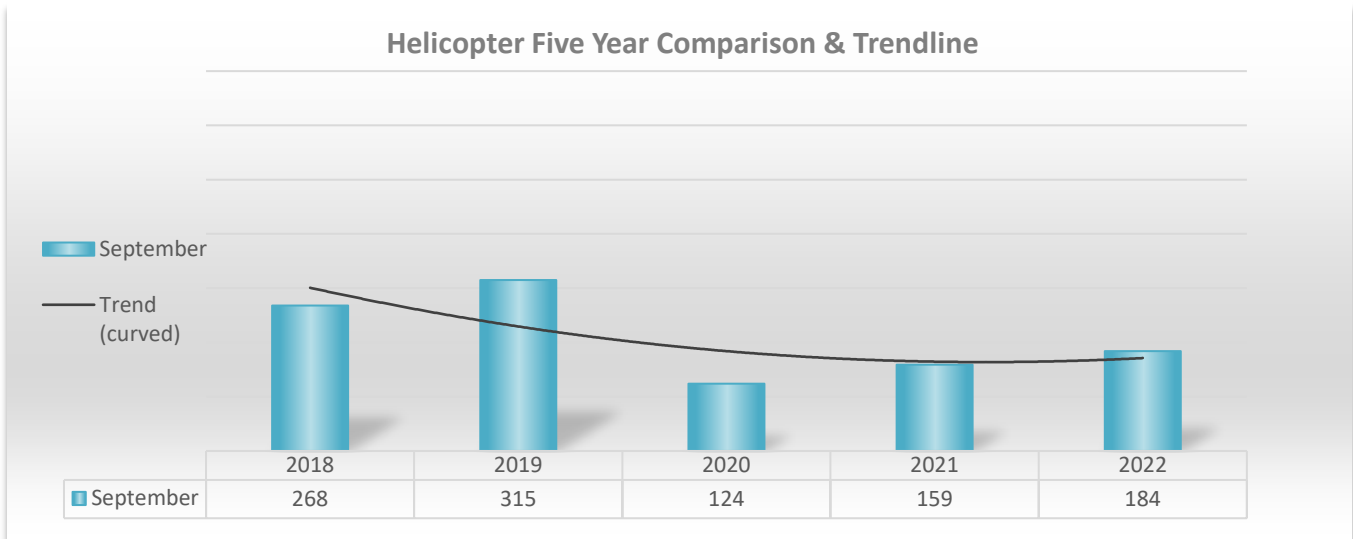
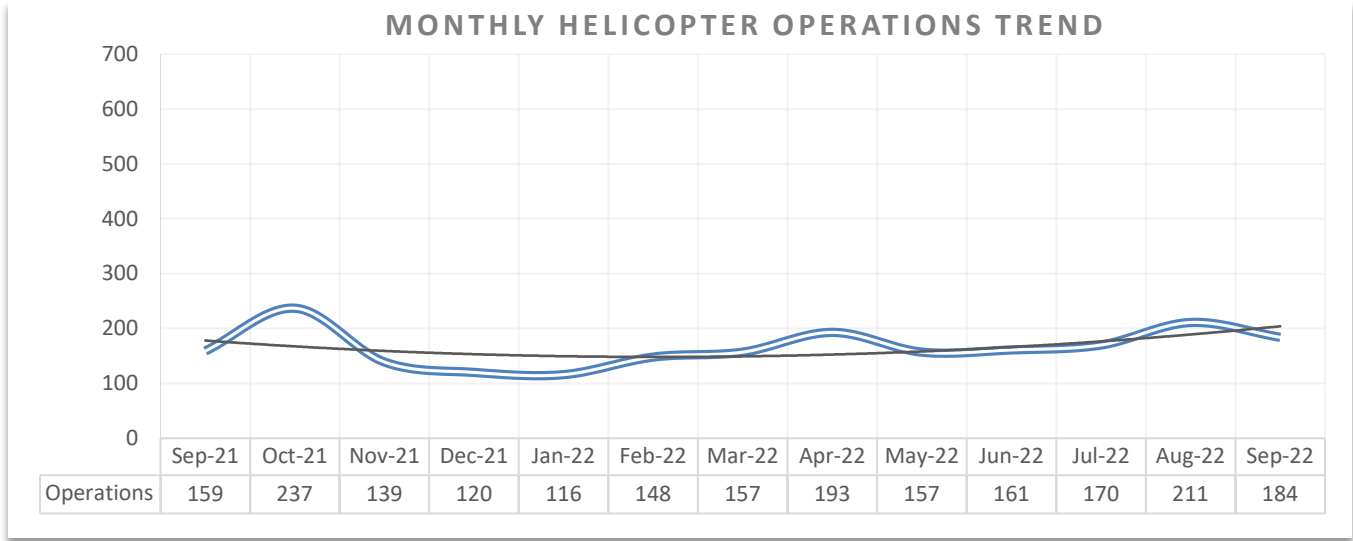
Turboprop Operations

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 September 2022, approximately 376 were by turboprop aircraft, comprising approximately 7% of the total operations. Turboprop aircraft operations increased approximately 10% from the 341 operations recorded during September 2021.



