



Santa Monica Airport Monthly Operations Report

April 2022

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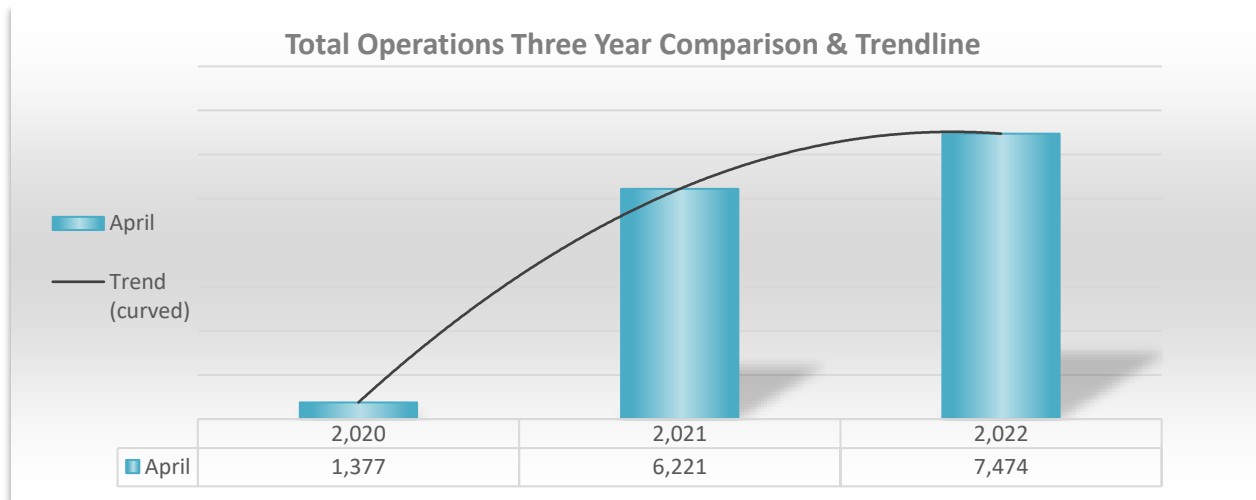
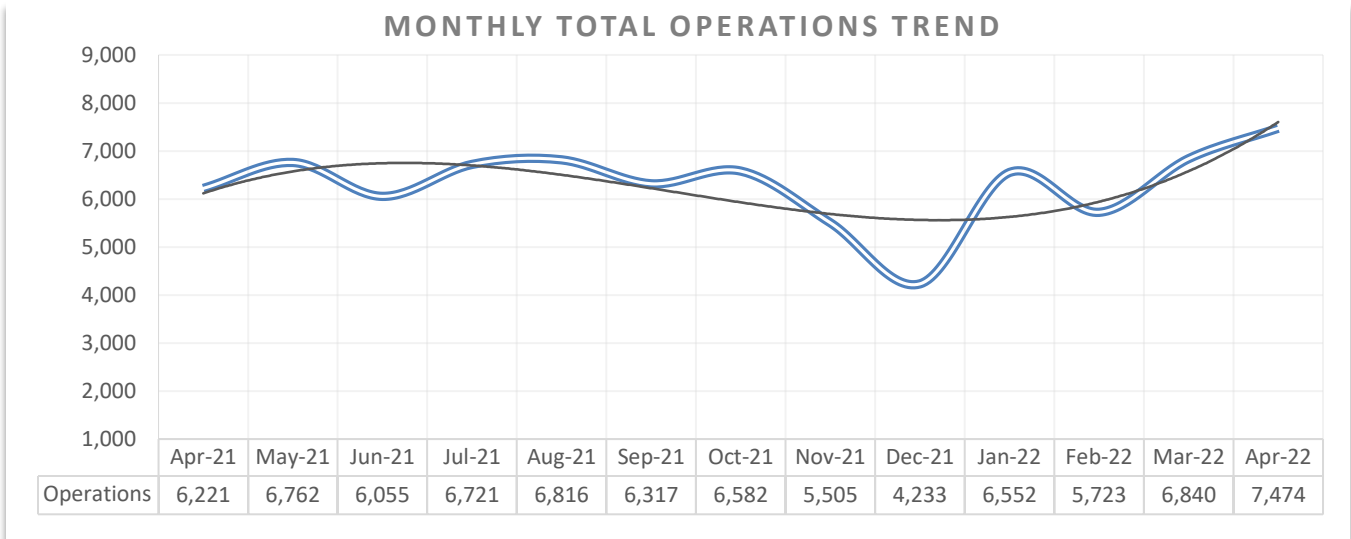
I. Introduction

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 April 2022.

