Santa Monica Airport
Monthly Operations Report

August 2023

Report prepared by:

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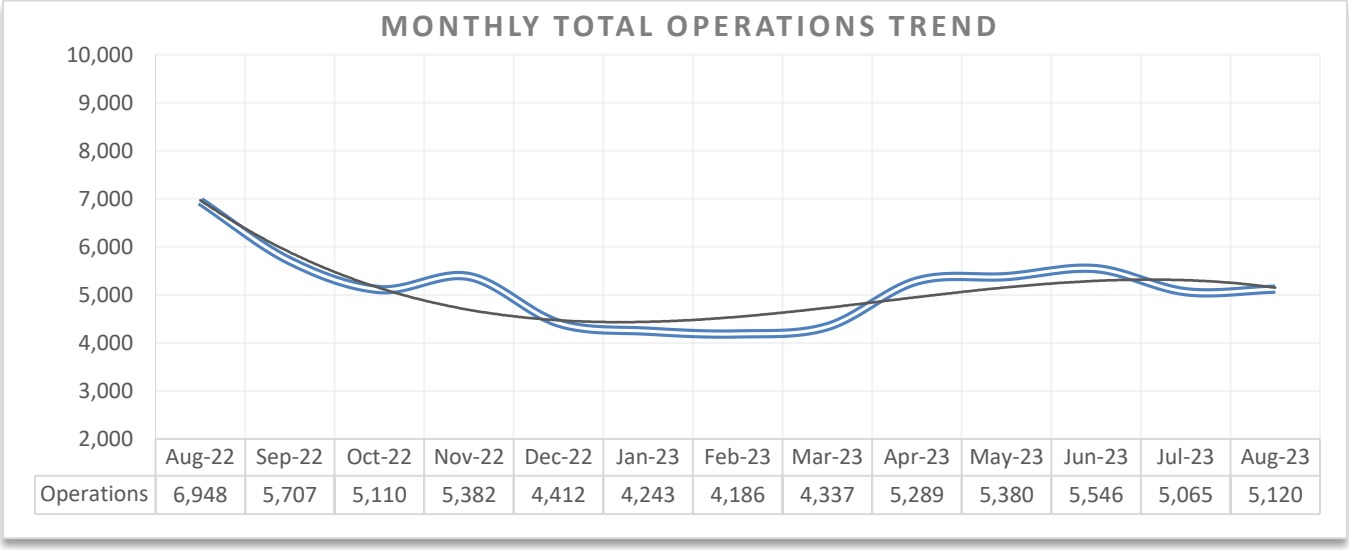
I. Introduction

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 August 2023.

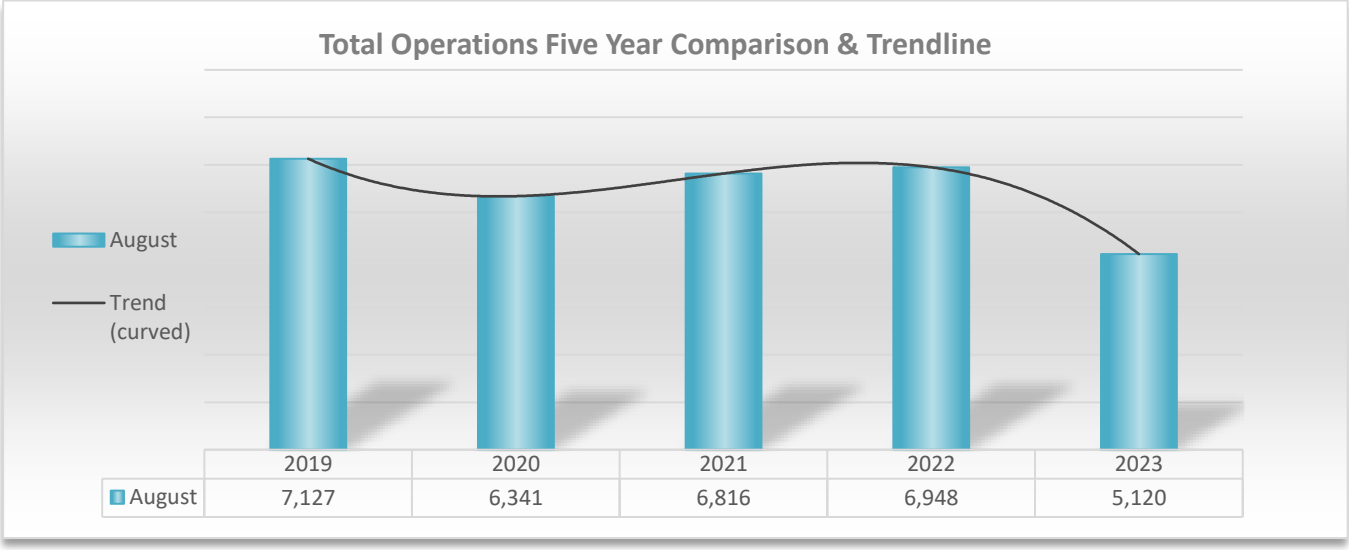
II. Aircraft Operations Data

The total number of aircraft operations recorded during the month of August 2023 was 5,120, which represents a 26% decrease from the 6,948 operations recorded during August 2022. Approximately 16% of the operations were instrument flights (IFR transient), 35% 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 twelve-month period are as follows.



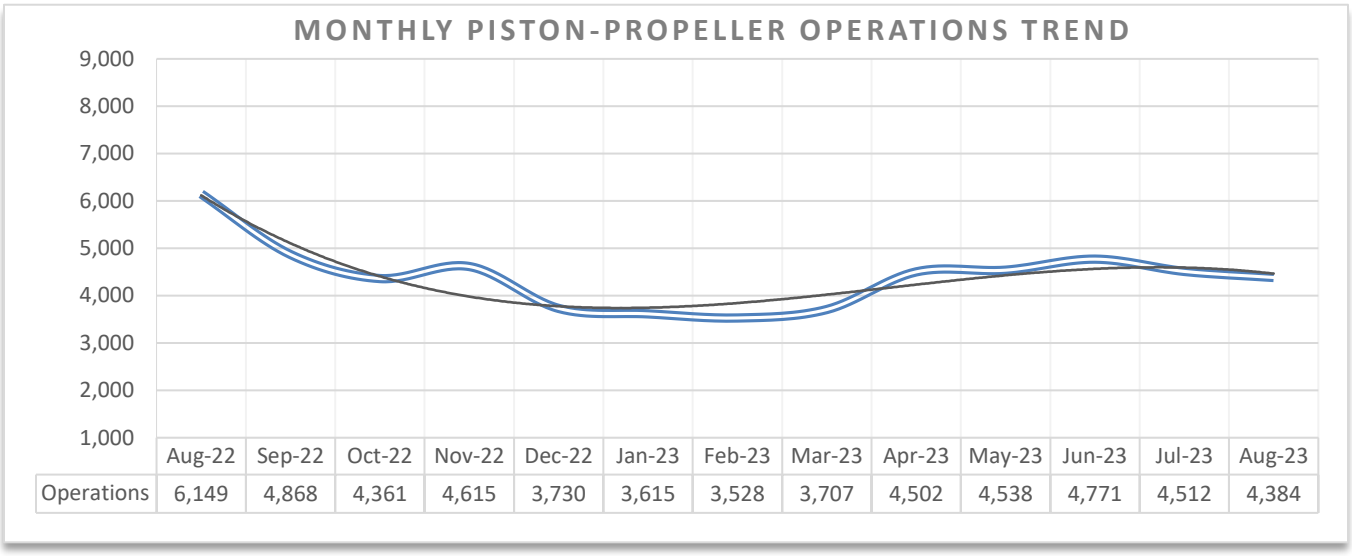
	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Operations	6,948	5,707	5,110	5,382	4,412	4,243	4,186	4,337	5,289	5,380	5,546	5,065	5,120



