



Santa Monica Airport Monthly Operations Report

February 2022

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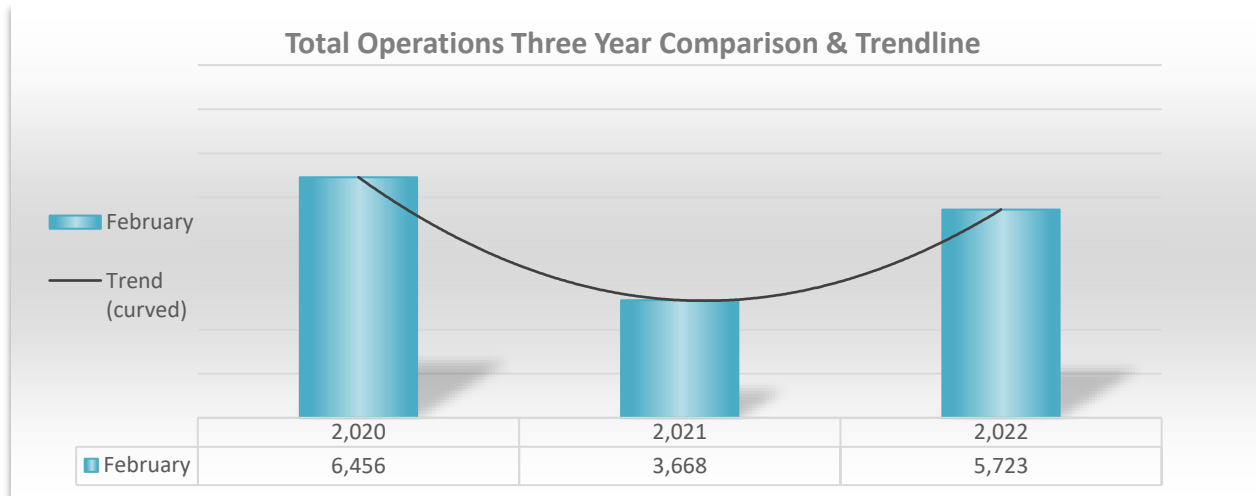
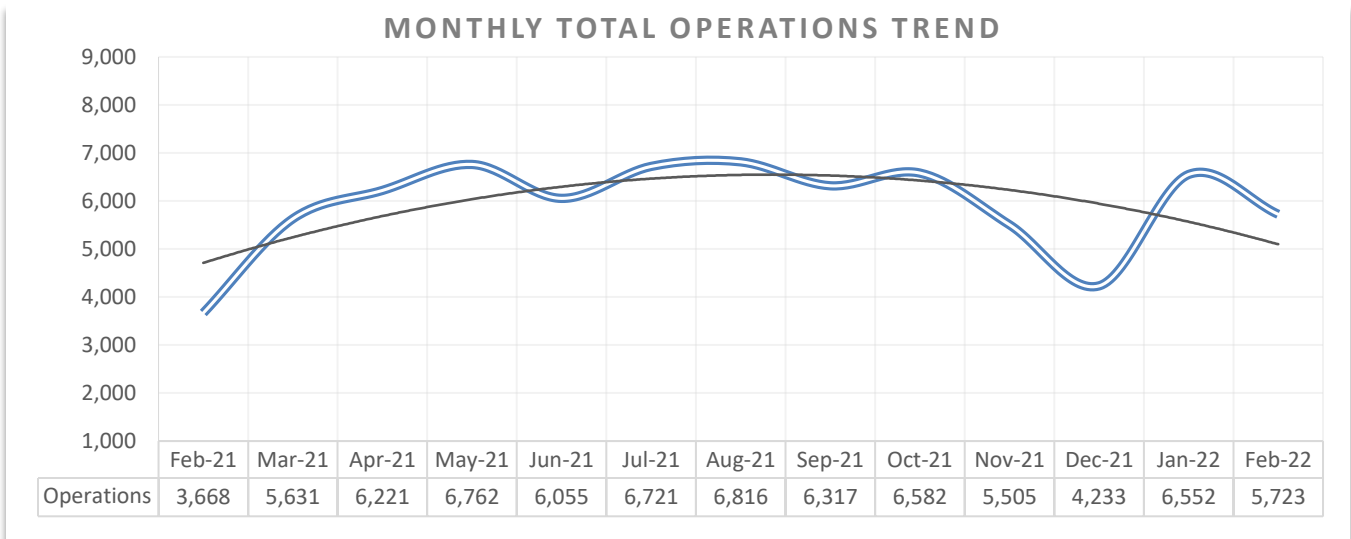
I. Introduction

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 February 2022.