II. Aircraft Operations Data

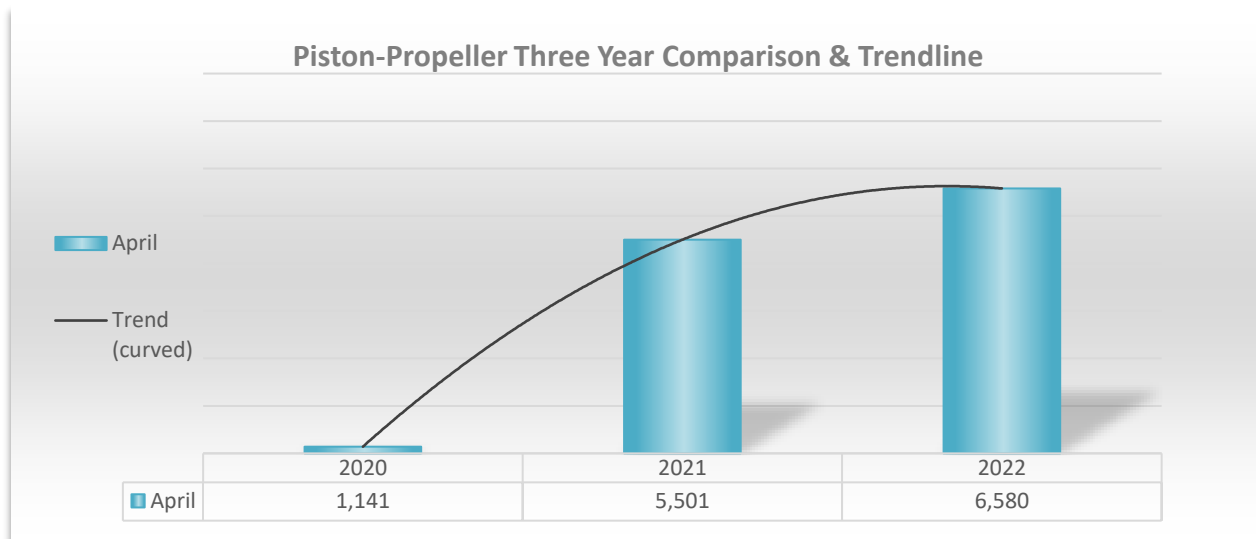
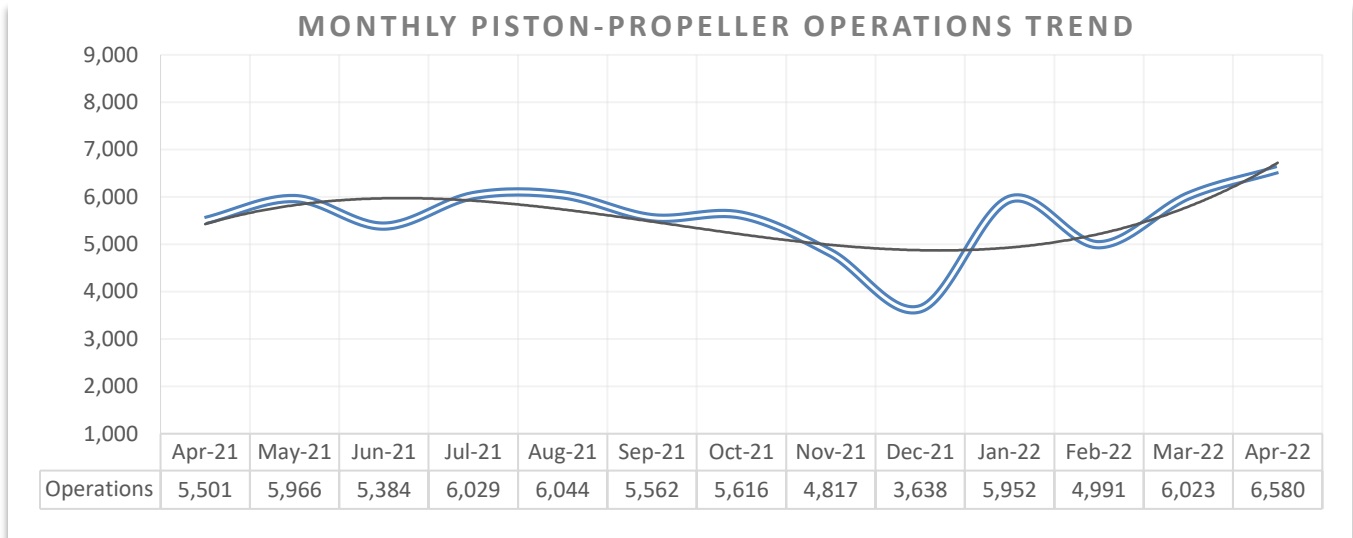
The total number of aircraft operations recorded during the month of April 2022 was 7,474 which represents a 20% increase from the 6,221 operations recorded during April 2021. Approximately 12% of the operations were instrument flights (IFR transient), 46% were local flights (VFR local operations), and 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, along with a graph for each type indicating each monthly aircraft operations trend during the preceding 12-month period is as follows.



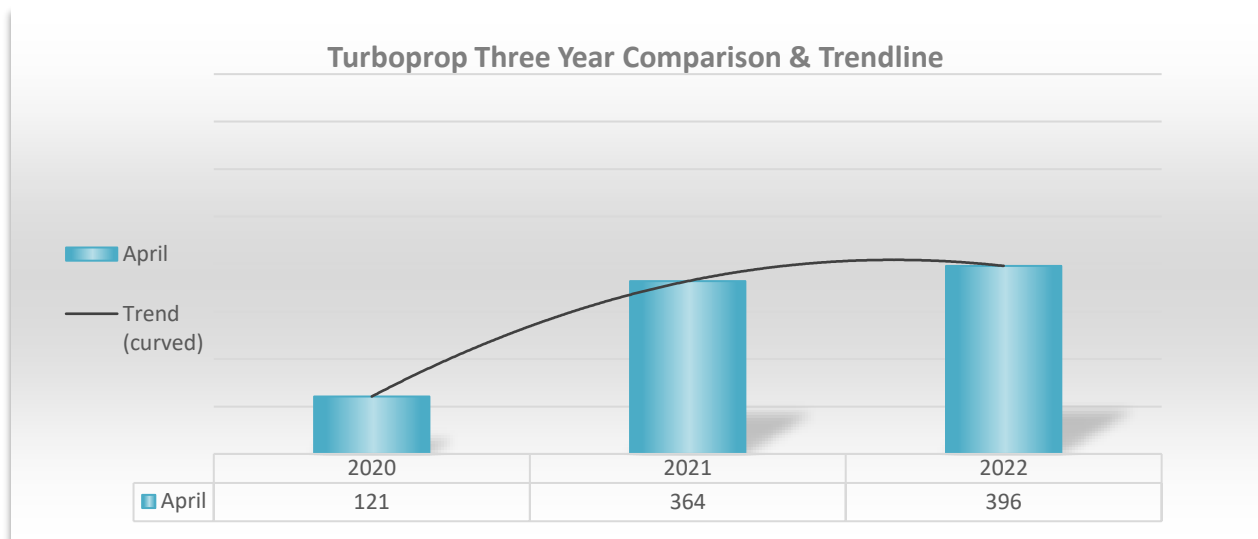
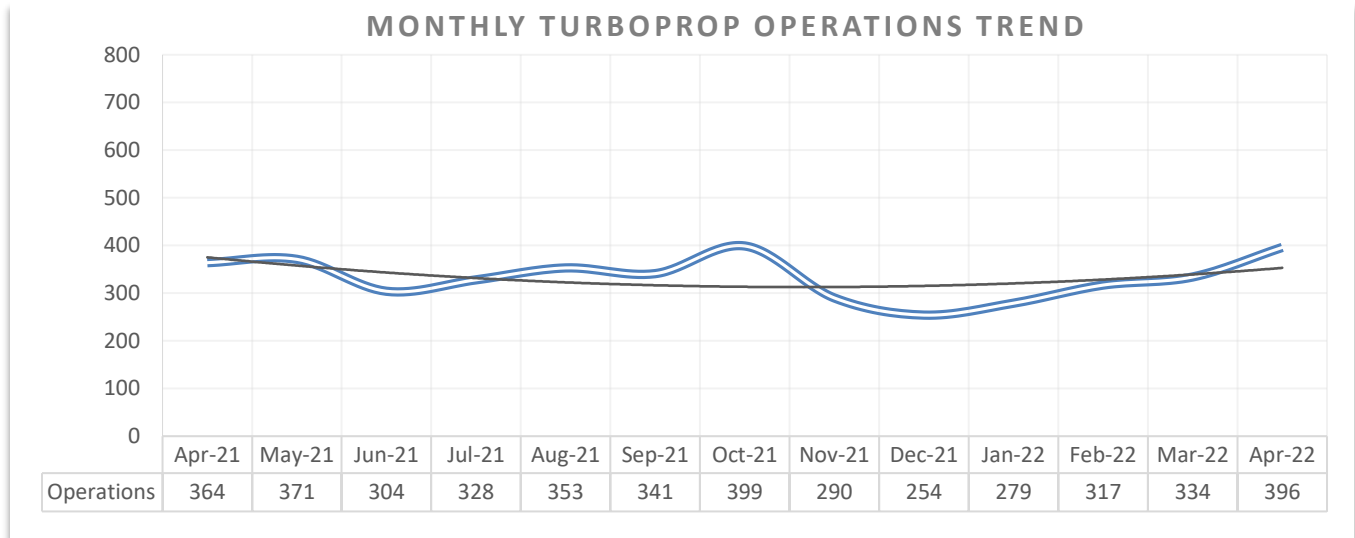
Piston-propeller Aircraft Operations

There were approximately 6,580 piston-propeller aircraft operations recorded, comprising approximately 88% of the total operations. Piston-propeller aircraft operations for April 2022 increased 20% from the 5,501 piston-propeller aircraft operations recorded during April 2021.



