

Santa Monica Airport
Monthly Operations Report
October 2020



City of
Santa Monica™

Report prepared by:

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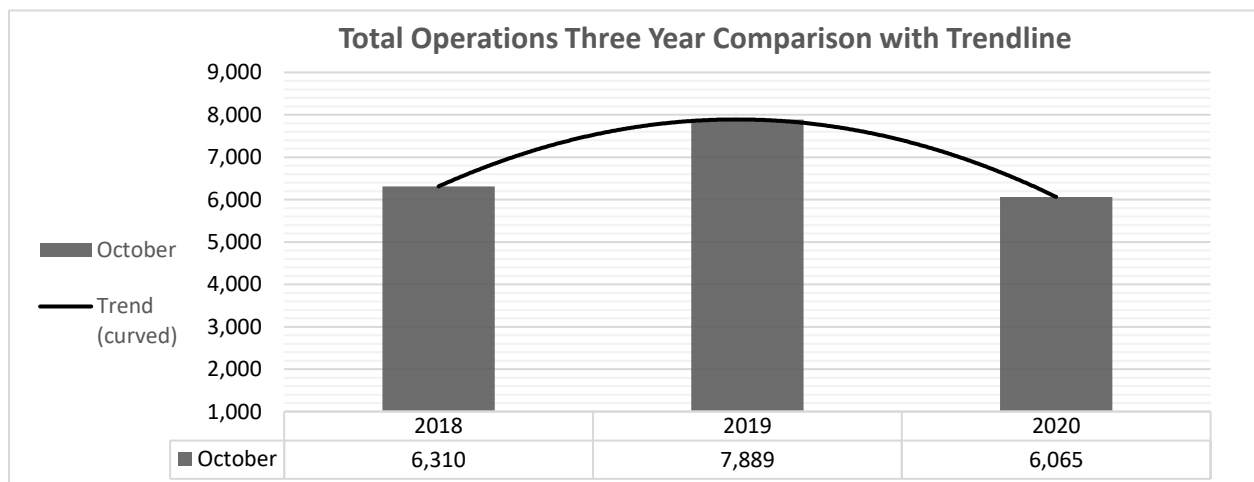
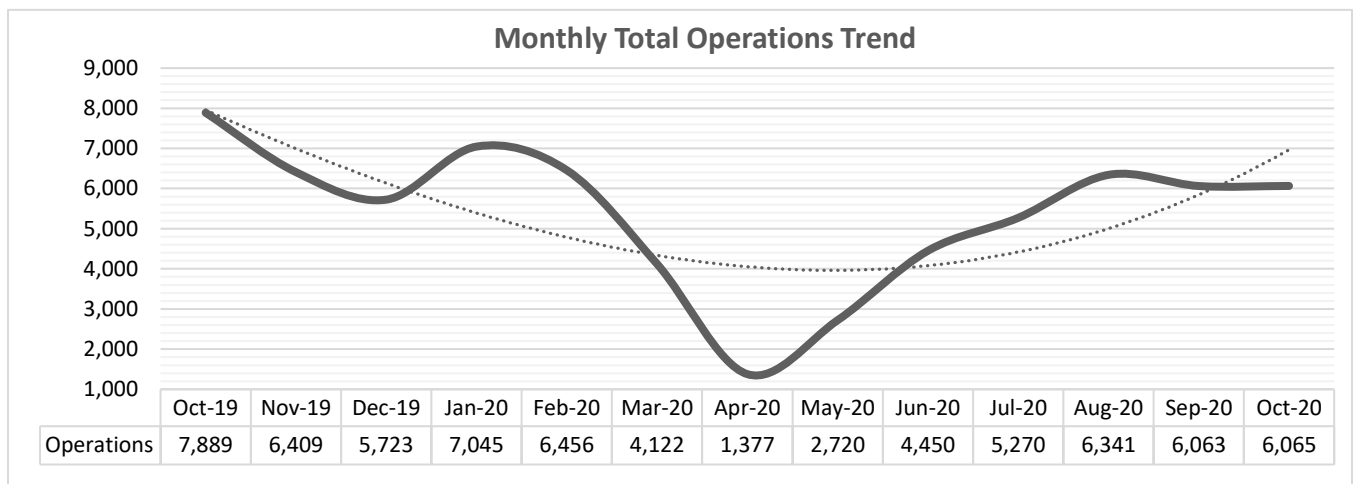
I. Introduction

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 October 2020.

II. Aircraft Operations Data

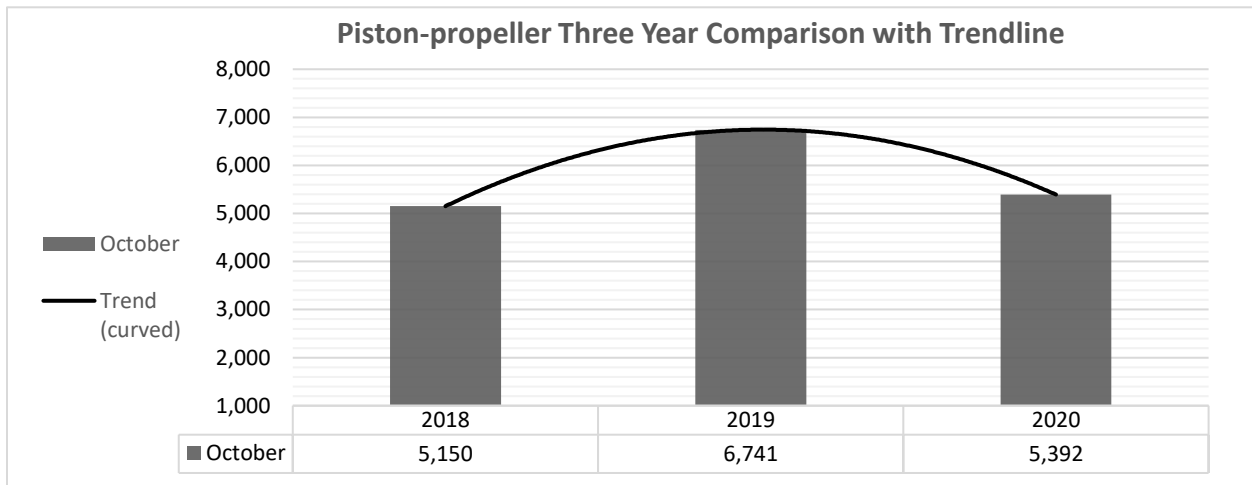
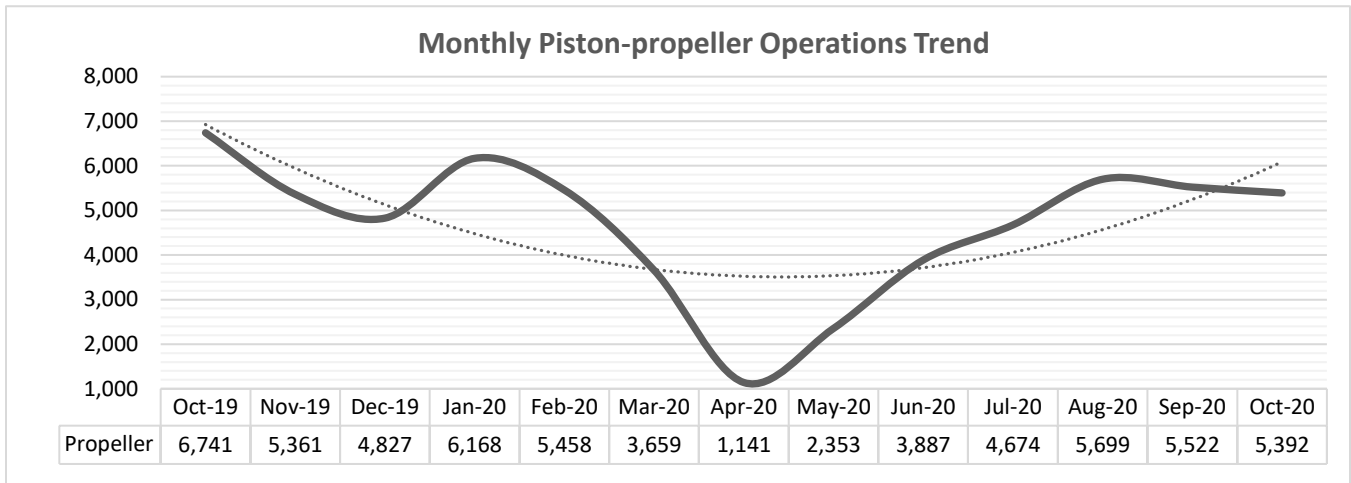
The total number of aircraft operations recorded during the month of October 2020 was 6,065 which represents a 23% decrease from the 7,889 operations recorded during October 2019. Approximately 11% of the operations were instrument flights (IFR transient), 51% were local flights (VFR local operations), and 38% 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.