Helicopter Operations

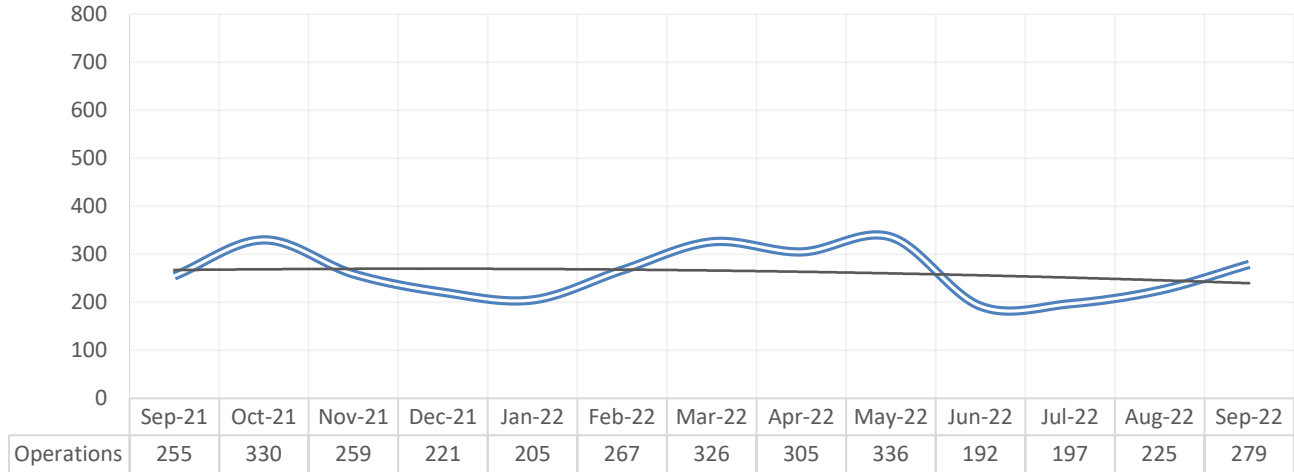
Of the monthly aircraft operations for September 2022, approximately 184 operations are attributed to helicopters, comprising approximately 3% of the total operations. Helicopter operations during September 2022 increased approximately 16% from the 159 helicopter operations recorded in September 2021.



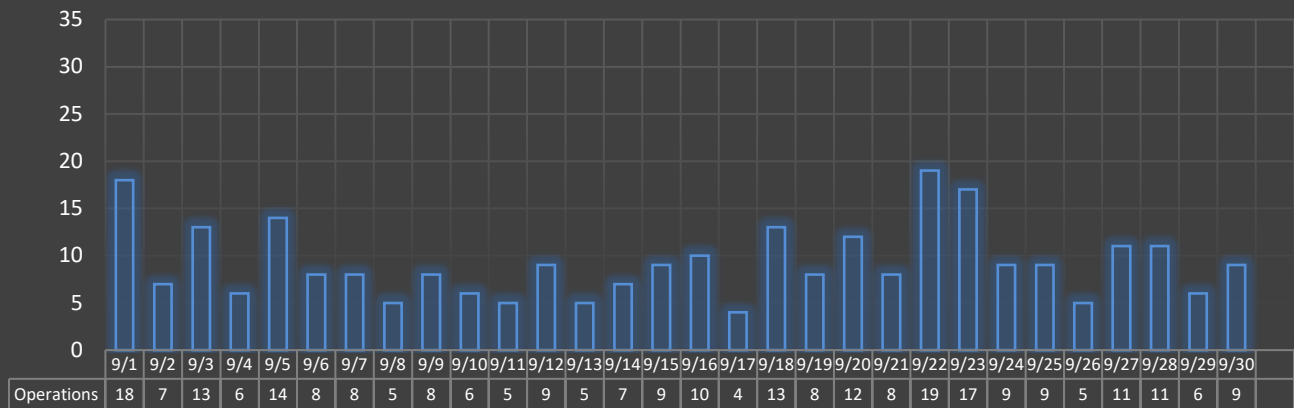
Jet Aircraft Operations

In September of 2022, there were approximately 279 jet operations recorded, encompassing approximately 5% of the total operations. Jet operations for September increased 9% from the 255 jet aircraft operations recorded during September 2021. Daily jet operations vary significantly day over day. During the month of September 2022, jet aircraft averaged 9 operations per day. The bar graph below represents the monthly and daily operations for jet engine driven aircraft for the month of September 2022.

