



Santa Monica Airport Monthly Operations Report

December 2022

Report prepared by:

Stelios Makrides
Airport Director

stelios.makrides@santamonica.gov

310-458-8591

Diana Hernandez

Airport Operations Administrator

diana.hernandez@santamonica.gov

310-458-8692

Daniel Quezada

Airport Operations Analyst

daniel.quezada@santamonica.gov

310-458-8692

Santa Monica Airport
3223 Donald Douglas Loop South
Santa Monica, CA 90405

Airport.mailbox@santamonica.gov • www.santamonicaairport.org

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)	

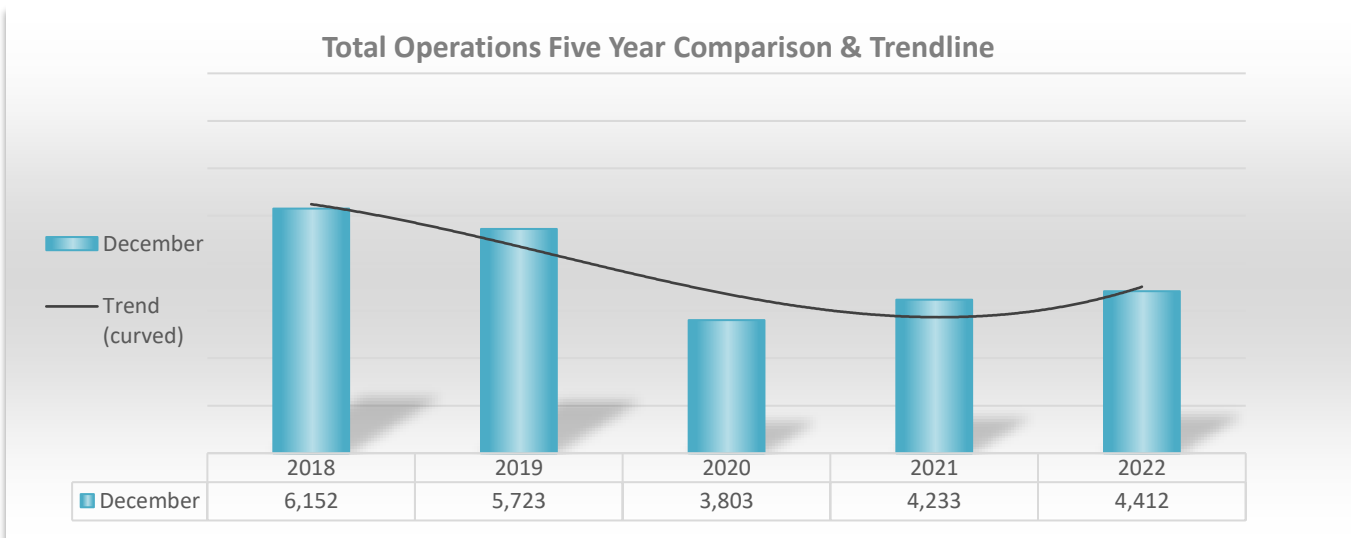
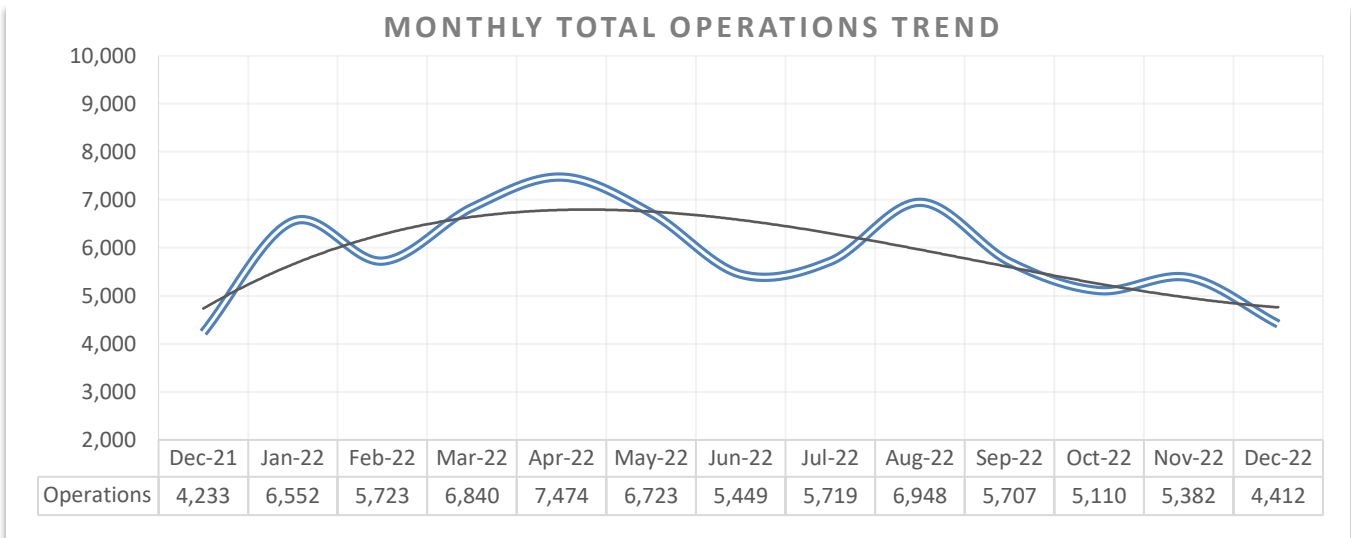
I. Introduction

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 December 2022.

II. Aircraft Operations Data

The total number of aircraft operations recorded during the month of December 2022 was 4,412, which represents a 4% increase from the 4,233 operations recorded during December 2021. Approximately 16% of the operations were instrument flights (IFR transient), 36% 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.

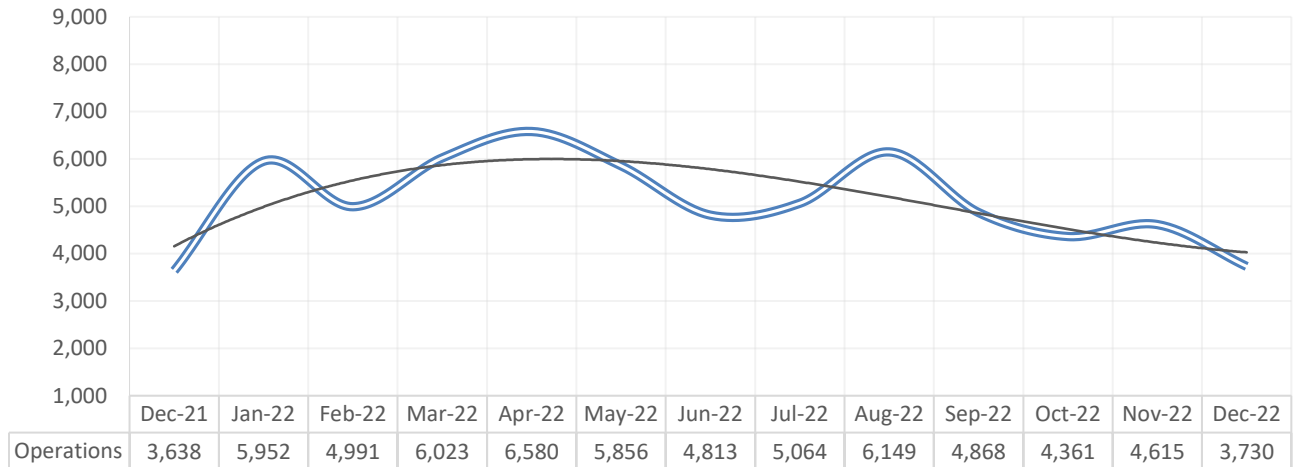
Breakdowns of the total operations grouped by aircraft type and a graph for each type indicating each monthly aircraft operations trend during the preceding 12-month period are as follows.



