Santa Monica Airport
Monthly Operations Report

January 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

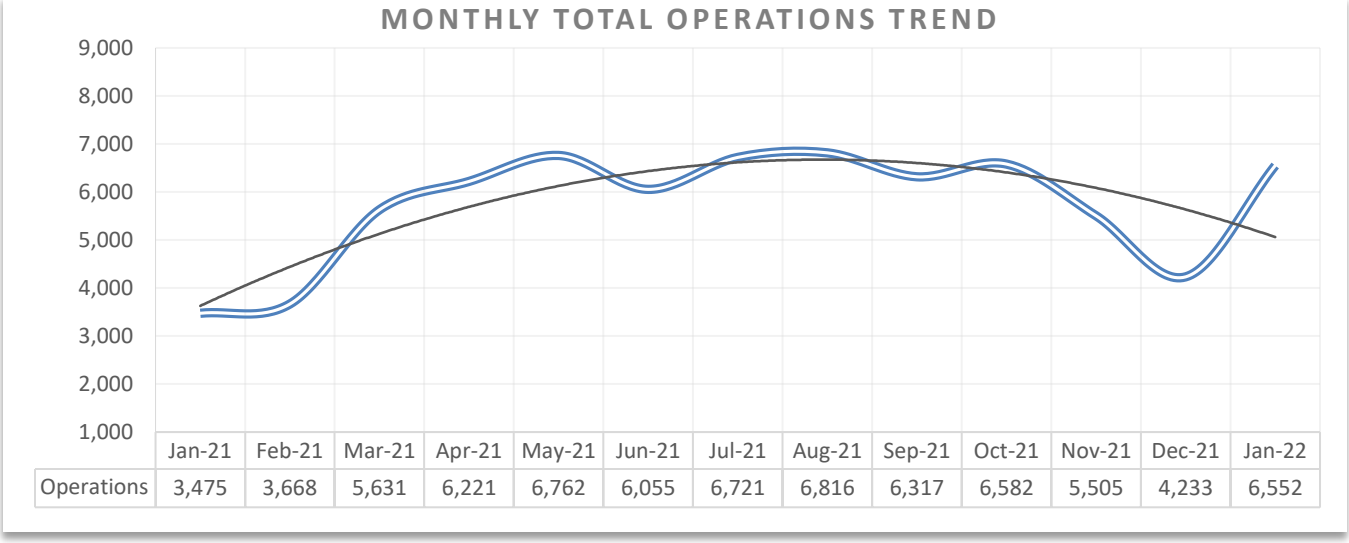
I. Introduction

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 January 2022.

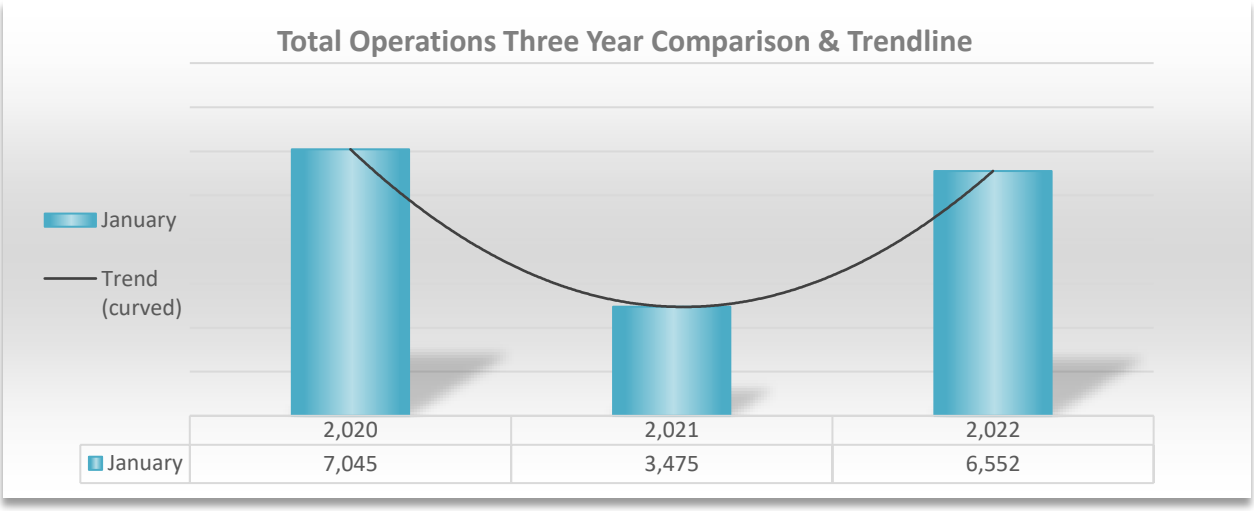
II. Aircraft Operations Data

The total number of aircraft operations recorded during the month of January 2022 was 6,552 which represents an 89% increase from the 3,475 operations recorded during January 2021. Approximately 11% of the operations were instrument flights (IFR transient), 44% 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.



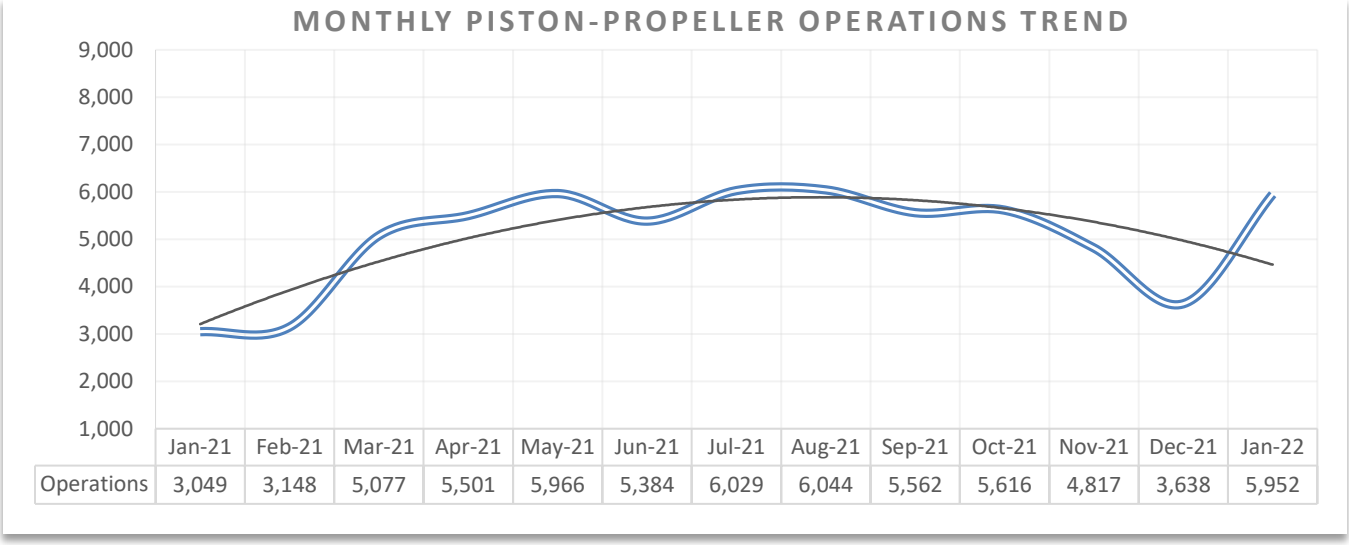
	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22
Operations	3,475	3,668	5,631	6,221	6,762	6,055	6,721	6,816	6,317	6,582	5,505	4,233	6,552