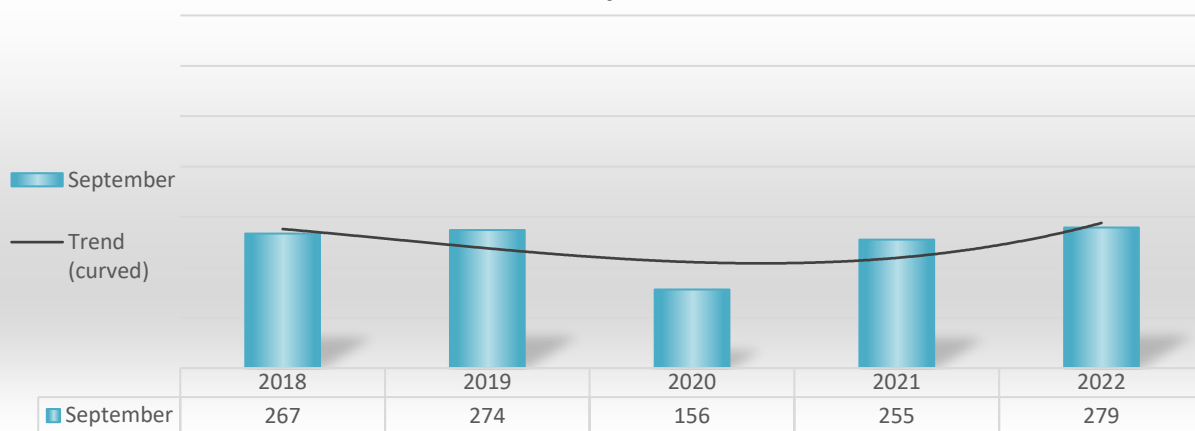
MONTHLY JET OPERATIONS TREND



DAILY JET OPERATIONS

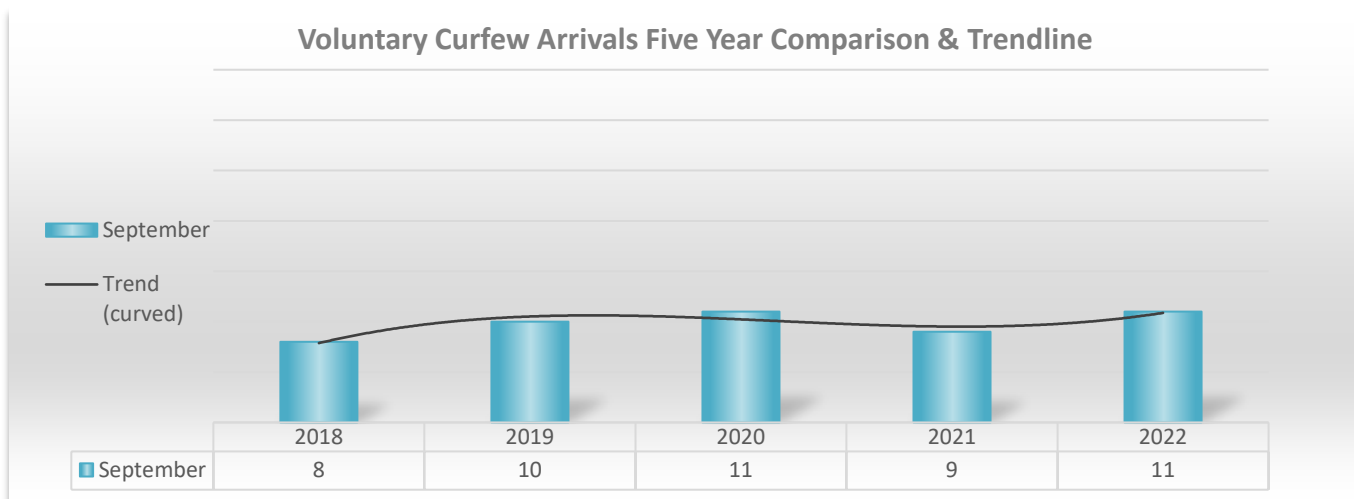
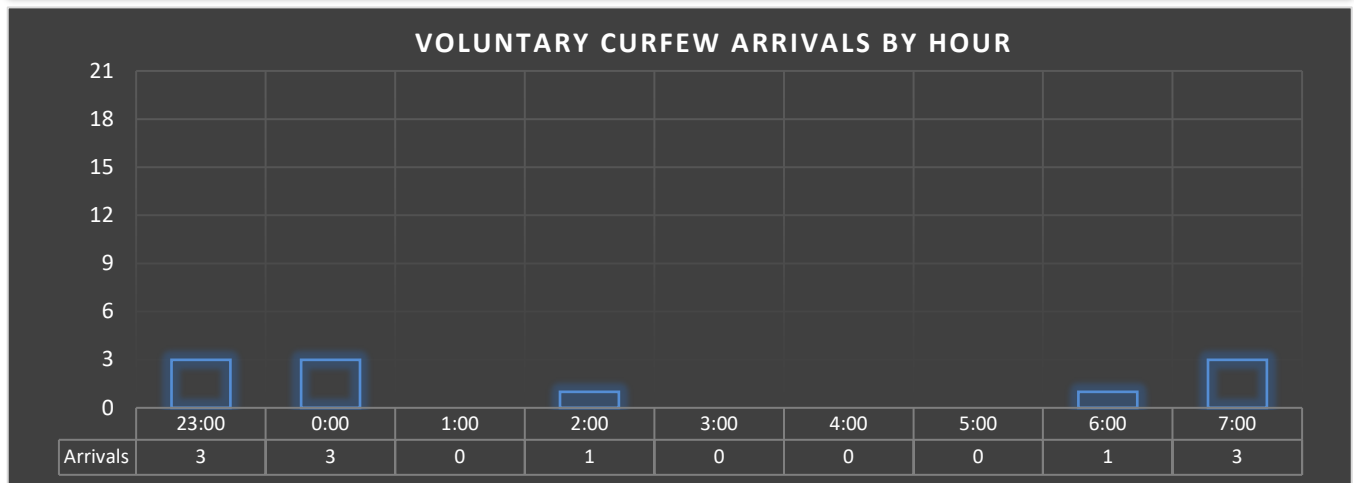
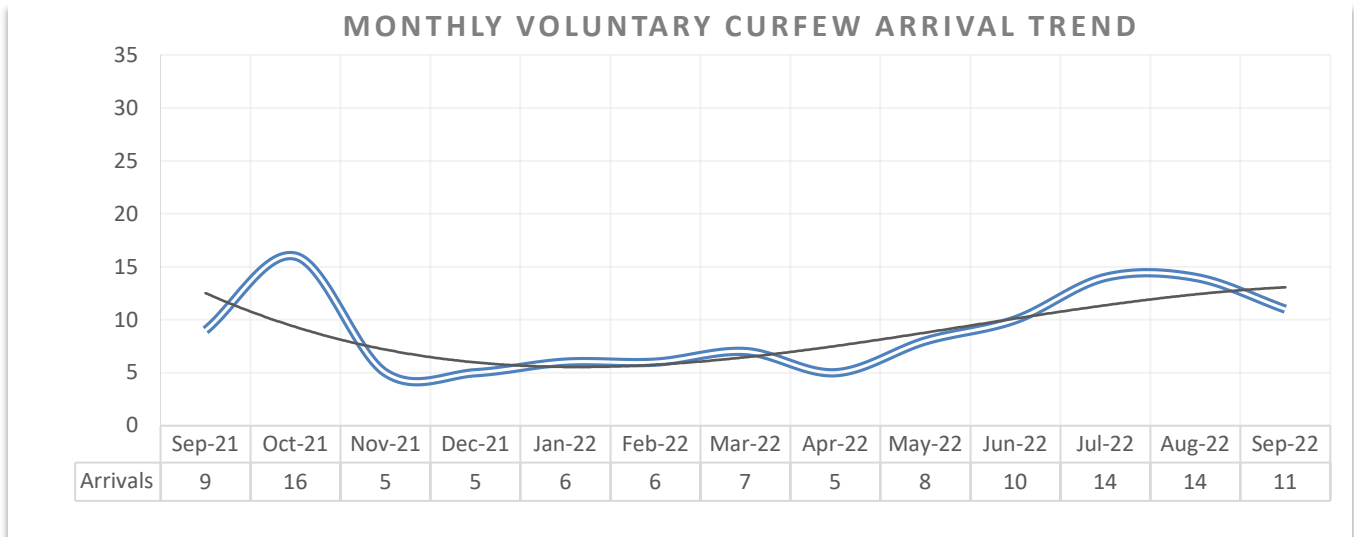


