

Santa Monica Airport
Monthly Operations Report
December 2020



Report prepared by:

Stelios Makrides
Airport Director
stelios.makrides@smgov.net
310-458-8591

Diana Hernandez
Airport Operations Administrator
diana.hernandez@smgov.net
310-458-8692

Daniel Quezada
Airport Operations Analyst
daniel.quezada@smgov.net
310-458-8692

Santa Monica Airport
3223 Donald Douglas Loop South
Santa Monica, CA 90405
airport@smgov.net • www.santamonicaairport.org

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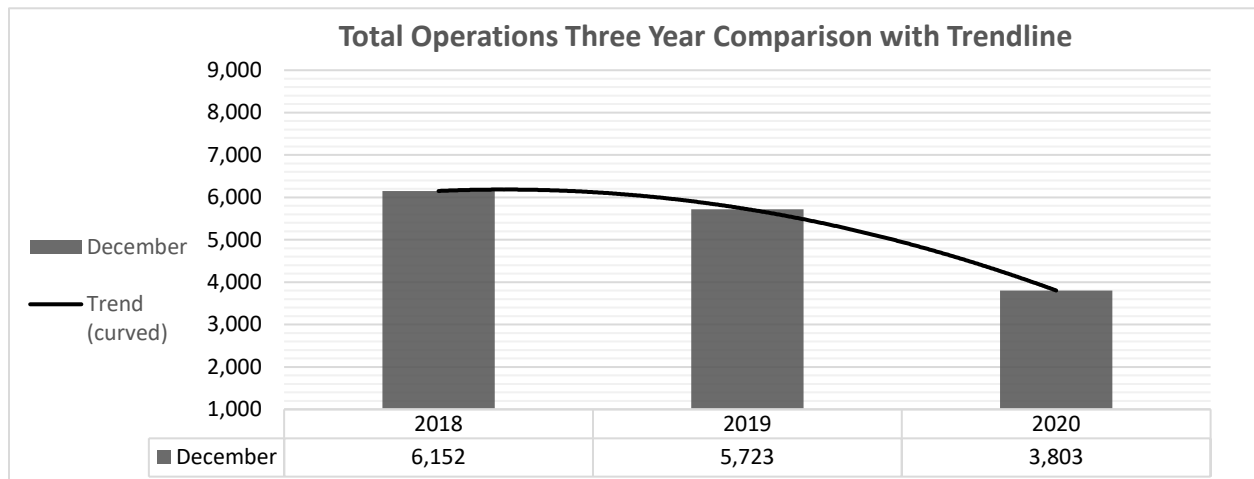
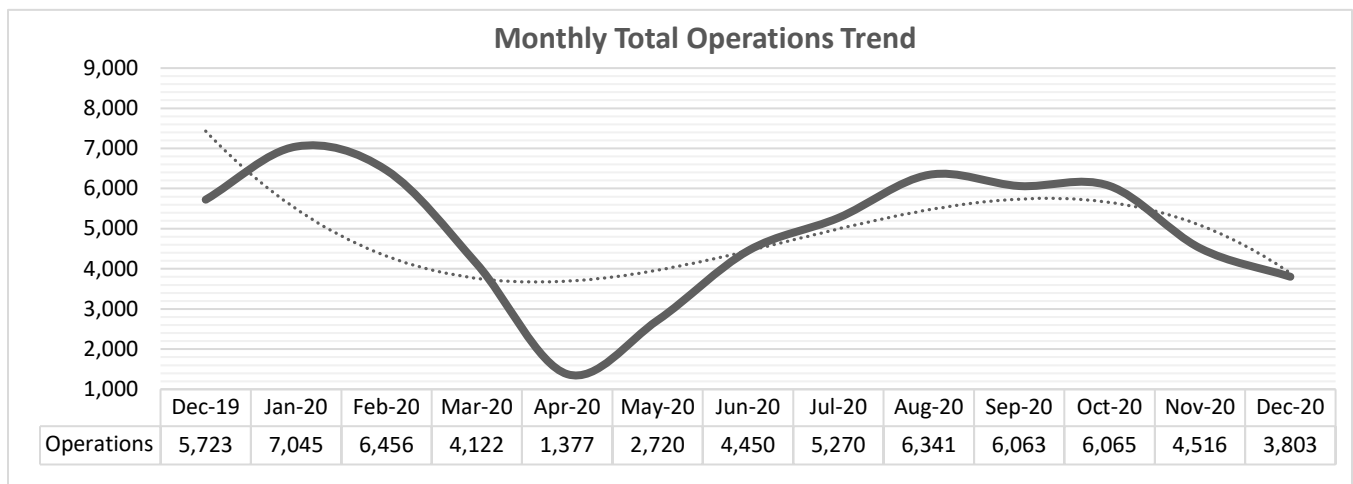
I. Introduction

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 December 2020.