II. Aircraft Operations Data

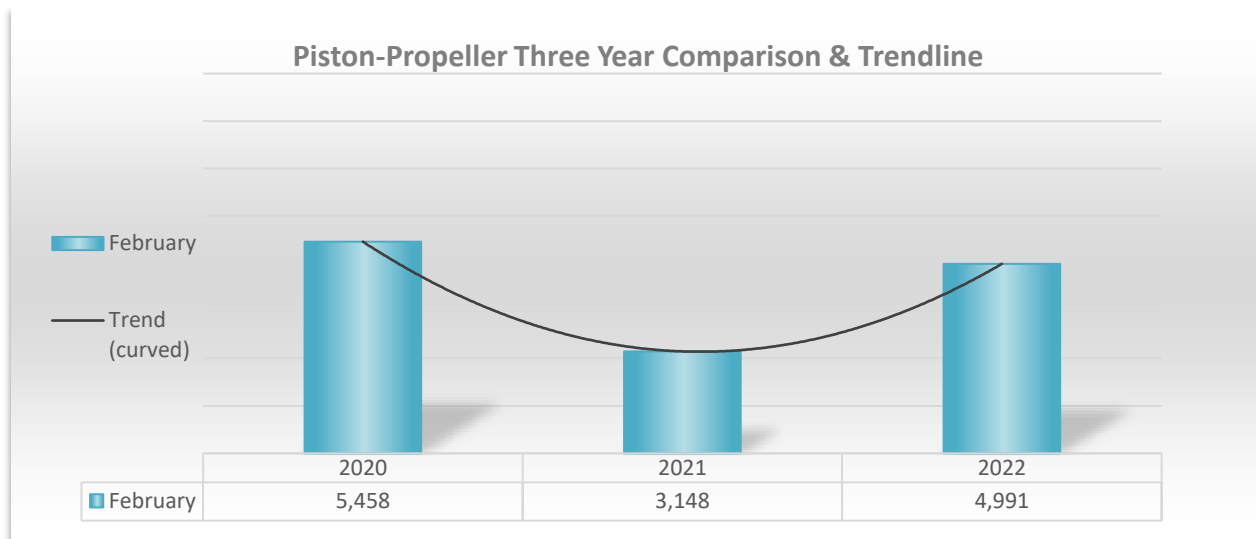
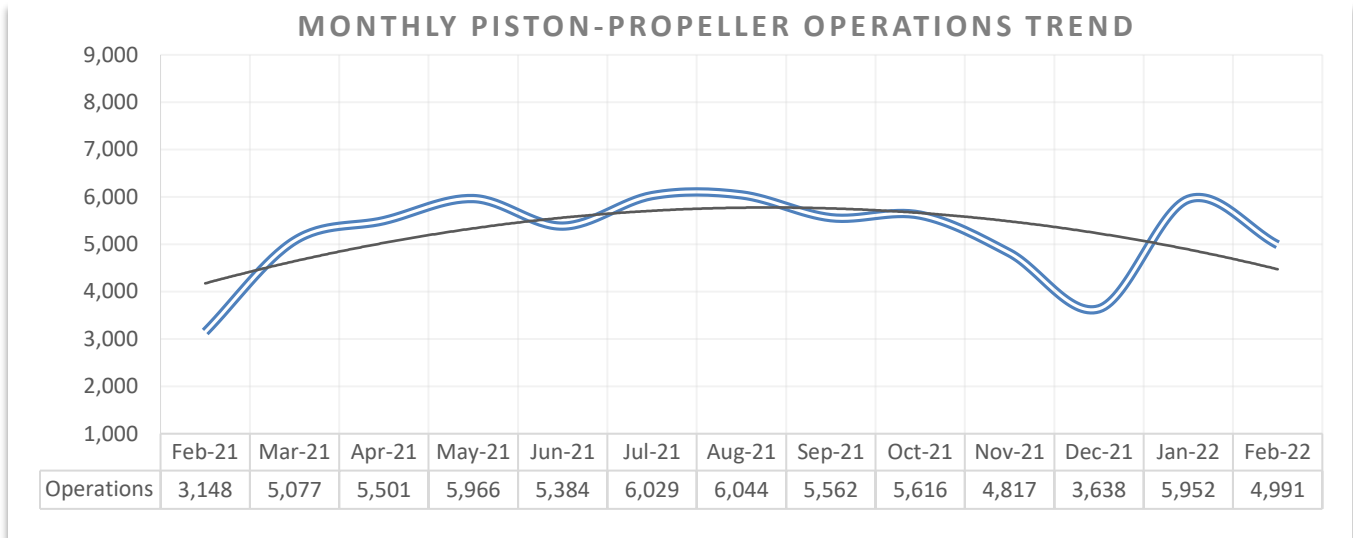
The total number of aircraft operations recorded during the month of February 2022 was 5,723 which represents a 56% increase from the 3,668 operations recorded during February 2021. Approximately 11% of the operations were instrument flights (IFR transient), 42% were local flights (VFR local operations), and 47% 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.



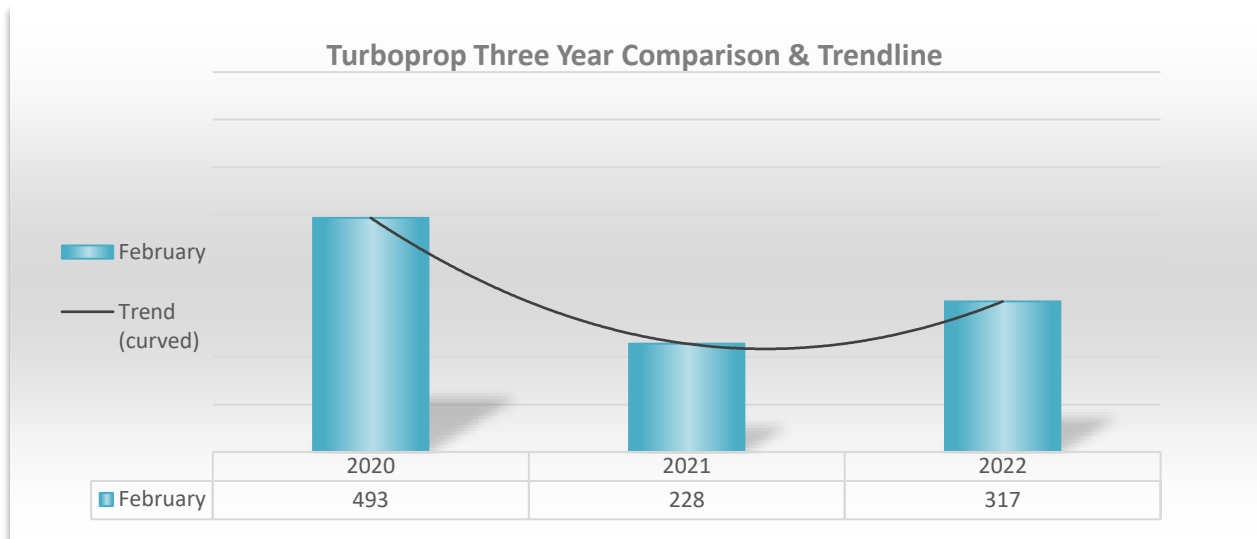
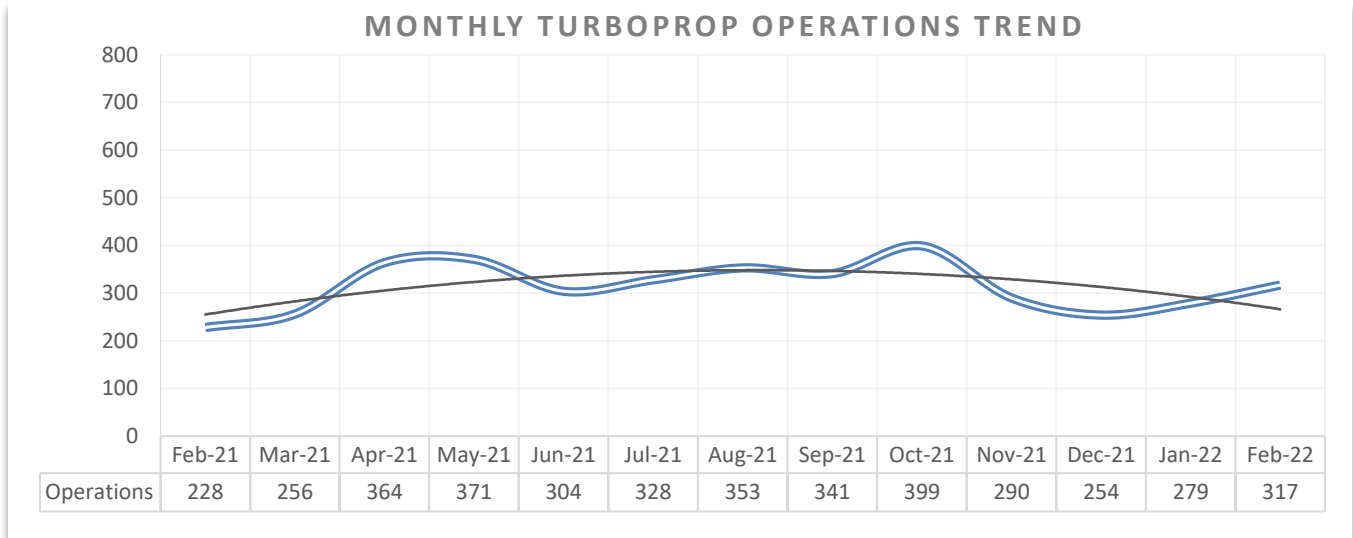
Piston-propeller Aircraft Operations

There were approximately 4,991 piston-propeller aircraft operations recorded, comprising approximately 87% of the total operations. Piston-propeller aircraft operations for February 2022 increased 59% from the 3,148 piston-propeller aircraft operations recorded during February 2021.