Jet Five Year Comparison & Trendline



III. Voluntary Arrival Curfew

During the month of September 2022, Airport Staff logged a total of 11 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 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 September 2022, there were two authorized departures during curfew hours, and one 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 advised of the proper Noise Management procedures. During the month of September 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

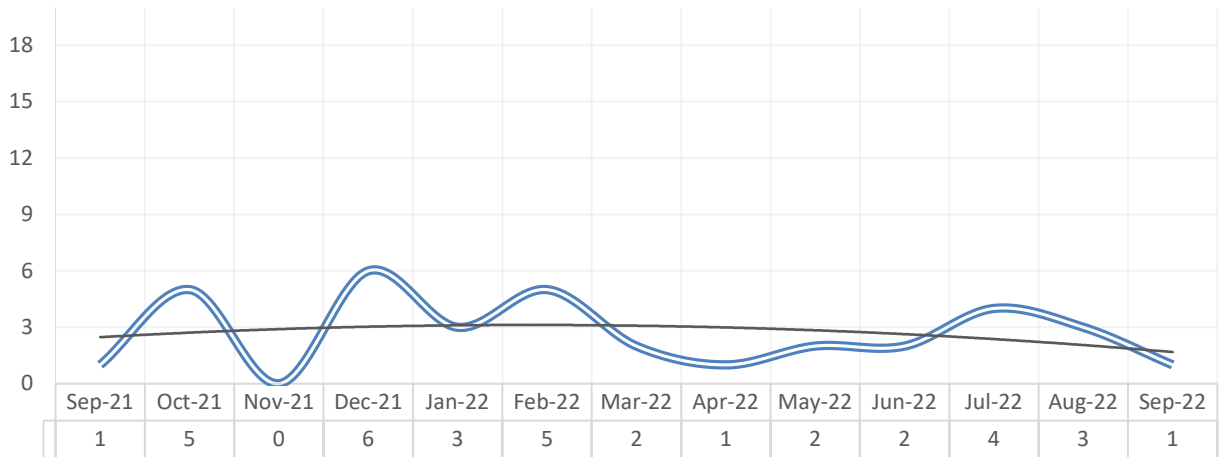
Santa Monica Airport enforces a maximum noise limit as approved by City Ordinance adopted in 1985. The Santa Monica Municipal Code section 10.04.04.060 states that “No aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing on 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 2022, there was 1 noise violation recorded which represents no change from the 1 noise violation recorded during September 2021. A summary of noise violations for September 2022 is listed on attachment D. Of the 5,707 aircraft operations recorded during the month of September 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 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.

