

NOISE ABATEMENT PROGRAM

QUARTERLY REPORT

For the period:
April 1, 2018 through June 30, 2018

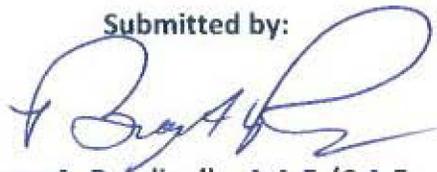
Prepared in accordance with:

AIRPORT NOISE STANDARD

STATE OF CALIFORNIA

California Administrative Code Title 21,
Chapter 2.5, SubChapter 6:
Division of Aeronautics
Noise Standards

Submitted by:



Barry A. Rondinella, A.A.E./C.A.E.
Airport Director
John Wayne Airport, Orange County



INTRODUCTION

This is the 182nd Quarterly Report submitted by the County of Orange in accordance with the requirements of the California Airport Noise Standards (California Administrative Code Title 21, Chapter 2.5, SubChapter 6: Division of Aeronautics Noise Standards). Effective January 1, 1986, the criteria for defining "Noise Impact Area" was changed from 70 dB to 65 dB Community Noise Equivalent Level (CNEL). Under this criteria, John Wayne Airport currently has a "Noise Impact Area."

NOISE IMPACT SUMMARY

Caltrans' Aeronautics Program has established guidelines in the California State Noise Standard to control residential area noise levels produced by aircraft operations using the State's airports. Under those guidelines, residential noise sensitive areas exposed to an average Community Noise Equivalent Level (CNEL) of more than 65 dB define the "Noise Impact Area." John Wayne Airport uses ten permanent remote noise monitoring stations (NMS) located in Newport Beach, Santa Ana, Tustin and Irvine to measure noise levels, at the following locations:

MONITOR STATIONS

- | | |
|--|--|
| NMS-1S: Golf Course, 3100 Irvine Ave., Newport Beach | NMS-6S: 1912 Santiago, Newport Beach |
| NMS-2S: 20162 S.W. Birch St., Newport Beach | NMS-7S: 1131 Back Bay Drive, Newport Beach |
| NMS-3S: 2139 Anniversary Lane, Newport Beach | NMS-8N: 17372 Eastman Street, Irvine |
| NMS-4S: 2338 Tustin Ave., Newport Beach | NMS-9N: 1300 S. Grand Avenue, Santa Ana |
| NMS-5S: 324 ½ Vista Madera, Newport Beach | NMS-10N: 17952 Beneta Way, Tustin |

The map in Figure 1 shows the general location of each permanent remote monitor station.

Figure 2 shows the Airport's "Noise Impact Area" for the previous year (July 1, 2017 - June 30, 2018). The Figure 2 information was developed by Landrum and Brown, in consultation with John Wayne Airport. CNEL values measured for the period and current digitized land use information were utilized to calculate the land area acreages, number of residences and estimated number of people within the "Noise Impact Area".