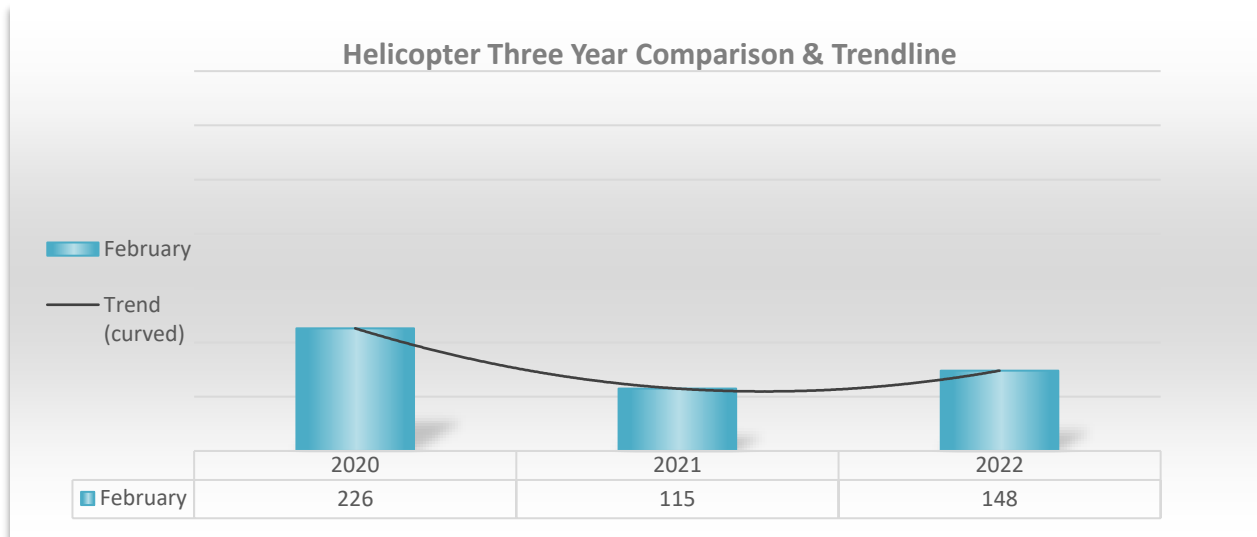
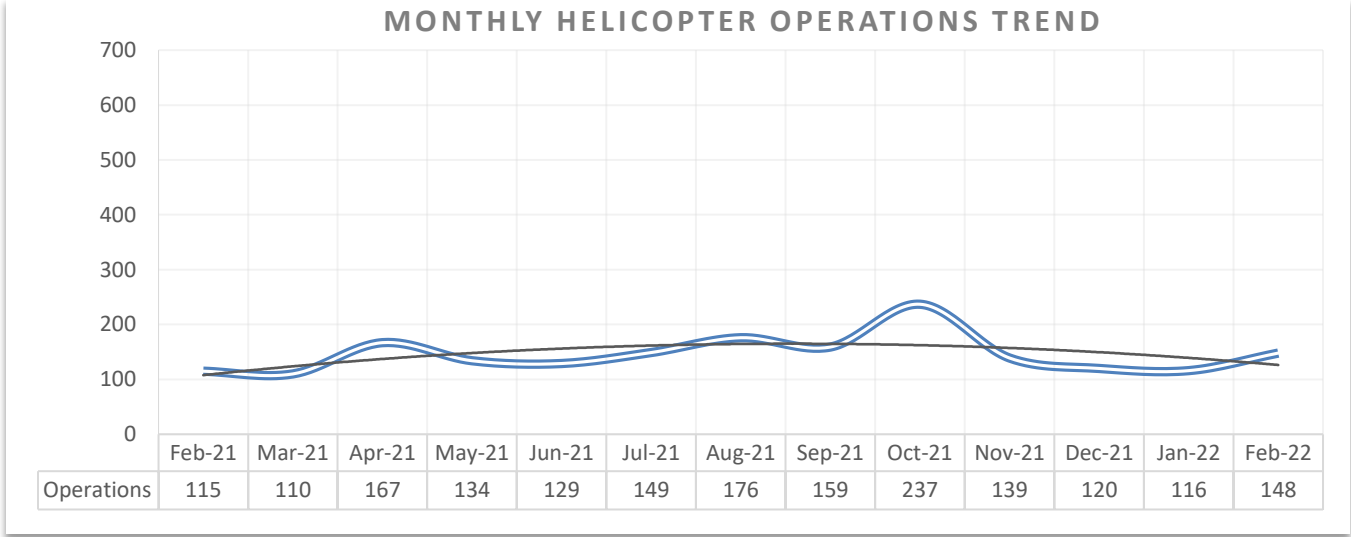
Turboprop Operations

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 February 2022, approximately 317 were by turboprop aircraft, comprising approximately 6% of the total operations. Turboprop aircraft operations increased approximately 39% from the 228 operations recorded during February 2021.