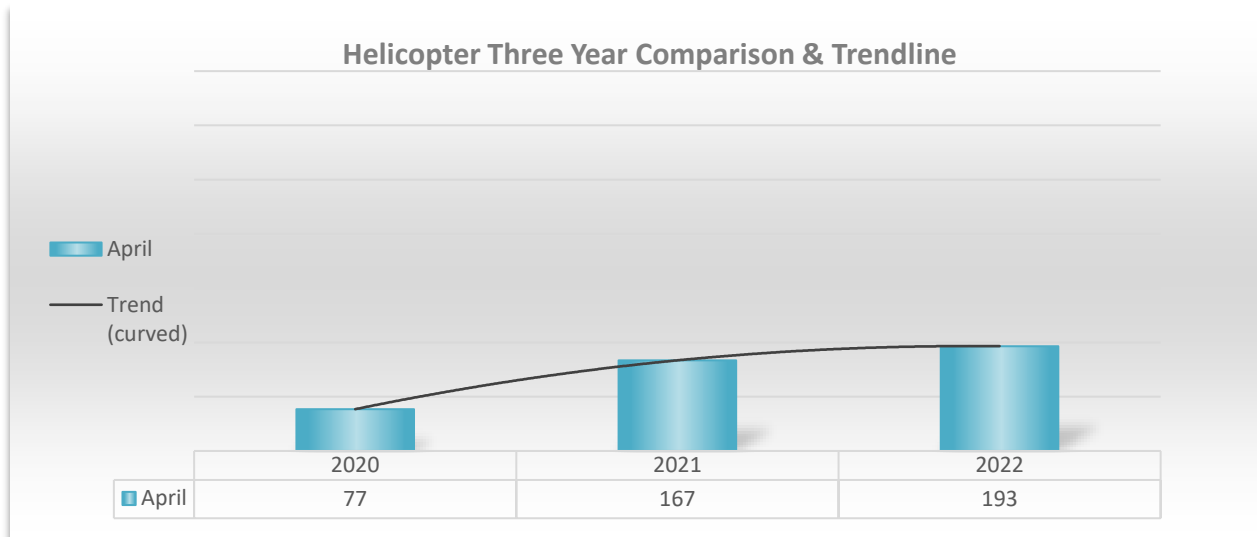
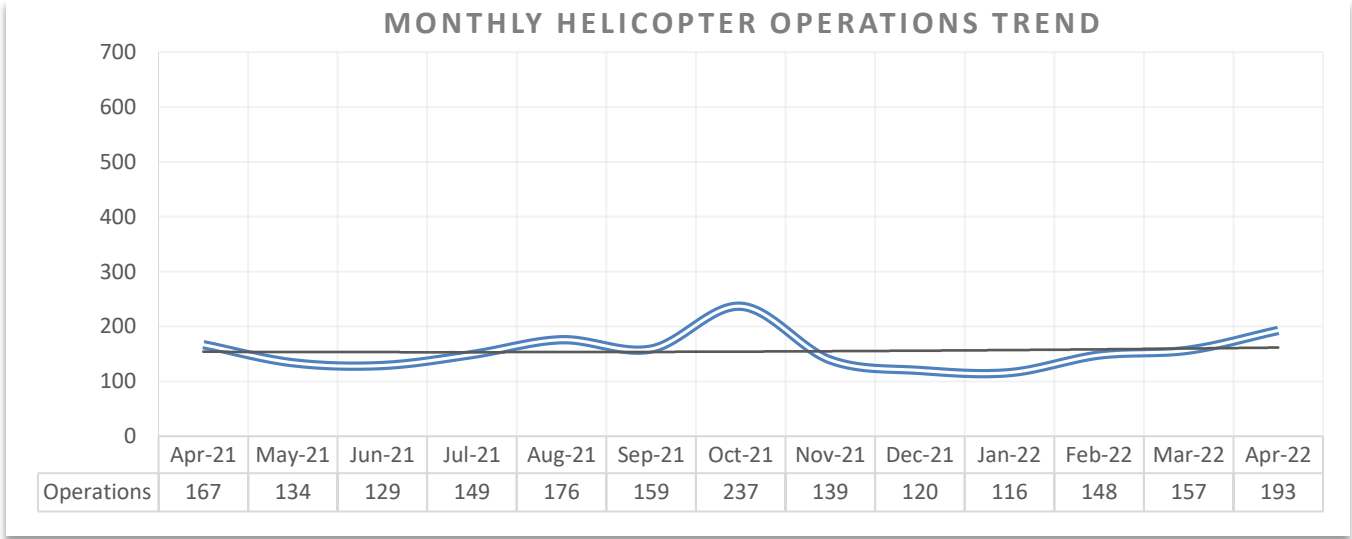
Turboprop Operations

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 April 2022, approximately 396 were by turboprop aircraft, comprising approximately 5% of the total operations. Turboprop aircraft operations increased approximately 9% from the 364 operations recorded during April 2021.