II. Aircraft Operations Data

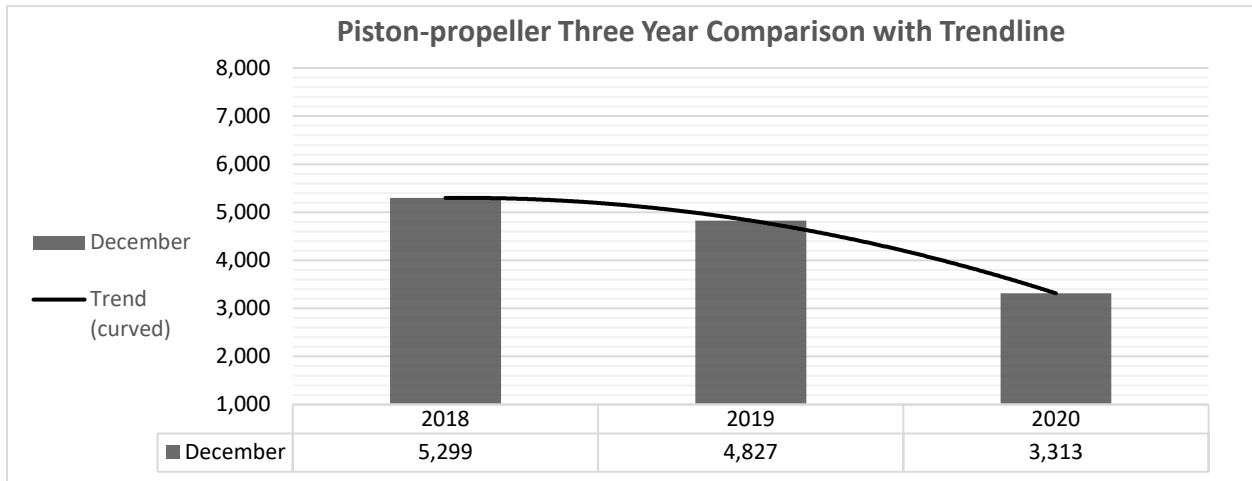
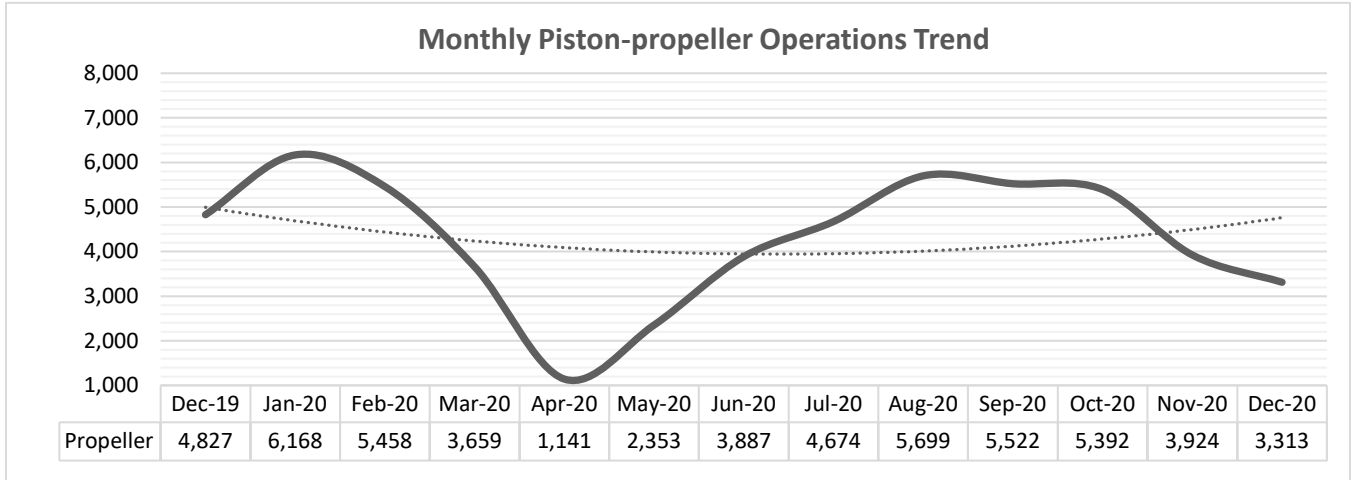
The total number of aircraft operations recorded during the month of December 2020 was 3,803 which represents a 34% decrease from the 5,723 operations recorded during December 2019. Approximately 12% of the operations were instrument flights (IFR transient), 40% were local flights (VFR local operations), and 48% were itinerant flights (VFR transient). The official total traffic count is recorded by the Federal Aviation Administration (FAA) control tower. Due to COVID-19, the control tower adopted a reduced hours operational schedule. This report includes total operations count and total local operations figures supplemented with the Airport’s own data during the hours when the tower was unstaffed. 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.



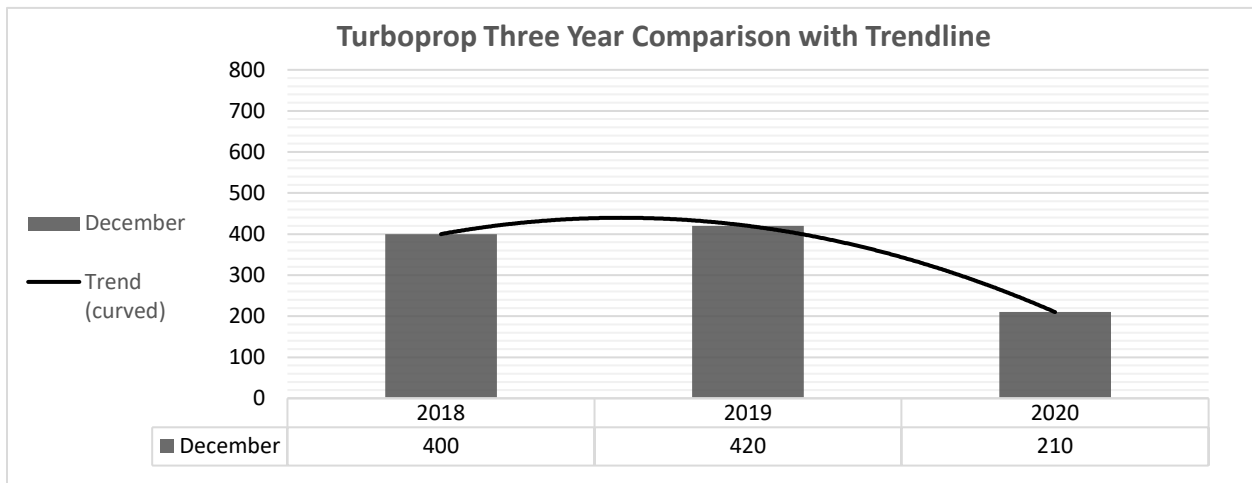
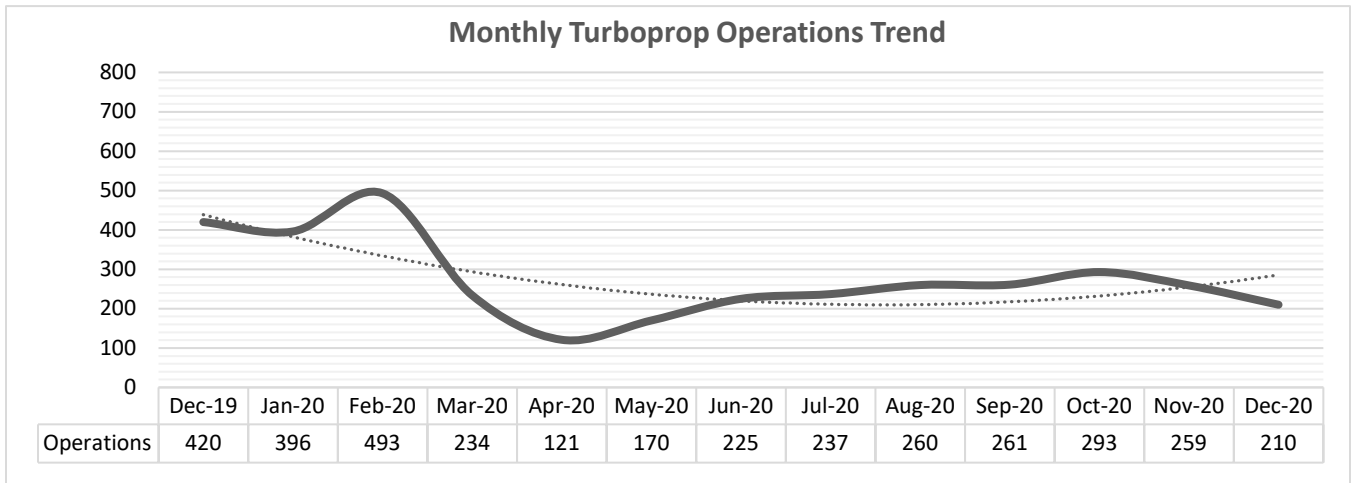
Piston-propeller Aircraft Operations

There were approximately 3,313 piston-propeller aircraft operations, comprising approximately 87% of the total operations. Piston-propeller aircraft operations for December 2020 decreased 31% from the 4,827 piston-propeller aircraft operations recorded during December 2019.