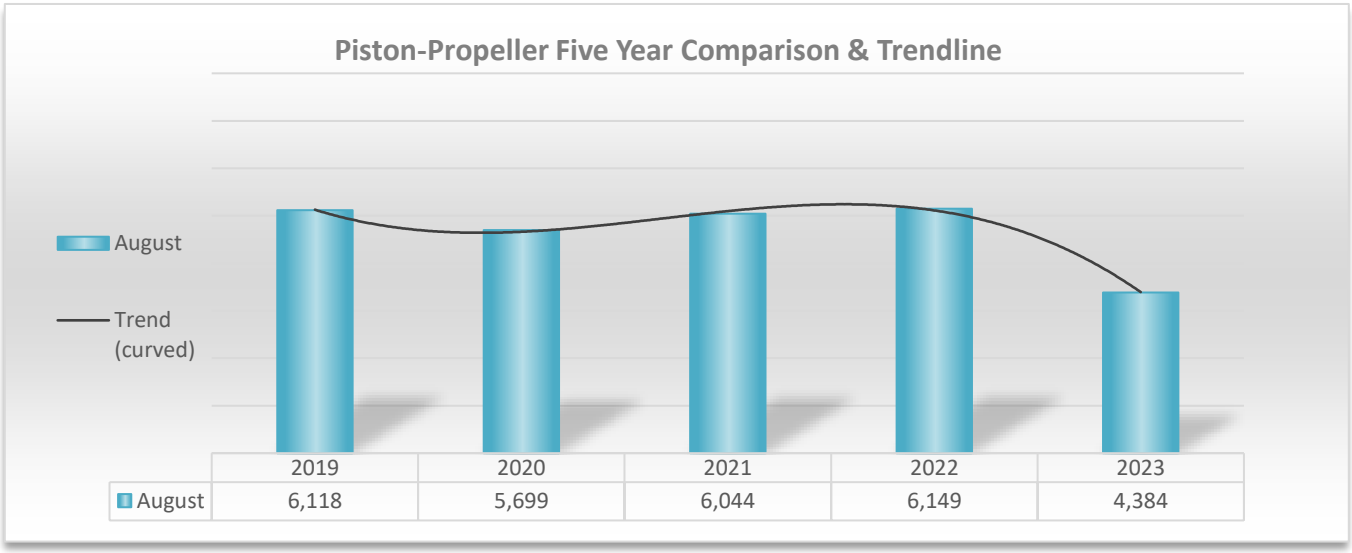
	2019	2020	2021	2022	2023
August	7,127	6,341	6,816	6,948	5,120

Piston-propeller Aircraft Operations

There were approximately 4,384 piston-propeller aircraft operations recorded, comprising about 86% of the total operations. Piston-propeller aircraft operations for August 2023 decreased 29% from the 6,149 piston-propeller aircraft operations recorded during August 2022.



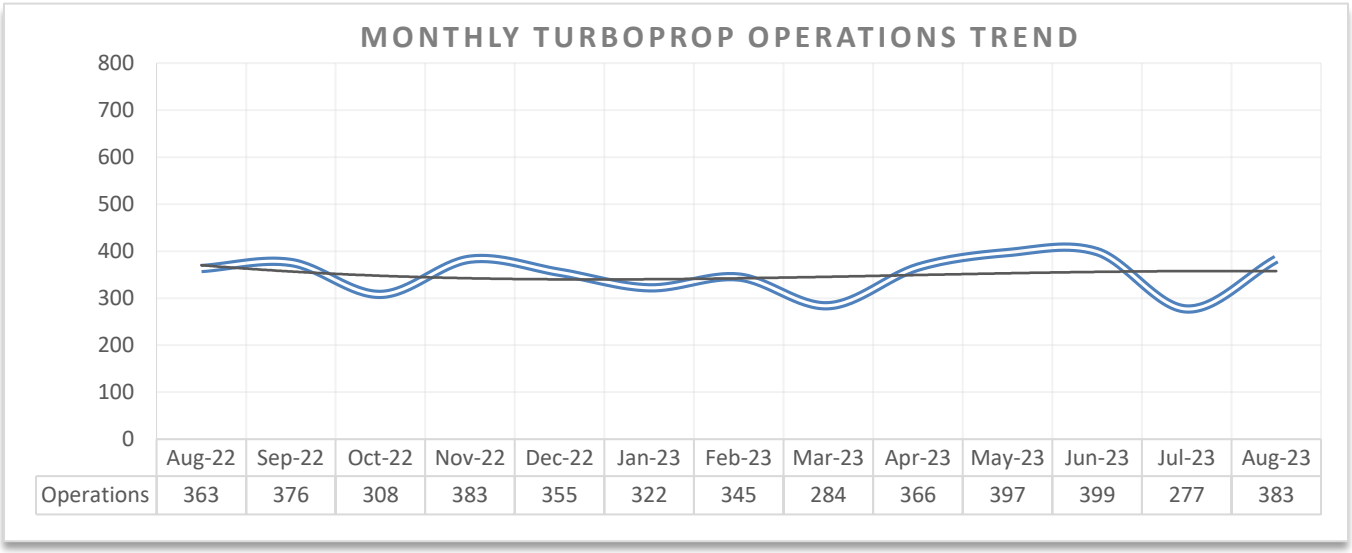
	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Operations	6,149	4,868	4,361	4,615	3,730	3,615	3,528	3,707	4,502	4,538	4,771	4,512	4,384



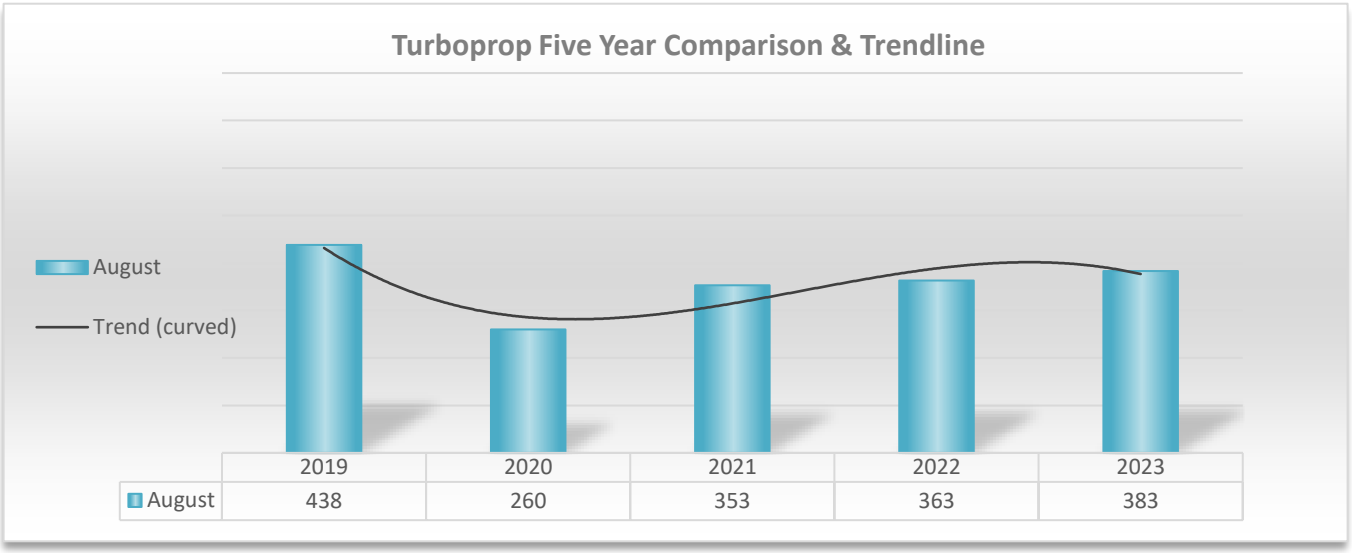
	2019	2020	2021	2022	2023
August	6,118	5,699	6,044	6,149	4,384

Turboprop Operations

The difference between a turboprop and piston-propeller aircraft is simply their type of engine. 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 August 2023, approximately 383 were by turboprop aircraft, comprising around 7% of the total operations. Turboprop aircraft operations increased by approximately 6% from the 363 operations recorded during August 2022.