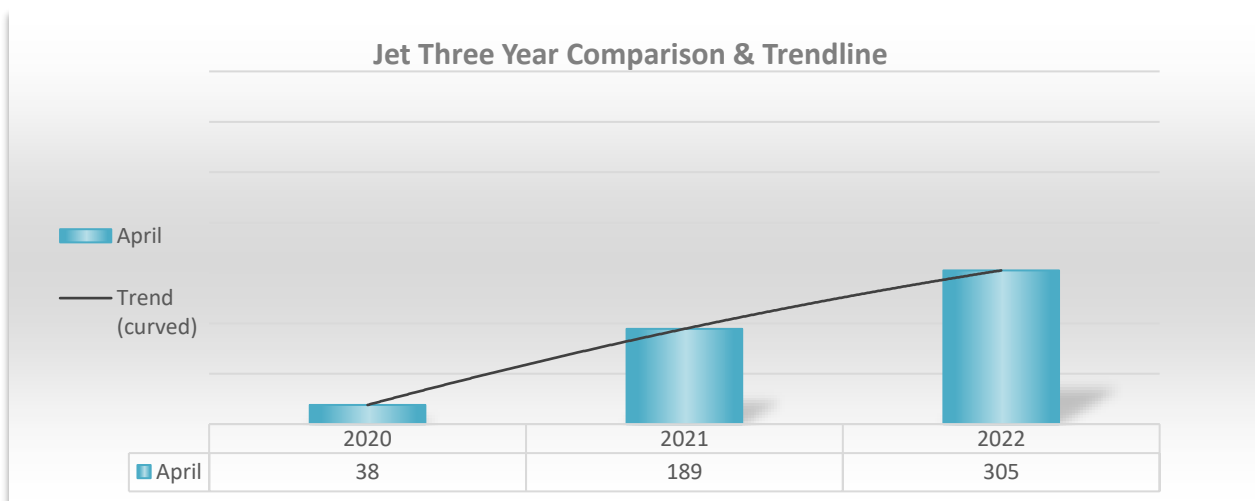
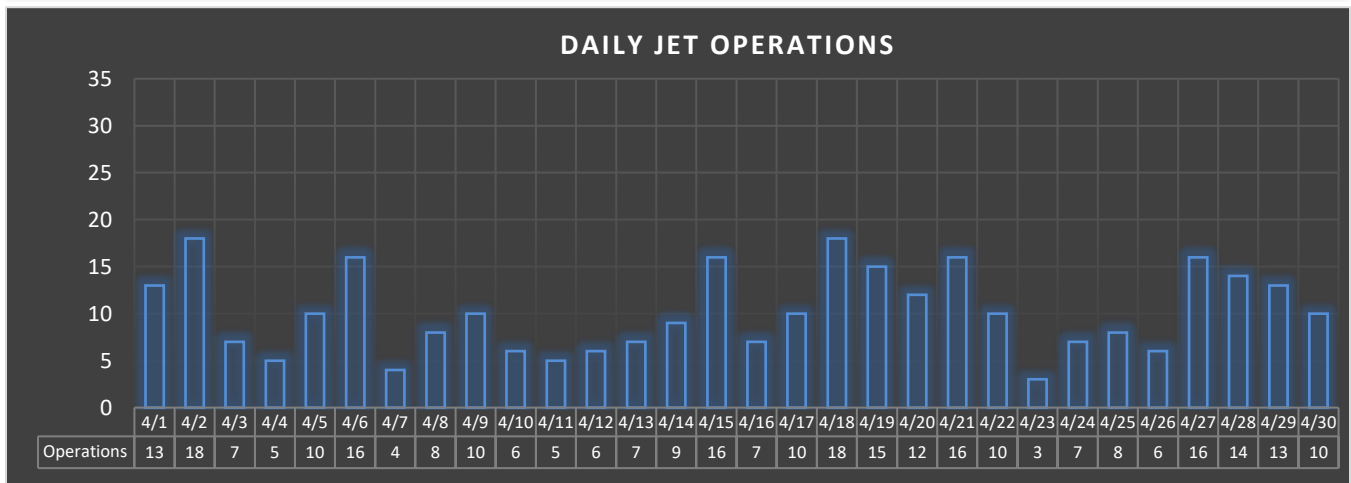
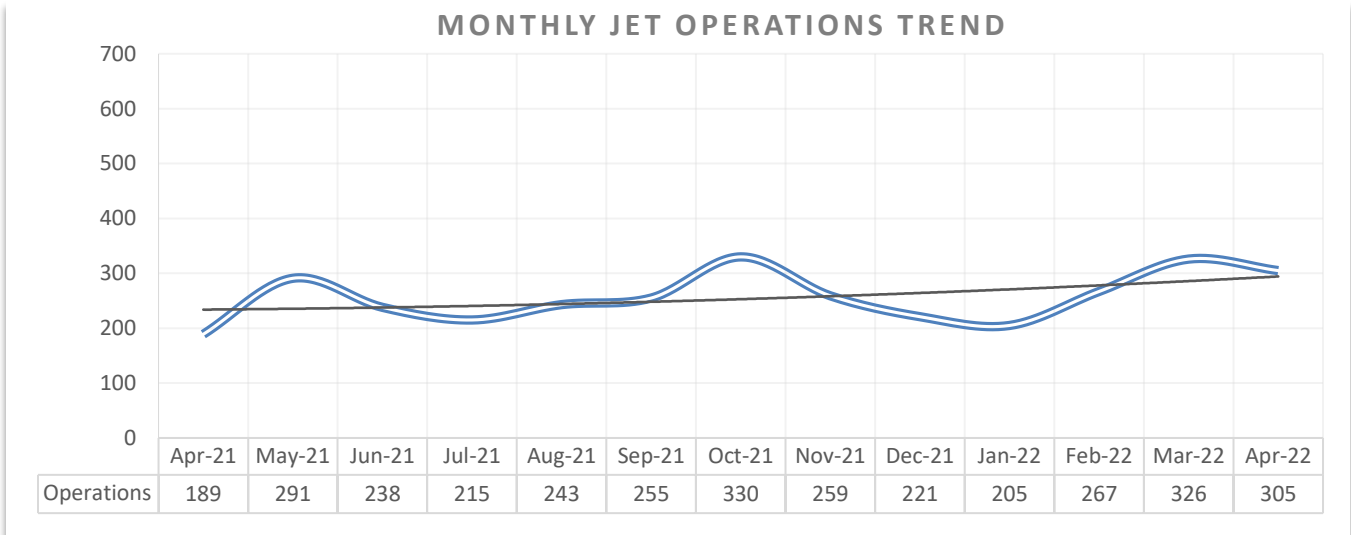
Helicopter Operations

Of the monthly aircraft operations for April 2022, approximately 193 operations are attributed to helicopters, comprising approximately 3% of the total operations. Helicopter operations during April 2022 increased approximately 16% from the 167 helicopter operations recorded in April 2021.