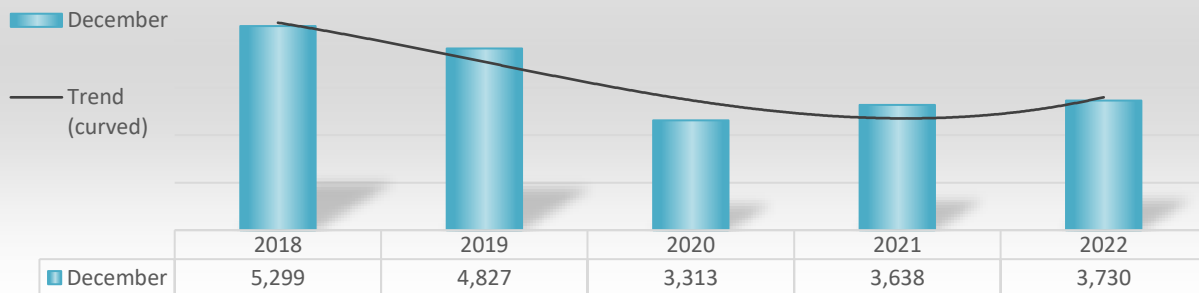
Piston-propeller Aircraft Operations

There were approximately 3,730 piston-propeller aircraft operations recorded, comprising approximately 85% of the total operations. Piston-propeller aircraft operations for December 2022 increased 3% from the 3,638 piston-propeller aircraft operations recorded during December 2021.

MONTHLY PISTON-PROPELLER OPERATIONS TREND

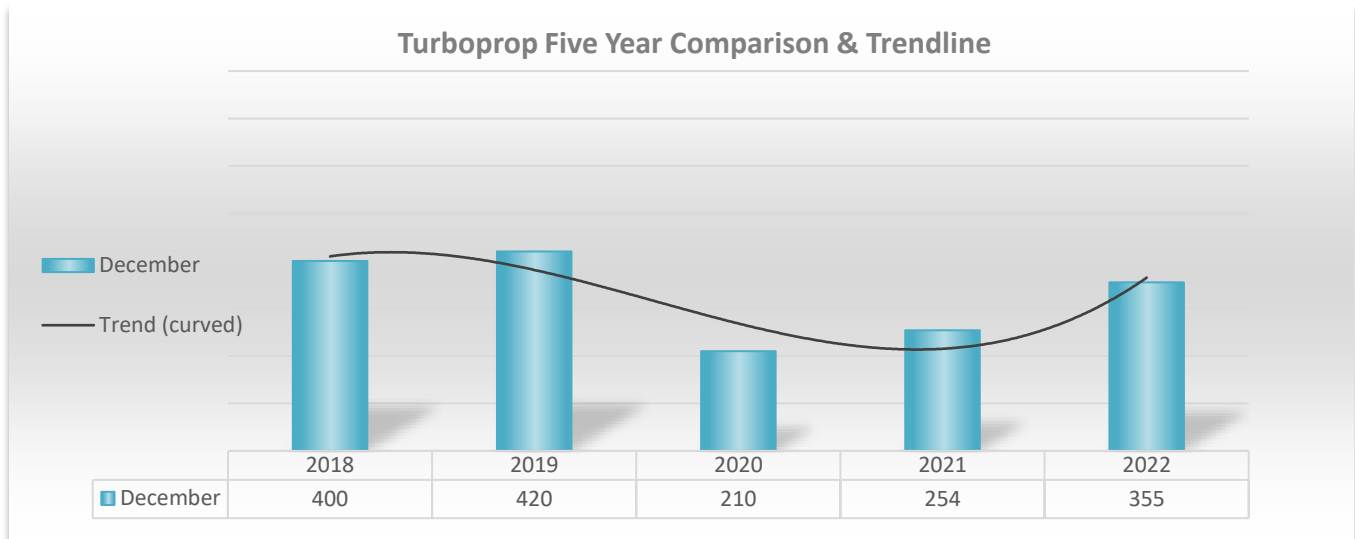
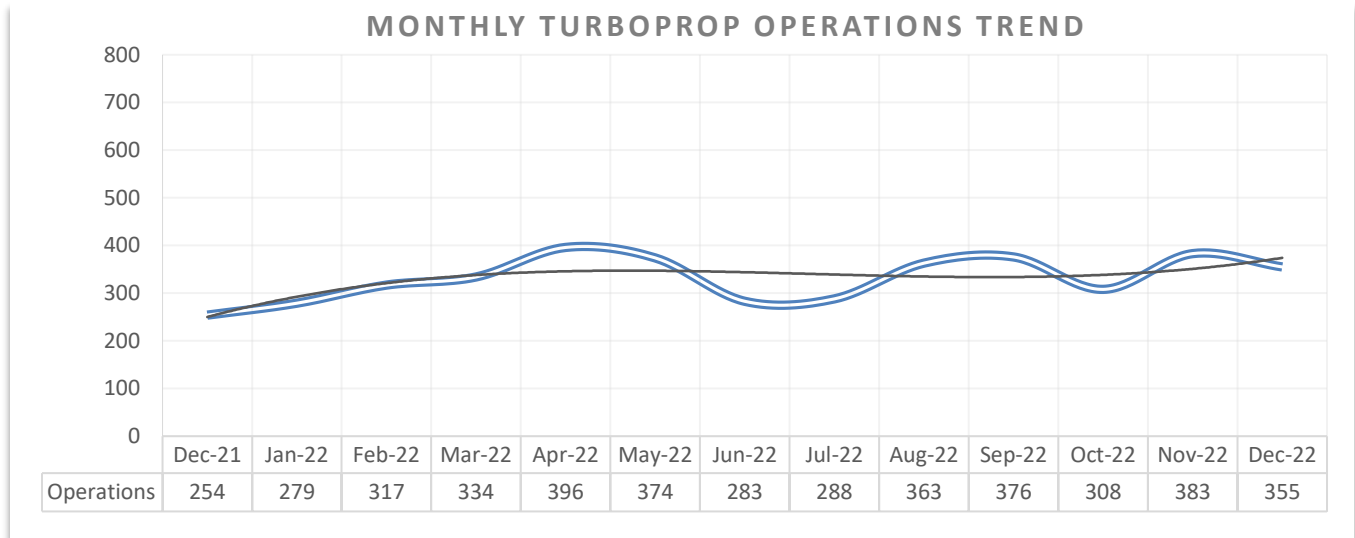