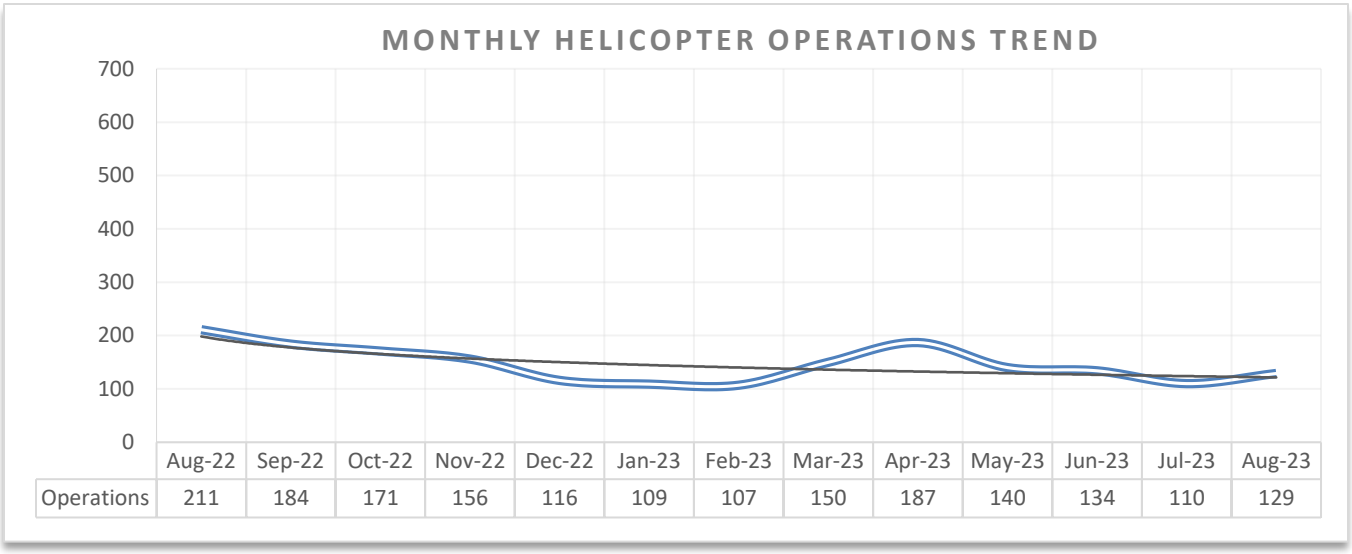
	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Operations	363	376	308	383	355	322	345	284	366	397	399	277	383



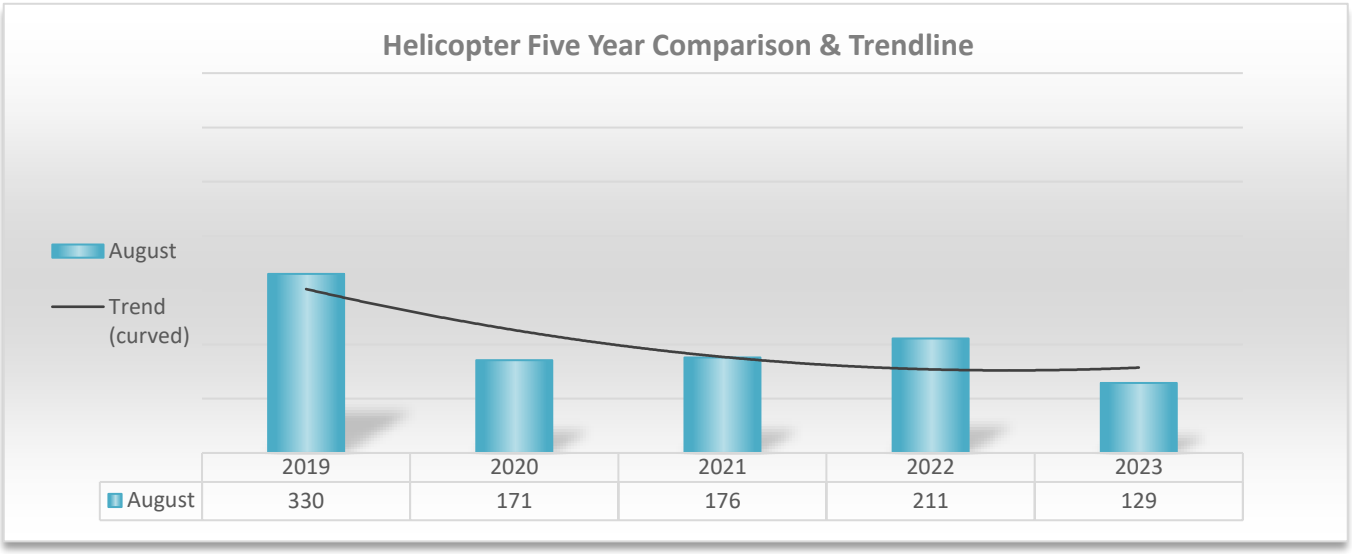
	2019	2020	2021	2022	2023
August	438	260	353	363	383

Helicopter Operations

Of the monthly aircraft operations for August 2023, approximately 129 operations are attributed to helicopters, comprising about 3% of the total operations. Helicopter operations during August 2023 decreased by approximately 39% from the 211 helicopter operations recorded in August 2022.



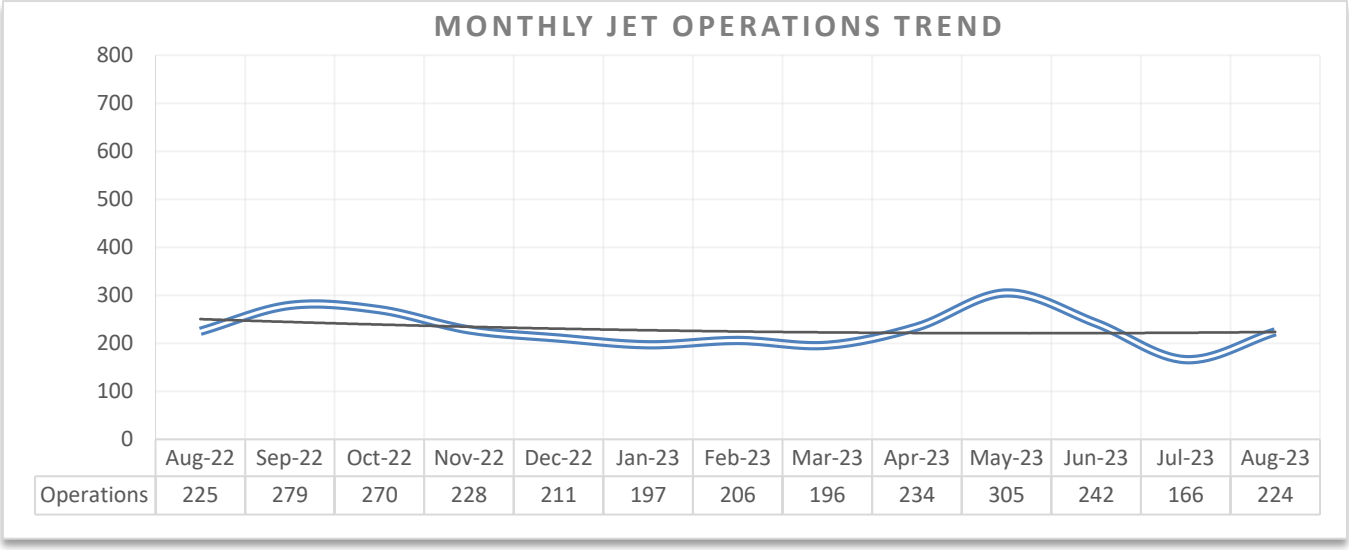
	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Operations	211	184	171	156	116	109	107	150	187	140	134	110	129