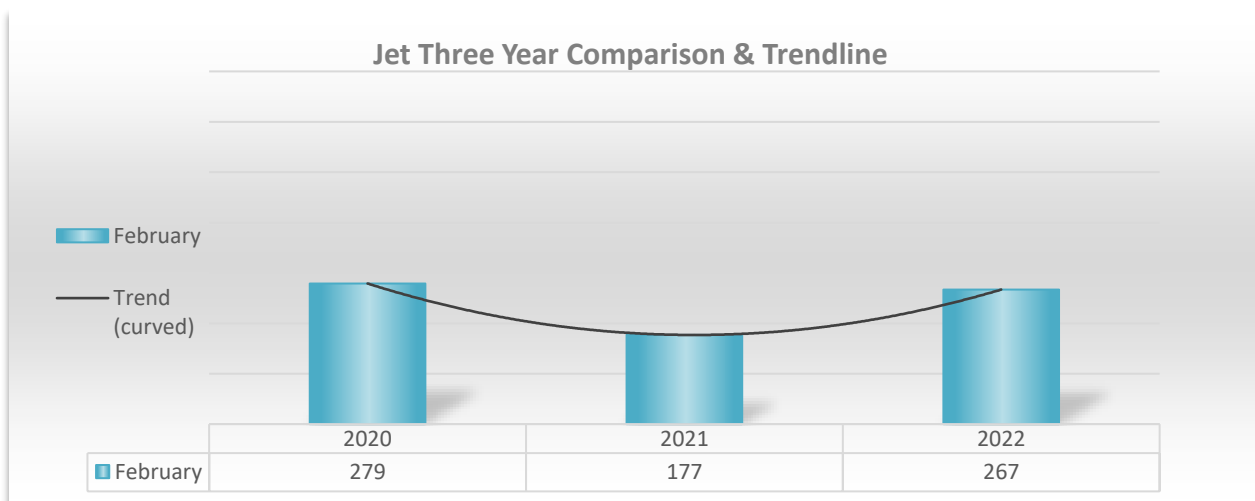
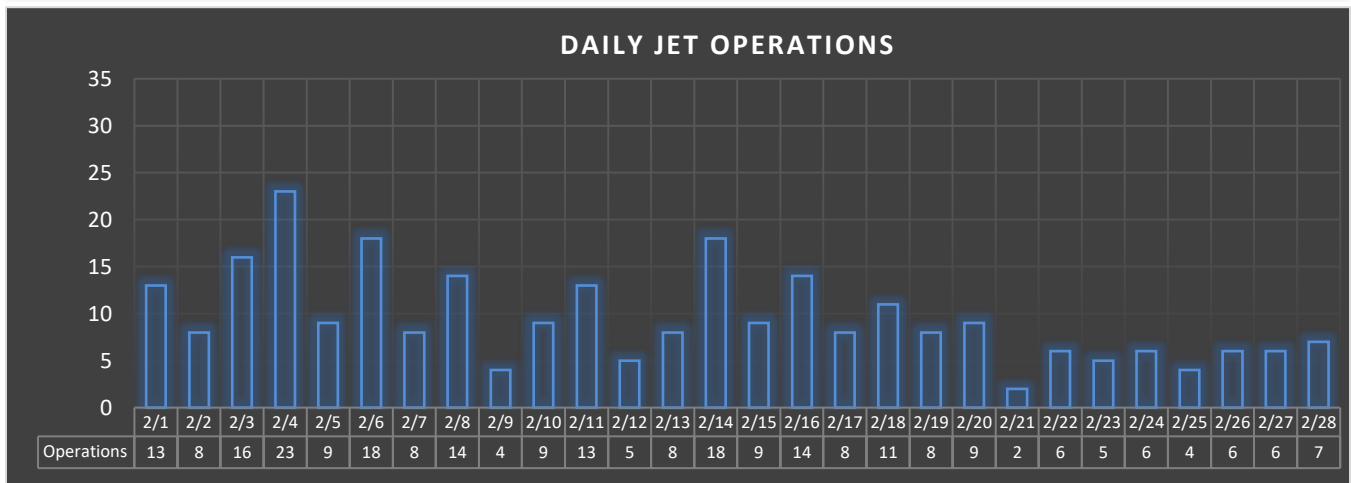
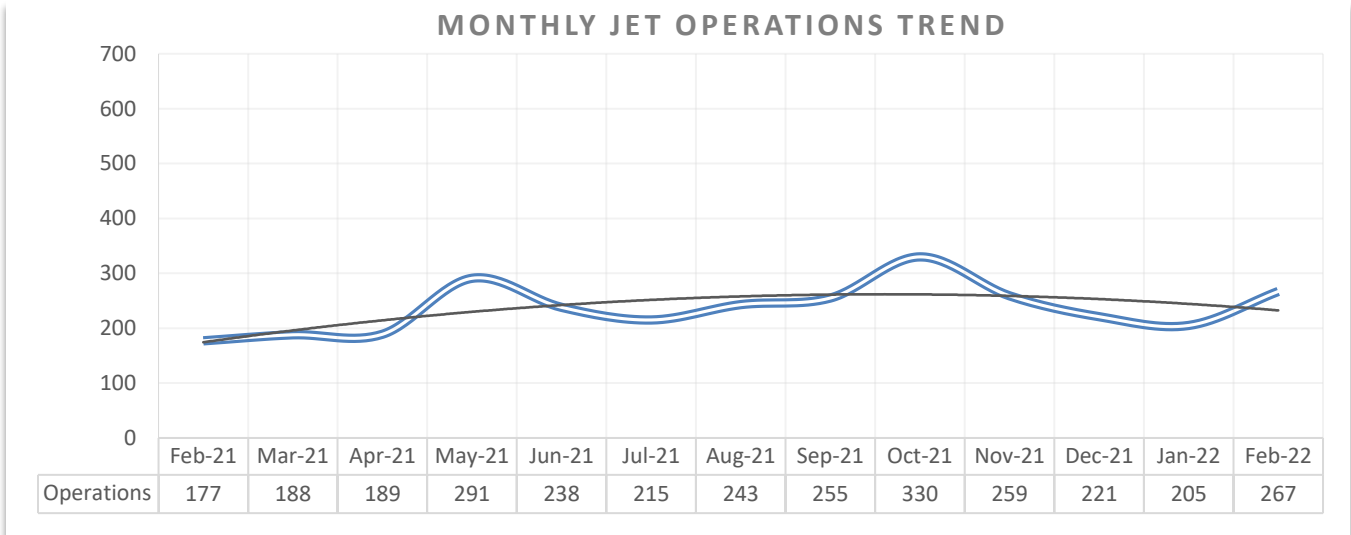
Helicopter Operations

Of the monthly aircraft operations for February 2022, approximately 148 operations are attributed to helicopters, comprising approximately 3% of the total operations. Helicopter operations during February 2022 increased approximately 29% from the 115 helicopter operations recorded in February 2021.