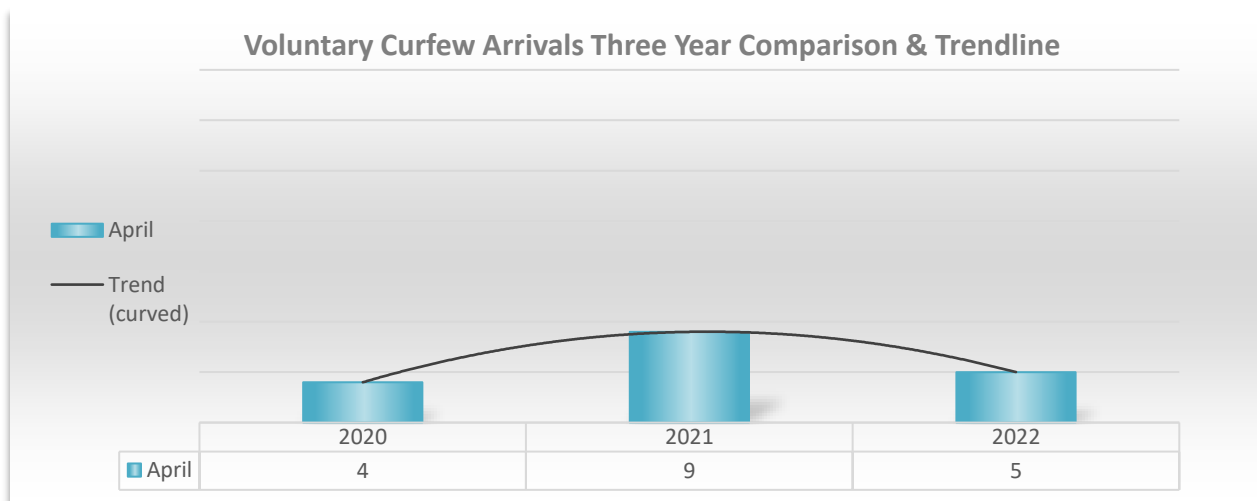
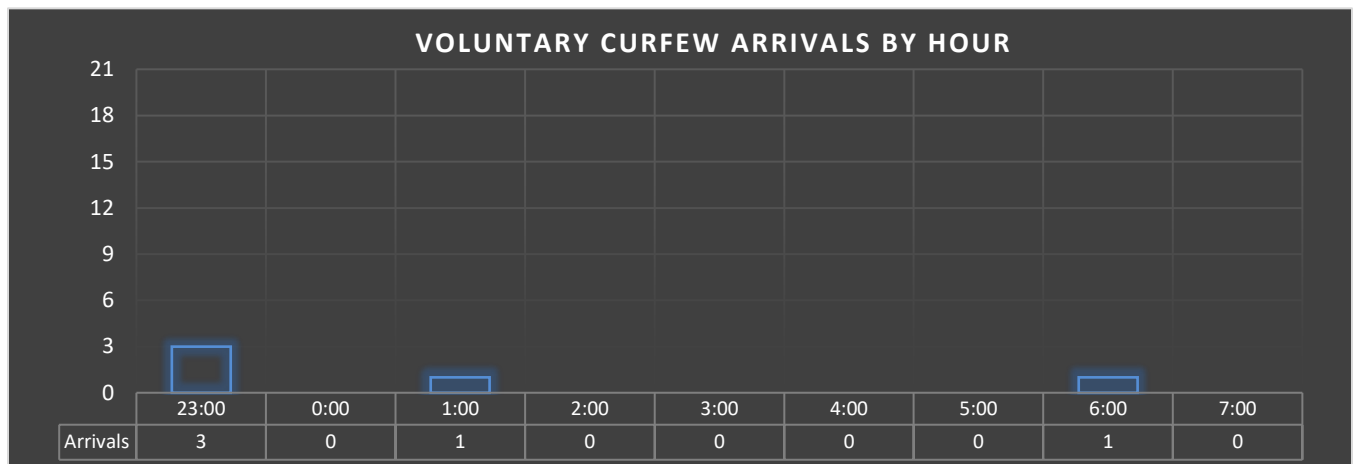
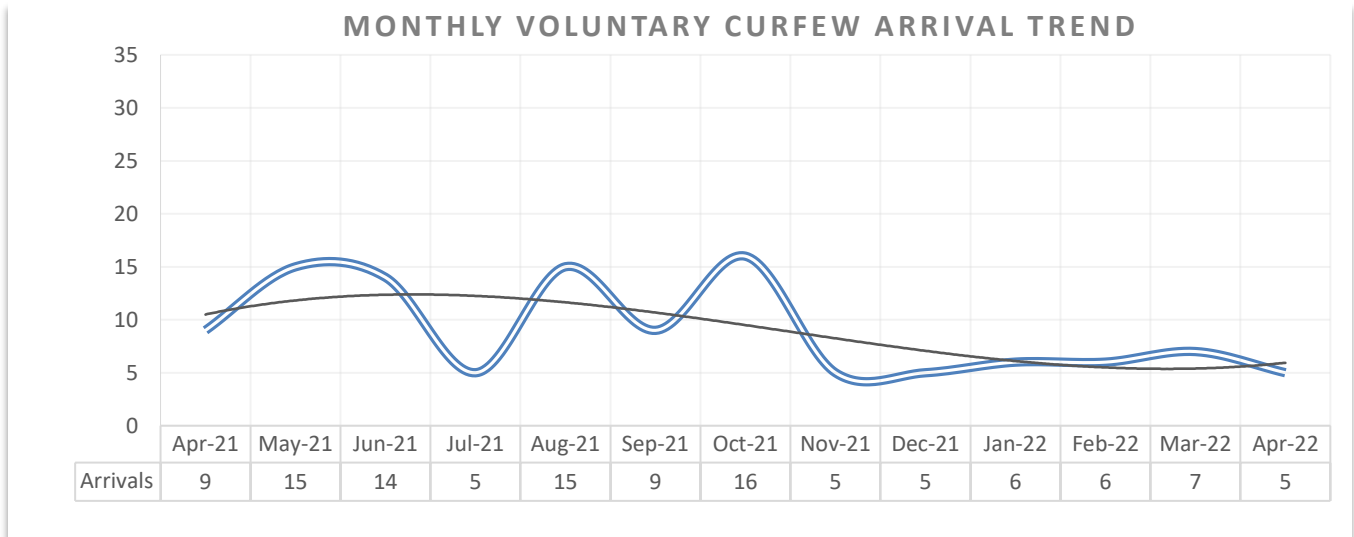
Jet Aircraft Operations

In April of 2022, there were approximately 305 jet operations recorded, encompassing approximately 4% of the total operations. Jet operations for April increased 61% from the 189 jet aircraft operations recorded during April 2021. Daily jet operations vary significantly day over day. During the month of April 2022, jet aircraft averaged 10 operations per day. The bar graph below represents the monthly and daily operations for jet engine driven aircraft for the month of April 2022.