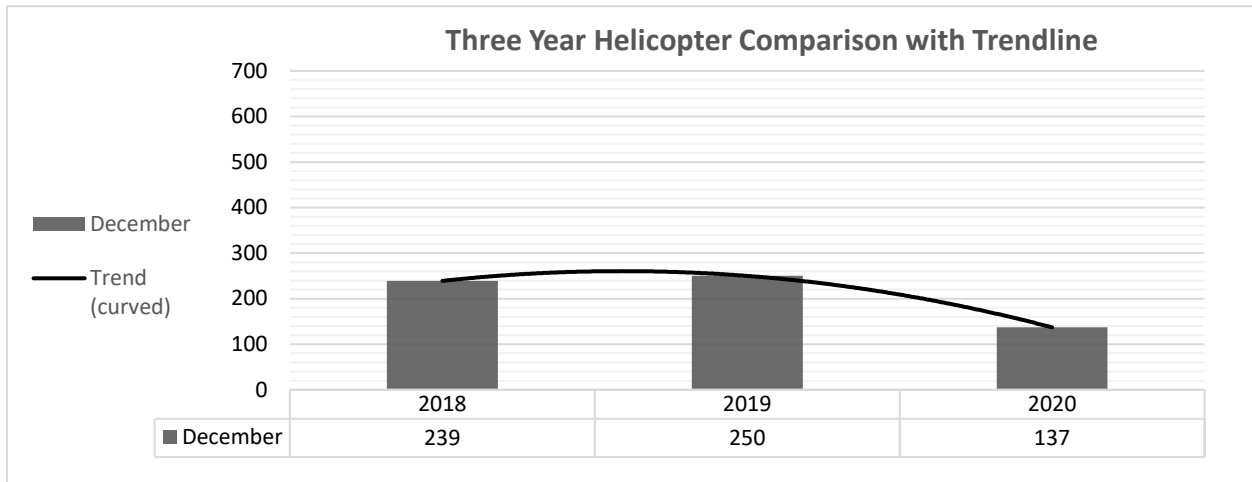
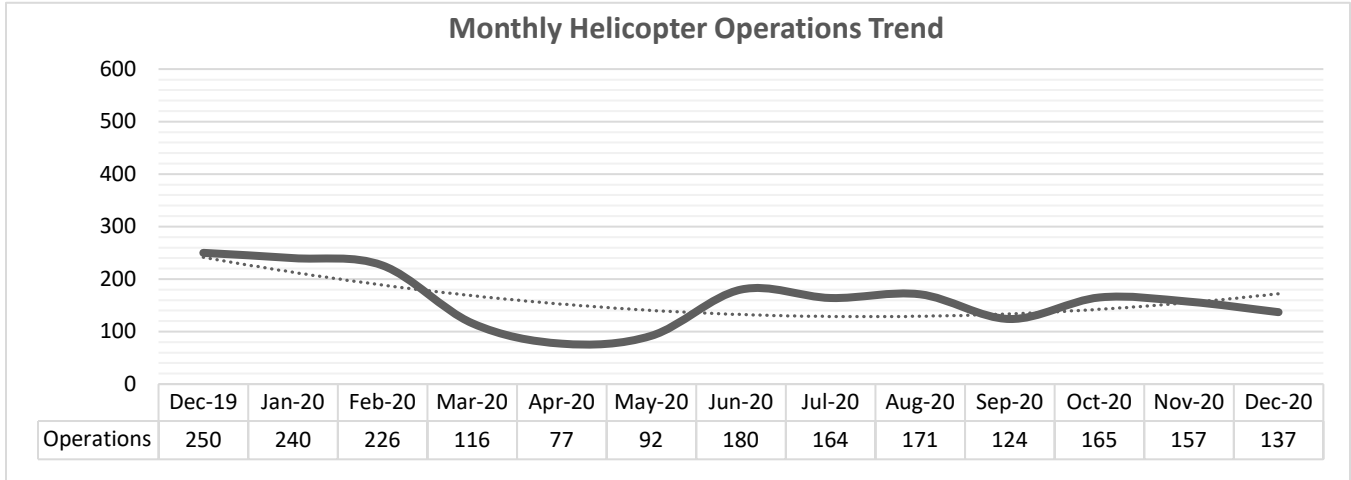
Turboprop Operations

The difference between a turboprop and piston-propeller aircraft is simply the 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 December 2020, approximately were by 210 turboprop aircraft, comprising approximately 6% of the total operations. Turboprop aircraft operations decreased approximately 50% from the 420 operations recorded during December 2019.