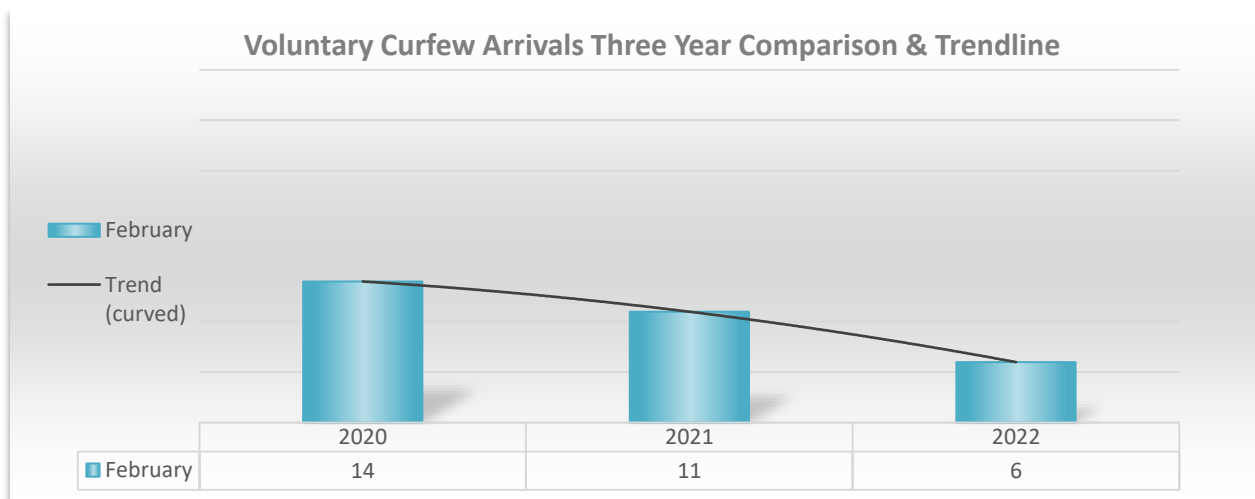
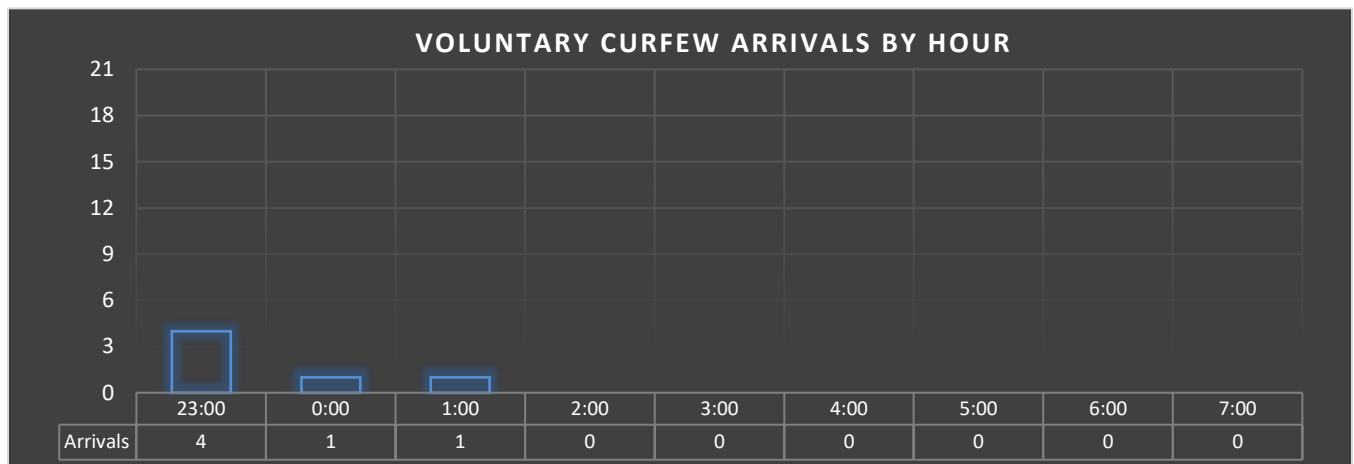
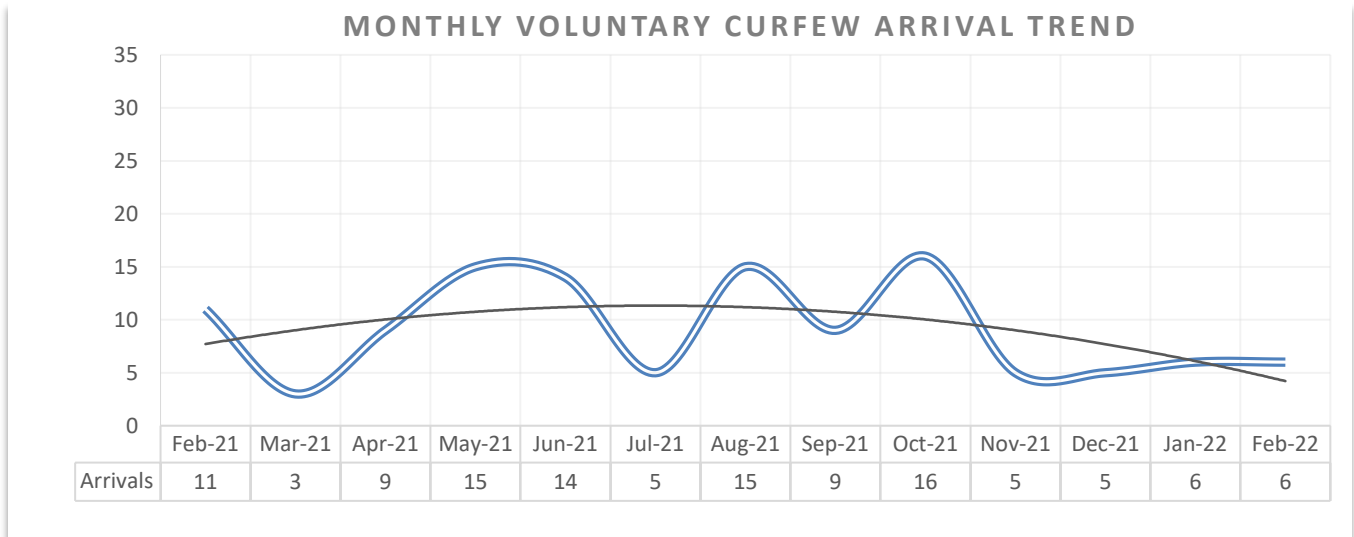
Jet Aircraft Operations

In February of 2022, there were approximately 267 jet operations recorded, encompassing approximately 5% of the total operations. Jet operations for February increased 51% from the 177 jet aircraft operations recorded during February 2021. Daily jet operations vary significantly day over day. During the month of February 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 February 2022.