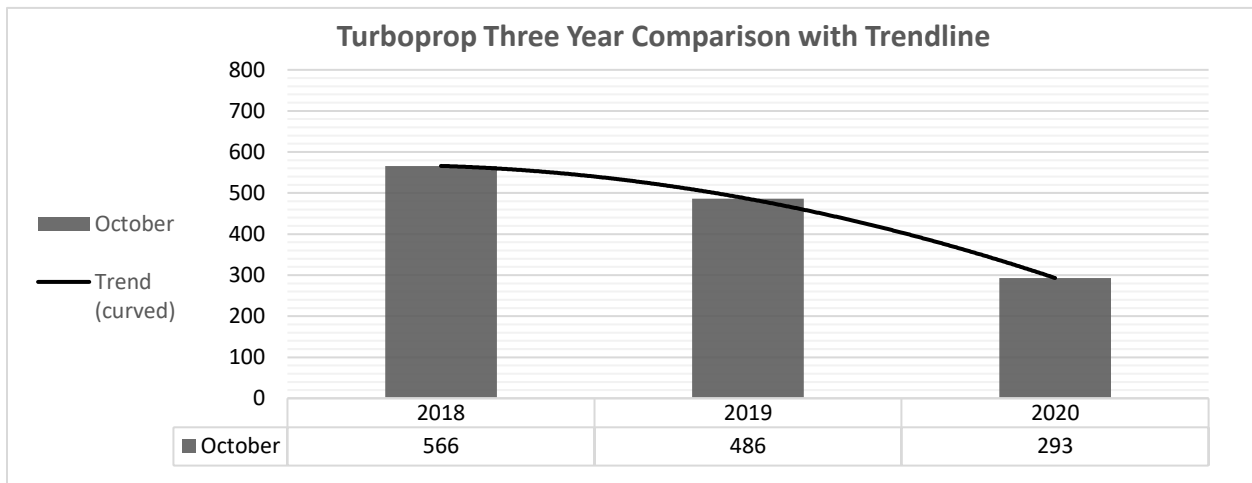
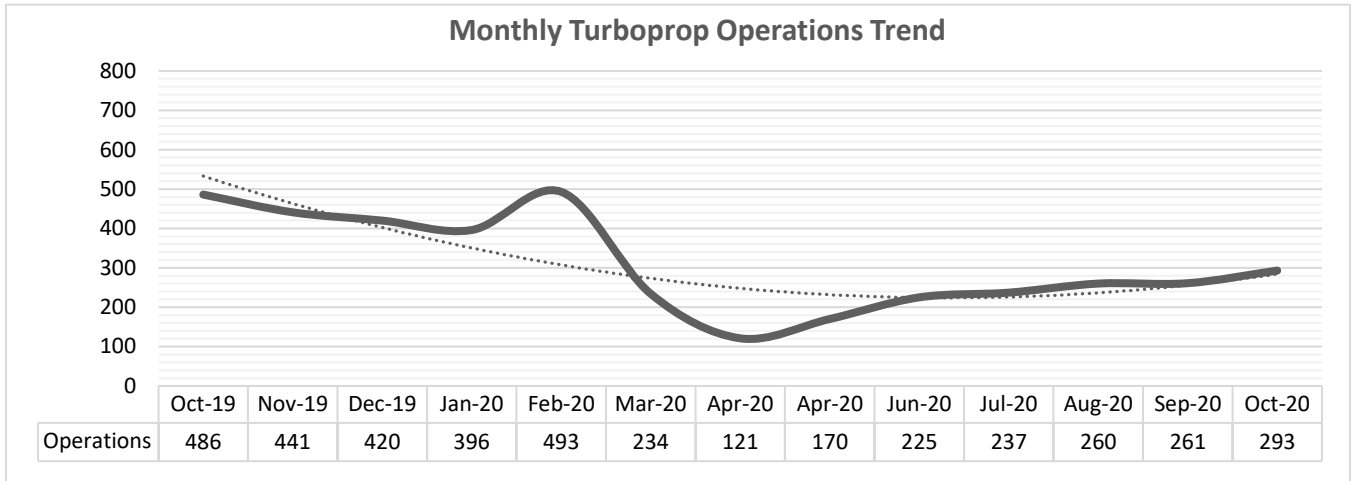
Piston-propeller Aircraft Operations

There were approximately 5,392 piston-propeller aircraft operations, comprising approximately 89% of the total operations. Piston-propeller aircraft operations for October 2020 decreased 20% from the 6,741 piston-propeller aircraft operations recorded during October 2019.