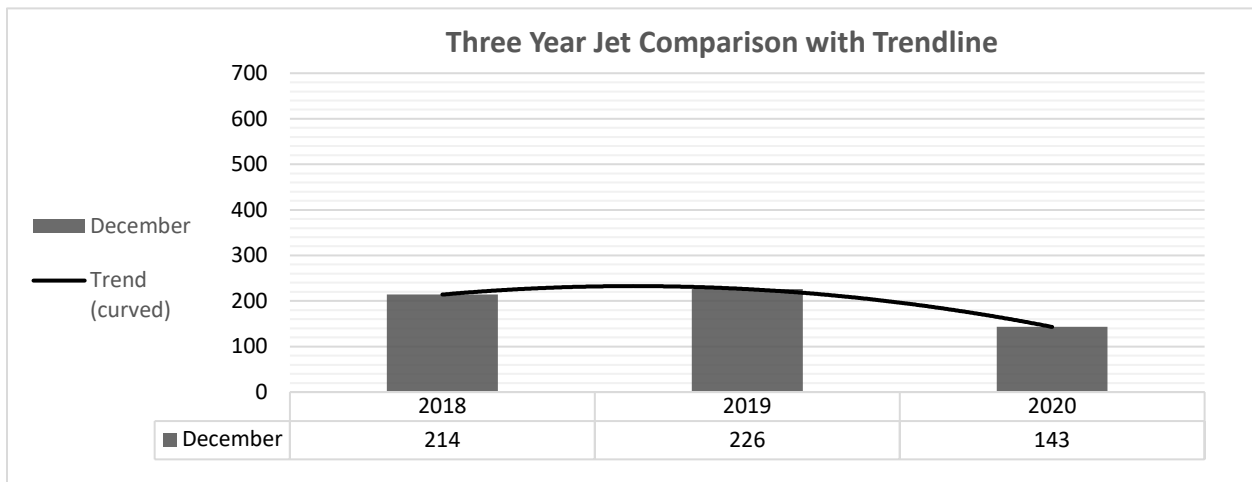
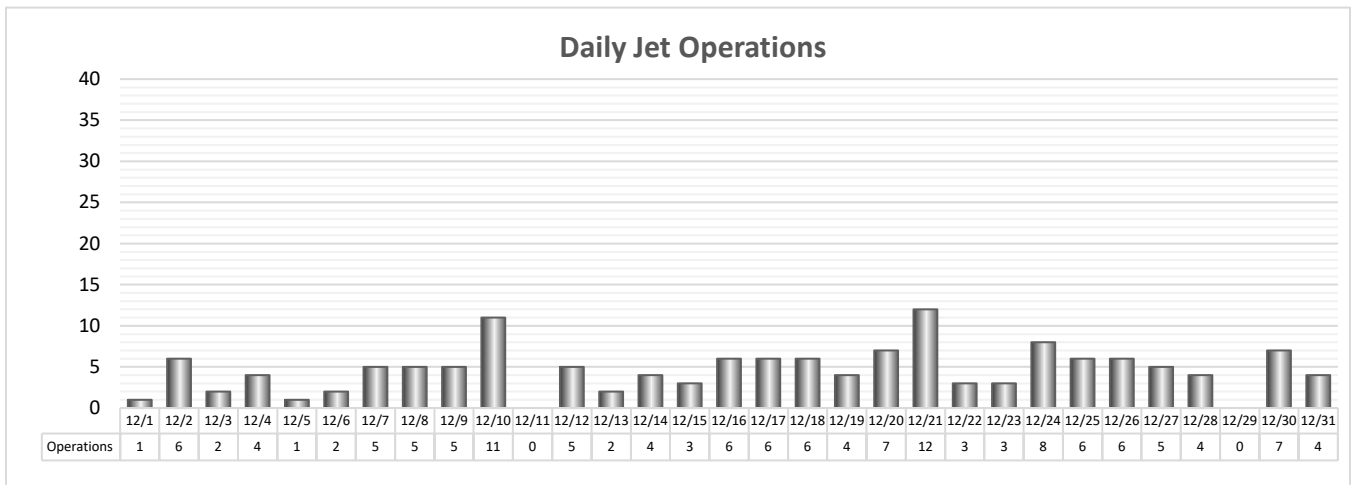
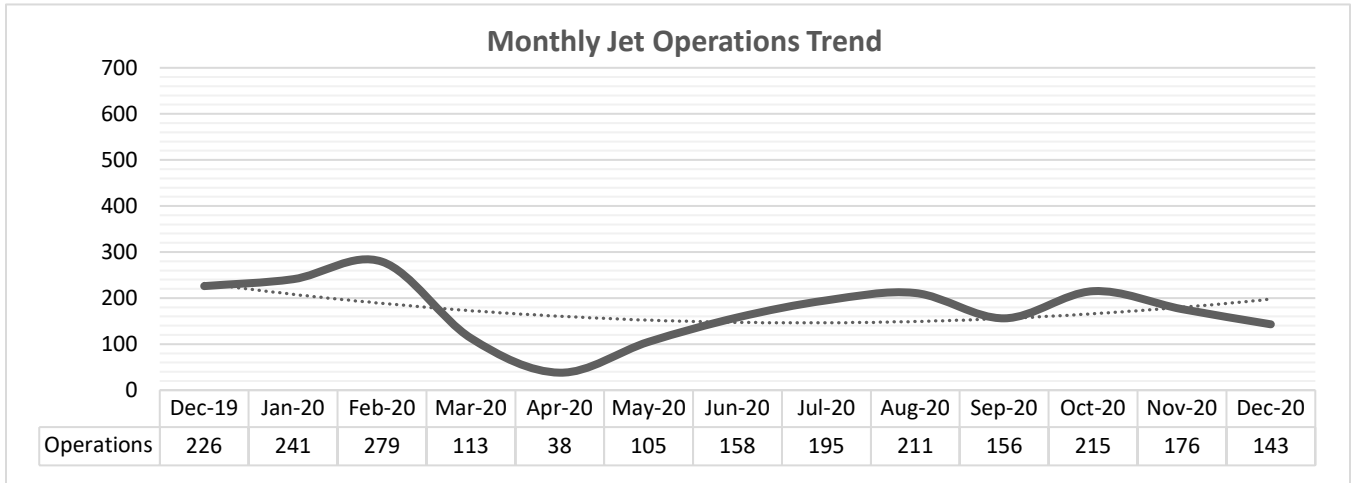
Helicopter Operations

Of the monthly aircraft operations for December 2020, approximately 137 operations were from helicopters, comprising approximately 4% of the total operations. Helicopter operations for December 2020 decreased 45% from the 250 helicopter operations recorded in December 2019.