III. Voluntary Arrival Curfew

During the month of February 2022, Airport Staff logged a total of 6 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 February 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 February 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 February 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

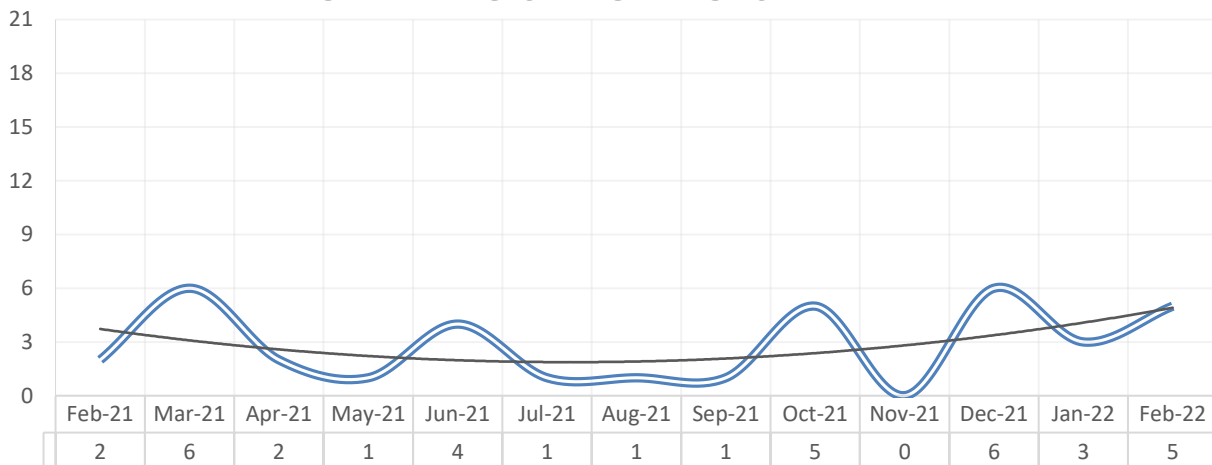
Santa Monica Airport enforces a maximum noise limit as approved by City Ordinance adopted in 1985. The Santa Monica Municipal Code section 10.04.04.060 states that “No aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing on February 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 February 2022, there were 5 noise violations recorded which represent an increase of 150% from the 2 noise violations recorded during February 2021. A summary of noise violations for February 2022 is listed on attachment D. Of the 5,723 aircraft operations recorded during the month of February 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	0	2	0	0	1	0	0	3	60%
Propeller	0	1	0	0	0	0	0	1	20%
Helicopter	0	0	0	0	1	0	0	1	20%
Total:	0	3	0	0	2	0	0	5	
%	0%	60%	0%	0%	40%	0%	0%		100%

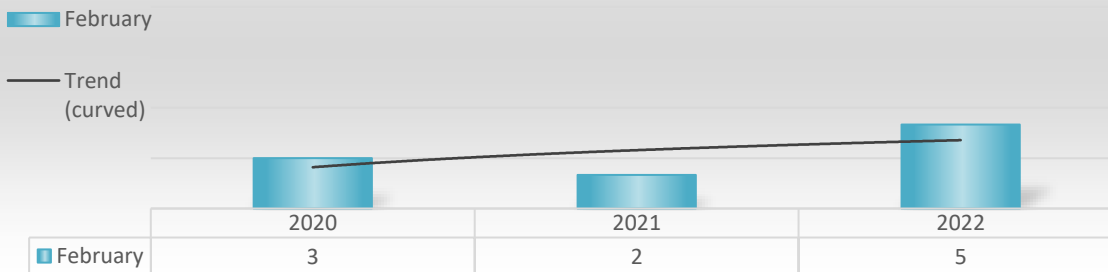
MONTHLY NOISE VIOLATIONS TREND



NOISE VIOLATIONS BY AIRCRAFT TYPE

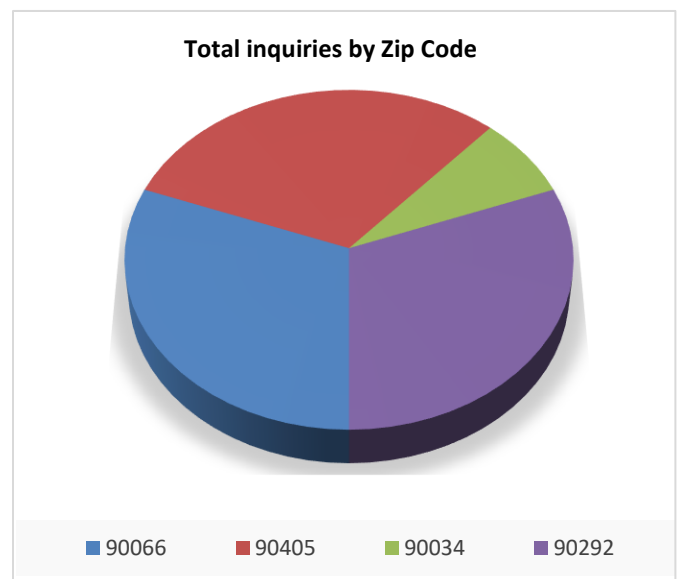
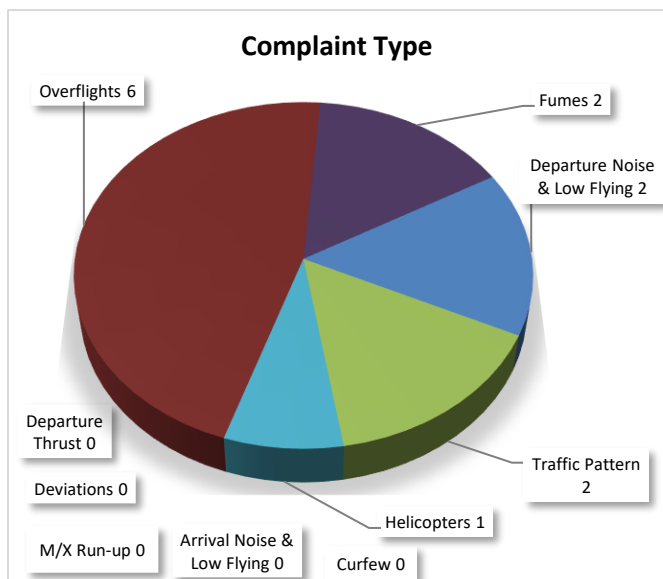
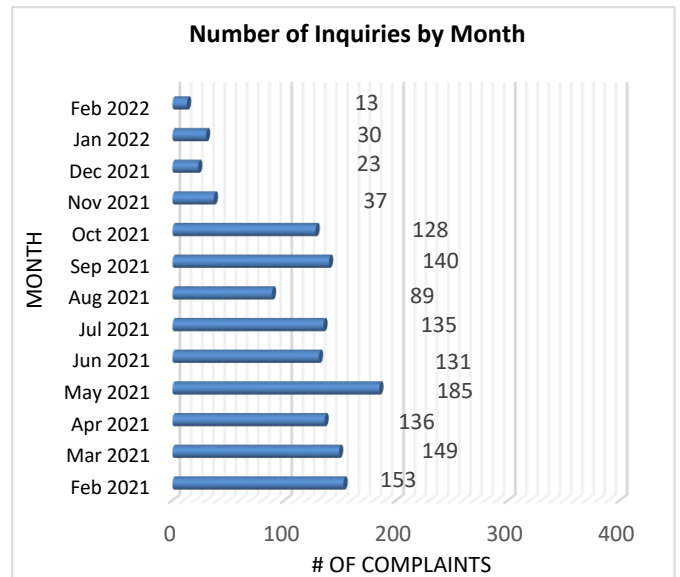
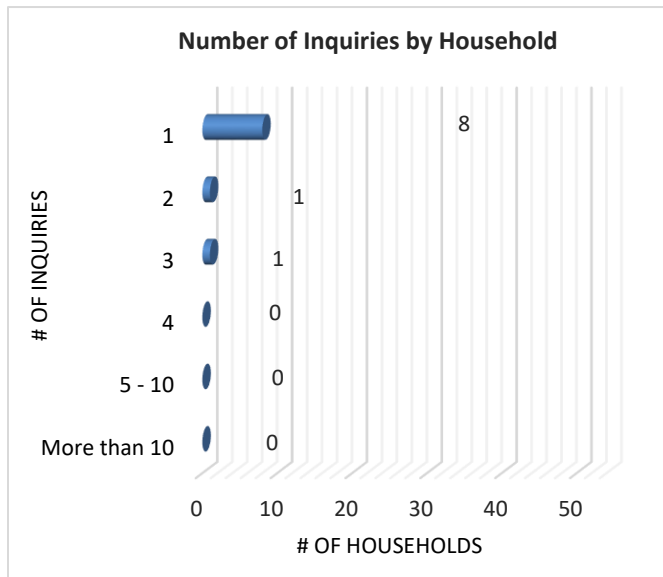