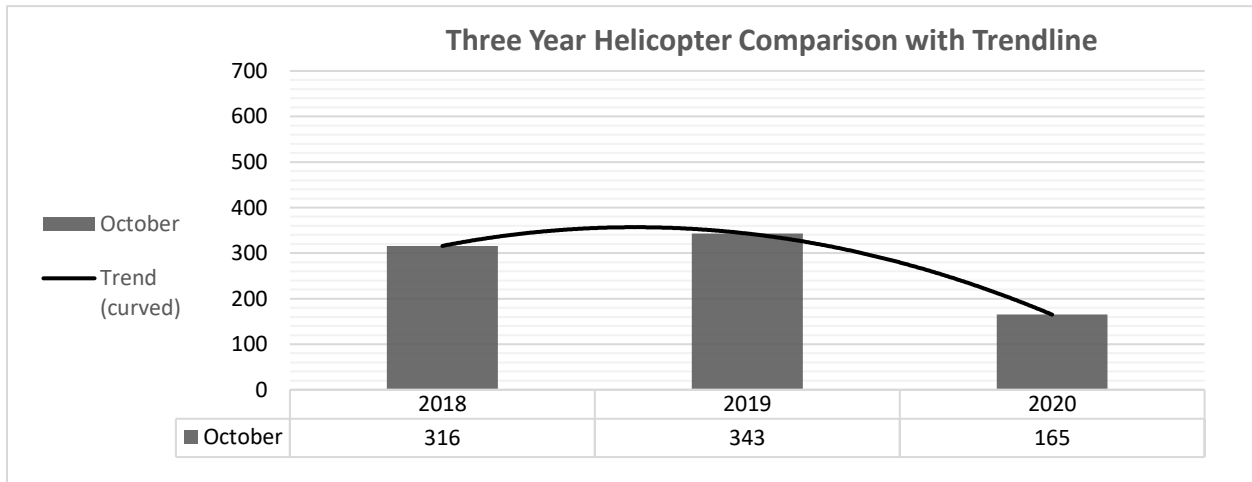
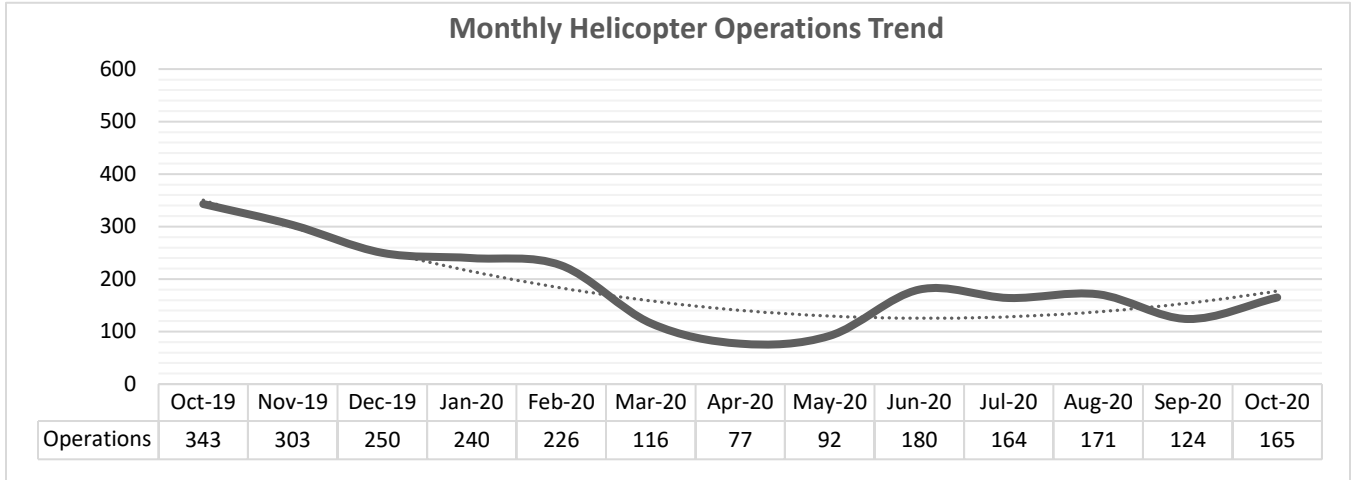
Turboprop Operations

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 October 2020, approximately were by 293 turboprop aircraft, comprising approximately 5% of the total operations. Turboprop aircraft operations decreased approximately 40% from the 486 operations recorded during October 2019.



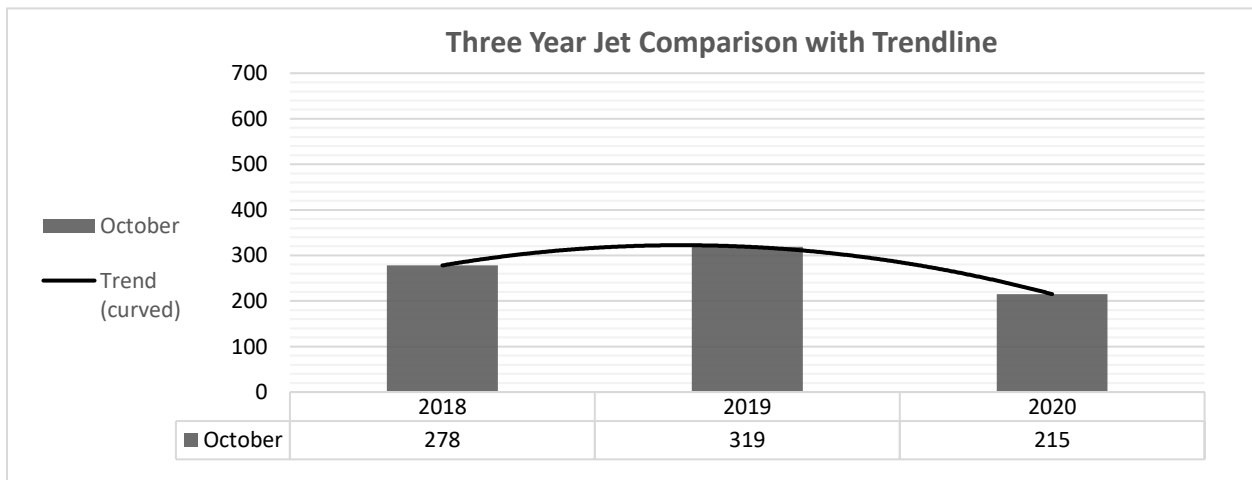
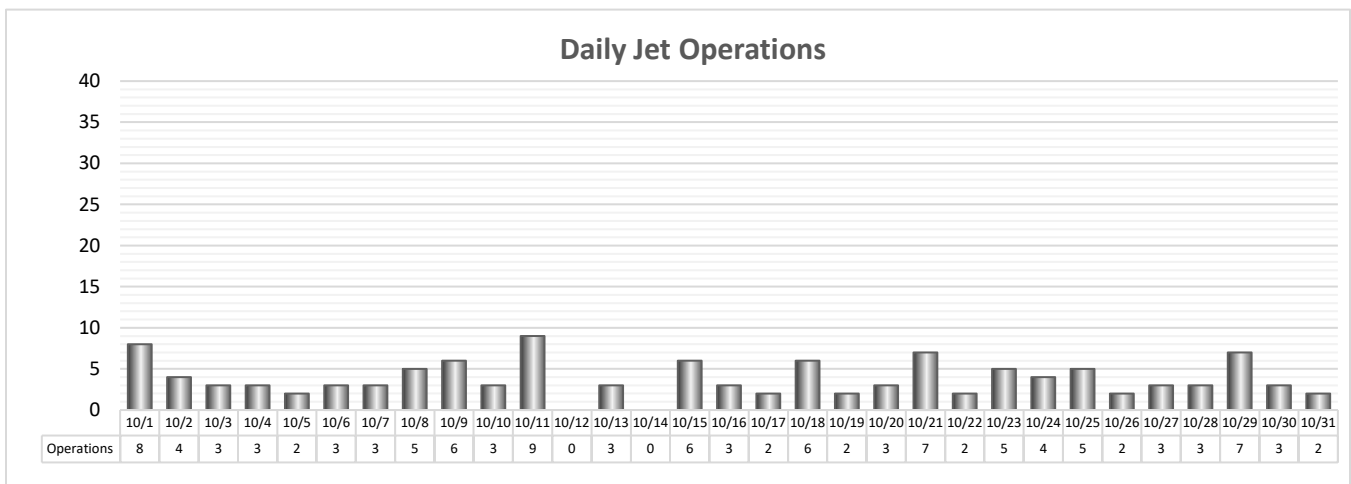
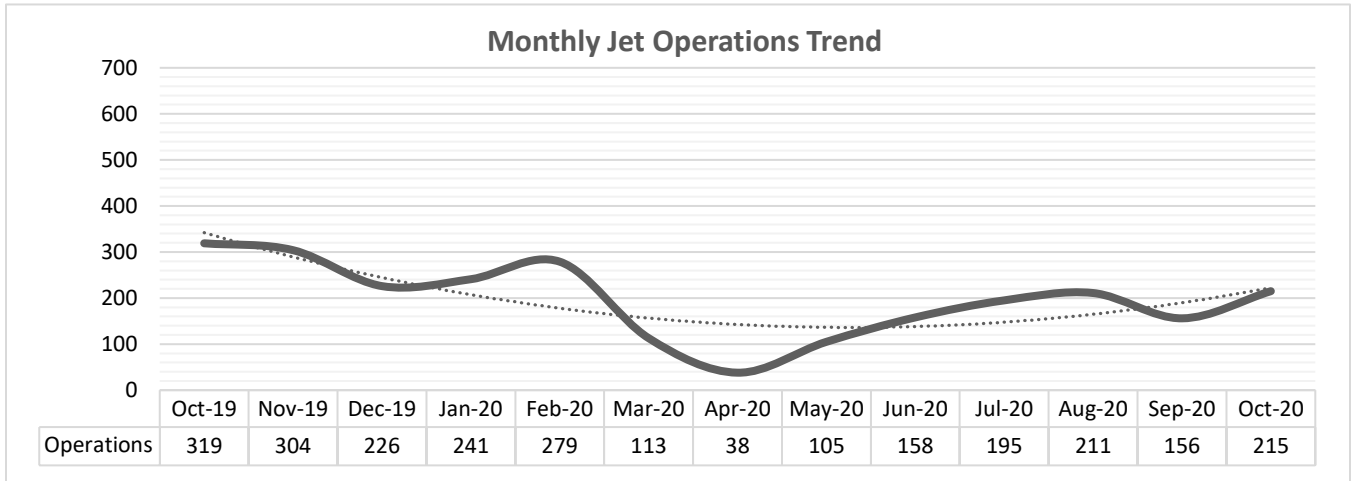
Helicopter Operations