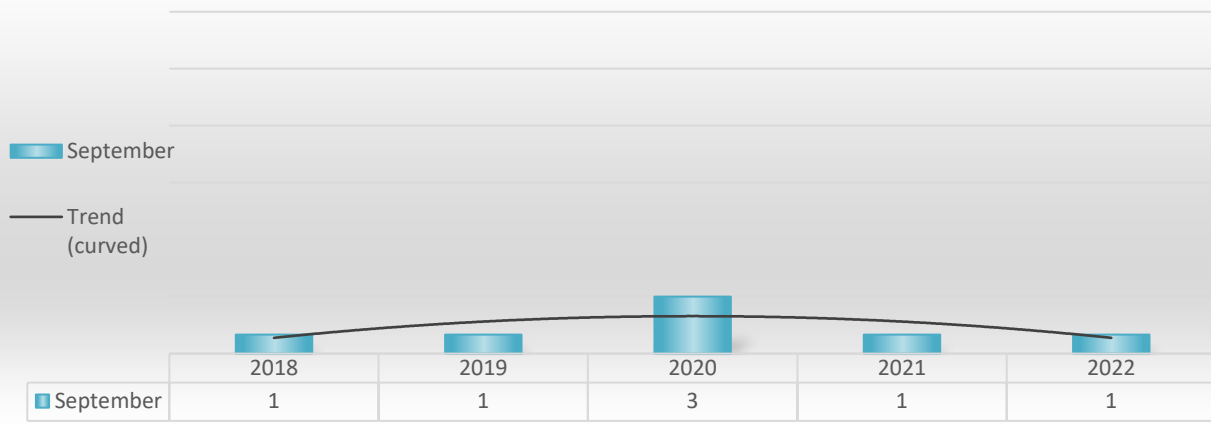
Violations Breakdown by Decibel Level

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	1	0	0	0	0	0	0	1	100%
Helicopter	0	0	0	0	0	0	0	0	0%
Total:	1	0	0	0	0	0	0	1	
%	100%	0%	0%	0%	0%	0%	0%		100%