Noise Violations Three Year Comparison & Trendline



VIII. Aircraft Related Inquiries

During the month of February of 2022, 10 individual households logged a total of 13 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 February 2022.



ATTACHMENT A

AIRPORT TRAFFIC RECORD		FACILITY NAME	LOCATION	02 / 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 } <input type="checkbox"/> B. RADAR <input type="checkbox"/> C. LIMITED RADAR <input type="checkbox"/> D. NON-RADAR <input checked="" type="checkbox"/> E. VFR TOWER <input type="checkbox"/> G. CONTRACT TOWER (Continue on reverse)		FACILITY TYPE CHANGED (12) <input type="checkbox"/> YES		IF DAILY HOURS OF OPERATION HAVE CHANGED, ENTER NEW HOURS HRS. 10 THS → (77-78) (79)						
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	8	110	0	118	75	0	75	193	193
2	0	11	42	0	53	48	0	48	101	294
3	0	14	123	0	137	165	0	165	302	596
4	0	18	101	0	119	104	0	104	223	819
5	0	7	139	0	146	91	0	91	237	1056
6	0	13	162	0	175	72	0	72	247	1303
7	0	6	124	0	130	141	0	141	271	1574
8	0	17	112	0	129	82	0	82	211	1785
9	0	30	114	0	144	89	0	89	233	2018
10	0	12	76	0	88	95	0	95	183	2201
11	0	12	2	0	14	124	0	124	138	2339
12	0	14	115	0	129	72	0	72	201	2540
13	0	6	79	0	85	49	0	49	134	2674
14	0	15	123	0	138	117	0	117	255	2929
15	0	9	41	1	51	35	0	35	86	3015
16	0	13	141	0	154	86	0	86	240	3255
17	0	13	95	0	108	96	0	96	204	3459
18	0	13	166	0	179	111	0	111	290	3749
19	0	17	178	0	195	64	0	64	259	4008
20	0	9	134	0	143	54	0	54	197	4205
21	0	2	81	0	83	120	0	120	203	4408
22	0	11	45	0	56	61	0	61	117	4525
23	0	5	100	0	105	87	0	87	192	4717
24	0	4	123	0	127	92	0	92	219	4936
25	0	7	139	0	146	85	0	85	231	5167
26	0	5	137	0	142	39	0	39	181	5348
27	0	1	141	0	142	47	0	47	189	5537
28	0	7	101	0	108	78	0	78	186	5723
29	0				0		0	0	0	5723
30	0				0		0	0	0	5723
31	0				0		0	0	0	5723
TOTAL	0	299	3044	1	3344	2379	0	2379	5723	

ATTACHMENT A

<i>THIS SIDE</i> 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	5	26	0	(16-19)	31		
2	0	10	8	0	(20-23)	18		
3	0	14	14	0	(24-27)	28		
4	0	15	19	0	(28-31)	34		
5	0	7	14	0	(32-35)	21		
6	0	13	14	0	(36-39)	27		
7	0	4	14	0	(40-43)	18		
8	0	9	20	0	(44-47)	29		
9	0	8	4	0	(48-51)	12		
10	0	7	14	0	(52-55)	21		
11	0	10	27	0	(56-59)	37		
12	0	7	8	0	(60-63)	15		
13	0	6	10	0	(64-67)	16		
14	0	14	25	0	(68-71)	39		
15	0	3	21	0	(72-75)	24		
16	0	9	11	0	(76-79)	20		
						(14-2)		
17	0	10	16	0	(16-19)	26		
18	0	10	22	0	(20-23)	32		
19	0	12	21	0	(24-27)	33		
20	0	9	39	0	(28-31)	48		
21	0	0	8	0	(32-35)	8		
22	0	6	15	0	(36-39)	21		
23	0	5	11	0	(40-43)	16		
24	0	4	9	0	(44-47)	13		
25	0	6	17	0	(48-51)	23		
26	0	4	11	0	(52-55)	15		
27	0	1	8	0	(56-59)	9		
28	0	4	12	0	(60-63)	16		
29	0	0	0	0	(64-67)	0		
30	0	0	0	0	(68-71)	0		
31	0	0	0	0	(72-75)	0		
TOTAL	0	212	438	0		650		
	(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
2/14/22	23:04	N95678	C182	21	69.2	2	RUDY AND SILVA AIRWAYS LLC	P
2/16/22	0:28	PD3	AS50	21	DNR	2	LAPD AIR SUPPORT	H
2/16/22	23:44	N705MT	B407	3	79.0	4	BANK OF UTAH TRUSTEE	H
2/19/22	1:19	N694AM	B407	21	88.7	2	AIR METHODS CORP	H
2/25/22	23:02	N702SC	SR20	21	76.7	2	VALKYRIE AVIATION LLC	P
2/28/22	23:16	N543TC	C208	21	86.1	2	WONDERFUL ORCHARDS LLC	P

ATTACHMENT C
(Authorized Departures & Curfew Violations)