Of the monthly aircraft operations for October 2020, approximately 165 operations were from helicopters, comprising approximately 3% of the total operations. Helicopter operations for October 2020 decreased 52% from the 343 helicopter operations recorded in October 2019.



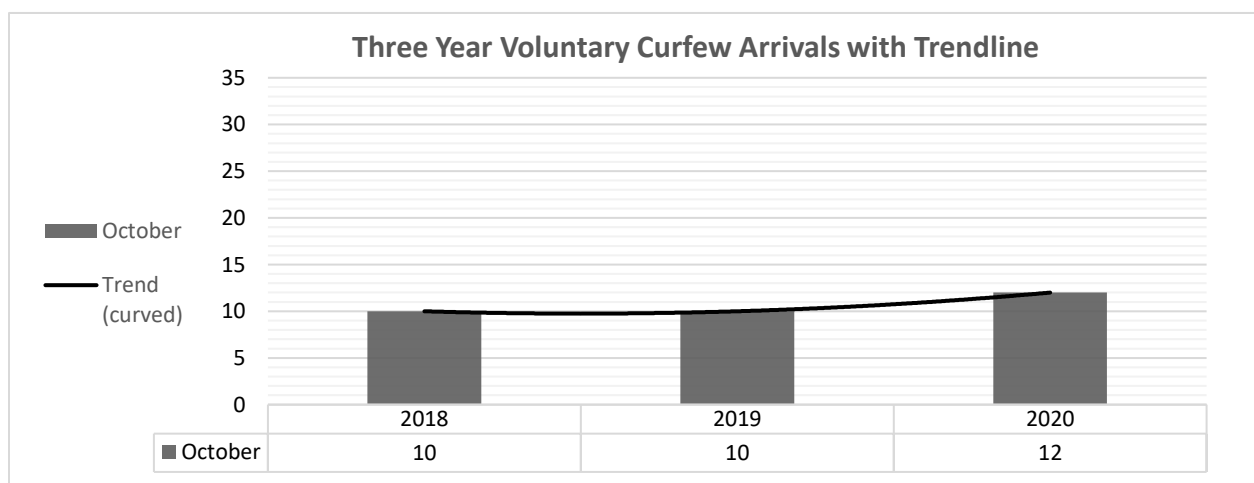
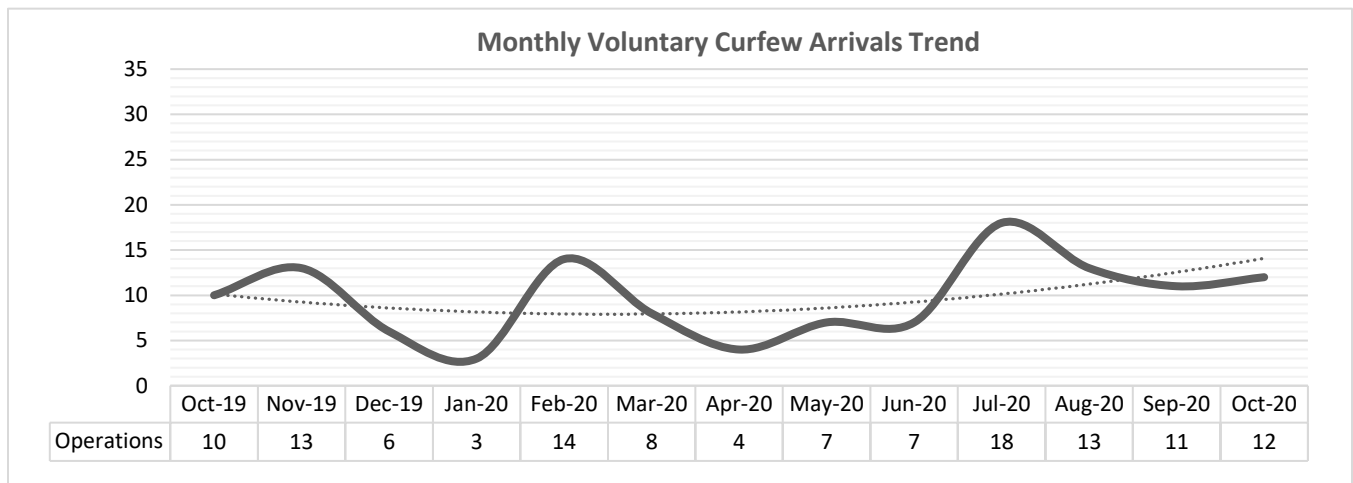
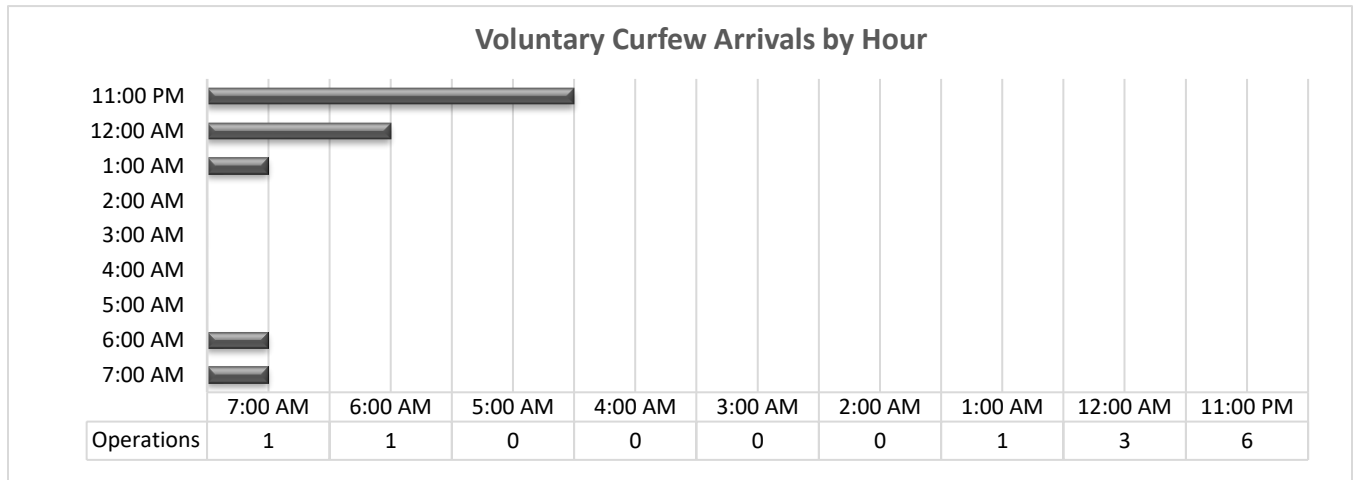
Jet Aircraft Operations