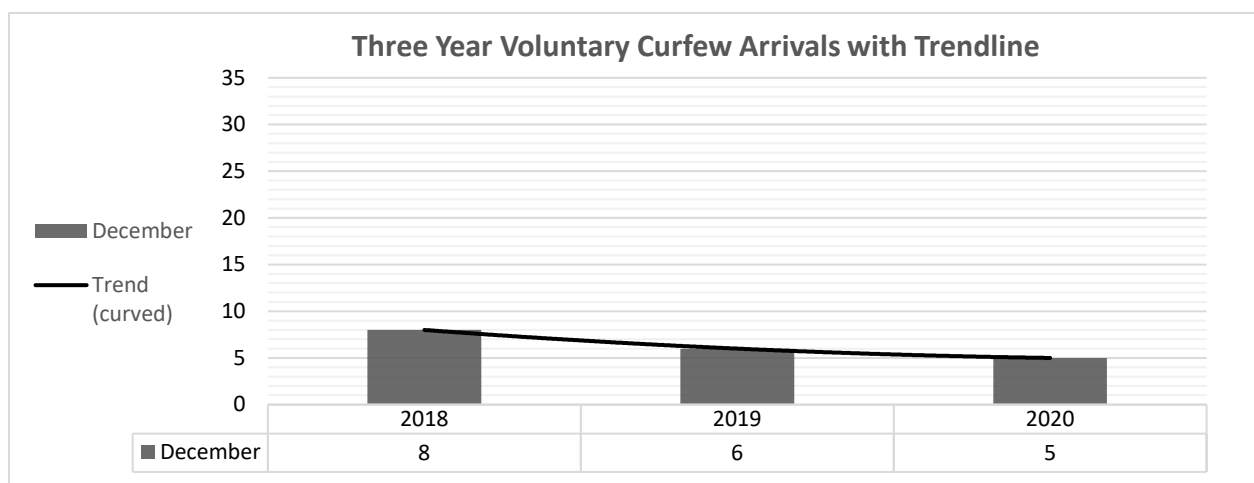
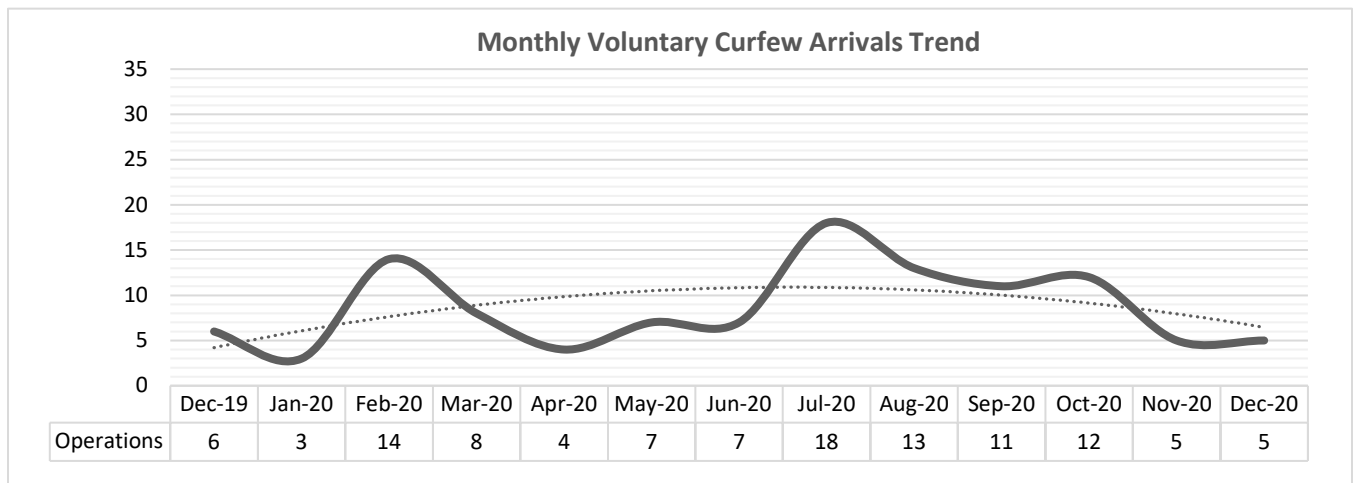
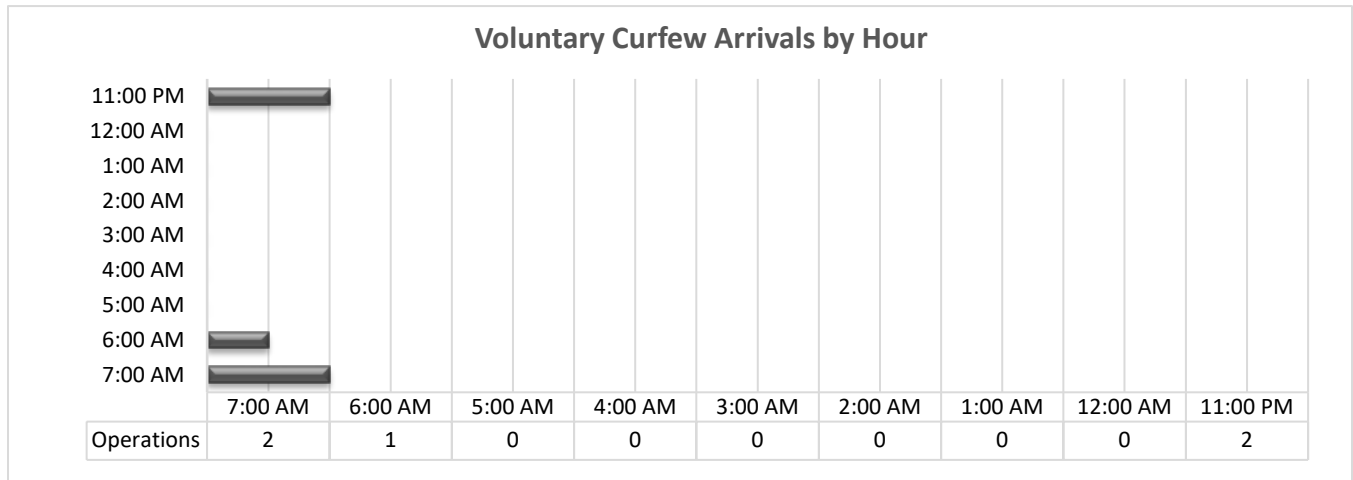
Jet Aircraft Operations

In December of 2020, there were approximately 143 jet operations, comprising approximately 4% of the total operations. Jet operations for December decreased 37% from the 226 jet aircraft operations recorded during December 2019. Daily jet operations significantly vary day over day. During the month of December 2020, jet aircraft averaged 7 operations per day. The bar graph below represents the daily operations for jet engine driven aircraft for the month of December 2020.



III. Voluntary Arrival Curfew

During the month of December 2020, 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 December 2020. 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 2020, 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 December 2020 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

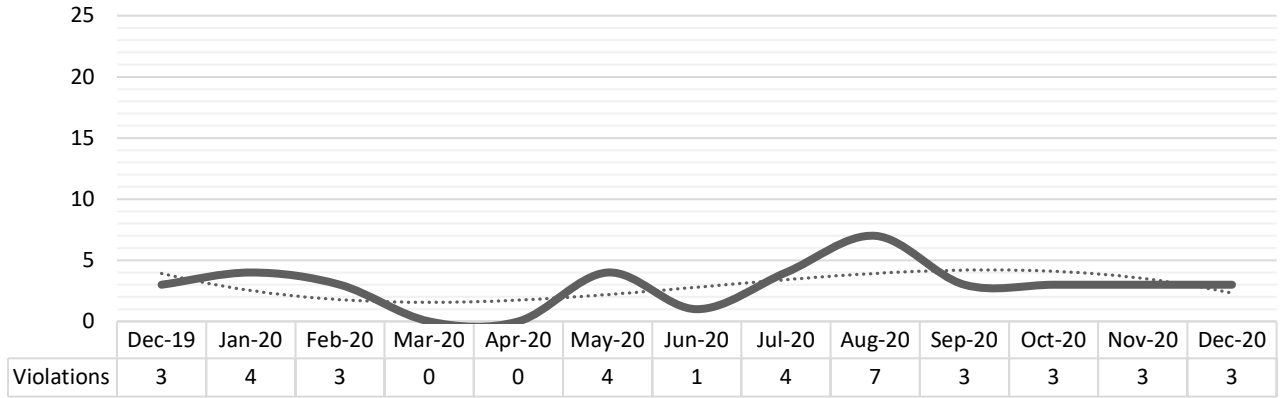
Santa Monica Airport enforces a maximum noise limit as approved by City Ordinance adopted in 1985. The Santa Monica Municipal Code section 10.04.04.060 states that "No aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing 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 2020, there were 3 noise violations recorded which represent a 0% decrease from the 3 noise violations recorded during December 2019. A summary of noise violations for December 2020 is listed on attachment D. Of the 3,803 aircraft operations recorded during the month of December 2020, 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 attributed 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.