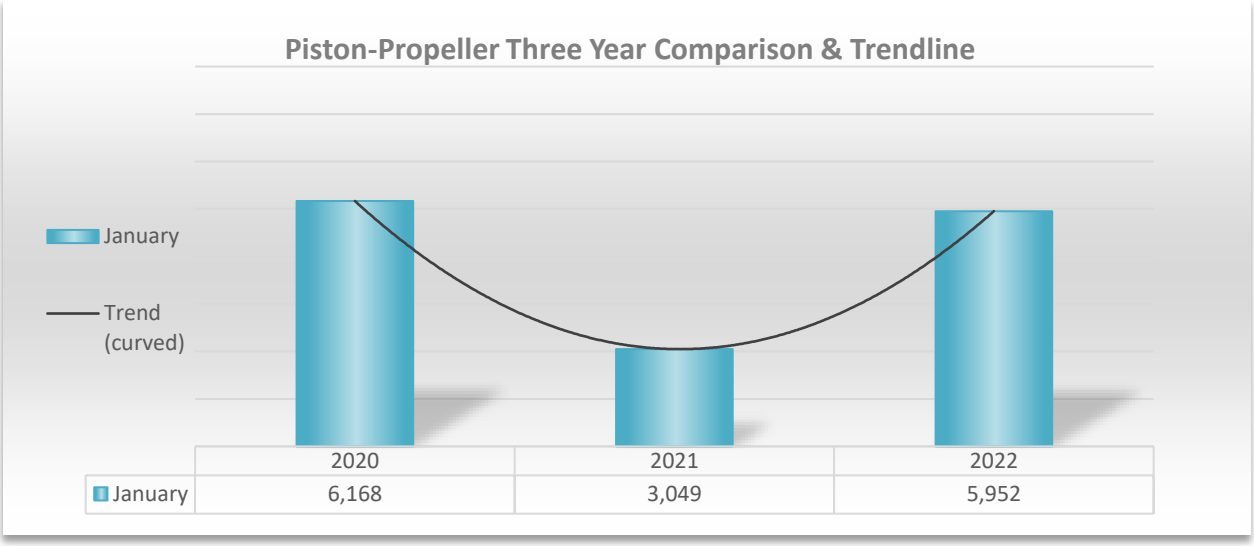
	2,020	2,021	2,022
January	7,045	3,475	6,552

Piston-propeller Aircraft Operations

There were approximately 5,952 piston-propeller aircraft operations recorded, comprising approximately 91% of the total operations. Piston-propeller aircraft operations for January 2022 increased 95% from the 3,049 piston-propeller aircraft operations recorded during January 2021.



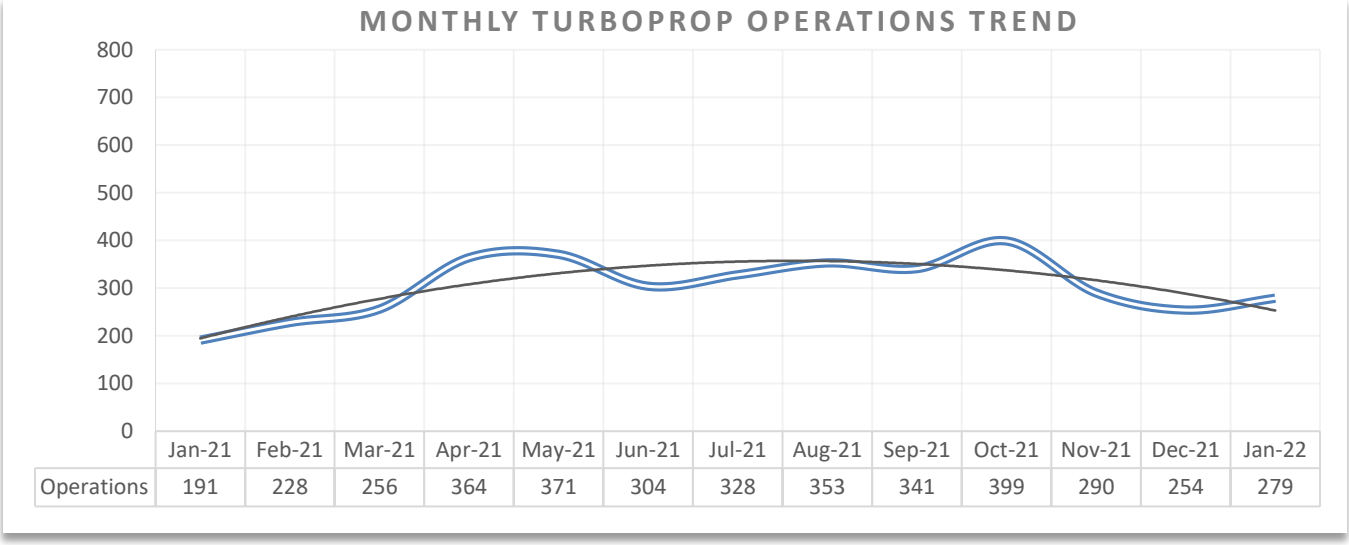
	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22
Operations	3,049	3,148	5,077	5,501	5,966	5,384	6,029	6,044	5,562	5,616	4,817	3,638	5,952



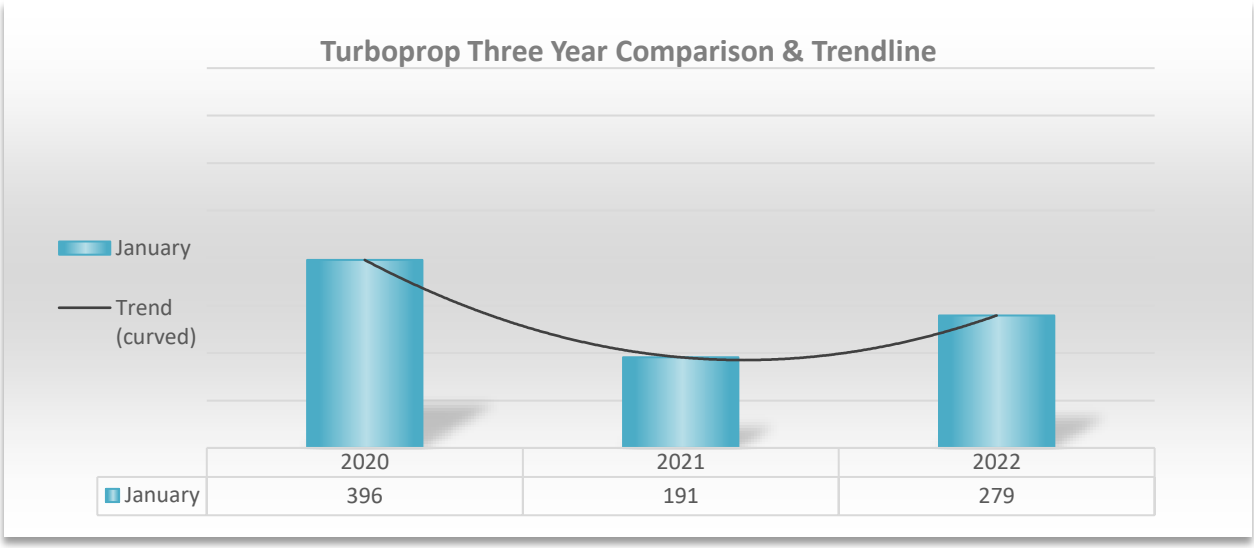
	2020	2021	2022
January	6,168	3,049	5,952

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 January 2022, approximately 279 were by turboprop aircraft, comprising approximately 4% of the total operations. Turboprop aircraft operations increased approximately 46% from the 191 operations recorded during January 2021.