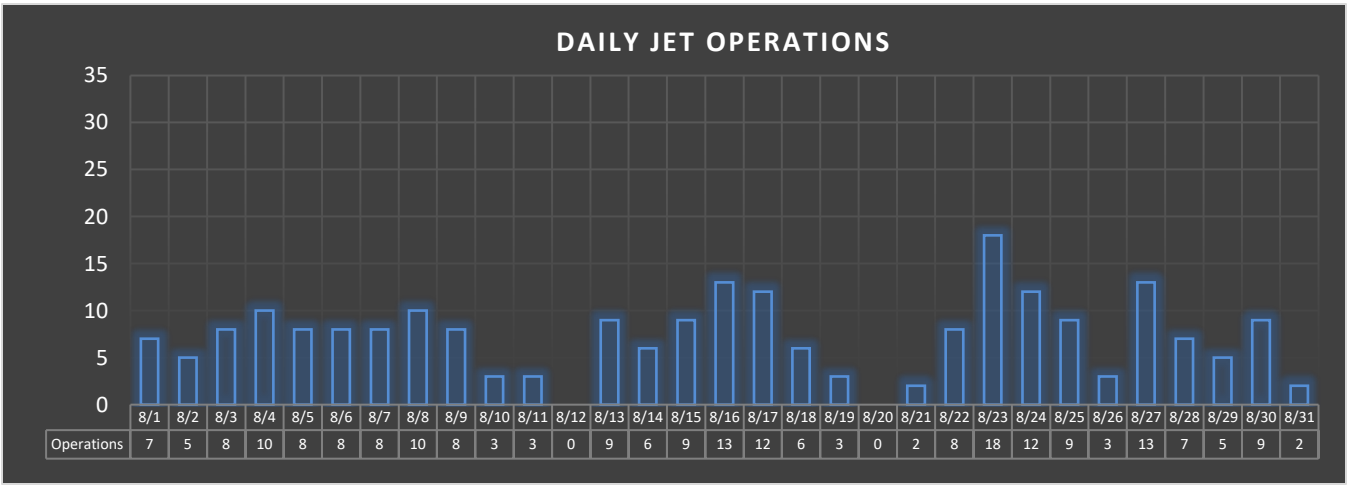
	2019	2020	2021	2022	2023
August	330	171	176	211	129

Jet Aircraft Operations

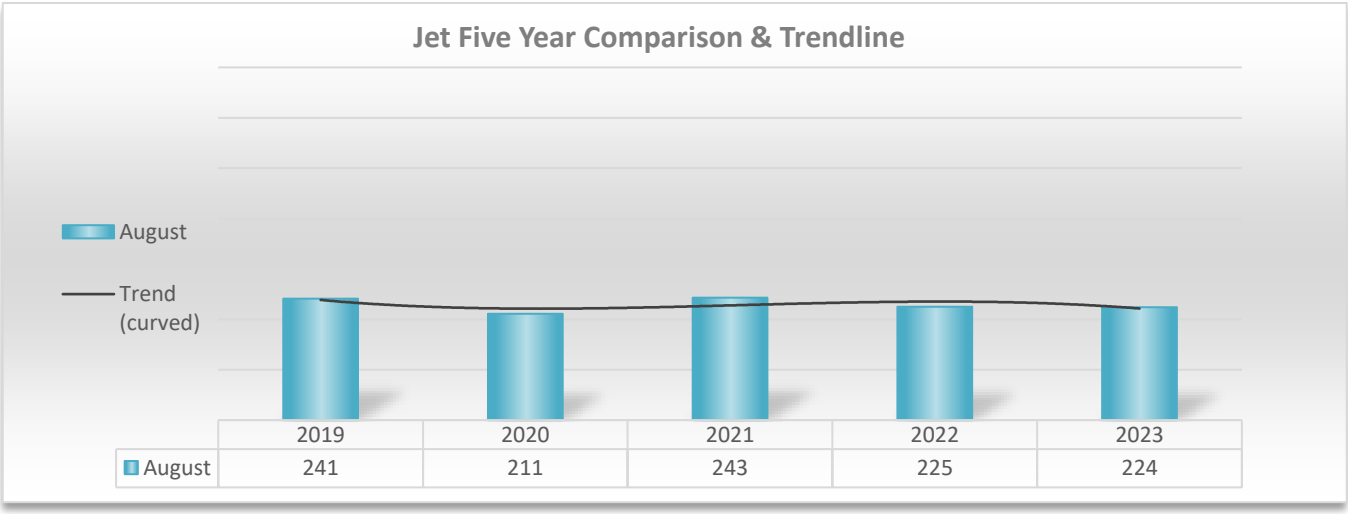
In August of 2023, there were approximately 224 jet operations recorded, encompassing around 4% of the total operations. Jet operations for August decreased by 0.4% from the 225 jet aircraft operations recorded during August 2022. Daily jet operations vary significantly day over day. During the month of August 2023, jet aircraft averaged 7 operations per day. The bar graph below represents the monthly and daily operations for jet-engined aircraft for the month of August 2023.



	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Operations	225	279	270	228	211	197	206	196	234	305	242	166	224



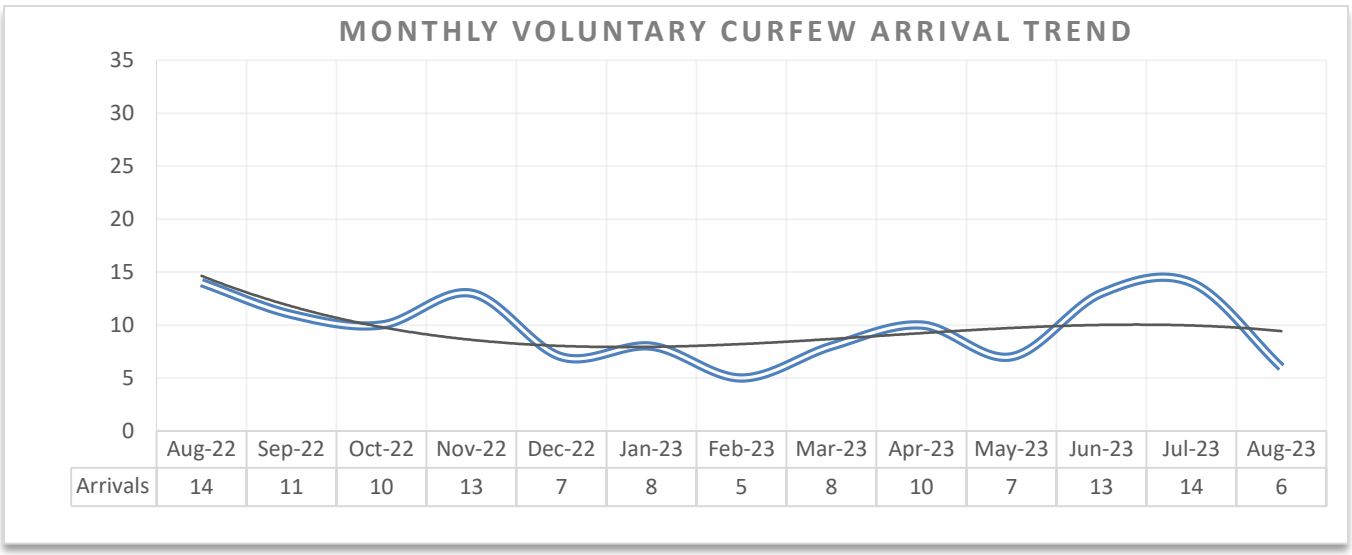
	8/1	8/2	8/3	8/4	8/5	8/6	8/7	8/8	8/9	8/10	8/11	8/12	8/13	8/14	8/15	8/16	8/17	8/18	8/19	8/20	8/21	8/22	8/23	8/24	8/25	8/26	8/27	8/28	8/29	8/30	8/31
Operations	7	5	8	10	8	8	8	10	8	3	3	0	9	6	9	13	12	6	3	0	2	8	18	12	9	3	13	7	5	9	2