In October of 2020, there were approximately 215 jet operations, comprising approximately 4% of the total operations. Jet operations for October decreased 33% from the 319 jet aircraft operations recorded during October 2019. Daily jet operations significantly vary day over day. During the month of October 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 October 2020.



III. Voluntary Arrival Curfew

During the month of October 2020, Airport Staff logged a total of 12 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 October 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 October 2020, 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 October 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

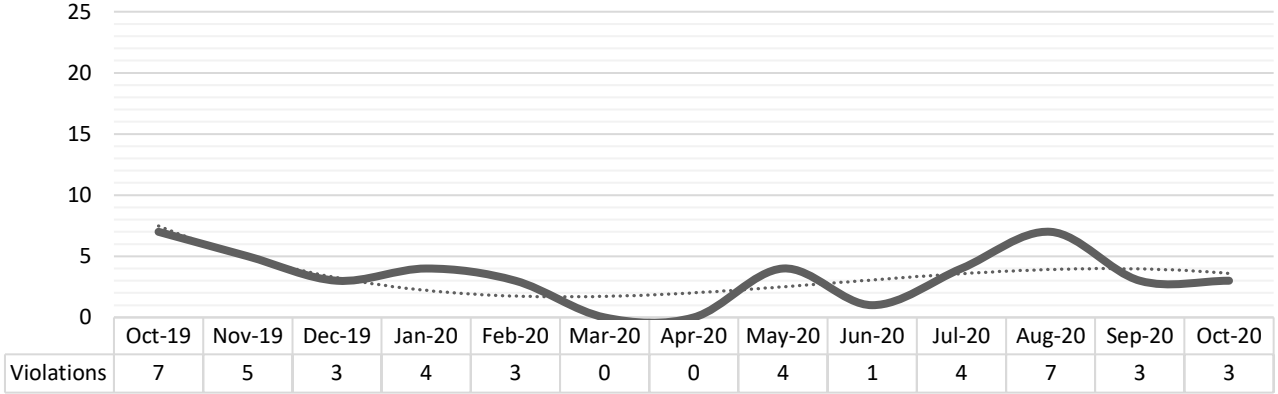
Santa Monica Airport enforces a maximum noise limit as approved by City Ordinance adopted in 1985. The Santa Monica Municipal Code section 10.04.04.060 states that "No aircraft shall exceed a Single Event Noise Exposure Level (SENEL) of 95.0 dBA as measured at the Airport Noise Measuring Stations existing on October 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 October 2020, there were 3 noise violations recorded which represent a 57% decrease from the 7 noise violation recorded during October 2019. A summary of noise violations for October 2020 is listed on attachment D. Of the 6,065 aircraft operations recorded during the month of October 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 exempt or medical emergency operations.

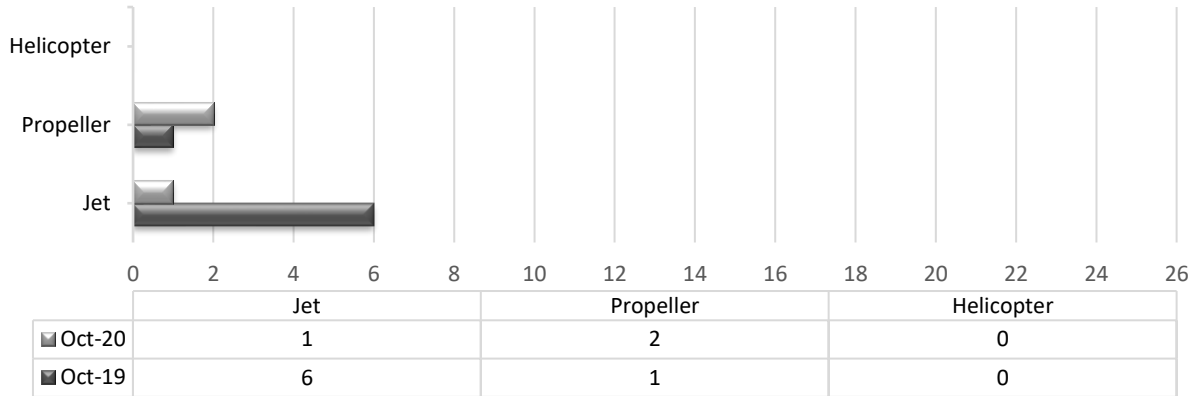
Violations Breakdown by Decibel Level

| 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 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 33% |
| Propeller | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 67% |
| Helicopter | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Total: | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 3 | |
| % | 33% | 33% | 33% | 0% | 0% | 0% | 0% | | 100% |