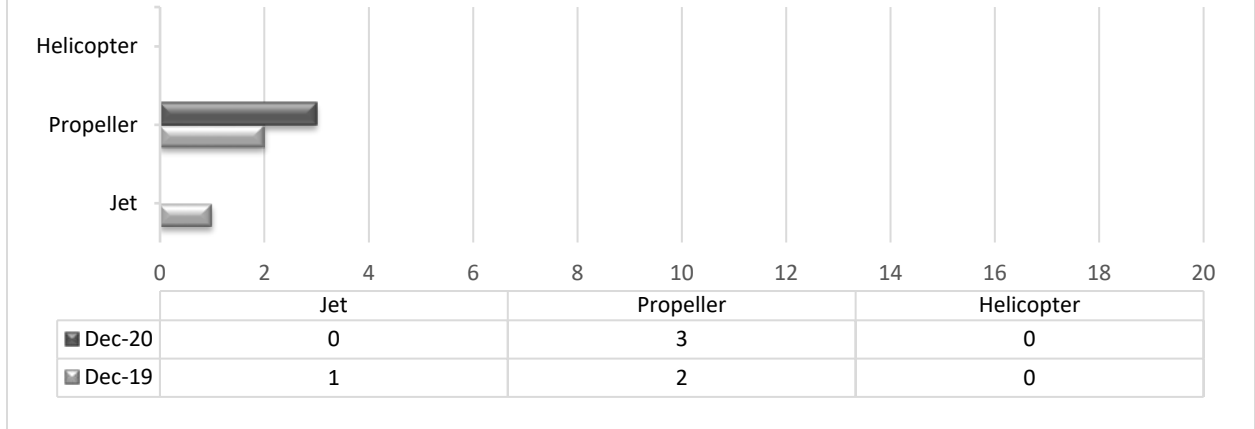
Violations Breakdown by Decibel Level

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	1	0	0	0	0	0	3	100%
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%

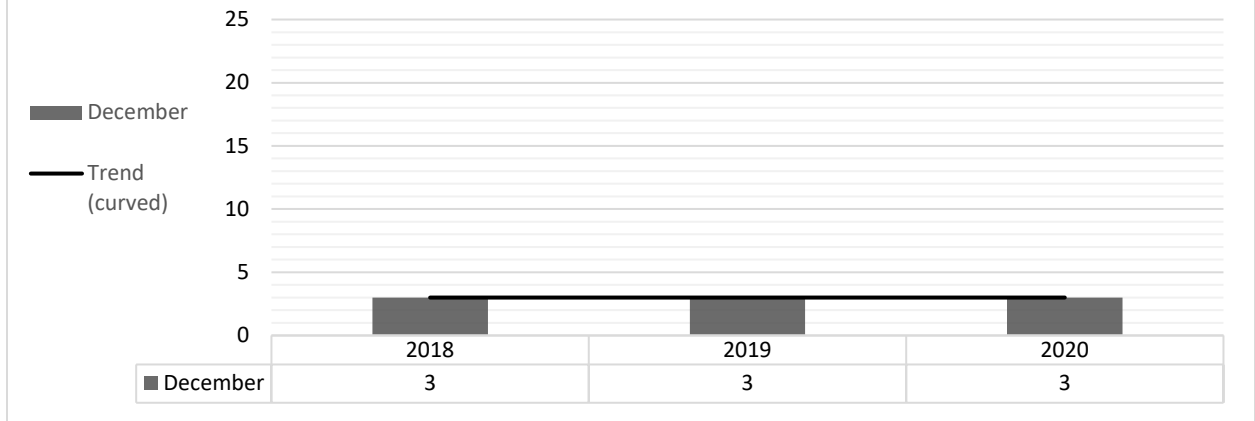
Monthly Noise Violations Trend



Noise Violations by Aircraft Category



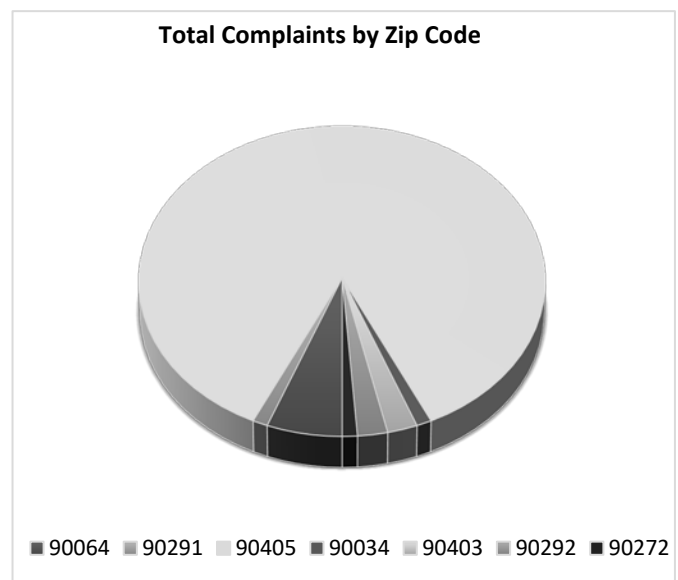
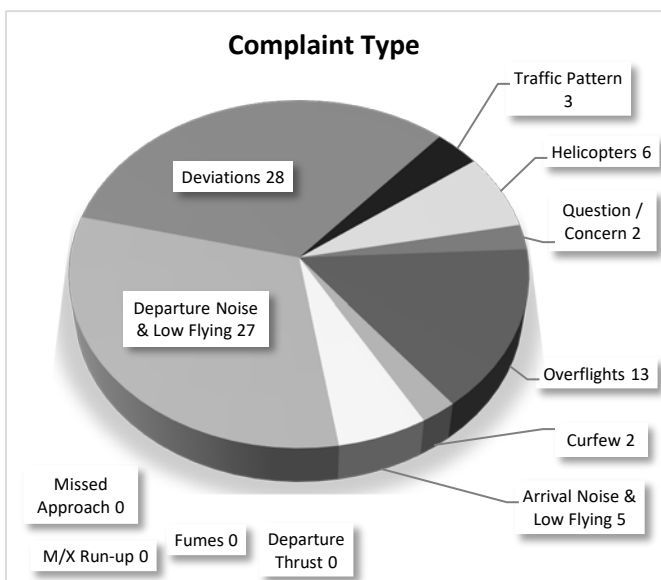
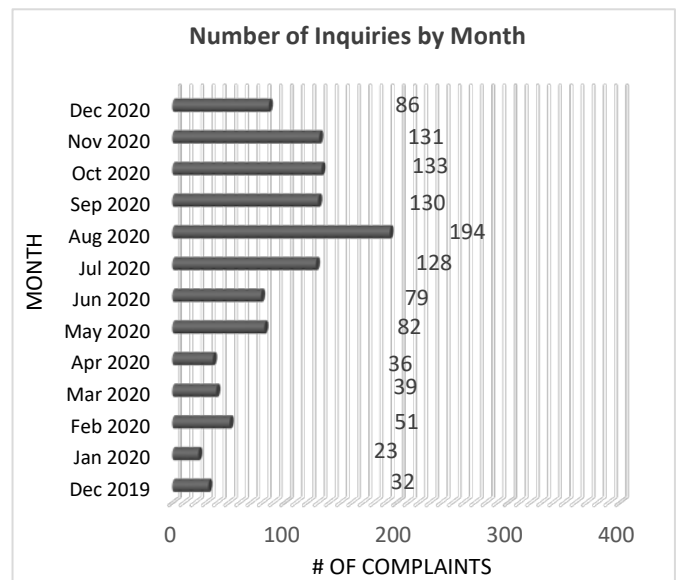
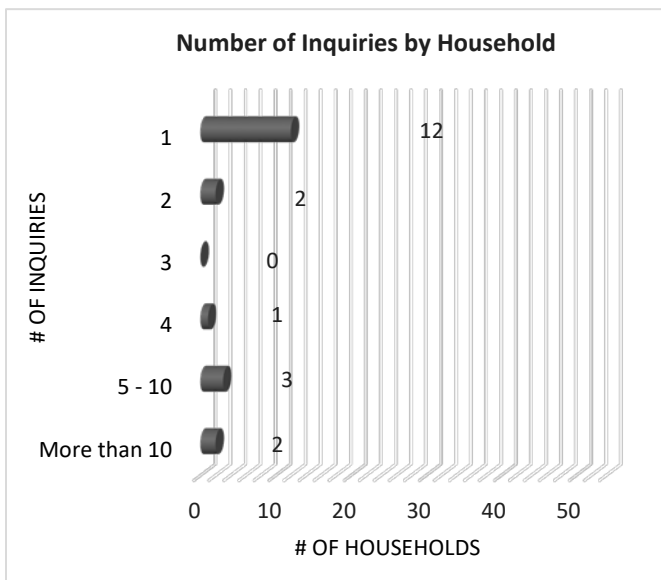
Three Year Noise Violations Comparison with Trendline