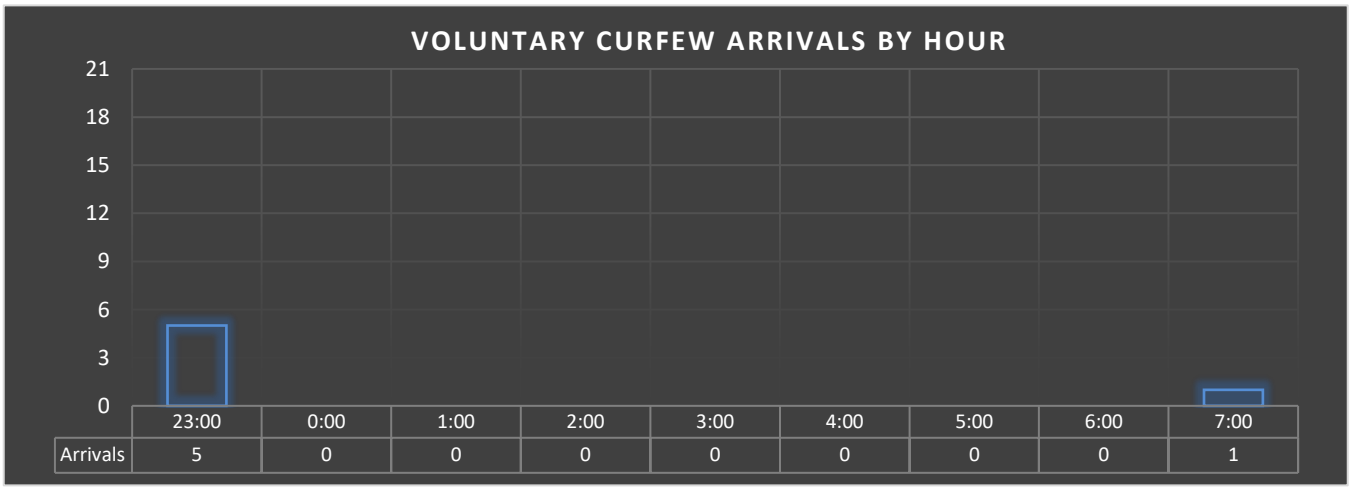
	2019	2020	2021	2022	2023
August	241	211	243	225	224

III. Voluntary Arrival Curfew

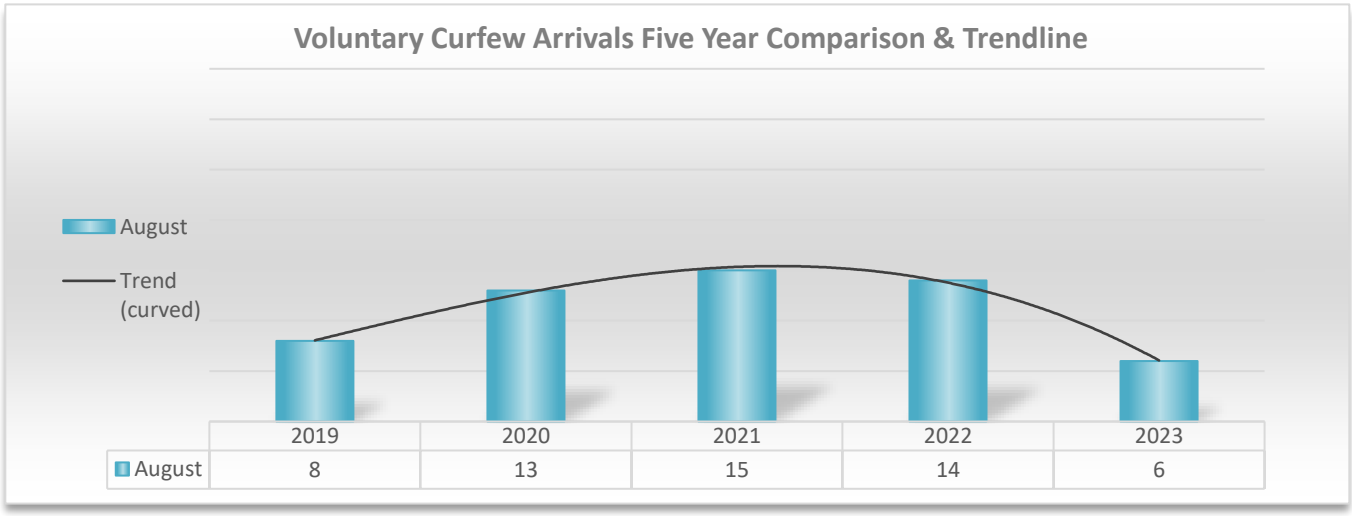
During the month of August 2023, Airport Staff logged a total of 6 aircraft arrivals during the Voluntary Arrival Curfew (VAC), which mirrors the mandatory departure curfew hours of 11:00 p.m. to 7:00 a.m. on weekdays, and 11:00 p.m. to 8:00 a.m. on weekends. The graph below depicts the number of arrivals for each VAC hour during the month of August 2023. For a listing of aircraft arrivals during the night hours, see Attachment B.



	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Arrivals	14	11	10	13	7	8	5	8	10	7	13	14	6



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



	2019	2020	2021	2022	2023
August	8	13	15	14	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 August 2023, there were no authorized departures during curfew hours, and one departure 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 informed of the proper Noise Management procedures. During the month of August 2023, 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 deviate due to weather, traffic or are 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 that will lower aircraft noise levels, which will minimize the impact of aircraft operations on the surrounding community.