Piston-Propeller Five Year Comparison & Trendline



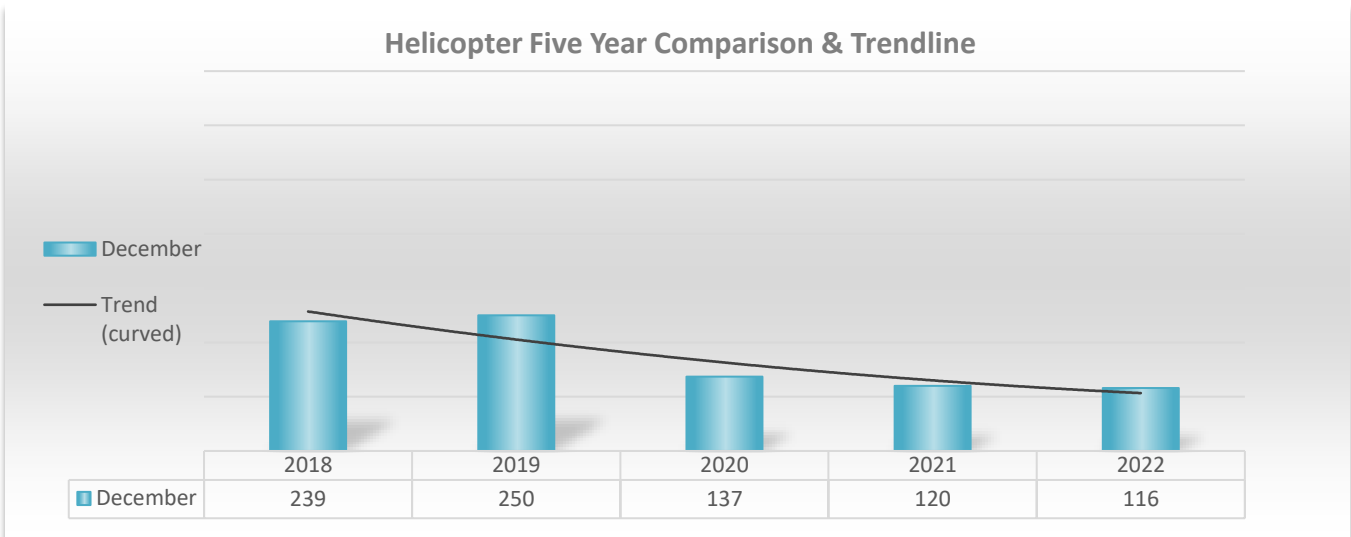
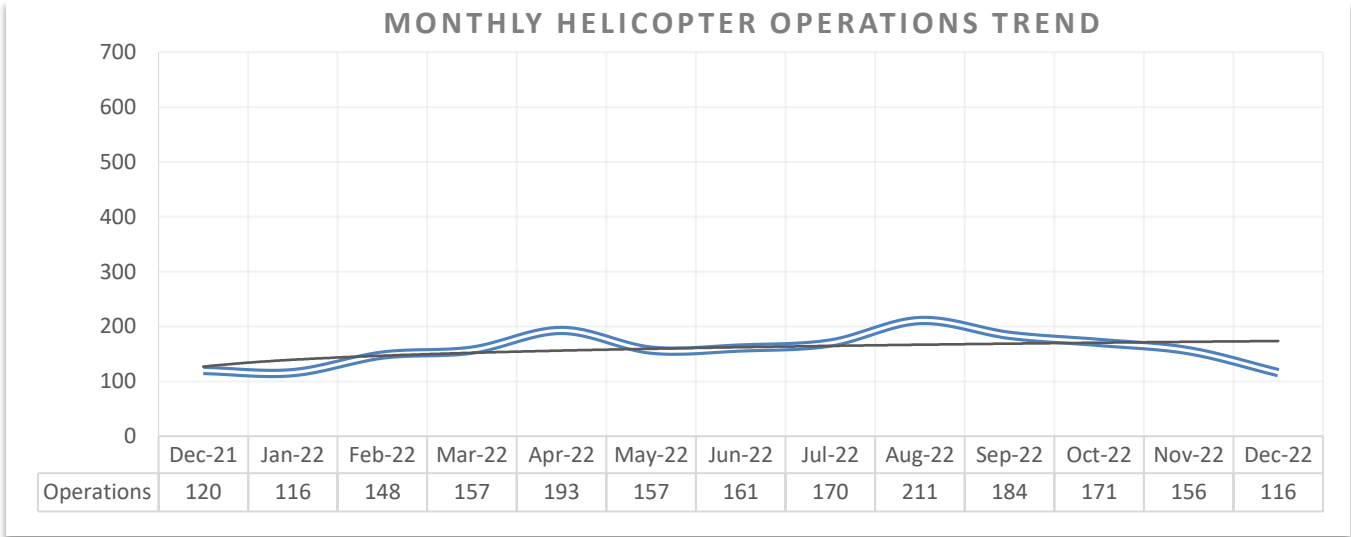
Turboprop Operations

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 December 2022, approximately 355 were by turboprop aircraft, comprising approximately 8% of the total operations. Turboprop aircraft operations increased approximately 40% from the 254 operations recorded during December 2021.