III. Voluntary Arrival Curfew

During the month of April 2022, Airport Staff logged a total of 5 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 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 April 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 April 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

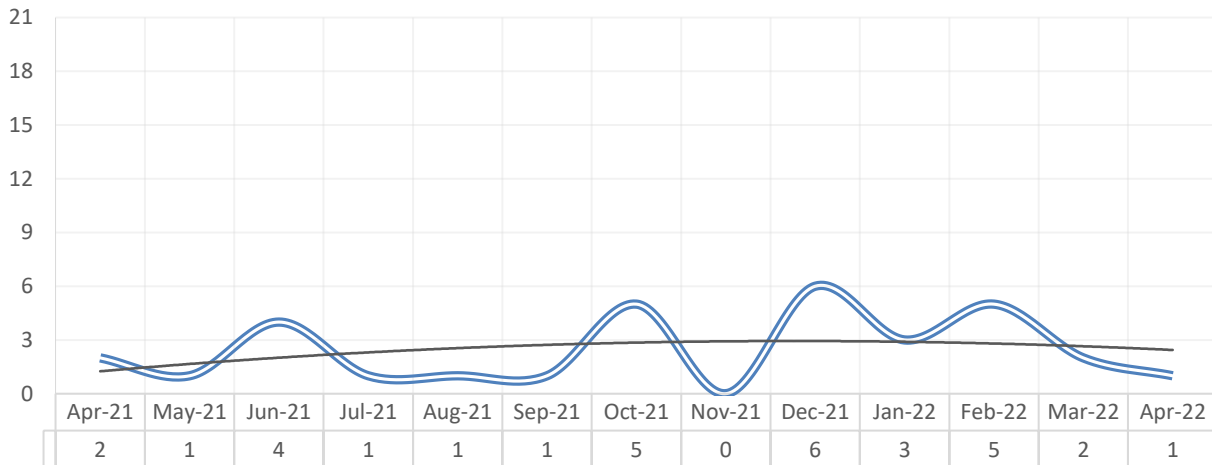
Santa Monica Airport enforces a maximum noise limit as approved by City Ordinance adopted in 1985. The Santa Monica Municipal Code section 10.04.04.060 states that “No aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing on April 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 April 2022, there was 1 noise violation recorded which represents a decrease of 50% from the 2 noise violations recorded during April 2021. A summary of noise violations for April 2022 is listed on attachment D. Of the 7,474 aircraft operations recorded during the month of April 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.