VIII. AIRCRAFT RELATED COMPLAINTS

During the month of December of 2020, 20 different households logged a total of 86 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 December 2020.

At the request of the Airport Commission, staff began tracking inquiries caused by the Airbus A320 aircraft series. From the 13 overflight reports recorded during December of 2020, zero A320 overflights were attributed to these reports.



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) 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>		FACILITY TYPE CHANGED (12) <input type="checkbox"/> 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	2	74	0	76	81	0	81	157	157
2	0	3	66	0	69	31	0	31	100	257
3	0	4	37	0	41	8	0	8	49	306
4	0	3	52	0	55	18	0	18	73	379
5	0	4	69	0	73	18	0	18	91	470
6	0	0	60	0	60	0	0	0	60	530
7	0	5	33	0	38	3	0	3	41	571
8	0	10	28	0	38	4	0	4	42	613
9	0	8	84	0	92	63	0	63	155	768
10	0	10	81	0	91	70	0	70	161	929
11	0	2	69	2	73	144	0	144	217	1146
12	0	3	50	0	53	102	0	102	155	1301
13	0	1	95	0	96	41	0	41	137	1438
14	0	4	28	0	32	13	0	13	45	1483
15	0	2	71	0	73	70	0	70	143	1626
16	0	4	67	0	71	47	0	47	118	1744
17	0	11	54	0	65	10	0	10	75	1819
18	0	2	71	0	73	68	0	68	141	1960
19	0	11	102	0	113	57	0	57	170	2130
20	0	2	104	0	106	57	0	57	163	2293
21	0	11	66	0	77	34	0	34	111	2404
22	0	4	86	0	90	64	0	64	154	2558
23	0	2	68	0	70	76	0	76	146	2704
24	0	6	46	0	52	39	0	39	91	2795
25	0	6	48	0	54	20	0	20	74	2869
26	0	3	74	0	77	14	0	14	91	2960
27	0	3	54	0	57	51	0	51	108	3068
28	0	1	9	0	10	24	0	24	34	3102
29	0	2	60	0	62	68	0	68	130	3232
30	0	11	111	0	122	126	0	126	248	3480
31	0	3	51	0	54	34	0	34	88	3568
TOTAL	0				2113	1455	0	1455	3568	

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	2	10	0	(16-19) 12			
2	0	2	10	0	(20-23) 12			
3	0	0	7	0	(24-27) 7			
4	0	3	5	0	(28-31) 8			
5	0	4	19	0	(32-35) 23			
6	0	0	8	0	(36-39) 8			
7	0	5	7	0	(40-43) 12			
8	0	4	9	0	(44-47) 13			
9	0	7	7	0	(48-51) 14			
10	0	7	30	0	(52-55) 37			
11	0	2	18	0	(56-59) 20			
12	0	2	20	0	(60-63) 22			
13	0	0	3	0	(64-67) 3			
14	0	2	4	0	(68-71) 6			
15	0	0	14	0	(72-75) 14			
16	0	4	11	0	(76-79) 15			
(14-2)								
17	0	7	12	0	(16-19) 19			
18	0	2	13	0	(20-23) 15			
19	0	4	11	0	(24-27) 15			
20	0	2	12	0	(28-31) 14			
21	0	9	15	0	(32-35) 24			
22	0	3	24	0	(36-39) 27			
23	0	2	10	0	(40-43) 12			
24	0	6	16	0	(44-47) 22			
25	0	6	2	0	(48-51) 8			
26	0	3	12	0	(52-55) 15			
27	0	3	13	0	(56-59) 16			
28	0	1	7	0	(60-63) 8			
29	0	1	5	0	(64-67) 6			
30	0	4	18	0	(68-71) 22			
31	0	3	4	0	(72-75) 7			
TOTAL	0	100	356	0	456			
	(17-21)	(22-26)	(27-31)	(32-36)				
FACILITY USE								

ATTACHMENT B
Registered Noise Levels for Night Arrivals
11 pm and 7 am Weekdays
11 pm and 8 am Weekends

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ENGINE
12/5/20	7:58	N752B	SR22	21	77.2	2	MICHAEL EVANS	P
12/12/20	23:05	N505DE	FA50	3	89.5	1	GLASS AVIATION	J
12/19/20	7:22	N965BC	AC95	21	86.9	2	HERZOG IAN	T
12/19/20	23:58	N84347	C172	21	DNR	2	MARCO GIOVANNINI	P
12/24/20	6:36	N60TJ	BE10	21	87.1	2	ARK LEASING INC	T