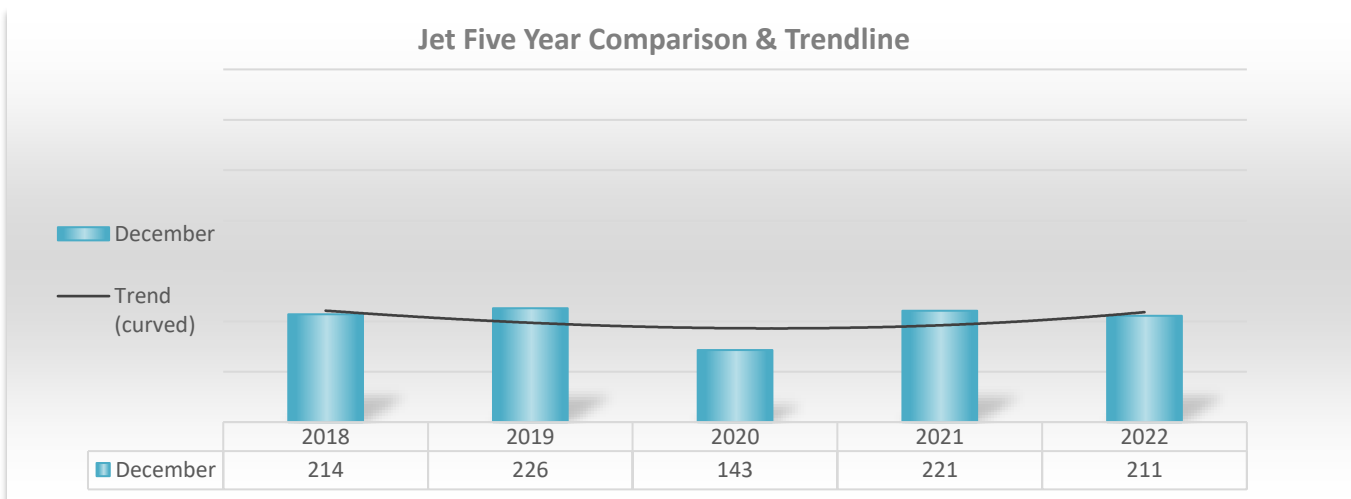
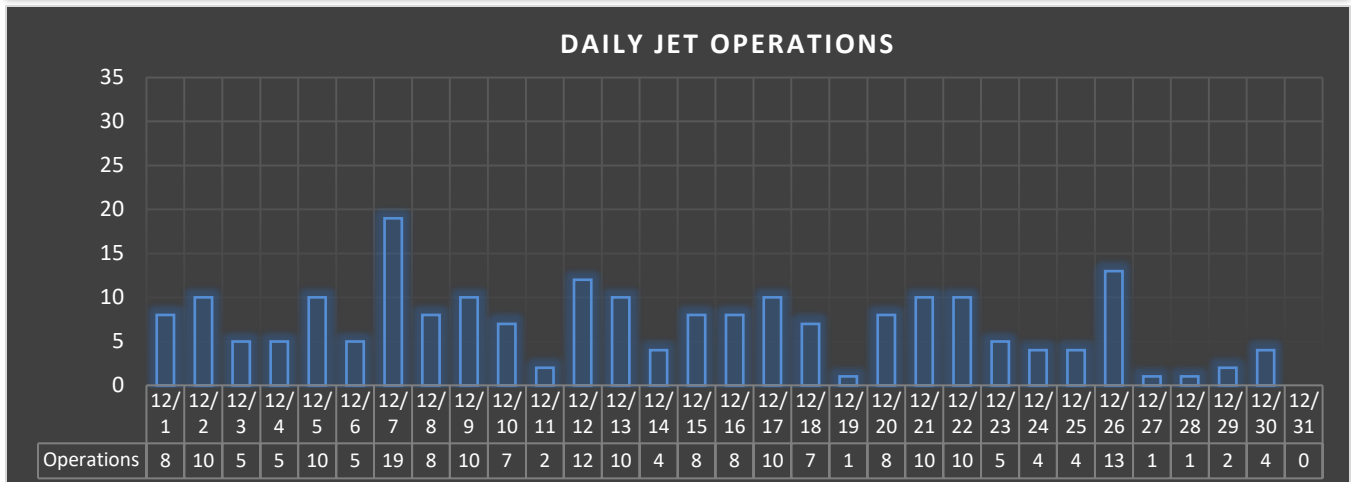
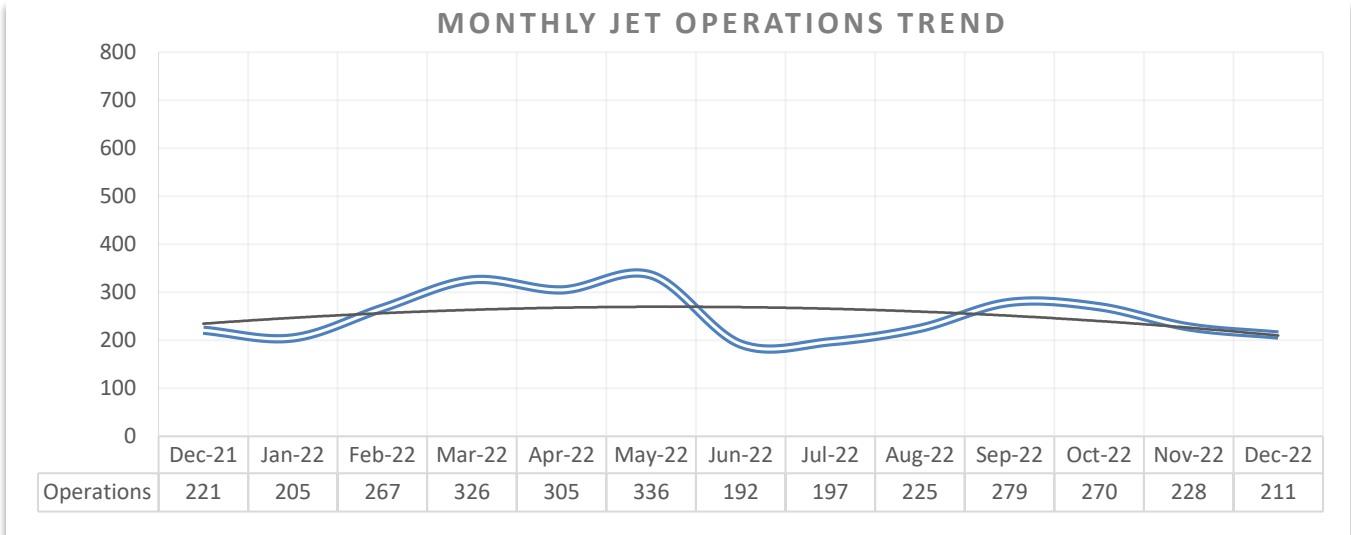
Helicopter Operations

Of the monthly aircraft operations for December 2022, approximately 116 operations are attributed to helicopters, comprising approximately 3% of the total operations. Helicopter operations during December 2022 decreased approximately 3% from the 120 helicopter operations recorded in December 2021.