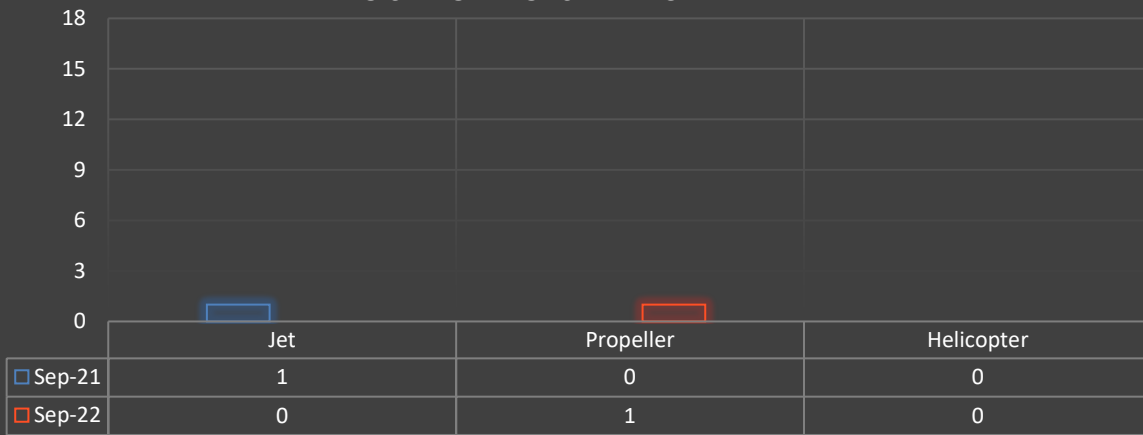
MONTHLY NOISE VIOLATIONS TREND



Noise Violations Three Year Comparison & Trendline

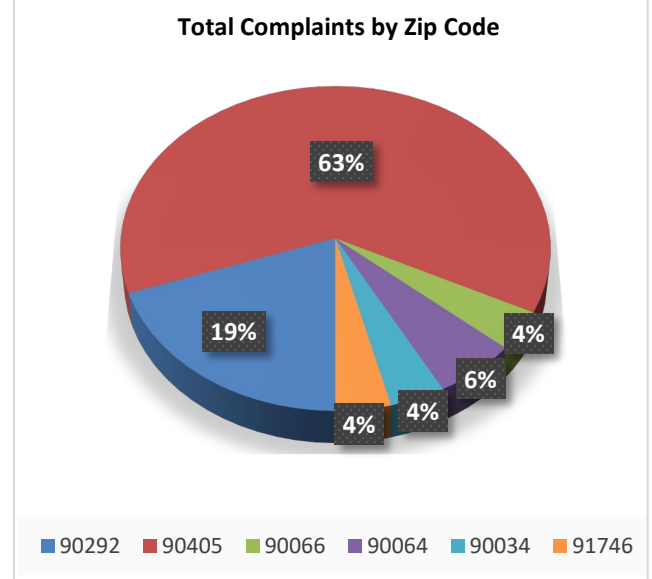
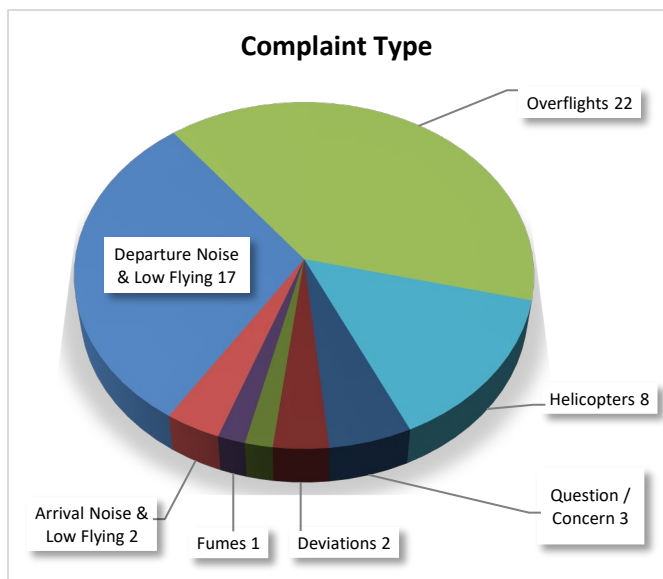
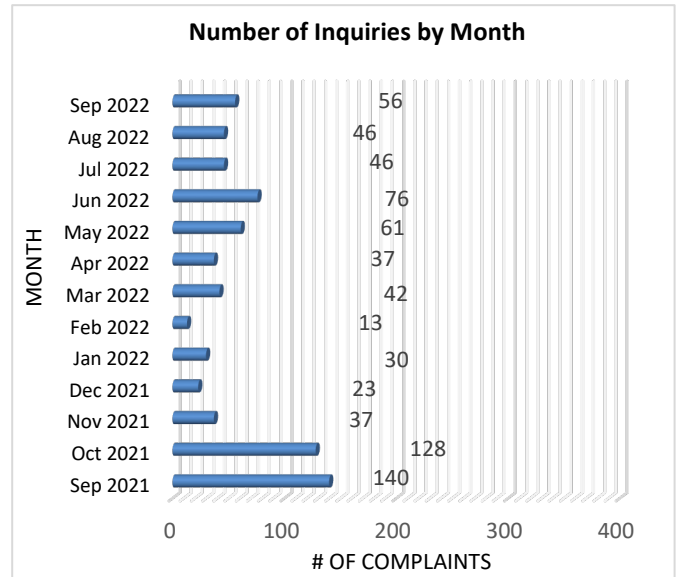
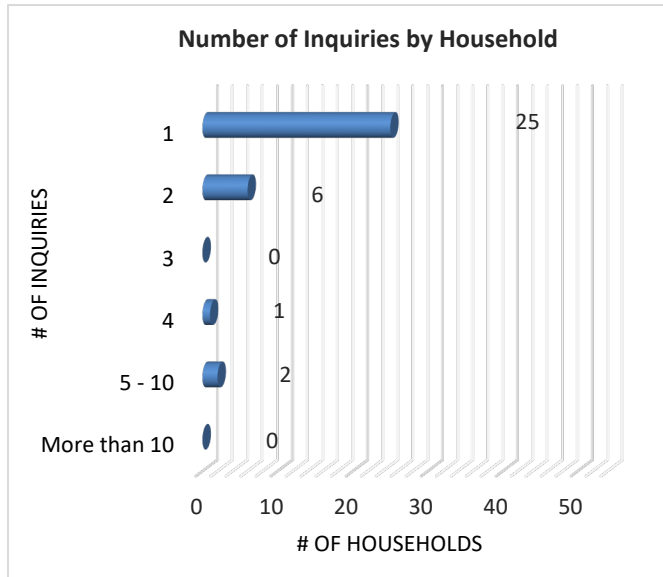


NOISE VIOLATIONS BY AIRCRAFT TYPE



VIII. Aircraft Related Inquiries

During the month of September 2022, 34 individual households logged a total of 56 reports about 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 2022.



ATTACHMENT A

AIRPORT TRAFFIC RECORD		FACILITY NAME			LOCATION					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) FACILITY TYPE ("X" ONE) (11)								FACILITY TYPE CHANGED (12) YES <input type="checkbox"/>		IF DAILY HOURS OF OPERATION HAVE CHANGED, ENTER NEW HOURS HRS. 10THS → (77-78) (79)	
APPROACH CONTROL TOWERS } <input type="checkbox"/> B. RADAR } <input type="checkbox"/> C. LIMITED RADAR } <input type="checkbox"/> D. NON-RADAR (also submit FAA Form 7230-26)					<input checked="" type="checkbox"/> E. VFR TOWER <input type="checkbox"/> G. CONTRACT TOWER (Continue on reverse)						
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	21	122	0	143	36	0	36	179	179	
2	0	15	134	0	149	149	0	149	298	477	
3	0	12	150	0	162	102	0	102	264	741	
4	0	8	68	0	76	45	0	45	121	862	
5	0	9	113	0	122	129	0	129	251	1113	
6	0	6	93	0	99	40	0	40	139	1252	
7	0	6	111	0	117	95	0	95	212	1464	
8	0	6	71	0	77	106	0	106	183	1647	
9	0	8	44	0	52	4	0	4	56	1703	
10	0	1	38	0	39	14	0	14	53	1756	
11	0	14	63	0	77	0	0	0	77	1833	
12	0	16	80	0	96	56	0	56	152	1985	
13	0	8	123	0	131	104	0	104	235	2220	
14	0	14	119	0	133	124	0	124	257	2477	
15	0	27	126	0	153	113	0	113	266	2743	
16	0	8	137	0	145	86	0	86	231	2974	
17	0	3	69	0	72	93	0	93	165	3139	
18	0	9	108	0	117	58	0	58	175	3314	
19	0	102	68	0	170	68	0	68	238	3552	
20	0	12	115	0	127	64	0	64	191	3743	
21	0	7	138	0	145	45	0	45	190	3933	
22	0	12	130	0	142	59	0	59	201	4134	
23	0	10	117	0	127	94	0	94	221	4355	
24	0	8	114	0	122	63	0	63	185	4540	
25	0	14	131	0	145	62	0	62	207	4747	
26	0	16	133	0	149	64	0	64	213	4960	
27	0	14	143	0	157	98	0	98	255	5215	
28	0	14	120	0	134	72	0	72	206	5421	
29	0	13	82	0	95	3	0	3	98	5519	
30	0	14	110	0	124	64	0	64	188	5707	
31	0				0		0	0	0	5707	
TOTAL	0	427	3170	0	3597	2110	0	2110	5707		