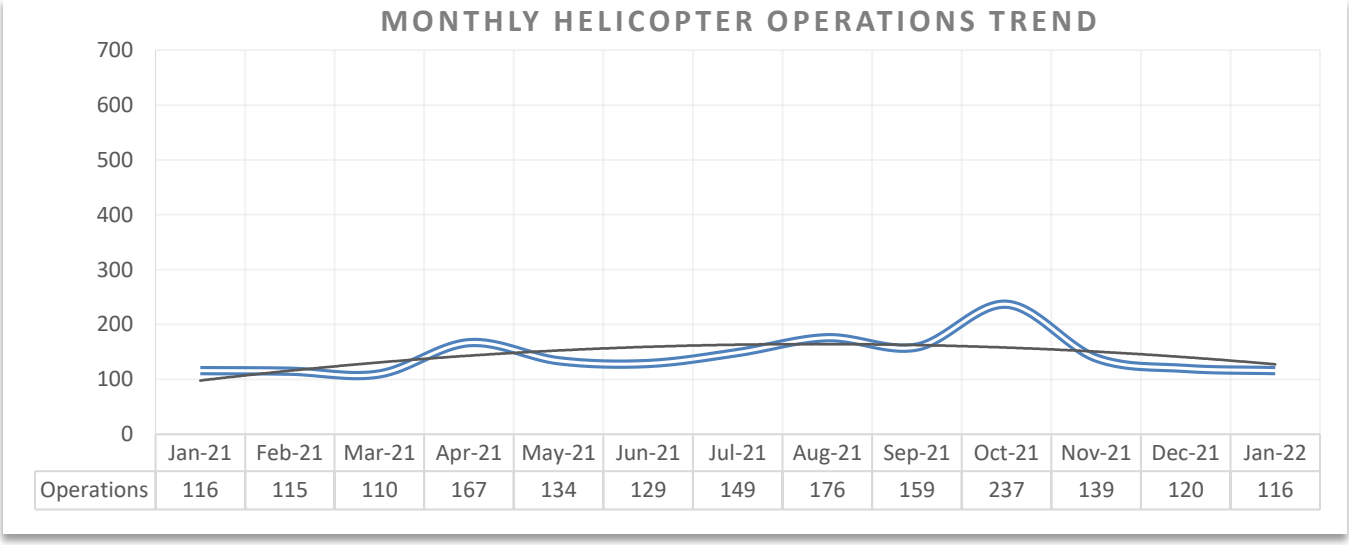
	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22
Operations	191	228	256	364	371	304	328	353	341	399	290	254	279



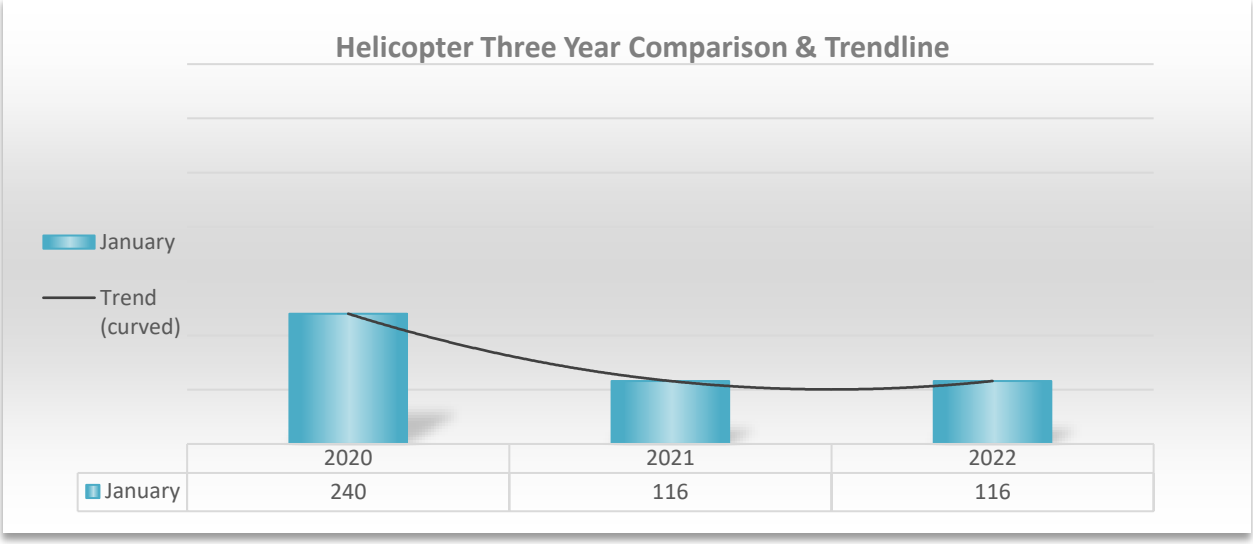
	2020	2021	2022
January	396	191	279

Helicopter Operations

Of the monthly aircraft operations for January 2022, approximately 116 operations were from helicopters, comprising approximately 2% of the total operations. Helicopter operations for January 2022 remained unchanged from January of 2021.



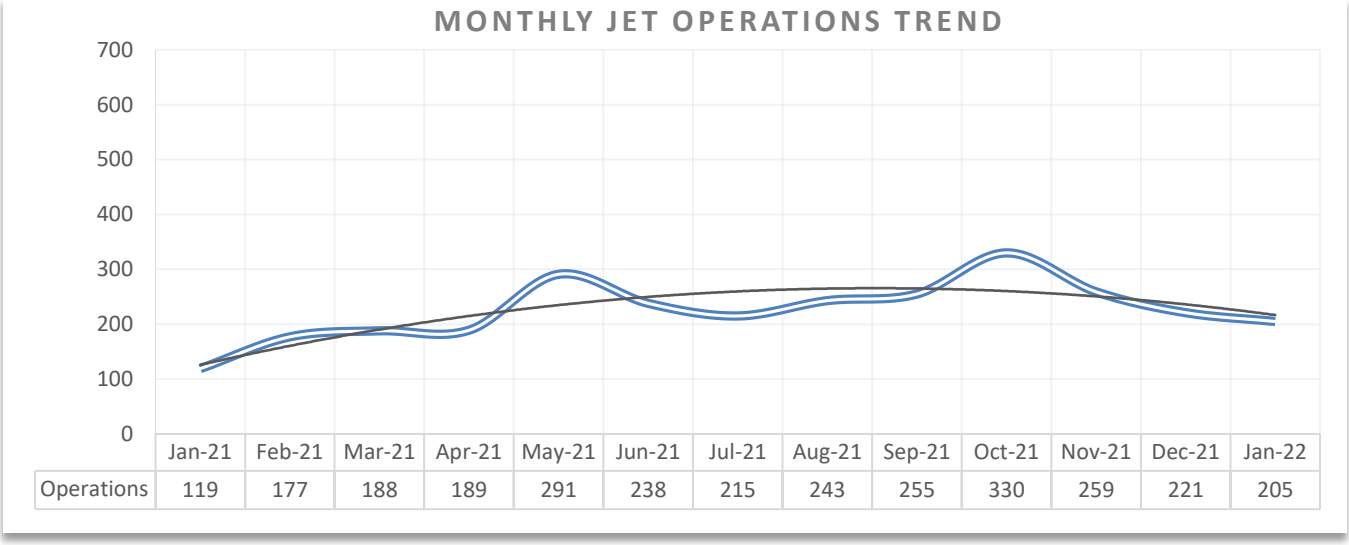
	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22
Operations	116	115	110	167	134	129	149	176	159	237	139	120	116