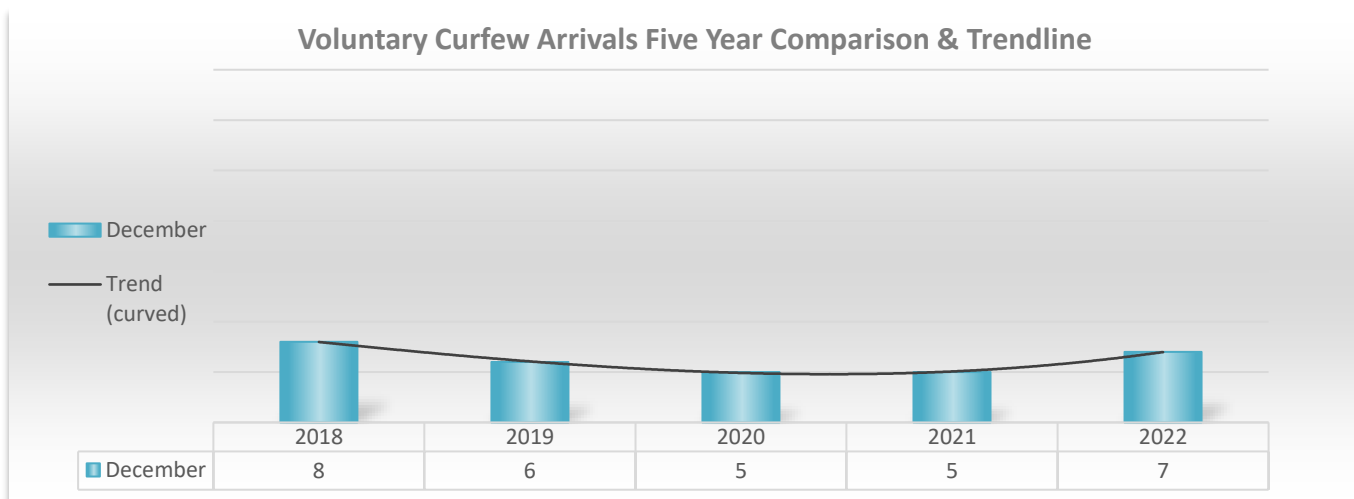
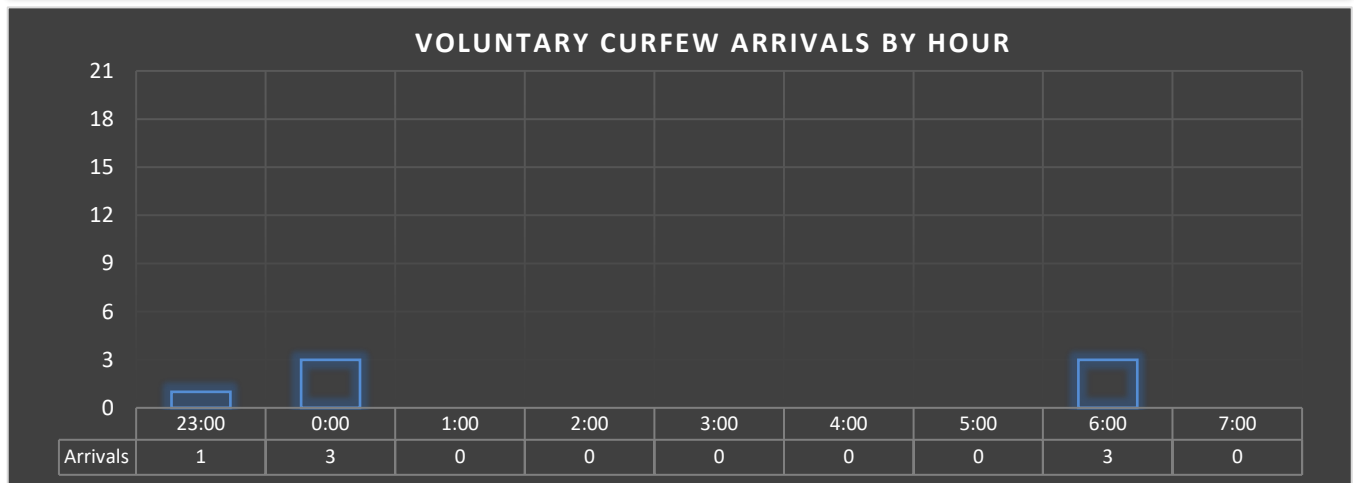
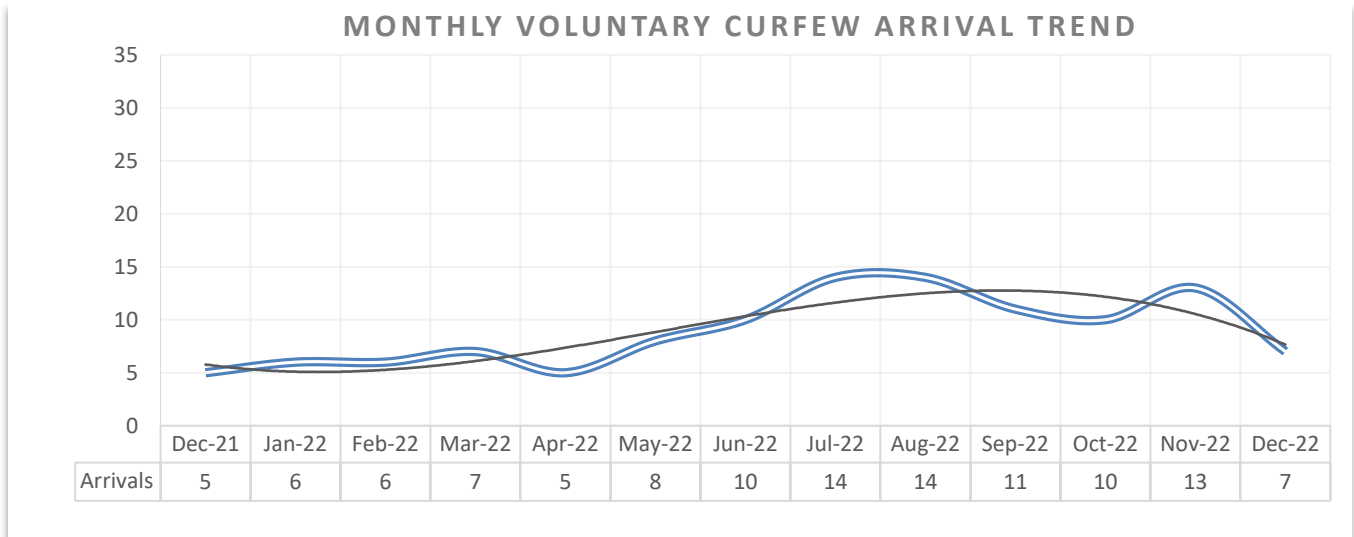
Jet Aircraft Operations

In December of 2022, there were approximately 211 jet operations recorded, encompassing approximately 5% of the total operations. Jet operations for December decreased 5% from the 221 jet aircraft operations recorded during December 2021. Daily jet operations vary significantly day over day. During the month of December 2022, jet aircraft averaged 7 operations per day. The bar graph below represents the monthly and daily operations for jet engine driven aircraft for the month of December 2022.