Authorized Curfew Departures

DATE	TIME	NUMBER	TYPE	OPERATOR	RUNWAY
2/16/22	0:37	PD3	AS50	LAW ENFORCEMENT	21

Curfew Violations

NONE

**ATTACHMENT D
(Aircraft Noise Violations)**

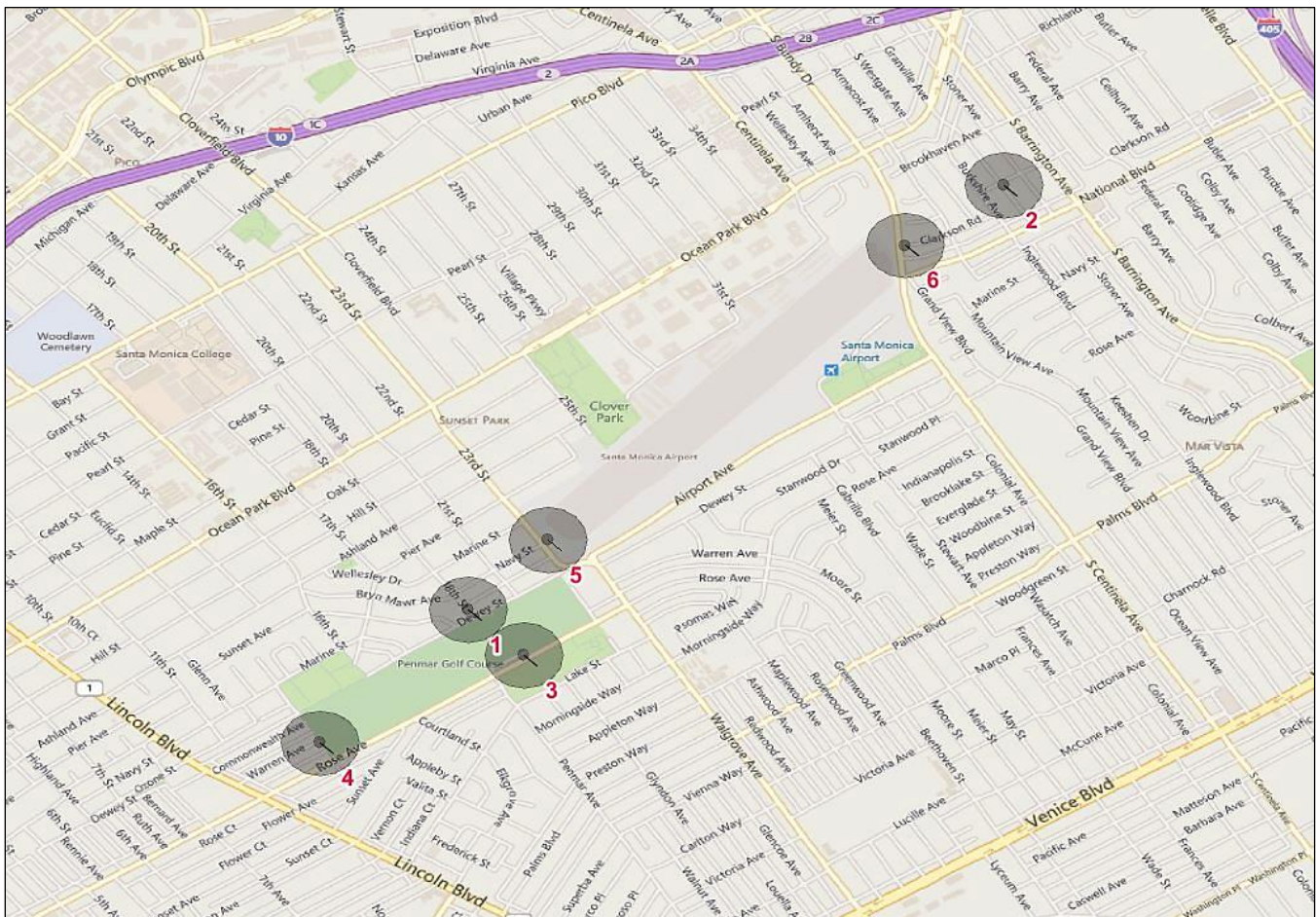
AIRCRAFT ENGINE CATEGORY LEGEND

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

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ACTION	ENGINE
2/14/22	07:38	N83HA	C560	21	99.3	1	HONAKER AVIATION / ACE LISTENGER ENTERP	WARNING	J
2/14/22	11:46	N423QS	E55P	21	96.4	1	NETJETS AVIATION INC	\$2,000	J
2/15/22	14:09	N224CR	PC24	21	96.0	1	CHRISTOPHER RANCH LLC	WARNING	J
2/23/22	09:40	N61DJ	S76	3	99.2	1	INVISION AIR / BLACK BADGE AVIATION LLC	WARNING	H
2/24/22	14:41	N120LD	NAVI	21	96.6	1	J & G AIRCRAFT LLC	WARNING	P

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.

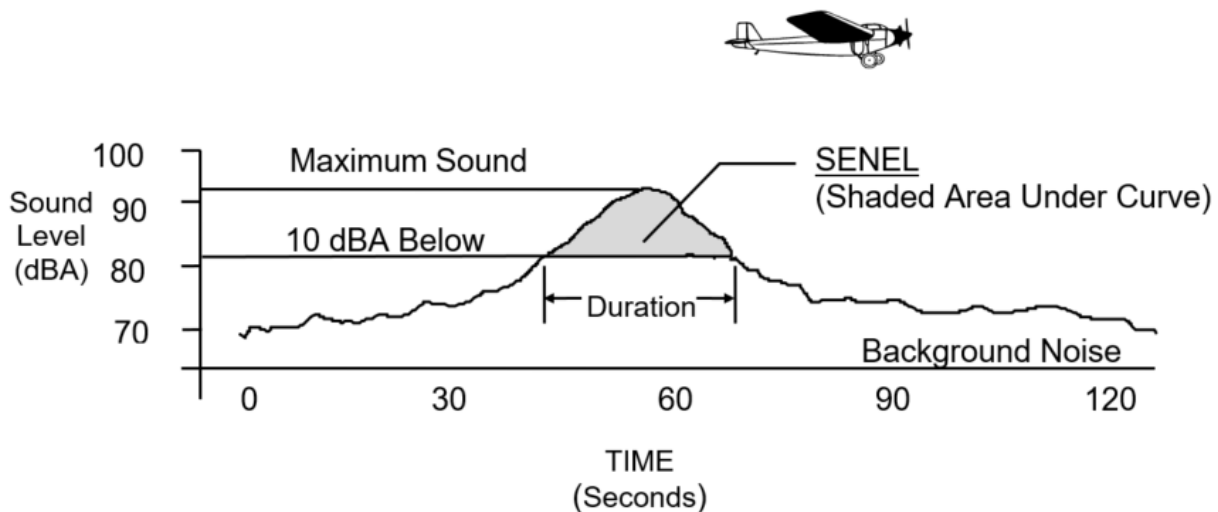
ATTACHMENT F (Single Event Noise Exposure Level)

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.