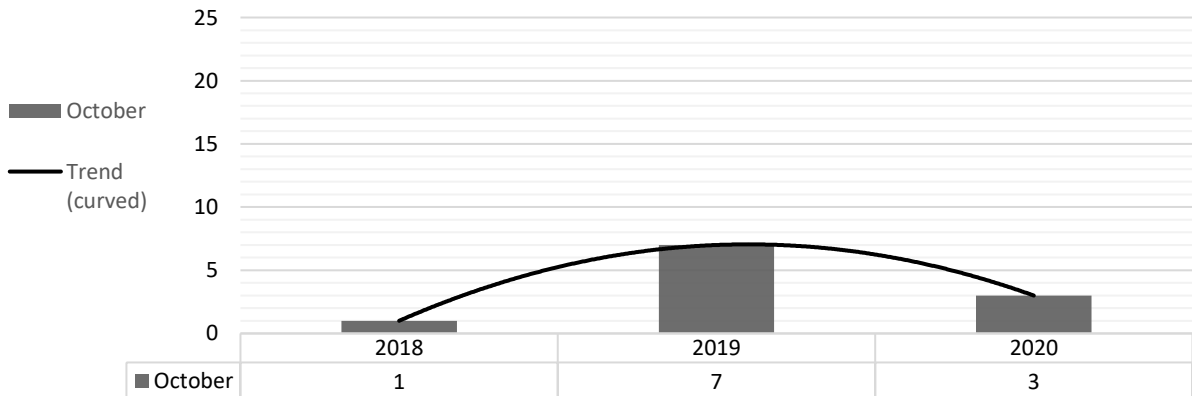
Monthly Noise Violations Trend



Noise Violations by Aircraft Category



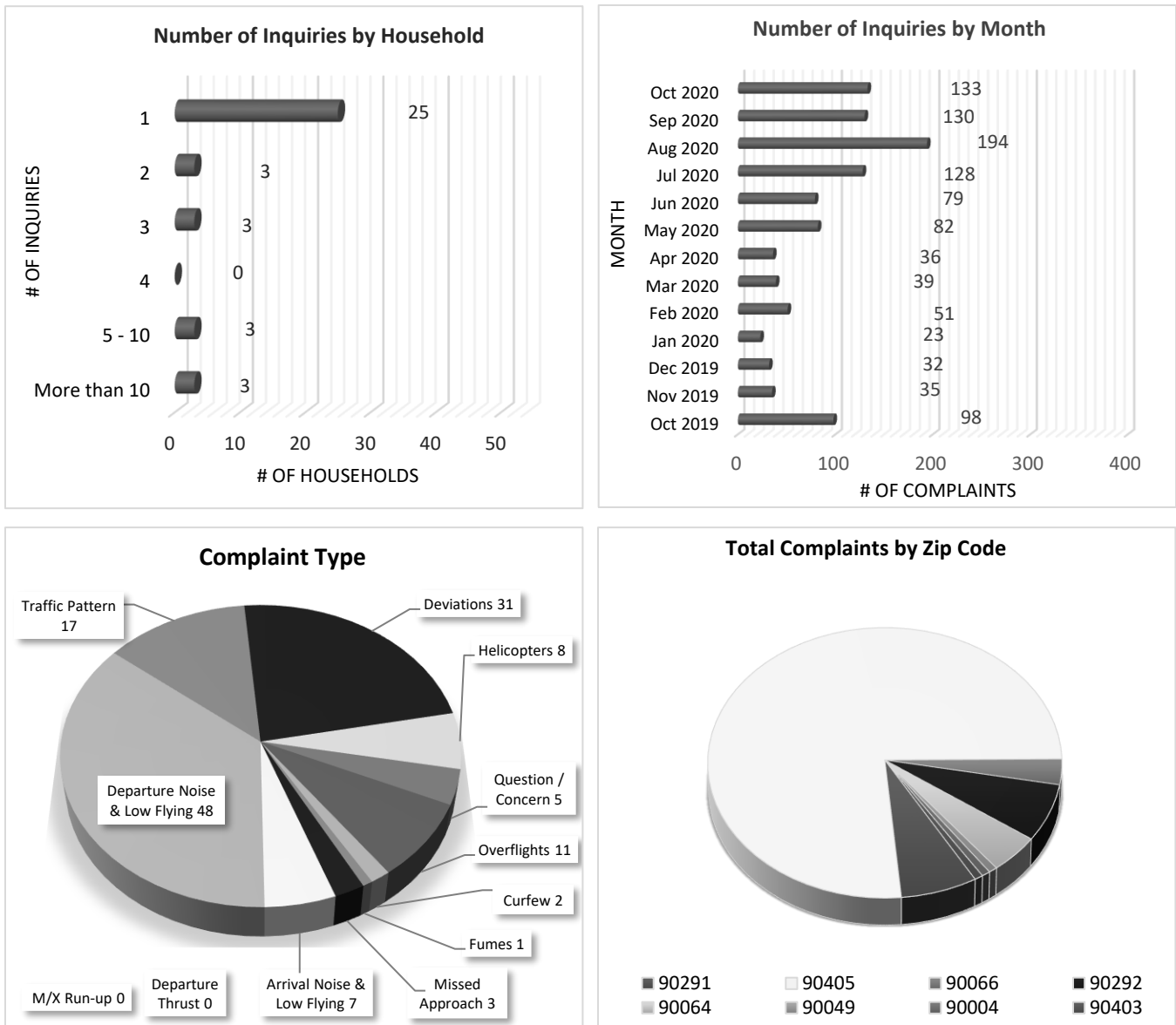
Three Year Noise Violations Comparison with Trendline



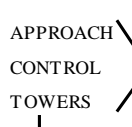

VIII. AIRCRAFT RELATED COMPLAINTS

During the month of October of 2020, 37 different households logged a total of 133 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 October 2020.