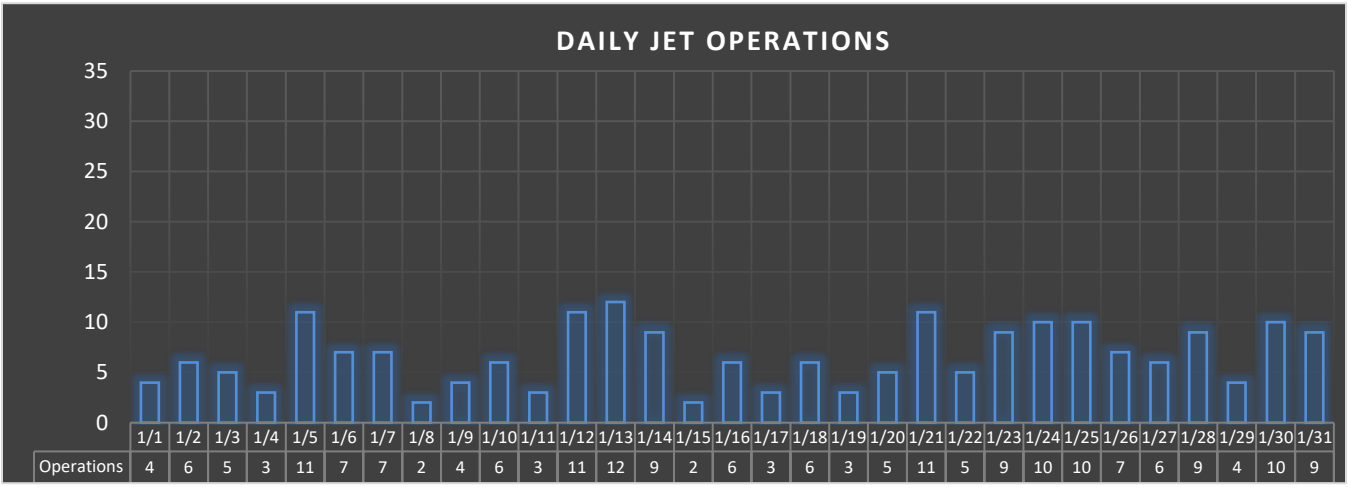
	2020	2021	2022
January	240	116	116

Jet Aircraft Operations

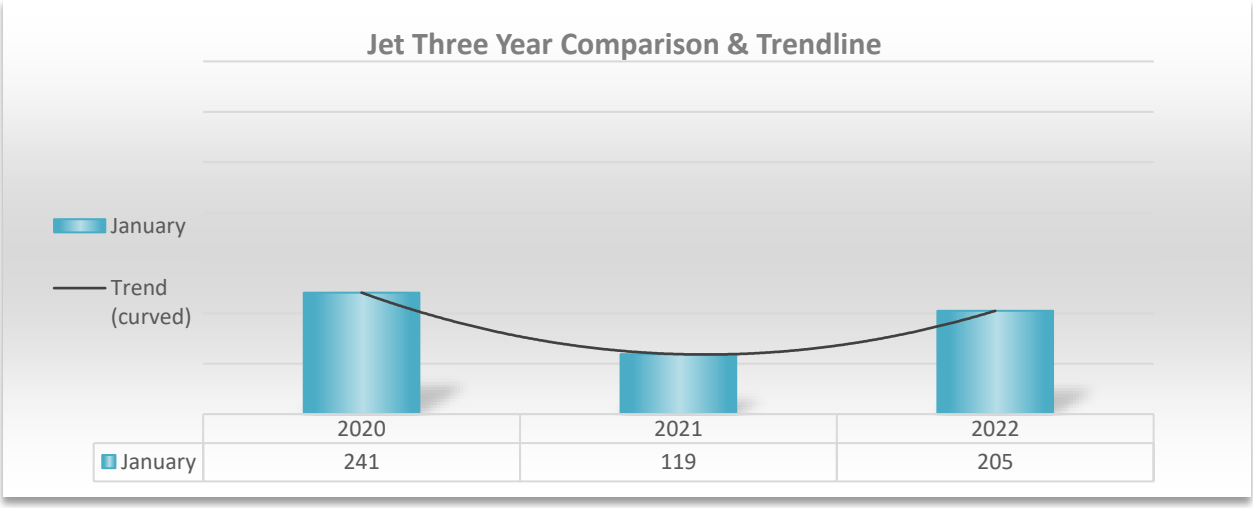
In January of 2022, there were approximately 205 jet operations recorded, encompassing approximately 3% of the total operations. Jet operations for January increased 72% from the 119 jet aircraft operations recorded during January 2021. Daily jet operations vary significantly day over day. During the month of January 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 January 2022.



	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22
Operations	119	177	188	189	291	238	215	243	255	330	259	221	205



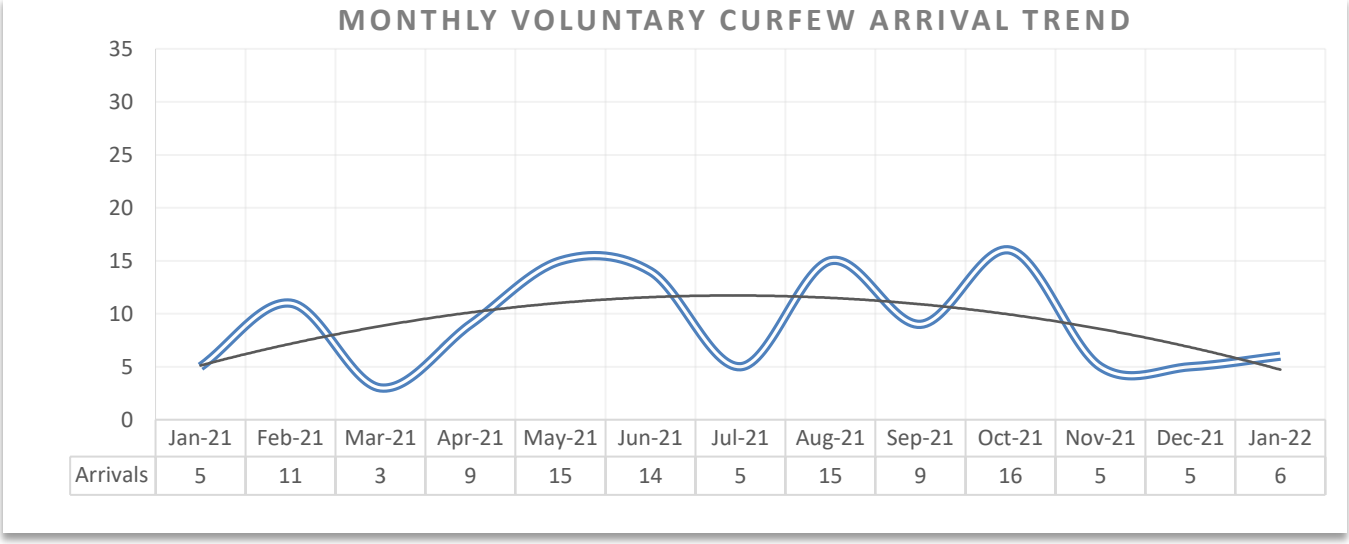
	1/1	1/2	1/3	1/4	1/5	1/6	1/7	1/8	1/9	1/10	1/11	1/12	1/13	1/14	1/15	1/16	1/17	1/18	1/19	1/20	1/21	1/22	1/23	1/24	1/25	1/26	1/27	1/28	1/29	1/30	1/31
Operations	4	6	5	3	11	7	7	2	4	6	3	11	12	9	2	6	3	6	3	5	11	5	9	10	10	7	6	9	4	10	9