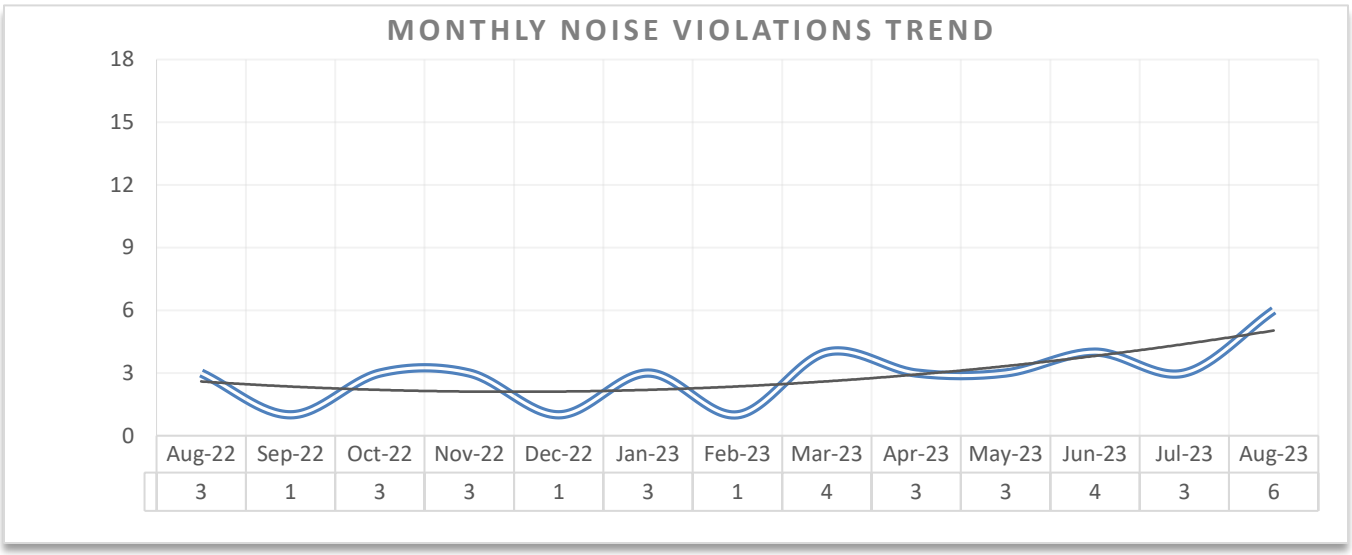
VII. Noise Violations

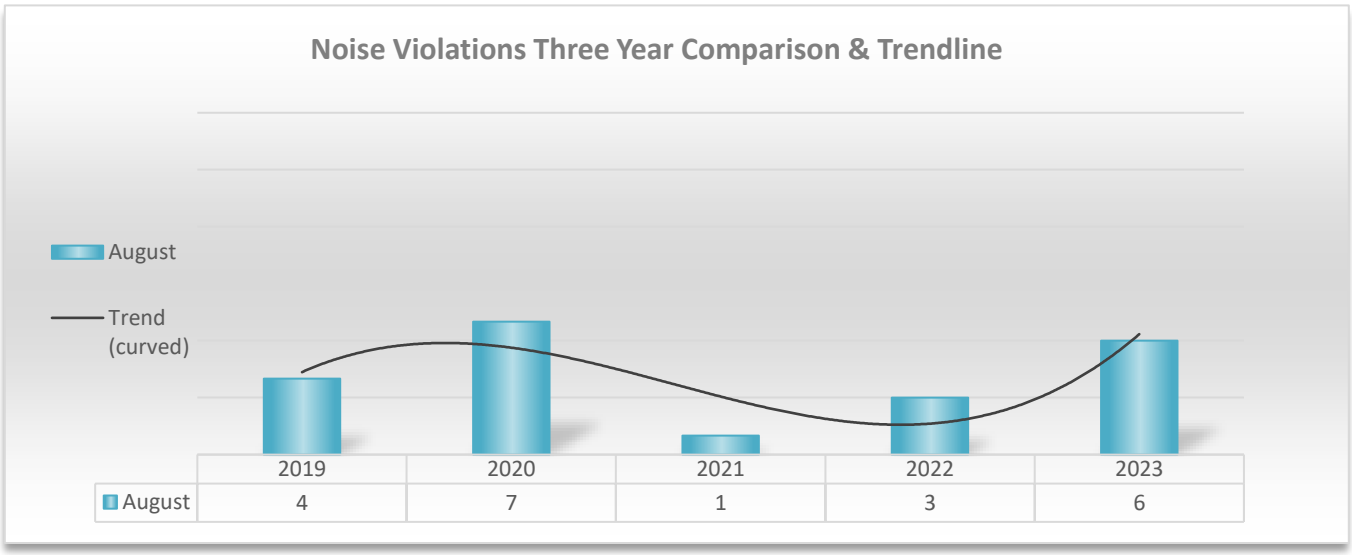
Santa Monica Airport enforces a maximum noise limit as approved by City Ordinance adopted in 1985. The Santa Monica Municipal Code section 10.04.04.060 states that "No aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing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

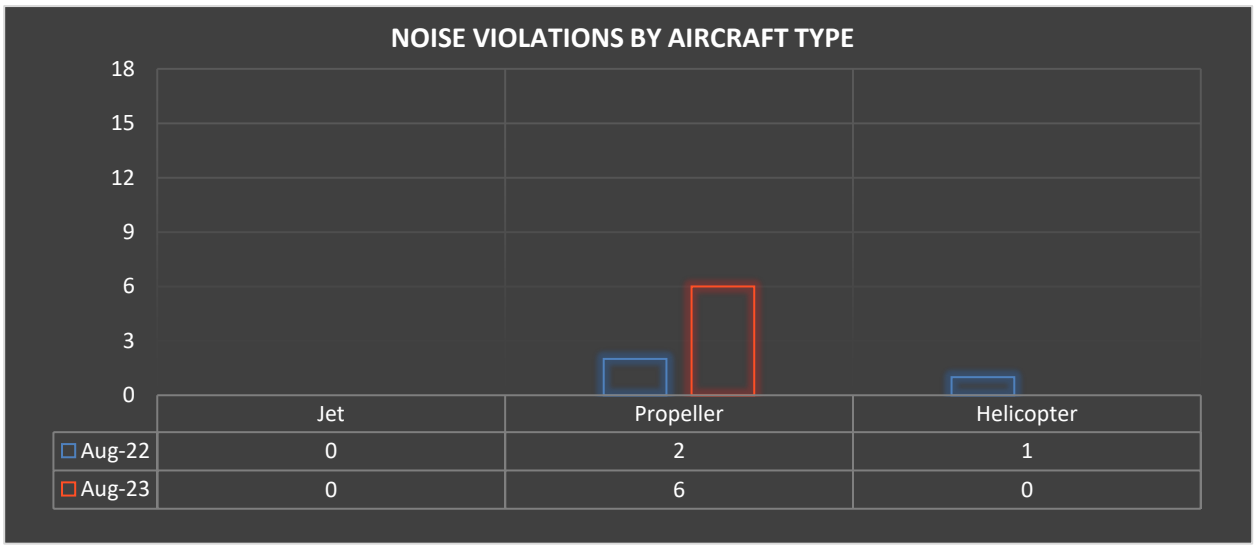
A violation occurs when an aircraft exceeds 95.0 dBA SENEL. During the month of August 2023, there were 6 noise violations recorded, a 100% increase compared to the 3 noise violations recorded during August 2022. A summary of noise violations for August 2023 is listed in Attachment D. Of the 5,120 aircraft operations recorded during the month of August 2023, 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	2	4	0	0	0	0	0	**6**	**100%**
Helicopter	0	0	0	0	0	0	0	**0**	**0%**
Total:	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**6**	
%	**33%**	**67%**	**0%**	**0%**	**0%**	**0%**	**0%**		**100%**

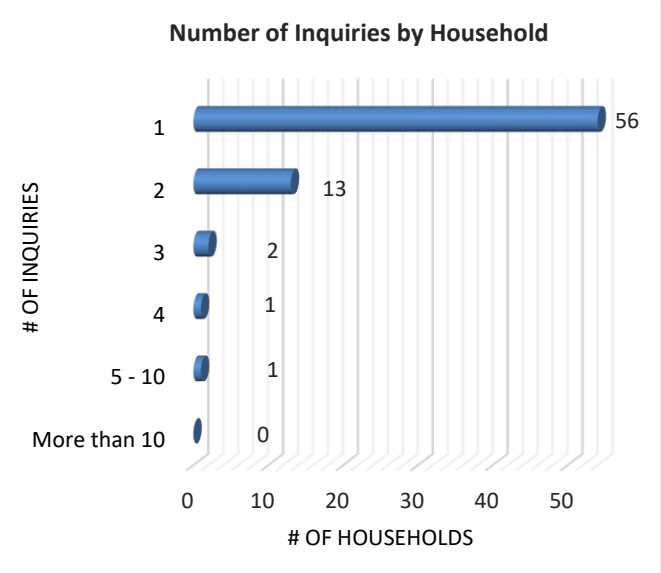

MONTHLY NOISE VIOLATIONS TREND
18
15
12
9
6
3
0
Aug-22 Sep-22 Oct-22 Nov-22 Dec-22 Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23
3 1 3 3 1 3 1 4 3 3 4 3 6