At the request of the Airport Commission, staff began tracking inquiries caused by the Airbus A320 aircraft series. From the 18 overflight reports recorded during October 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  <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 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 | | (47-51) |
| 1 | 0 | 5 | 92 | 0 | 97 | 120 | 0 | 120 | 217 | 217 |
| 2 | 0 | 11 | 117 | 0 | 128 | 121 | 0 | 121 | 249 | 466 |
| 3 | 0 | 1 | 81 | 0 | 82 | 69 | 0 | 69 | 151 | 617 |
| 4 | 0 | 8 | 113 | 0 | 121 | 84 | 0 | 84 | 205 | 822 |
| 5 | 0 | 4 | 66 | 0 | 70 | 86 | 0 | 86 | 156 | 978 |
| 6 | 0 | 2 | 72 | 0 | 74 | 31 | 0 | 31 | 105 | 1083 |
| 7 | 0 | 3 | 67 | 0 | 70 | 46 | 0 | 46 | 116 | 1199 |
| 8 | 0 | 14 | 71 | 0 | 85 | 100 | 0 | 100 | 185 | 1384 |
| 9 | 0 | 6 | 97 | 0 | 103 | 211 | 0 | 211 | 314 | 1698 |
| 10 | 0 | 4 | 108 | 0 | 112 | 131 | 0 | 131 | 243 | 1941 |
| 11 | 0 | 7 | 119 | 0 | 126 | 23 | 0 | 23 | 149 | 2090 |
| 12 | 0 | 6 | 89 | 0 | 95 | 81 | 0 | 81 | 176 | 2266 |
| 13 | 0 | 4 | 93 | 0 | 97 | 103 | 0 | 103 | 200 | 2466 |
| 14 | 0 | 3 | 102 | 0 | 105 | 162 | 0 | 162 | 267 | 2733 |
| 15 | 0 | 6 | 107 | 0 | 113 | 77 | 0 | 77 | 190 | 2923 |
| 16 | 0 | 8 | 88 | 0 | 96 | 107 | 0 | 107 | 203 | 3126 |
| 17 | 0 | 2 | 128 | 0 | 130 | 56 | 0 | 56 | 186 | 3312 |
| 18 | 0 | 9 | 80 | 0 | 89 | 43 | 0 | 43 | 132 | 3444 |
| 19 | 0 | 4 | 52 | 0 | 56 | 24 | 0 | 24 | 80 | 3524 |
| 20 | 0 | 6 | 59 | 0 | 65 | 14 | 0 | 14 | 79 | 3603 |
| 21 | 0 | 5 | 55 | 0 | 60 | 12 | 0 | 12 | 72 | 3675 |
| 22 | 0 | 2 | 78 | 0 | 80 | 212 | 0 | 212 | 292 | 3967 |
| 23 | 0 | 12 | 75 | 0 | 87 | 187 | 0 | 187 | 274 | 4241 |
| 24 | 0 | 2 | 86 | 0 | 88 | 90 | 0 | 90 | 178 | 4419 |
| 25 | 0 | 2 | 82 | 0 | 84 | 85 | 0 | 85 | 169 | 4588 |
| 26 | 0 | 7 | 26 | 0 | 33 | 18 | 0 | 18 | 51 | 4639 |
| 27 | 0 | 6 | 55 | 0 | 61 | 111 | 0 | 111 | 172 | 4811 |
| 28 | 0 | 5 | 121 | 0 | 126 | 53 | 0 | 53 | 179 | 4990 |
| 29 | 0 | 8 | 77 | 0 | 85 | 69 | 0 | 69 | 154 | 5144 |
| 30 | 0 | 5 | 106 | 0 | 111 | 70 | 0 | 70 | 181 | 5325 |
| 31 | 0 | 4 | 86 | 0 | 90 | 32 | 0 | 32 | 122 | 5447 |
| TOTAL | 0 | | | | 2819 | 2628 | 0 | 2628 | 5447 | |

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 | 4 | 13 | 0 | (16-19) | 17 | | | |
| 2 | 0 | 10 | 10 | 0 | (20-23) | 20 | | | |
| 3 | 0 | 1 | 5 | 0 | (24-27) | 6 | | | |
| 4 | 0 | 7 | 15 | 0 | (28-31) | 22 | | | |
| 5 | 0 | 4 | 15 | 0 | (32-35) | 19 | | | |
| 6 | 0 | 3 | 10 | 0 | (36-39) | 13 | | | |
| 7 | 0 | 3 | 15 | 0 | (40-43) | 18 | | | |
| 8 | 0 | 10 | 28 | 0 | (44-47) | 38 | | | |
| 9 | 0 | 5 | 35 | 0 | (48-51) | 40 | | | |
| 10 | 0 | 4 | 22 | 0 | (52-55) | 26 | | | |
| 11 | 0 | 7 | 17 | 0 | (56-59) | 24 | | | |
| 12 | 0 | 2 | 9 | 0 | (60-63) | 11 | | | |
| 13 | 0 | 5 | 10 | 0 | (64-67) | 15 | | | |
| 14 | 0 | 2 | 5 | 0 | (68-71) | 7 | | | |
| 15 | 0 | 5 | 17 | 0 | (72-75) | 22 | | | |
| 16 | 0 | 8 | 5 | 0 | (76-79) | 13 | | | |
| (14-2) | | | | | | | | | |
| 17 | 0 | 2 | 13 | 0 | (16-19) | 15 | | | |
| 18 | 0 | 9 | 20 | 0 | (20-23) | 29 | | | |
| 19 | 0 | 2 | 15 | 0 | (24-27) | 17 | | | |
| 20 | 0 | 6 | 31 | 0 | (28-31) | 37 | | | |
| 21 | 0 | 5 | 33 | 0 | (32-35) | 38 | | | |
| 22 | 0 | 1 | 31 | 0 | (36-39) | 32 | | | |
| 23 | 0 | 12 | 34 | 0 | (40-43) | 46 | | | |
| 24 | 0 | 2 | 31 | 0 | (44-47) | 33 | | | |
| 25 | 0 | 2 | 26 | 0 | (48-51) | 28 | | | |
| 26 | 0 | 4 | 5 | 0 | (52-55) | 9 | | | |
| 27 | 0 | 9 | 14 | 0 | (56-59) | 23 | | | |
| 28 | 0 | 3 | 19 | 0 | (60-63) | 22 | | | |
| 29 | 0 | 10 | 11 | 0 | (64-67) | 21 | | | |
| 30 | 0 | 4 | 18 | 0 | (68-71) | 22 | | | |
| 31 | 0 | 2 | 11 | 0 | (72-75) | 13 | | | |
| TOTAL | 0 | 153 | 543 | 0 | | 696 | | | |
| | (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 |
|----------|-------|--------|------|-----|-------|-----|------------------------|--------|
| 10/3/20 | 0:05 | N9378D | C72R | 21 | 74.7 | 2 | ANDDEN AVIATION LLC | P |
| 10/5/20 | 23:56 | N273NF | SR22 | 21 | 73.4 | 2 | PEAK AERO | P |
| 10/6/20 | 23:09 | UNKN | SR20 | 21 | 77.5 | 2 | UNKNOWN | P |
| 10/9/20 | 0:23 | N417C | C25C | 21 | 84.5 | 2 | GLASS AVIATION | J |
| 10/9/20 | 23:43 | N9378D | C72R | 21 | 75.9 | 2 | ANDDEN AVIATION LLC | P |
| 10/10/20 | 1:47 | N63KA | SR22 | 21 | 77.3 | 2 | CAERUS AVIATION INC | P |
| 10/11/20 | 0:14 | N417C | C25C | 21 | 81.3 | 2 | GLASS AVIATION | J |
| 10/16/20 | 23:54 | N9378D | C172 | 21 | 76.2 | 2 | ANDDEN AVIATION LLC | P |
| 10/20/20 | 23:16 | N505DE | FA50 | 21 | 86.0 | 2 | GLASS AVIATION | J |
| 10/25/20 | 7:53 | N9877T | C172 | 21 | DNR | 2 | IVAN A MARKS | P |
| 10/26/20 | 23:50 | N885LV | AC90 | 21 | 83.8 | 2 | SKY WEST AVIATION INC. | T |
| 10/28/20 | 6:39 | N721BB | R44 | 21 | DNR | 2 | ORBIC AIR LLC | H |

ATTACHMENT C
(Authorized Departures & Curfew Violations)