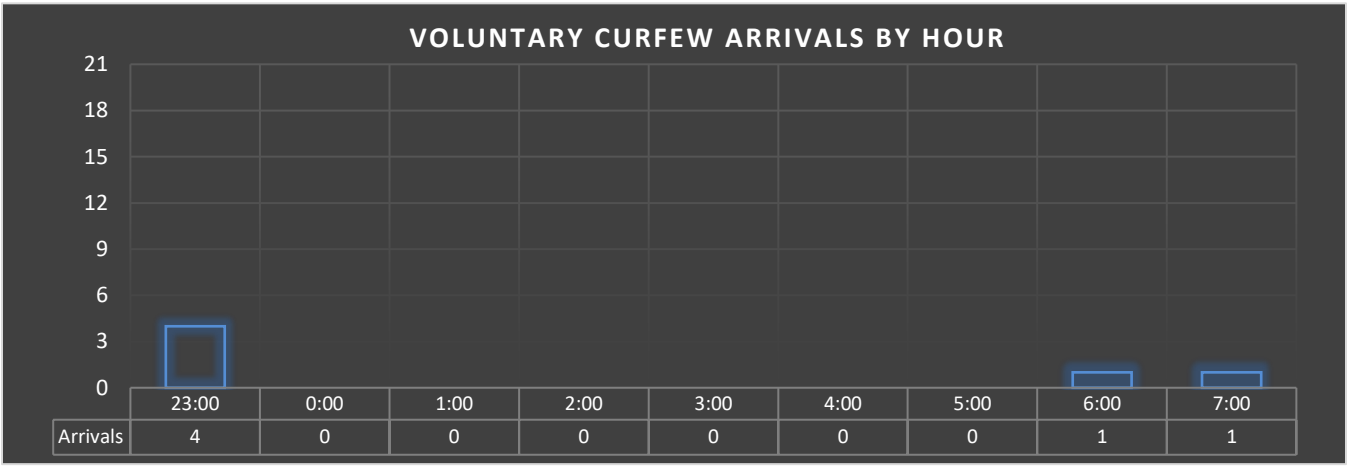
	2020	2021	2022
January	241	119	205

III. Voluntary Arrival Curfew

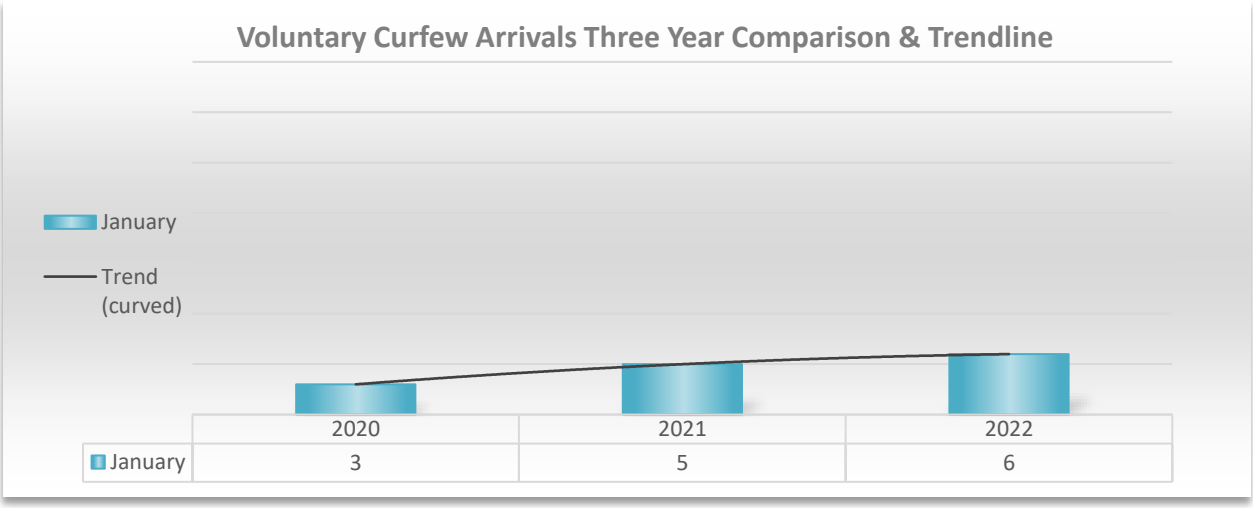
During the month of January 2022, Airport Staff logged a total of 6 aircraft arrivals during the Voluntary Arrival Curfew (VAC), which mirrors the mandatory departure curfew hours of 11:00 p.m. to 7:00 a.m. on weekdays, and 11:00 p.m. to 8:00 a.m. on weekends. The graph below depicts the number of arrivals for each VAC hour during the month of January 2022. For a listing of aircraft arrivals during the night hours, see Attachment B.



	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22
Arrivals	5	11	3	9	15	14	5	15	9	16	5	5	6



	23:00	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00
Arrivals	4	0	0	0	0	0	0	1	1



	2020	2021	2022
January	3	5	6

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 January 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 January 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.