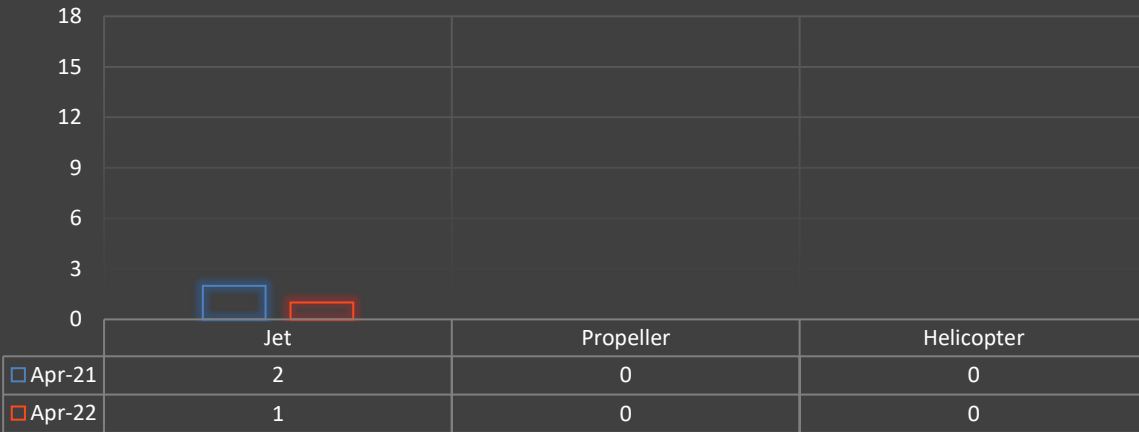
Violations Breakdown by Decibel Level

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%

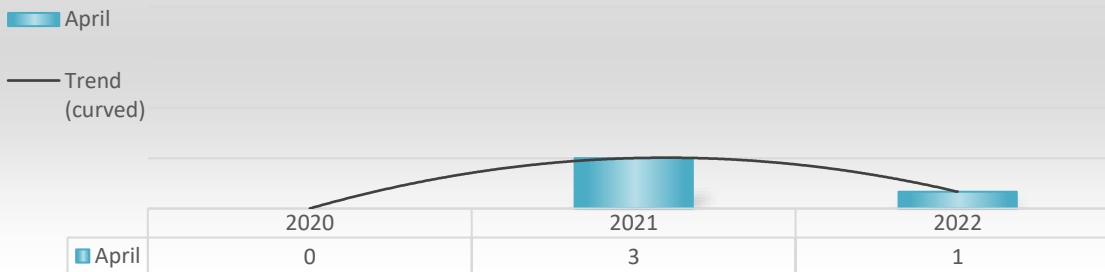
MONTHLY NOISE VIOLATIONS TREND



NOISE VIOLATIONS BY AIRCRAFT TYPE

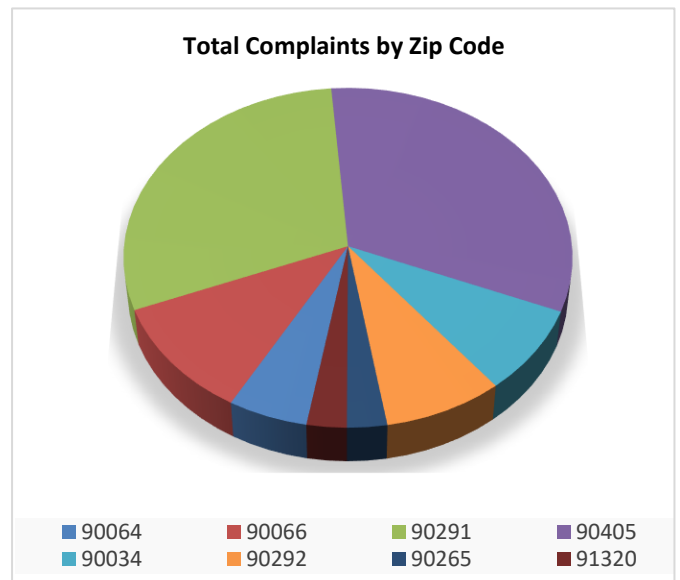
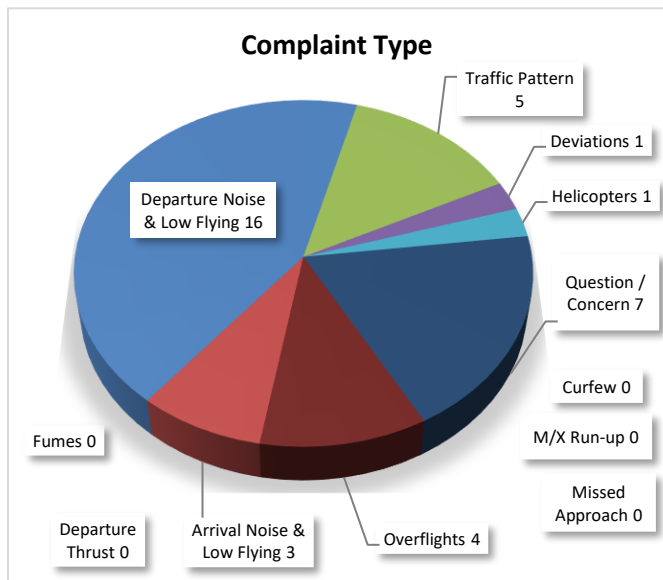
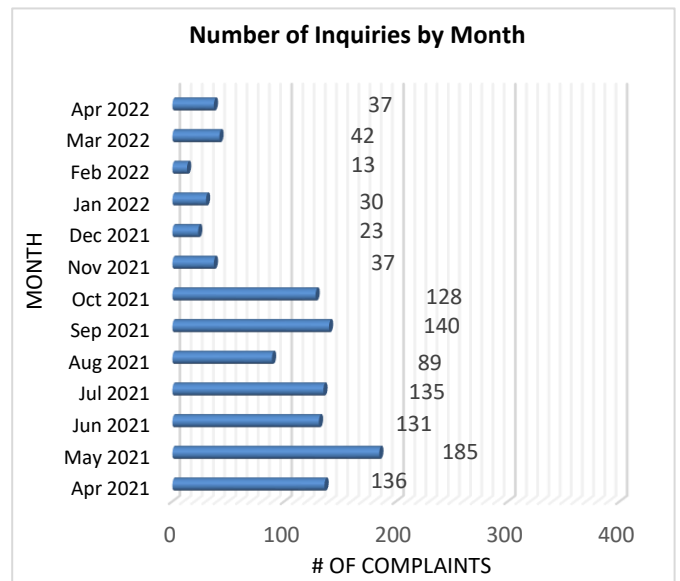
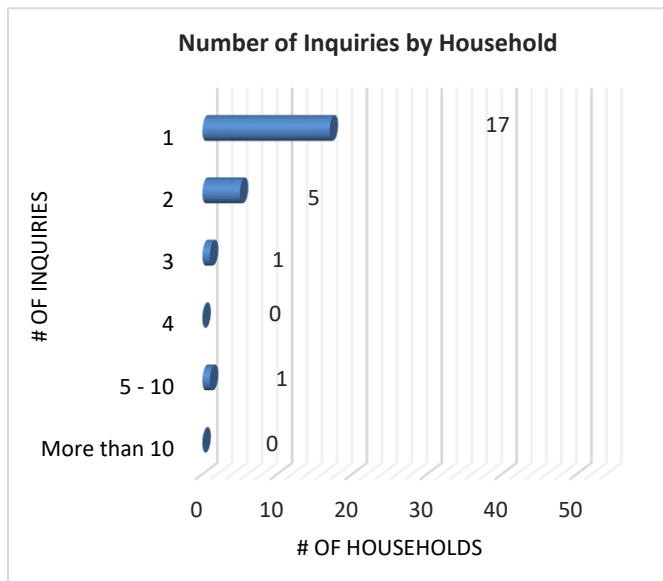


Noise Violations Three Year Comparison & Trendline



VIII. Aircraft Related Inquiries

During the month of April of 2022, 24 individual households logged a total of 37 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 April 2022.



ATTACHMENT A

AIRPORT TRAFFIC RECORD		FACILITY NAME		LOCATION		04 / 22		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) 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: 10px;"> <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: 10px;"> <input type="checkbox"/> 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	120	0	133	64	0	64	197	197
2	0	21	105	0	126	78	0	78	204	401
3	0	6	104	0	110	123	0	123	233	634
4	0	3	106	0	109	43	0	43	152	786
5	0	11	94	0	105	86	0	86	191	977
6	0	13	149	0	162	143	0	143	305	1282
7	0	6	139	0	145	120	0	120	265	1547
8	0	10	150	0	160	125	0	125	285	1832
9	0	4	160	0	164	54	0	54	218	2050
10	0	7	139	0	146	85	0	85	231	2281
11	0	15	44	0	59	42	0	42	101	2382
12	0	2	55	0	57	23	0	23	80	2462
13	0	7	110	0	117	118	0	118	235	2697
14	0	15	168	0	183	122	0	122	305	3002
15	0	12	174	0	186	127	0	127	313	3315
16	0	9	89	0	98	53	0	53	151	3466
17	0	12	138	0	150	86	0	86	236	3702
18	0	18	134	0	152	136	0	136	288	3990
19	0	19	153	0	172	107	0	107	279	4269
20	0	14	113	0	127	226	0	226	353	4622
21	0	19	114	0	133	65	0	65	198	4820
22	0	13	94	0	107	114	0	114	221	5041
23	0	9	169	0	178	136	0	136	314	5355
24	0	4	144	0	148	130	0	130	278	5633
25	0	11	133	0	144	174	0	174	318	5951
26	0	7	118	0	125	222	0	222	347	6298
27	0	17	116	0	133	217	0	217	350	6648
28	0	13	92	2	107	216	0	216	323	6971
29	0	20	121	0	141	145	0	145	286	7257
30	0	10	142	0	152	65	0	65	217	7474
31	0				0		0	0	0	7474
TOTAL	0	340	3687	2	4029	3445	0	3445	7474	

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	20	0	(16-19) 28				
2	0	17	49	0	(20-23) 66				
3	0	4	34	0	(24-27) 38				
4	0	0	15	0	(28-31) 15				
5	0	6	4	0	(32-35) 10				
6	0	8	23	0	(36-39) 31				
7	0	5	17	0	(40-43) 22				
8	0	8	11	0	(44-47) 19				
9	0	4	20	0	(48-51) 24				
10	0	5	31	0	(52-55) 36				
11	0	9	19	0	(56-59) 28				
12	0	1	12	0	(60-63) 13				
13	0	4	18	0	(64-67) 22				
14	0	7	15	0	(68-71) 22				
15	0	11	30	0	(72-75) 41				
16	0	5	21	0	(76-79) 26				
					(14-2)				
17	0	10	14	0	(16-19) 24				
18	0	9	34	0	(20-23) 43				
19	0	18	24	0	(24-27) 42				
20	0	13	25	0	(28-31) 38				
21	0	12	32	0	(32-35) 44				
22	0	10	26	0	(36-39) 36				
23	0	6	19	0	(40-43) 25				
24	0	4	24	0	(44-47) 28				
25	0	6	19	0	(48-51) 25				
26	0	1	14	0	(52-55) 15				
27	0	15	19	0	(56-59) 34				
28	0	13	27	0	(60-63) 40				
29	0	16	17	0	(64-67) 33				
30	0	9	14	0	(68-71) 23				
31	0	0	0	0	(72-75) 0				
TOTAL	0	244	647	0	891				
	(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
4/7/22	6:28	N442EG	SR22	21	78.5	2	GROTECH INC.	P
4/18/22	1:38	N32169	PA28	21	67.8	2	AIRLEASING LLC	P
4/24/22	23:05	N5148V	C172	21	DNR	2	AYRES AVIATION LLC	P
4/24/22	23:08	N353MV	C172	21	DNR	2	IGAL ZUBERY	P
4/25/22	23:20	N66025	C172	21	DNR	2	SUBURBAN AIR CORP	P