III. Voluntary Arrival Curfew

During the month of December 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 December 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 December 2022, there was one authorized departure 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 December 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

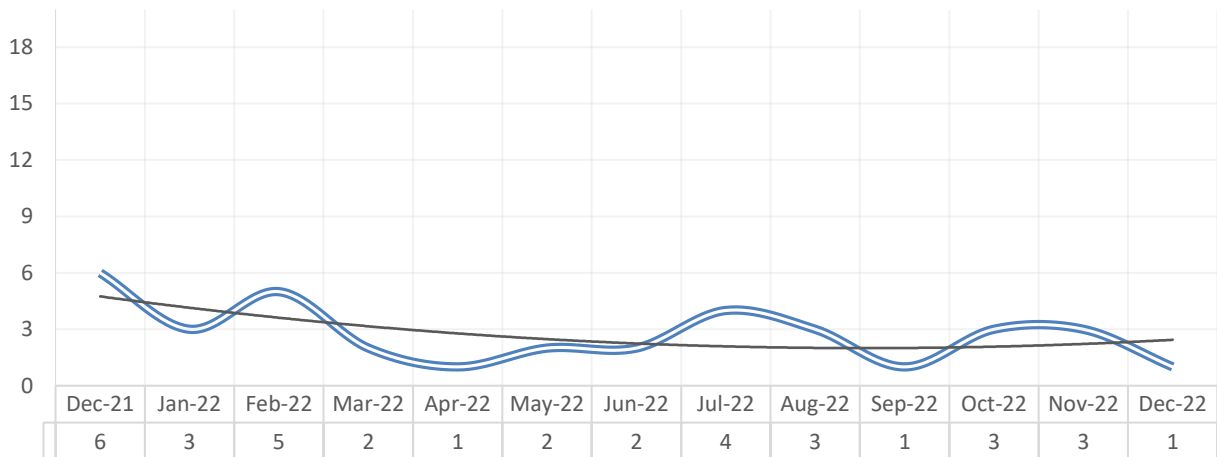
Santa Monica Airport enforces a maximum noise limit as approved by City Ordinance adopted in 1985. The Santa Monica Municipal Code section 10.04.04.060 states that “No aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing on December 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 December 2022, there was 1 noise violation recorded which represents an 83% decrease from the 6 noise violations recorded during December 2021. A summary of noise violations for December 2022 is listed on attachment D. Of the 4,412 aircraft operations recorded during the month of December 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.

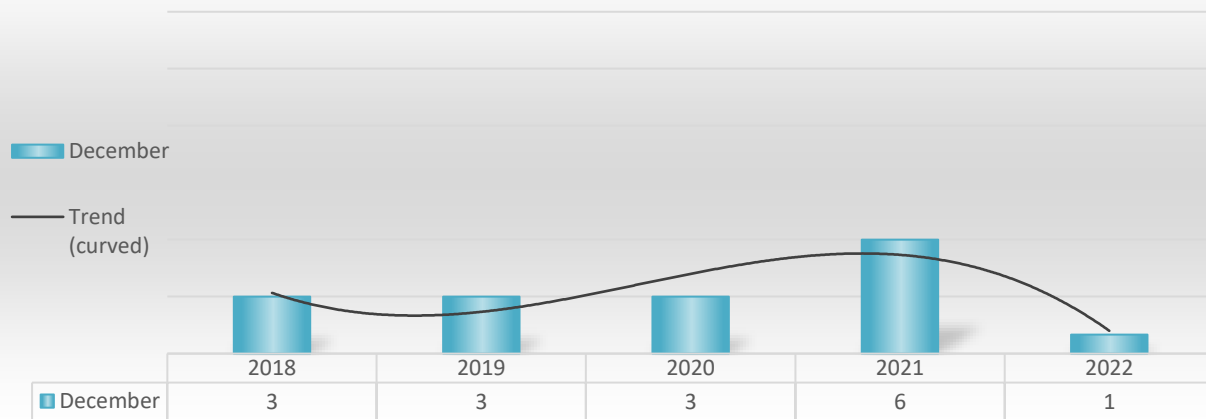
Violations Breakdown by Decibel Level

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	1	0	0	0	0	0	0	1	100%
Propeller	0	0	0	0	0	0	0	0	0%
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

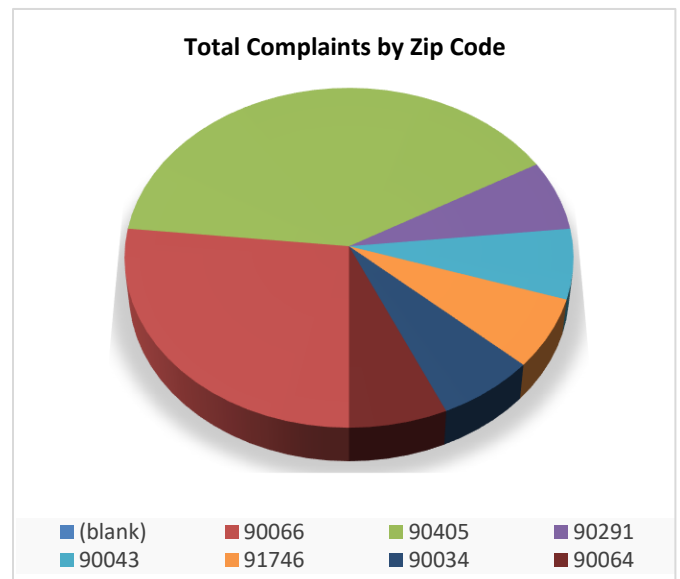
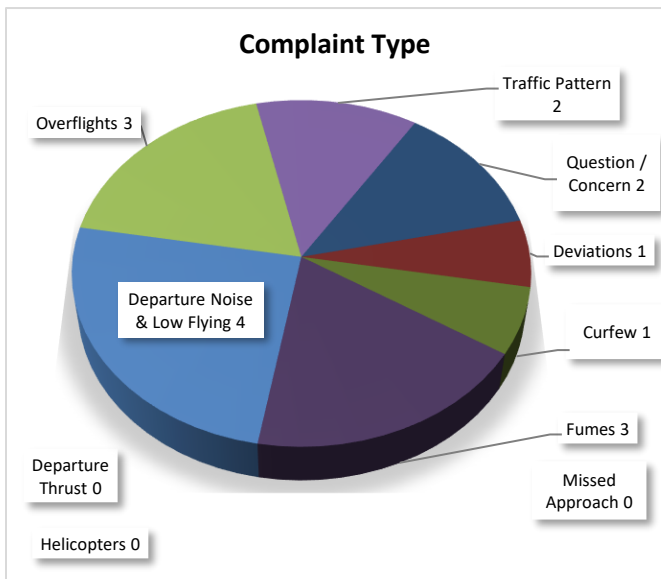
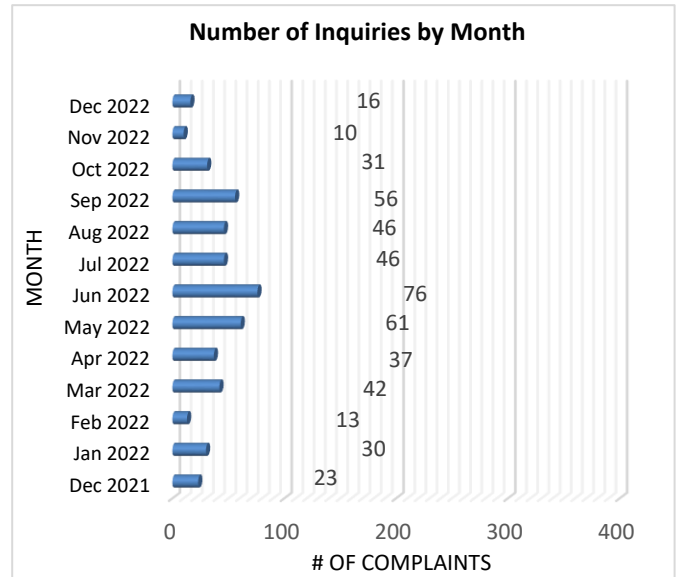
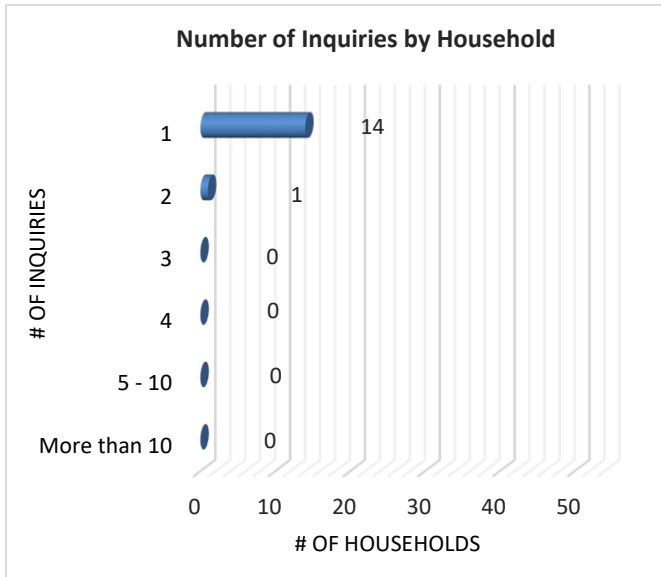