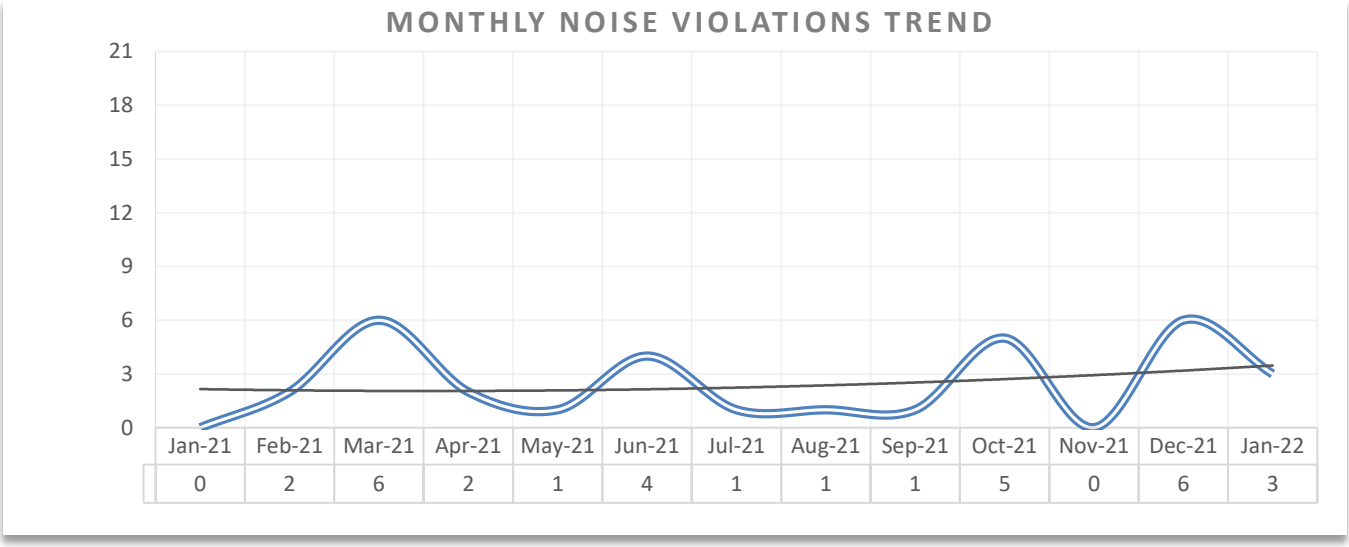
VII. Noise Violations

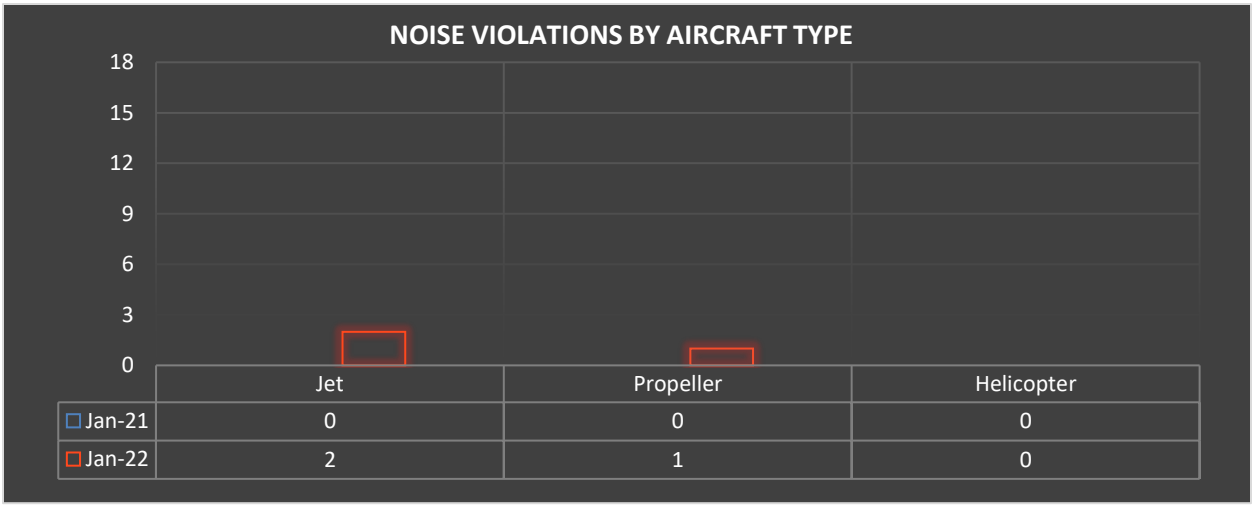
Santa Monica Airport enforces a maximum noise limit as approved by City Ordinance adopted in 1985. The Santa Monica Municipal Code section 10.04.04.060 states that "No aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing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

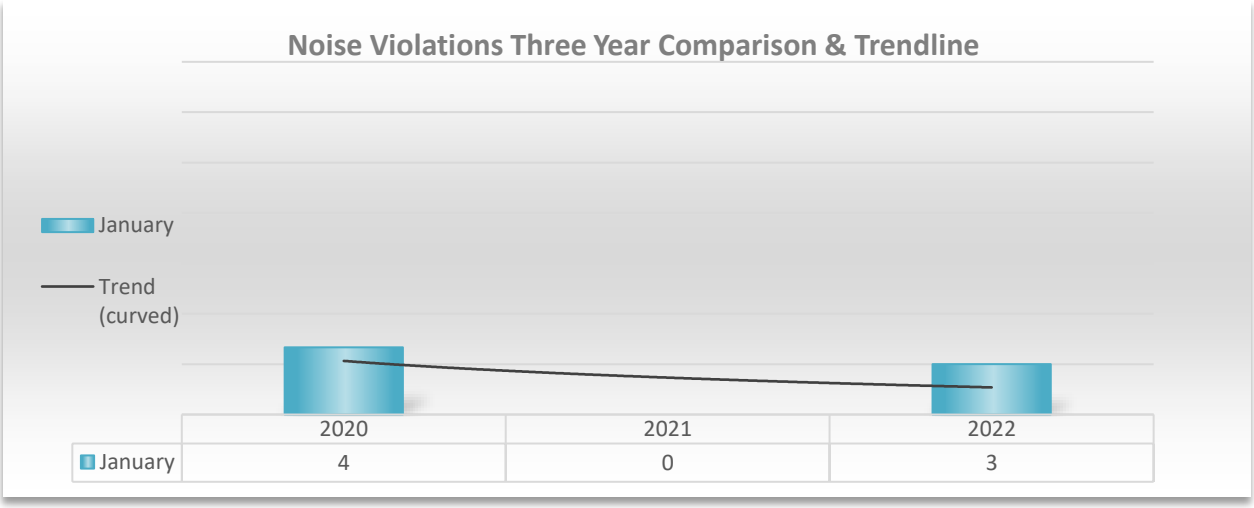
A violation occurs when an aircraft exceeds 95.0 dBA SENEL. During the month of January 2022, there were 3 noise violations recorded which represent an increase from the 0 noise violations recorded during January 2021. A summary of noise violations for January 2022 is listed on attachment D. Of the 6,552 aircraft operations recorded during the month of January 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	2	0	0	0	0	0	0	**2**	**67%**
Propeller	0	1	0	0	0	0	0	**1**	**33%**
Helicopter	0	0	0	0	0	0	0	**0**	**0%**
Total:	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	
%	**67%**	**33%**	**0%**	**0%**	**0%**	**0%**	**0%**		**100%**

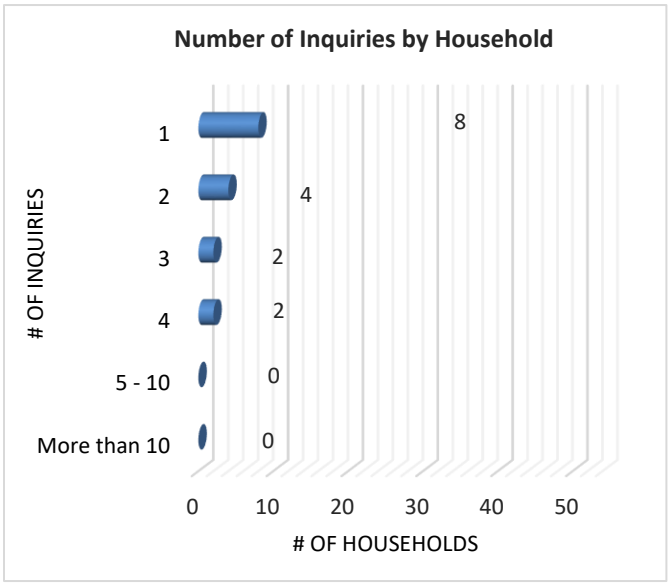

MONTHLY NOISE VIOLATIONS TREND
21
18
15
12
9
6
3
0
Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22
0 2 6 2 1 4 1 1 1 5 0 6 3

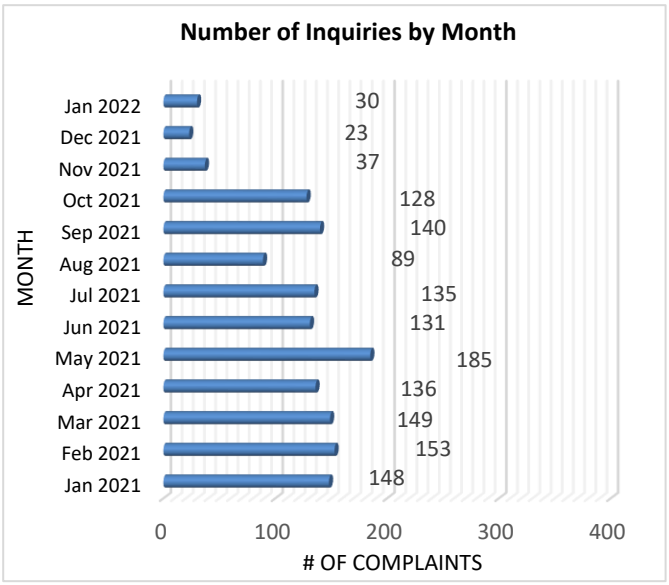

NOISE VIOLATIONS BY AIRCRAFT TYPE
18
15
12
9
6
3
0
Jet Propeller Helicopter
Jan-21 0 0 0
Jan-22 2 1 0