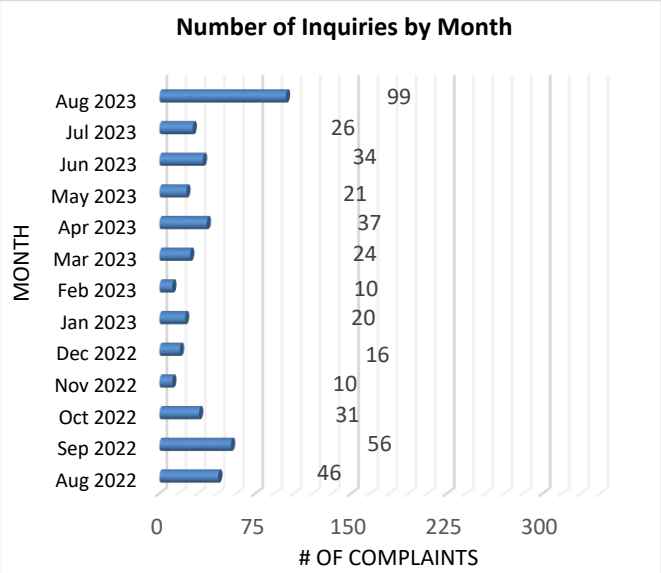

Noise Violations Three Year Comparison & Trendline
August
Trend (curved)
2019 2020 2021 2022 2023
August 4 7 1 3 6

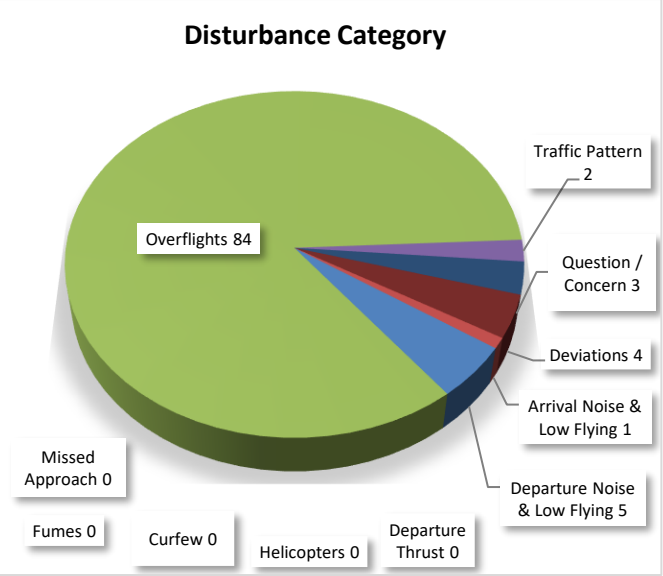

NOISE VIOLATIONS BY AIRCRAFT TYPE
18
15
12
9
6
3
0
Jet Propeller Helicopter
Aug-22 0 2 1
Aug-23 0 6 0

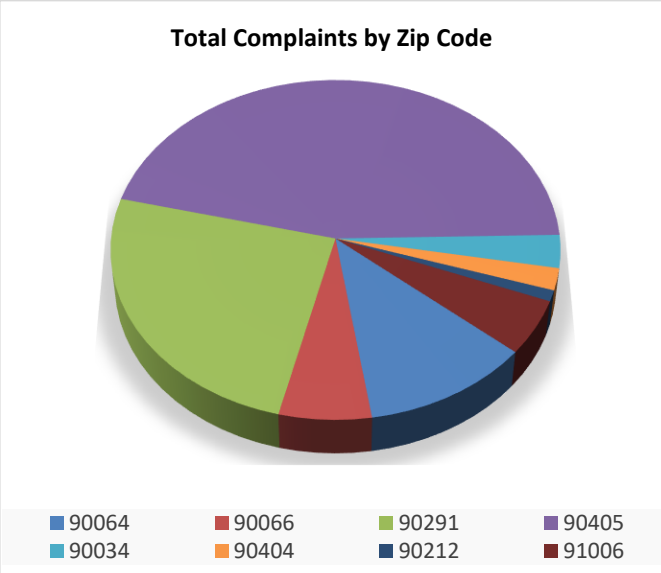
VIII. Aircraft Related Inquiries

During the month of August 2023, 73 individual households logged a total of 99 reports regarding 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 August 2023.









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) MO. (3-4) YR.	(5-9) LOC ID

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

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. 10THS (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	98	0	106	92	0	92	198	198
2	0	9	118	0	127	76	0	76	203	401
3	0	8	92	0	100	134	0	134	234	635
4	0	14	123	0	137	68	0	68	205	840
5	0	10	96	0	106	58	0	58	164	1004
6	0	17	125	0	142	27	0	27	169	1173
7	0	7	94	0	101	56	0	56	157	1330
8	0	11	107	4	122	36	0	36	158	1488
9	0	7	85	0	92	20	0	20	112	1600
10	0	4	87	0	91	60	0	60	151	1751
11	0	9	93	0	102	79	0	79	181	1932
12	0	5	90	0	95	28	0	28	123	2055
13	0	8	107	0	115	30	0	30	145	2200
14	0	12	61	0	73	0	0	0	73	2273
15	0	10	73	0	83	20	0	20	103	2376
16	0	8	106	0	114	62	0	62	176	2552
17	0	10	80	0	90	10	0	10	100	2652
18	0	6	106	0	112	100	0	100	212	2864
19	0	4	134	0	138	113	0	113	251	3115
20	0	3	4	0	7	0	0	0	7	3122
21	0	4	53	0	57	102	0	102	159	3281
22	0	7	100	0	107	77	0	77	184	3465
23	0	17	133	0	150	78	0	78	228	3693
24	0	15	84	0	99	33	0	33	132	3825
25	0	16	120	2	138	58	0	58	196	4021
26	0	8	124	2	134	59	0	59	193	4214
27	0	22	128	0	150	94	0	94	244	4458
28	0	20	85	0	105	60	0	60	165	4623
29	0	12	90	0	102	104	0	104	206	4829
30	0	6	119	0	125	51	0	51	176	5005
31	0	4	89	0	93	22	0	22	115	5120
TOTAL	0	301	3004	8	3313	1807	0	1807	5120	

FAA Form 7230-1 (8-78) SUPERSEDES PREVIOUS EDITION AND FAA FORM 7230-11 RIS: AT 7230-99

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						
DAY	**AC**	**AT**	**GA**	**MILITARY**		**TOTAL (10 - E) (14 - 1)**
1	0	6	10	0	(16-19)	16
2	0	9	12	0	(20-23)	21
3	0	8	10	0	(24-27)	18
4	0	14	16	0	(28-31)	30
5	0	9	17	0	(32-35)	26
6	0	15	20	0	(36-39)	35
7	0	6	22	0	(40-43)	28
8	0	11	15	0	(44-47)	26
9	0	7	23	0	(48-51)	30
10	0	4	24	0	(52-55)	28
11	0	9	29	0	(56-59)	38
12	0	4	12	0	(60-63)	16
13	0	5	35	0	(64-67)	40
14	0	12	36	0	(68-71)	48
15	0	6	32	0	(72-75)	38
16	0	8	28	0	(76-79)	36
						(14-2)
17	0	10	31	0	(16-19)	41
18	0	4	24	0	(20-23)	28
19	0	3	20	0	(24-27)	23
20	0	3	2	0	(28-31)	5
21	0	4	6	0	(32-35)	10
22	0	6	17	0	(36-39)	23
23	0	14	18	0	(40-43)	32
24	0	14	35	0	(44-47)	49
25	0	12	21	0	(48-51)	33
26	0	6	11	0	(52-55)	17
27	0	18	12	0	(56-59)	30
28	0	9	6	0	(60-63)	15
29	0	12	9	0	(64-67)	21
30	0	5	15	0	(68-71)	20
31	0	4	18	0	(72-75)	22
TOTAL	0	257	586	0		843
	(17-21)	(22-26)	(27-31)	(32-36)		
FACILITY USE						