ATTACHMENT C
(Authorized Departures & Curfew Violations)

Authorized Curfew Departures

NONE

Curfew Violations

NONE

**ATTACHMENT D
(Aircraft Noise Violations)**

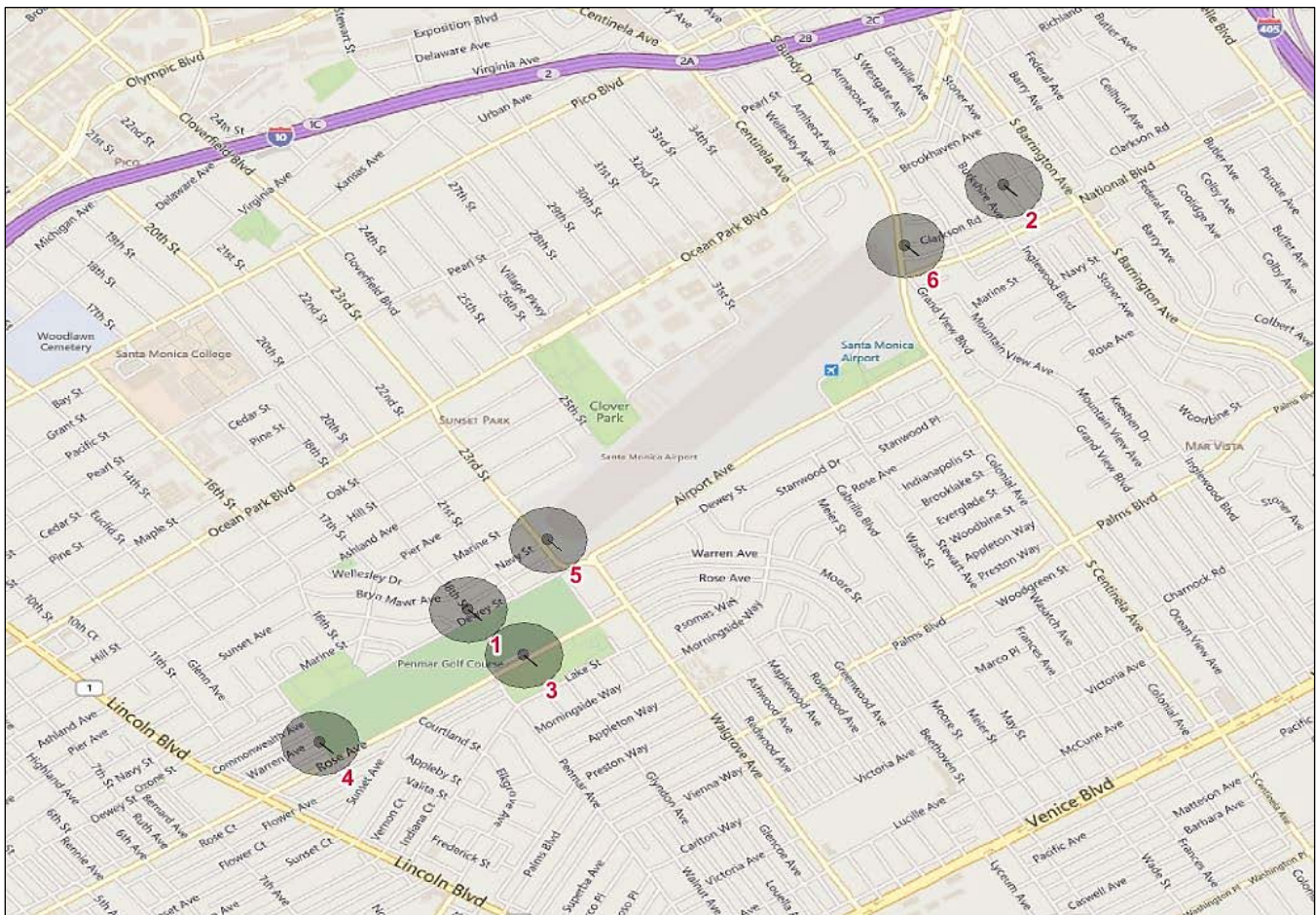
AIRCRAFT ENGINE CATEGORY LEGEND

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

DATE	TIME	NUMBER	TYPE	RWY	SENEL	RMS	COMPANY NAME	ACTION	ENGINE
12/19/20	13:12	N86303	C337	21	95.5	1	WESTERN SKYMASTERS	WARNING	P
12/22/20	11:37	N976DR	BKUT	21	96.2	1	N976DR LLC	\$5,000	P
12/24/20	15:03	N361TD	BE20	3	95.4	1	OPTIMAL AVIATION SERVICES LLC / PRIMAVERA MA	WARNING	T

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.

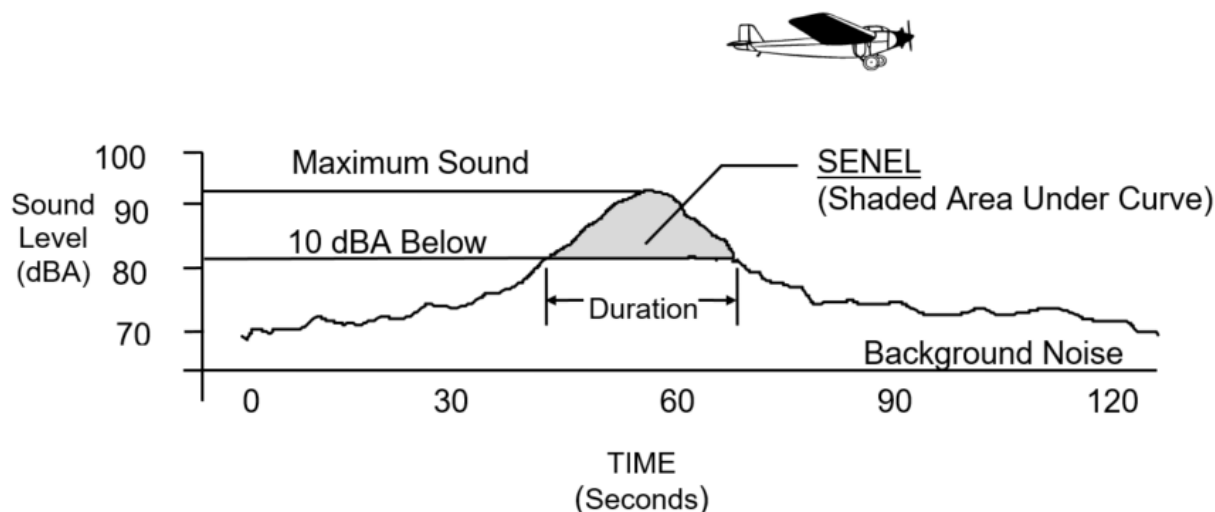
ATTACHMENT F (Single Event Noise Exposure Level)

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.