ATTACHMENT C
(Authorized Departures & Curfew Violations)

Authorized Curfew Departures

NONE

Curfew Violations

NONE

**ATTACHMENT D
(Aircraft Noise Violations)**

AIRCRAFT ENGINE CATEGORY LEGEND

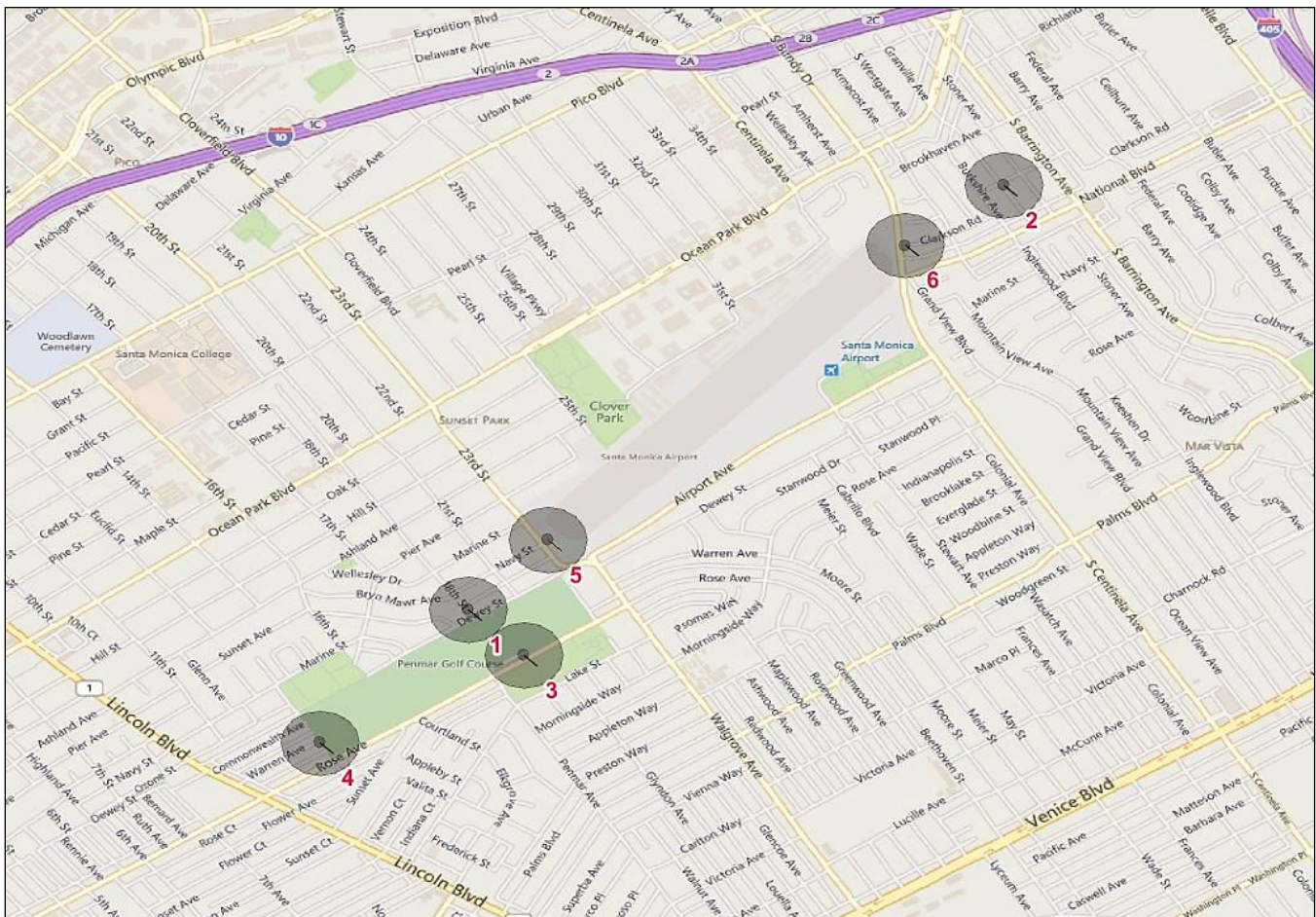
(J) = Jet (P) = Piston-propeller
(T) = Turboprop (H) = Helicopter

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ACTION	ENGINE
4/2/22	12:51	N951WA	C25A	21	95.3	1	LIFT AVIATION / R3Z AIR LLC	WARNING	J

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.

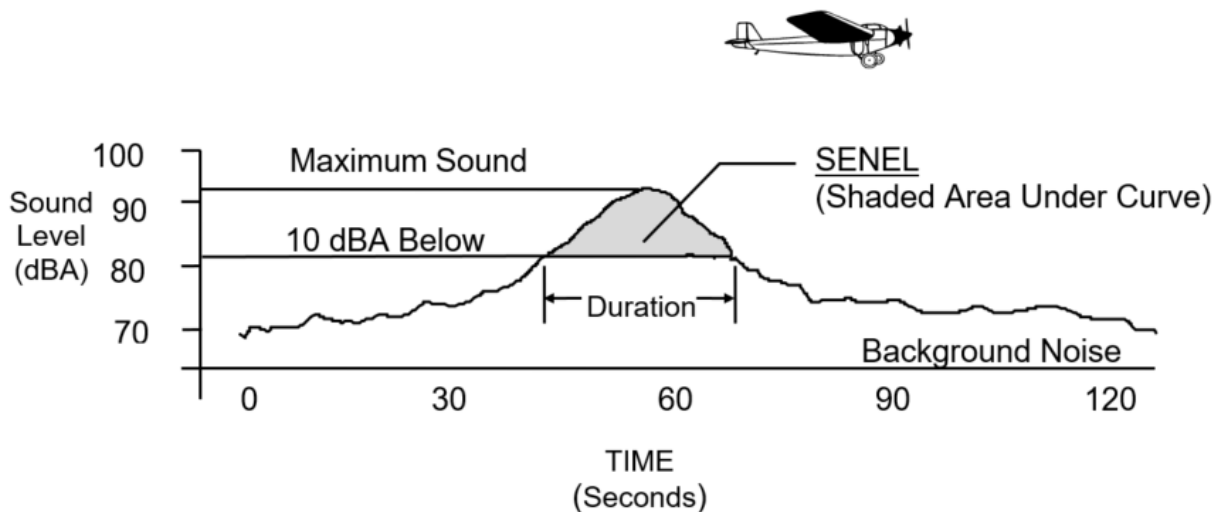
ATTACHMENT F (Single Event Noise Exposure Level)

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.