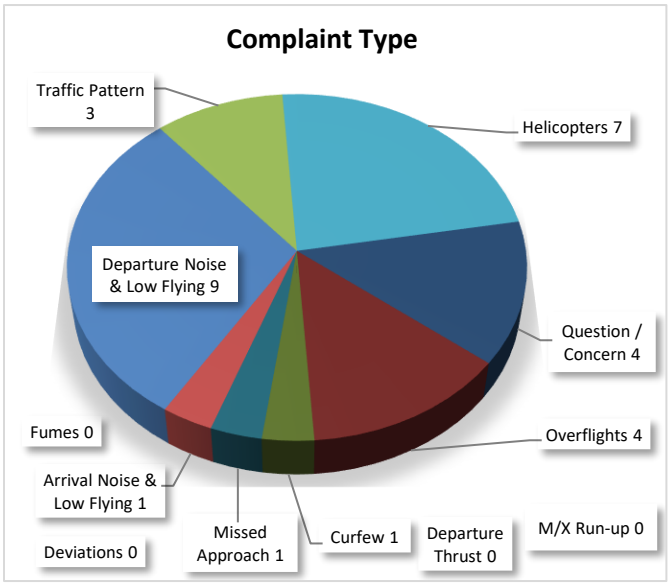

Noise Violations Three Year Comparison & Trendline
January
Trend (curved)
2020 2021 2022
January 4 0 3

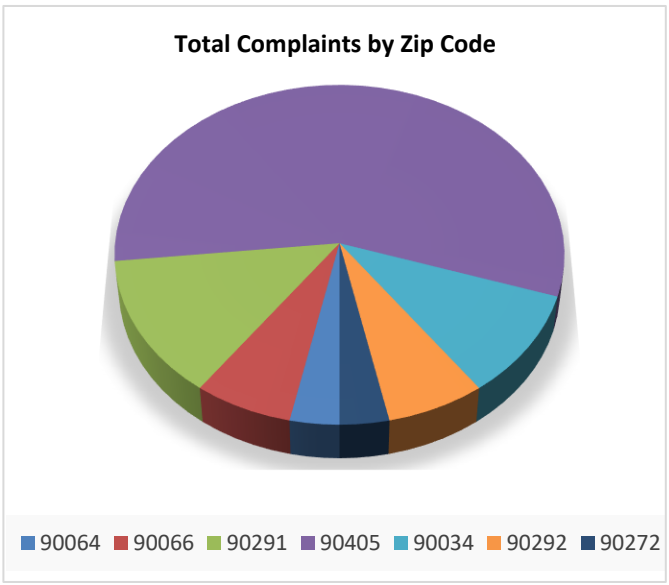
VIII. Aircraft Related Inquiries

During the month of January of 2022, 16 individual households logged a total of 30 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 January 2022.









ATTACHMENT A

AIRPORT TRAFFIC RECORD	FACILITY NAME	LOCATION	(1-2) MO. (3-4) YR.	SMO (5-9) LOC ID
Mail ORIGINAL of this form to Washington Office, APO-110, thru Regional Air Traffic Division.	Santa Monica ATCT	Santa Monica , California		

(10-1) FACILITY TYPE ("X" ONE)
(11)

APPROACH CONTROL TOWERS
- [ ] B. RADAR
- [ ] C. LIMITED RADAR
- [ ] D. NON-RADAR

(also submit FAA Form 7230-26)

- [X] E. VFR TOWER
- [ ] G. CONTRACT TOWER

(Continue on reverse)

FACILITY TYPE CHANGED (12) [ ] 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	4	57	0	61	16	0	16	77	77
2	0	2	104	0	106	50	0	50	156	233
3	0	4	93	0	97	135	0	135	232	465
4	0	11	93	0	104	92	0	92	196	661
5	0	17	91	0	108	88	0	88	196	857
6	0	6	84	0	90	134	0	134	224	1081
7	0	1	44	0	45	0	0	0	45	1126
8	0	4	132	0	136	66	0	66	202	1328
9	0	8	144	0	152	87	0	87	239	1567
10	0	3	90	0	93	43	0	43	136	1703
11	0	5	115	0	120	66	0	66	186	1889
12	0	6	108	0	114	64	0	64	178	2067
13	0	14	128	0	142	115	0	115	257	2324
14	0	10	123	0	133	158	0	158	291	2615
15	0	1	112	0	113	108	0	108	221	2836
16	0	7	154	0	161	104	0	104	265	3101
17	0	5	75	0	80	27	0	27	107	3208
18	0	14	82	0	96	56	0	56	152	3360
19	0	7	85	0	92	139	0	139	231	3591
20	0	6	137	0	143	95	0	95	238	3829
21	0	15	132	0	147	140	0	140	287	4116
22	0	1	34	0	35	14	0	14	49	4165
23	0	11	151	0	162	100	0	100	262	4427
24	0	7	102	0	109	107	0	107	216	4643
25	0	10	111	0	121	80	0	80	201	4844
26	0	7	113	0	120	194	0	194	314	5158
27	0	8	109	0	117	178	0	178	295	5453
28	0	19	151	0	170	143	0	143	313	5766
29	0	5	171	0	176	70	2	72	248	6014
30	0	18	203	0	221	79	0	79	300	6314
31	0	11	124	0	135	103	0	103	238	6552
TOTAL	0	247	3452	0	3699	2851	2	2853	6552	

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	4	8	0	(16-19)	12	
2	0	2	14	0	(20-23)	16	
3	0	4	16	0	(24-27)	20	
4	0	3	9	0	(28-31)	12	
5	0	9	8	0	(32-35)	17	
6	0	3	8	0	(36-39)	11	
7	0	1	44	0	(40-43)	45	
8	0	3	20	0	(44-47)	23	
9	0	6	16	0	(48-51)	22	
10	0	3	8	0	(52-55)	11	
11	0	5	6	0	(56-59)	11	
12	0	3	18	0	(60-63)	21	
13	0	11	10	0	(64-67)	21	
14	0	10	10	0	(68-71)	20	
15	0	1	24	0	(72-75)	25	
16	0	2	21	0	(76-79)	23	
						(14-2)	
17	0	2	36	0	(16-19)	38	
18	0	10	28	0	(20-23)	38	
19	0	5	38	0	(24-27)	43	
20	0	5	13	0	(28-31)	18	
21	0	17	19	0	(32-35)	36	
22	0	1	14	0	(36-39)	15	
23	0	10	24	0	(40-43)	34	
24	0	9	7	0	(44-47)	16	
25	0	6	7	0	(48-51)	13	
26	0	4	7	0	(52-55)	11	
27	0	8	20	0	(56-59)	28	
28	0	14	19	0	(60-63)	33	
29	0	4	11	0	(64-67)	15	
30	0	12	24	0	(68-71)	36	
31	0	10	25	0	(72-75)	35	
TOTAL	0	187	532	0		719	
	(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
1/1/22	7:54	N73262	C172	21	DNR	2	AIRSPACERS	P
1/2/22	23:57	N5148V	C172	21	DNR	2	AYRES AVIATION LLC	P
1/4/22	6:47	N473PC	PC12	21	88.9	2	JEMASA INC	T
1/8/22	23:06	N973SN	SR22	21	81.3	2	CLEARFUZE NETWORKS INC	P
1/9/22	23:33	N6JX	RV6	21	DNR	2	GRAHAM GALLAHER	P
1/13/22	23:53	N973SN	SR22	21	81.4	2	CLEARFUZE NETWORKS INC	P