REMARKS

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
8/1/23	23:11	N348SB	SR22	21	73.4	2	ASPIRE LEARNING	P
8/4/23	23:11	N441CM	P46T	21	87.7	2	JASON GILBERT	P
8/5/23	23:07	N2150Y	P28A	21	74.1	2	JASON STRONG	P
8/10/23	23:51	N93GS	SR20	21	DNR	2	AIRSPACERS	P
8/13/23	7:48	N885US	DA40	21	77.0	2	SKY DIAMONDS LLC	P
8/28/23	23:46	N796SP	C172	21	DNR	2	SANTA MONICA FLYERS	P

ATTACHMENT C
(Authorized Departures & Curfew Violations)

Authorized Curfew Departures

NONE

Curfew Violations

DATE	TIME	NUMBER	TYPE	RUNWAY	OPERATION	ACTION
8/1/2023	23:03	N6105X	SR22	3	DEPARTURE	WARNING

ATTACHMENT D
(Aircraft Noise Violations)

AIRCRAFT ENGINE CATEGORY LEGEND

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

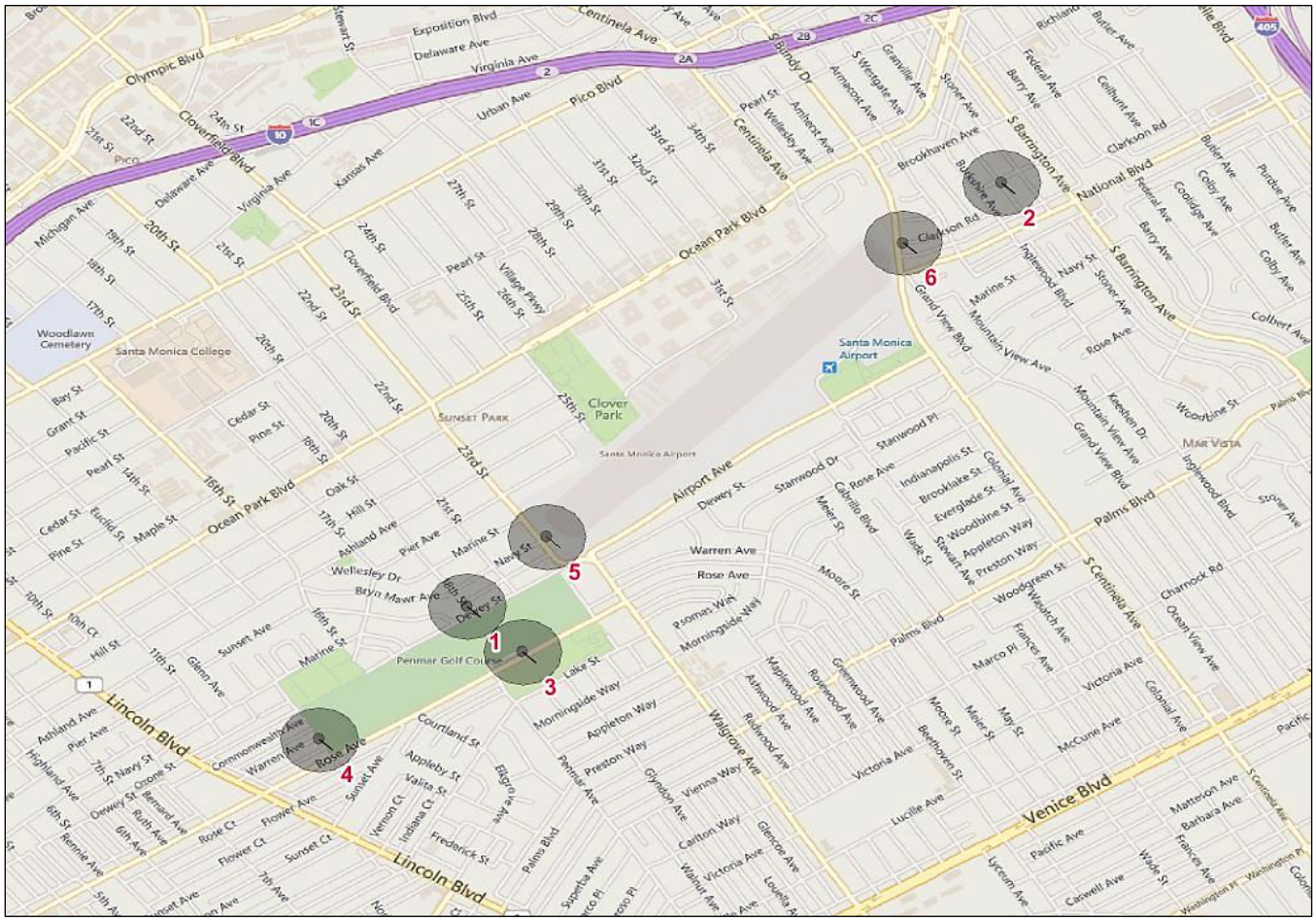
DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ACTION	ENGINE
8/12/23	16:03	N958DB	DHC2	21	95.7	1	KENMORE CREW LEASING INC	WARNING	P
8/12/23	17:20	N958DB	DHC2	21	96.9	1	KENMORE CREW LEASING INC	WARNING	P
8/13/23	13:08	N958DB	DHC2	21	96.1	1	KENMORE CREW LEASING INC	WARNING	P
8/13/23	16:41	N958DB	DHC2	21	96.7	1	KENMORE CREW LEASING INC	WARNING	P
8/14/23	14:53	N2542S	C337	3	96.2	2	SIERRA SYSTEMS LLC	WARNING	P
8/17/23	11:48	N424	C337	3	95.8	2	MICHAEL J. ROSS	WARNING	P

Unenforceable Noise Events

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ACTION
8/25/23	17:01	N66TE	C210	21	95.8	1	FLY4FUN LLC	SAFETY OF FLIGHT

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.

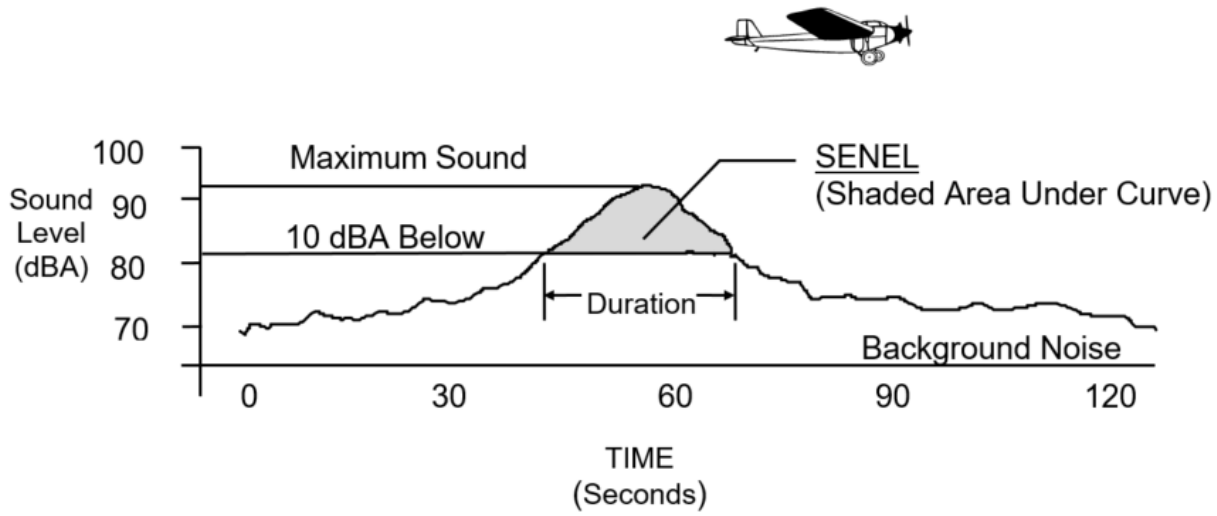
ATTACHMENT F
(Single Event Noise Exposure Level)

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.