NOISE VIOLATIONS BY AIRCRAFT TYPE



VIII. Aircraft Related Inquiries

During the month of December 2022, 15 individual households logged a total of 16 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 December 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) LOCID						
(10-1) FACILITY TYPE ("X" ONE) (11) APPROACH CONTROL TOWERS <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> <input type="checkbox"/> B. RADAR <input type="checkbox"/> C. LIMITED RADAR <input type="checkbox"/> D. NON-RADAR </div> <div style="display: inline-block; vertical-align: middle; margin-left: 100px;"> <input checked="" type="checkbox"/> E. VFR TOWER <input type="checkbox"/> G. CONTRACT TOWER (Continue on reverse) </div> <div style="display: inline-block; vertical-align: middle; margin-left: 100px;"> FACILITY TYPE CHANGED (12) <input type="checkbox"/> YES </div>			IF DAILY HOURS OF OPERATION HAVE CHANGED, ENTER NEW HOURS → HRS. 10 THS (77-78) (79)							
AIRPORT OPERATIONS COUNT										
	ITINERANT					LOCAL			TOTAL OPERATIONS	SPECIAL USE
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		
1	0	13	42	0	55	115	2	117	172	172
2	0	4	21	0	25	0	0	0	25	197
3	0	3	111	0	114	71	0	71	185	382
4	0	3	43	0	46	45	0	45	91	473
5	0	6	90	0	96	25	0	25	121	594
6	0	13	82	0	95	129	0	129	224	818
7	0	18	132	0	150	77	0	77	227	1045
8	0	14	124	0	138	57	0	57	195	1240
9	0	19	151	0	170	68	0	68	238	1478
10	0	3	51	0	54	65	0	65	119	1597
11	0	7	18	0	25	0	0	0	25	1622
12	0	3	68	0	71	57	0	57	128	1750
13	0	9	135	0	144	70	0	70	214	1964
14	0	13	139	0	152	81	0	81	233	2197
15	0	7	100	0	107	48	5	53	160	2357
16	0	9	129	0	138	94	0	94	232	2589
17	0	10	112	0	122	51	0	51	173	2762
18	0	7	128	0	135	45	0	45	180	2942
19	0	1	89	0	90	55	0	55	145	3087
20	0	9	116	0	125	55	0	55	180	3267
21	0	10	143	0	153	52	0	52	205	3472
22	0	11	105	0	116	87	0	87	203	3675
23	0	3	87	0	90	26	0	26	116	3791
24	0	4	42	0	46	14	0	14	60	3851
25	0	5	21	0	26	2	0	2	28	3879
26	0	6	105	0	111	47	0	47	158	4037
27	0	3	77	0	80	45	0	45	125	4162
28	0	2	64	0	66	88	0	88	154	4316
29	0	10	29	0	39	17	0	17	56	4372
30	0	8	24	0	32	0	0	0	32	4404
31	0	0	8	0	8	0	0	0	8	4412
TOTAL	0	233	2586	0	2819	1586	7	1593	4412	

ATTACHMENT A

THIS SIDE FOR USE BY VFR TOWERS ONLY (ALL Approach Control Terminals MUST use FAA Form 7230-26)					ALL VFR Towers recording Instrument Operations on this side MUST COMPLETE		/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	8	29	0	(16-19) 37				
2	0	4	18	0	(20-23) 22				
3	0	0	12	0	(24-27) 12				
4	0	5	32	0	(28-31) 37				
5	0	9	22	0	(32-35) 31				
6	0	9	20	0	(36-39) 29				
7	0	10	31	0	(40-43) 41				
8	0	9	16	0	(44-47) 25				
9	0	11	26	0	(48-51) 37				
10	0	1	19	0	(52-55) 20				
11	0	7	5	0	(56-59) 12				
12	0	1	17	0	(60-63) 18				
13	0	3	12	0	(64-67) 15				
14	0	2	17	0	(68-71) 19				
15	0	3	13	0	(72-75) 16				
16	0	6	23	0	(76-79) 29				
					(14-2)				
17	0	7	15	0	(16-19) 22				
18	0	4	17	0	(20-23) 21				
19	0	1	23	0	(24-27) 24				
20	0	6	14	0	(28-31) 20				
21	0	7	18	0	(32-35) 25				
22	0	9	22	0	(36-39) 31				
23	0	2	12	0	(40-43) 14				
24	0	3	3	0	(44-47) 6				
25	0	5	3	0	(48-51) 8				
26	0	5	26	0	(52-55) 31				
27	0	3	12	0	(56-59) 15				
28	0	1	19	0	(60-63) 20				
29	0	9	17	0	(64-67) 26				
30	0	7	22	0	(68-71) 29				
31	0	0	8	0	(72-75) 8				
TOTAL	0	157	543	0	700				
	(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
12/3/22	6:46	N82525	P28T	21	78.1	2	BRAVO ZULU AERO LLC	P
12/12/22	23:54	N598TP	E55P	21	85.3	2	ALPHACRAFT AIR LLC	J
12/15/22	0:34	N340MJ	C340	21	80.5	2	ALL-STAR EXECUTIVE AVIATION INC	P
12/15/22	6:34	N48CS	BE20	3	87.3	1	SIMONE AIR LLC	P
12/17/22	0:03	N333YY	SR20	21	67.4	2	ZENTRAX INC	P
12/23/22	6:51	N741LS	R44	21	DNR	2	RS AVIATION SERVICES	H
12/31/22	0:18	N318RX	EC35	21	92.4	2	REACH AIR MEDICAL SERVICES	H