ATTACHMENT A

<i>THIS SIDE</i> FOR USE BY VFR TOWERS ONLY (ALL Approach Control Terminals MUST use FAA Form 7230-26)					<i>ALL VFR Towers recording Instrument Operations on this side MUST COMPLETE</i>		/02 (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) (14-1)				
1	0	16	11	0	(16-19)	27			
2	0	10	12	0	(20-23)	22			
3	0	12	19	0	(24-27)	31			
4	0	5	9	0	(28-31)	14			
5	0	8	23	0	(32-35)	31			
6	0	5	12	0	(36-39)	17			
7	0	3	13	0	(40-43)	16			
8	0	3	11	0	(44-47)	14			
9	0	0	12	0	(48-51)	12			
10	0	0	14	0	(52-55)	14			
11	0	9	20	0	(56-59)	29			
12	0	8	13	0	(60-63)	21			
13	0	5	19	0	(64-67)	24			
14	0	9	17	0	(68-71)	26			
15	0	20	26	0	(72-75)	46			
16	0	9	19	0	(76-79)	28			
(14-2)									
17	0	6	29	0	(16-19)	35			
18	0	8	42	0	(20-23)	50			
19	0	4	24	0	(24-27)	28			
20	0	10	25	0	(28-31)	35			
21	0	7	16	0	(32-35)	23			
22	0	9	32	0	(36-39)	41			
23	0	10	21	0	(40-43)	31			
24	0	6	14	0	(44-47)	20			
25	0	9	20	0	(48-51)	29			
26	0	8	17	0	(52-55)	25			
27	0	8	33	0	(56-59)	41			
28	0	7	14	0	(60-63)	21			
29	0	11	38	0	(64-67)	49			
30	0	11	20	0	(68-71)	31			
31	0			0	(72-75)	#VALUE!			
TOTAL	0	236	595	0		#VALUE!			
(17-21) (22-26) (27-31) (32-36)									
FACILITY USE									

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
9/2/22	0:39	N764SF	PA28	21	DNR	2	PROTEUS AIR SERVICES	P
9/3/22	7:10	N402AV	SR20	21	72.4	2	CIRRUS DESIGN CORP	P
9/3/22	7:40	N6833P	PA24	21	DNR	2	HOLMES DARRELL	P
9/3/22	7:47	N855EF	SR20	21	74.0	2	LUFTHANSA AVIATION TRAINING USA INC	P
9/5/22	23:11	N804DL	S22T	21	79.5	2	FARHAD SIGARI M D F A C S P C	P
9/7/22	23:30	N948CP	C172	21	DNR	2	CIVIL AIR PATROL	P
9/11/22	2:14	N39RX	EC35	21	89.5	2	REACH AIR MEDICAL	H
9/15/22	6:44	N334AM	PC12	21	91.0	2	AM3 LLC	P
9/15/22	23:10	N462JB	C182	21	70.7	2	PLANE NONSENSE INC	P
9/25/22	0:53	N84347	C172	3	DNR	1	GIOVANNINI MARCO	P
9/29/22	0:20	N315HP	SR22	21	81.9	2	N315HP LLC	P

ATTACHMENT C
(Authorized Departures & Curfew Violations)

Authorized Curfew Departures

DATE	TIME	NUMBER	TYPE	OPERATOR	RUNWAY
9/4/22	23:21	N832CS	EC35	LIFE FLIGHT	21
9/11/22	3:31	N39RX	EC35	LIFE FLIGHT	3

Curfew Violations

DATE	TIME	NUMBER	TYPE	RUNWAY	OPERATION	ACTION
9/16/2022	23:14	N850EF	SR20	21	Lufthansa Aviation	WARNING

**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
9/23/22	15:20	N394QS	E55P	21	95.5	1	NETJETS AVIATION INC	\$2,000	J