ATTACHMENT C
(Authorized Departures & Curfew Violations)

Authorized Curfew Departures

DATE	TIME	NUMBER	TYPE	OPERATION	RUNWAY
1/8/22	0:01	N318MT	PC12	LIFE FLIGHT	21

Curfew Violations

NONE

ATTACHMENT D
(Aircraft Noise Violations)

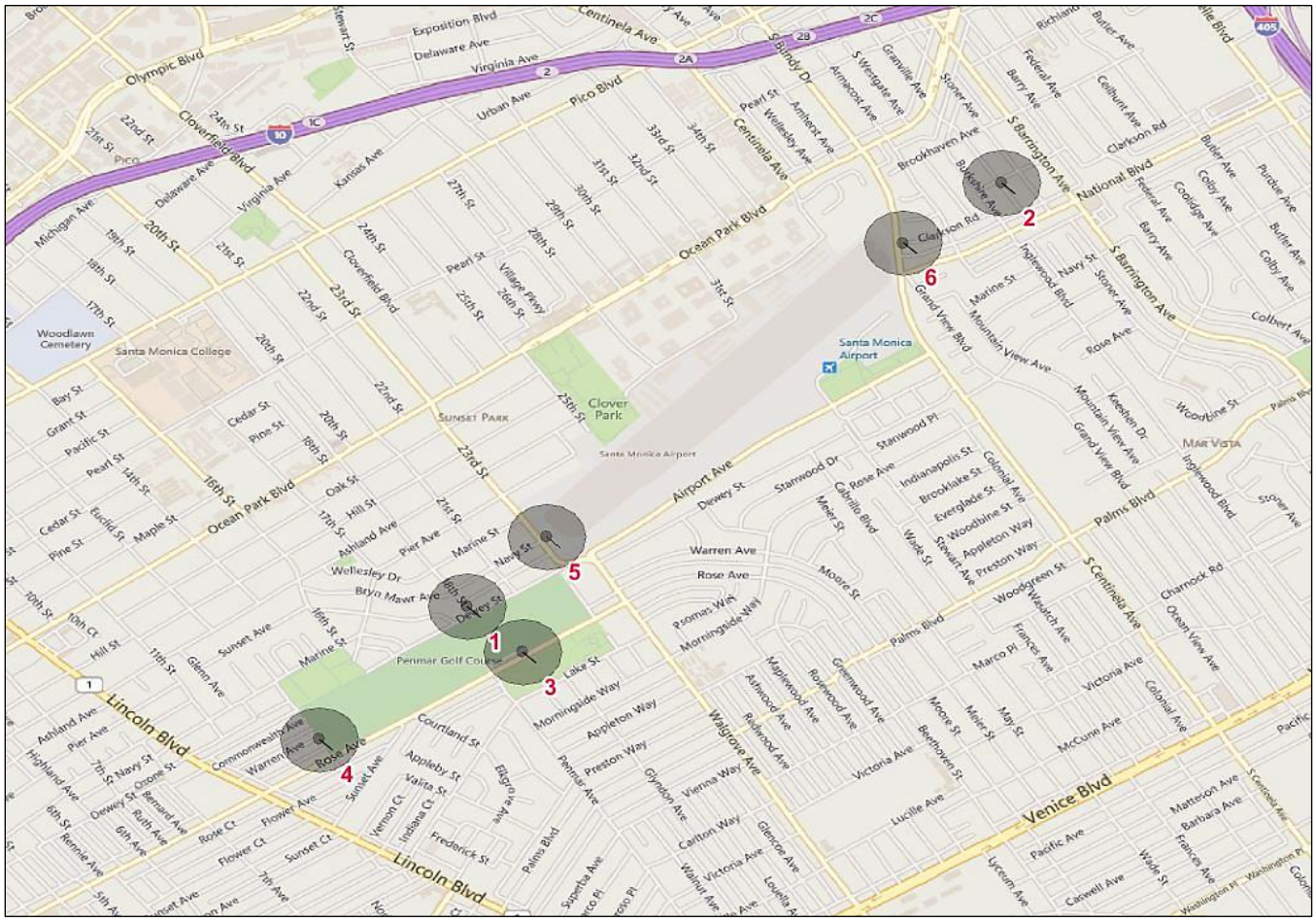
AIRCRAFT ENGINE CATEGORY LEGEND

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

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ACTION	ENGINE
1/7/22	19:47	N8X	FA7X	21	95.5	1	DASSAULT FALCON AVIATION	WARNING	J
1/16/22	13:40	N3058R	BE58	21	96.1	1	ON TOP AVIATION LLC	WARNING	P
1/25/22	11:22	N420QS	E55P	21	95.5	1	NETJETS AVIATION INC	$2,000	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.

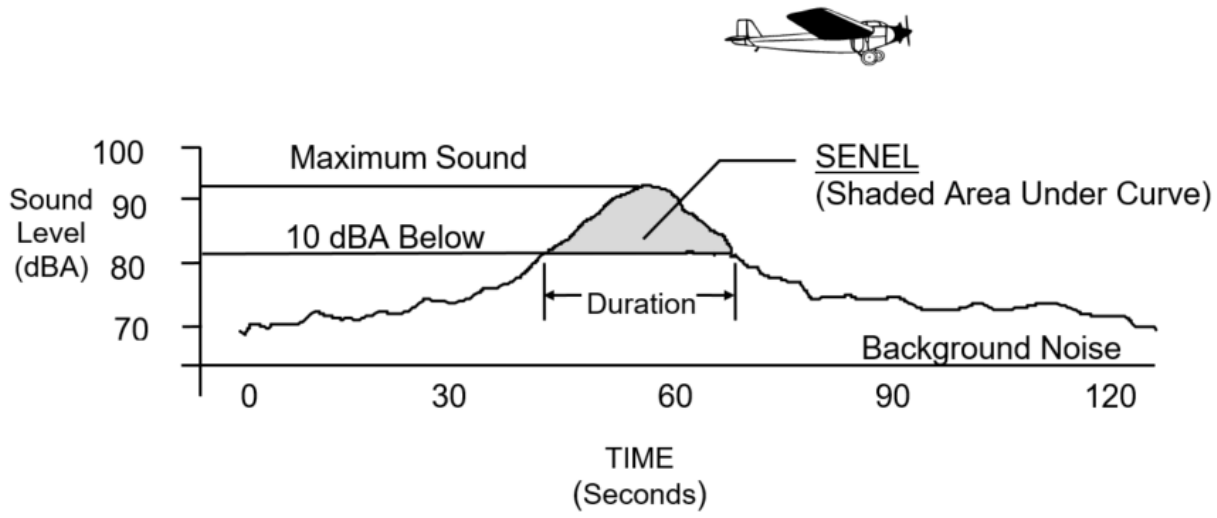
ATTACHMENT F
(Single Event Noise Exposure Level)

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.