ATTACHMENT C
(Authorized Departures & Curfew Violations)

Authorized Curfew Departures

DATE	TIME	NUMBER	TYPE	OPERATOR	RUNWAY
12/31/22	0:43	N318RX	EC35	LIFE FLIGHT	21

Curfew Violations

NONE

**ATTACHMENT D
(Aircraft Noise Violations)**

AIRCRAFT ENGINE CATEGORY LEGEND

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

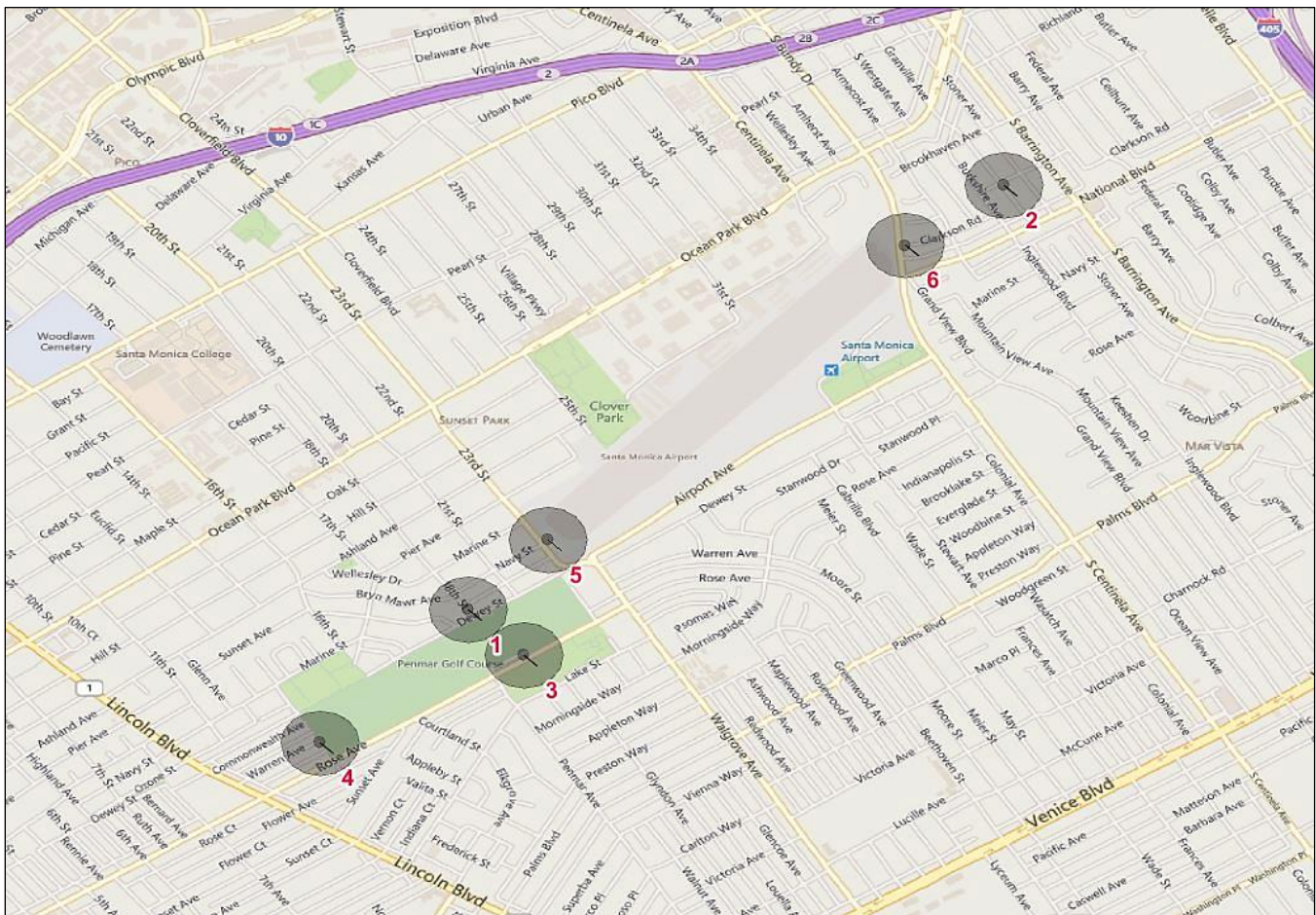
DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ACTION	ENGINE
12/12/22	15:41	N377FX	E55P	21	95.9	1	FLEXJET	\$2,000	J

Unenforceable Noise Events

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	REASON	ENGINE
12/15/22	14:25	NAVY400	HH60	21	95.3	2	U. S. NAVY	MILITARY	H

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.

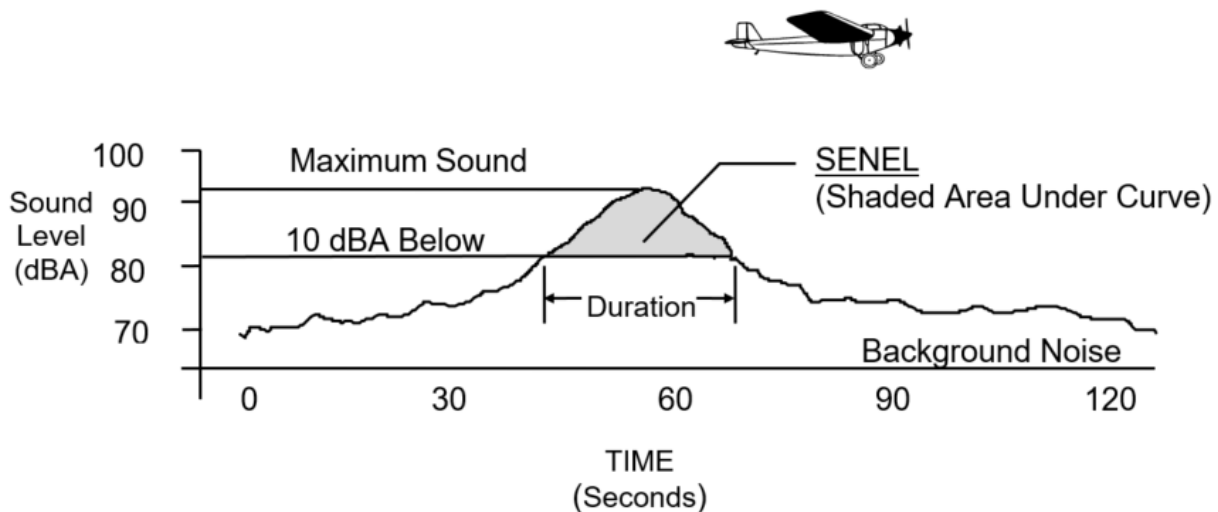
ATTACHMENT F (Single Event Noise Exposure Level)

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.