Authorized Curfew Departures

| DATE | TIME | NUMBER | TYPE | OPERATION | RUNWAY |
|---------|-------|--------|------|-------------|--------|
| 10/7/20 | 23:33 | N481HC | BE20 | LIFE FLIGHT | 21 |

Curfew Violations

NONE

ATTACHMENT D
(Aircraft Noise Violations)

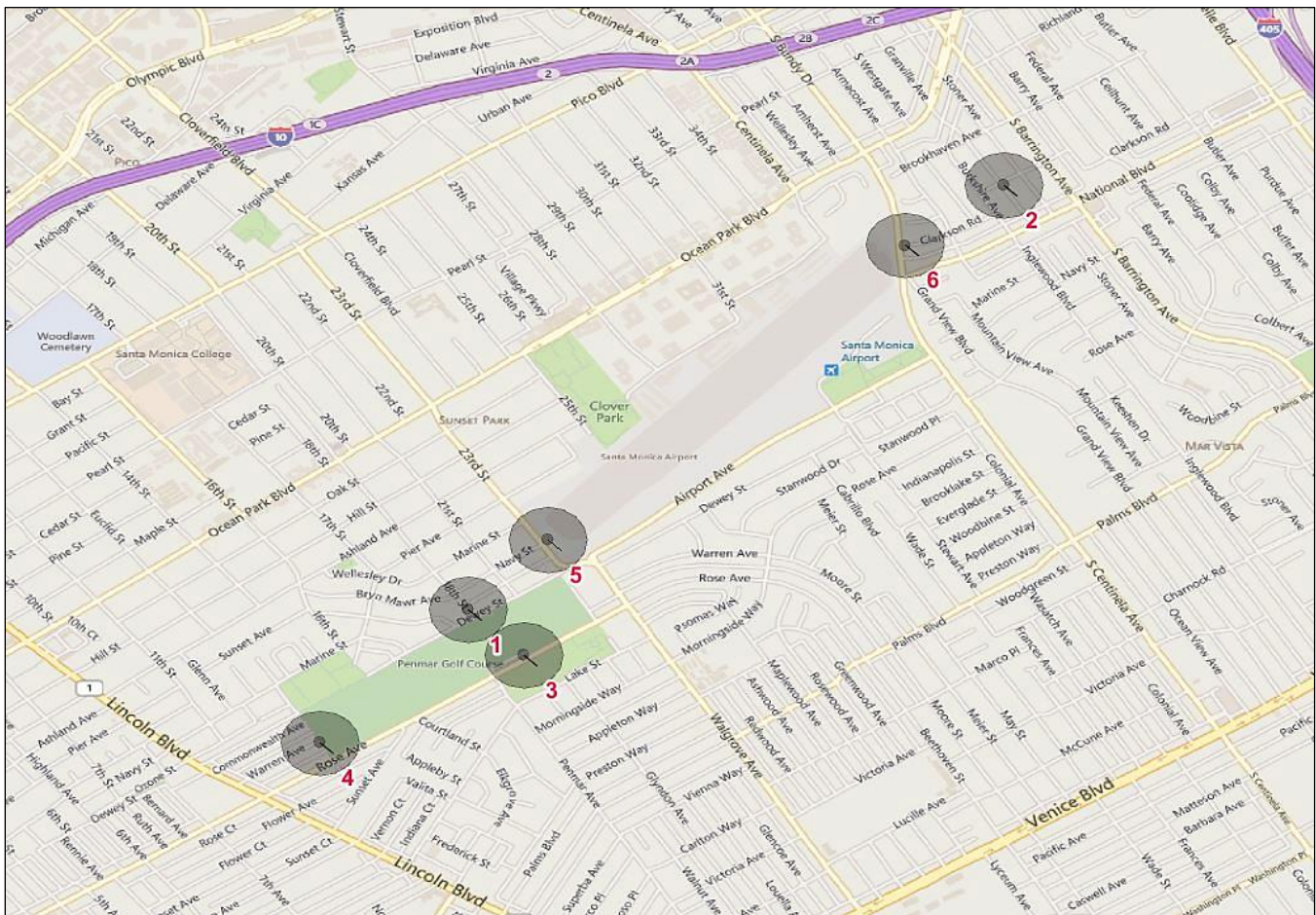
AIRCRAFT ENGINE CATEGORY LEGEND

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

| DATE | TIME | NUMBER | TYPE | RWY | SENEL | RMS | COMPANY NAME | ACTION | ENGINE |
|----------|-------|--------|------|-----|-------|-----|-------------------|---------|--------|
| 10/9/20 | 09:42 | N525LH | C525 | 21 | 96.4 | 1 | BOBAIR LLC | WARNING | J |
| 10/11/20 | 13:17 | N925DJ | BE50 | 21 | 97.7 | 1 | FLOW AVIATION LLC | WARNING | P |
| 10/18/20 | 12:46 | N8675Y | PA30 | 21 | 95.7 | 1 | DANIEL KATZ | 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.

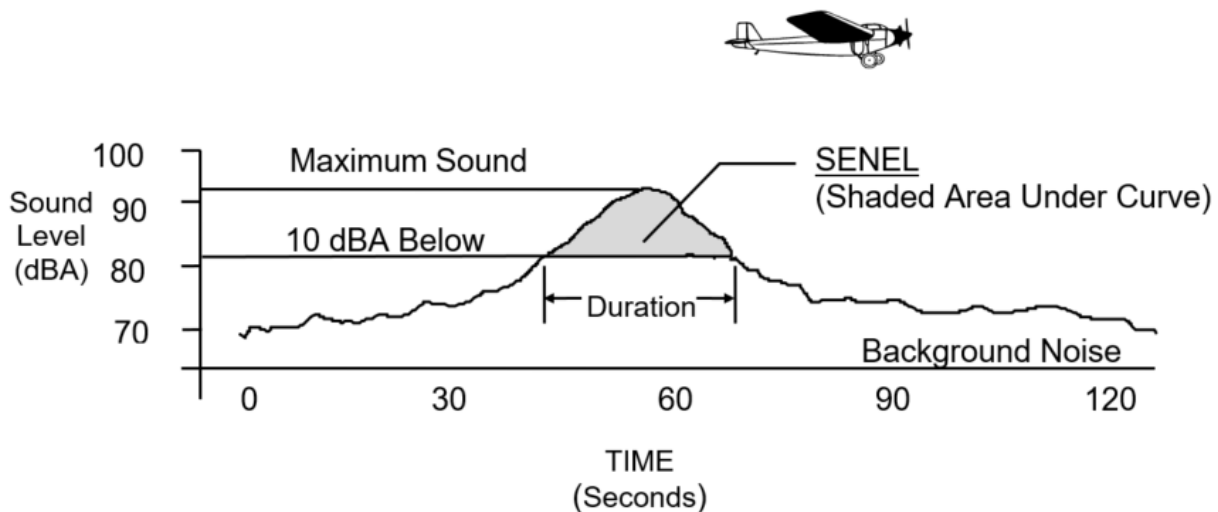
ATTACHMENT F (Single Event Noise Exposure Level)

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.