Unenforceable Noise Events

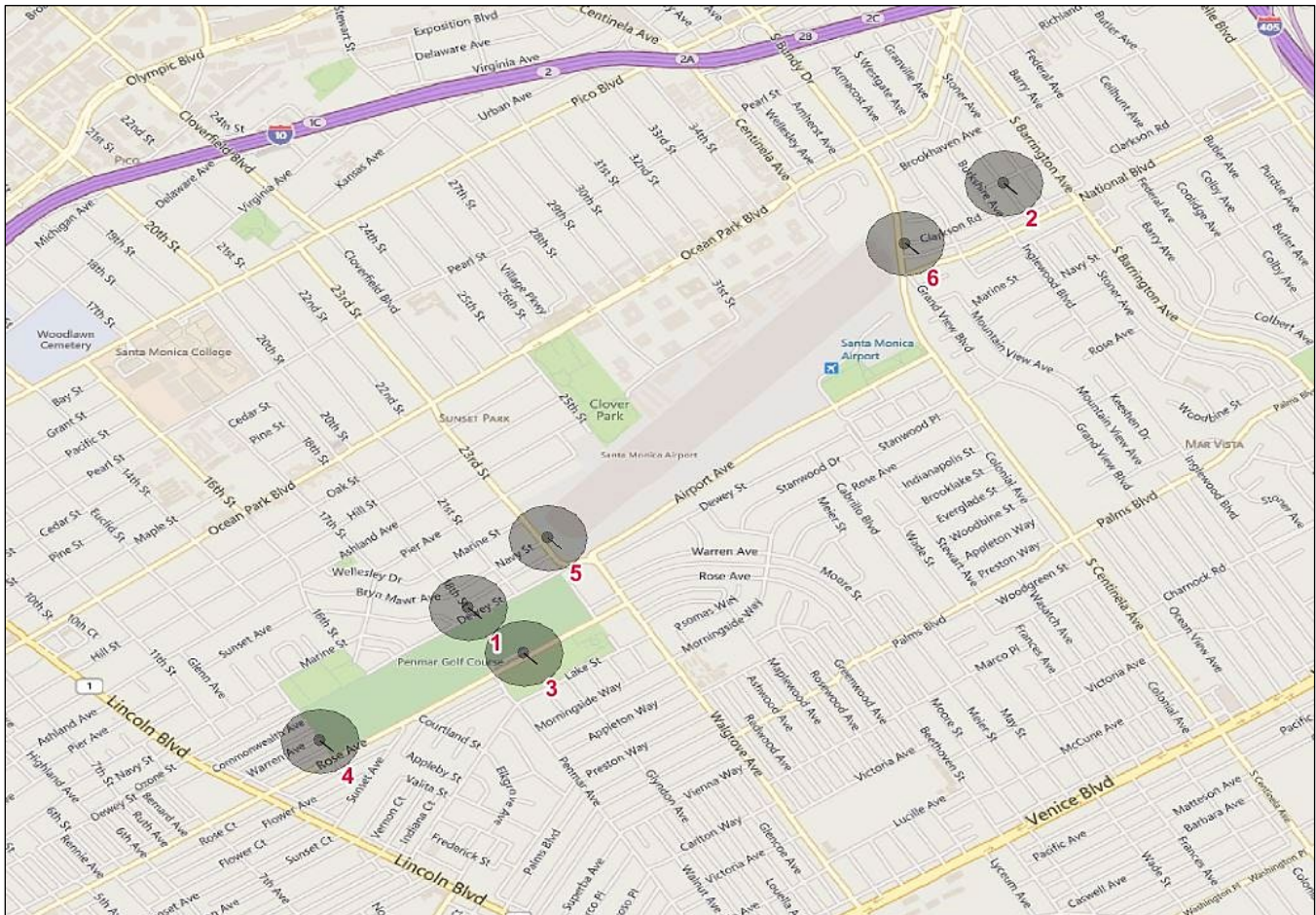
NONE

Appeals

NONE

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.

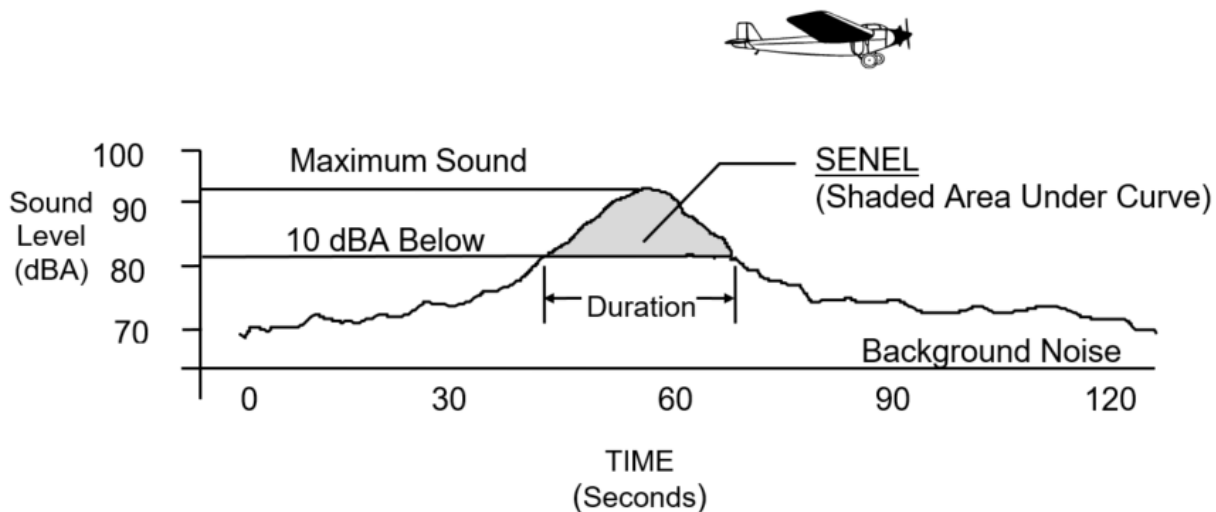
ATTACHMENT F (Single Event Noise Exposure Level)

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 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.