FIGURE 1
NOISE MONITORING STATIONS (NMS)
LOCATION MAP

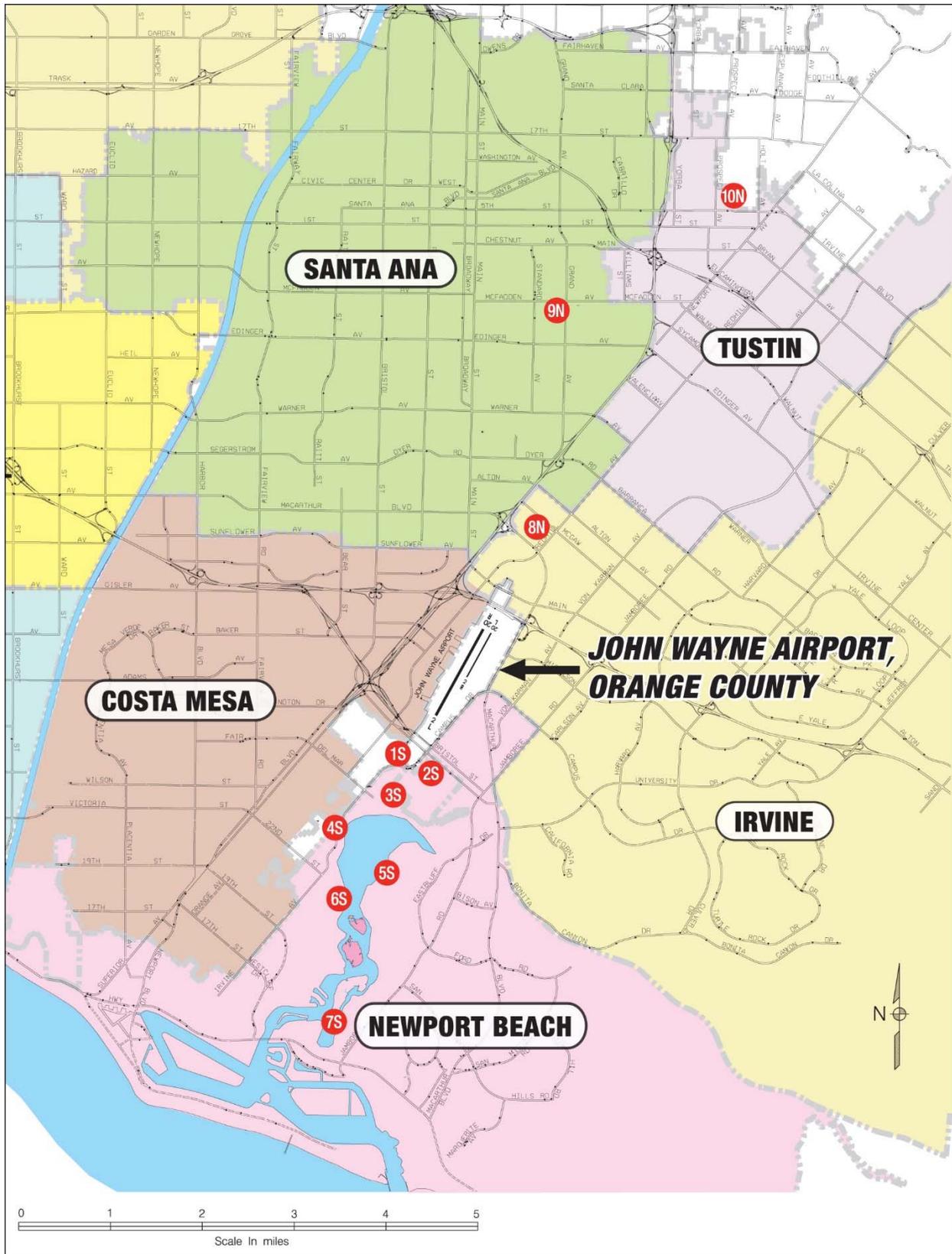


FIGURE 2



AIRCRAFT TRAFFIC SUMMARY

The Airport traffic summary for this quarter is shown in Table 1 below. Air Carrier operational count histories and average daily departure counts are illustrated in Tables 9 & 11.

TABLE 1
LANDING AND TAKEOFF OPERATIONS
April - June 2018

Period	Air Carriers		GA Jet (1)	Total Operations (2)	Average Daily Jet Operations
	Jet	Prop			
April	7,548	60	2,932	24,999	349
May	7,873	62	3,058	26,572	353
June	7,892	60	3,081	26,643	366
Second Quarter	23,313	182	9,071	78,214	356
Twelve Months 07/01/17 - 06/30/18	90,960	1,100	35,532	302,303	347

NOTE: (1) GA Jet figures include a 5% factor for operations not identified by the JWA noise monitor stations.

(2) Counts in this column are based upon records provided by the local FAA representatives.

COMMUNITY NOISE EQUIVALENT LEVELS

The monthly, quarterly and twelve month Community Noise Equivalent Level (CNEL) average values for each monitor station are shown in Table 2, while daily CNEL values are shown in Tables 3 through 5. Insufficient data is indicated by “#N/A” entries in each table. Also, “*#N/A” entries in each table indicate there were no aircraft related noise events.

Average Single Event Noise Exposure Level (SENEL) values for Air Carrier and General Aviation Jet aircraft are shown in Tables 6 through 8.

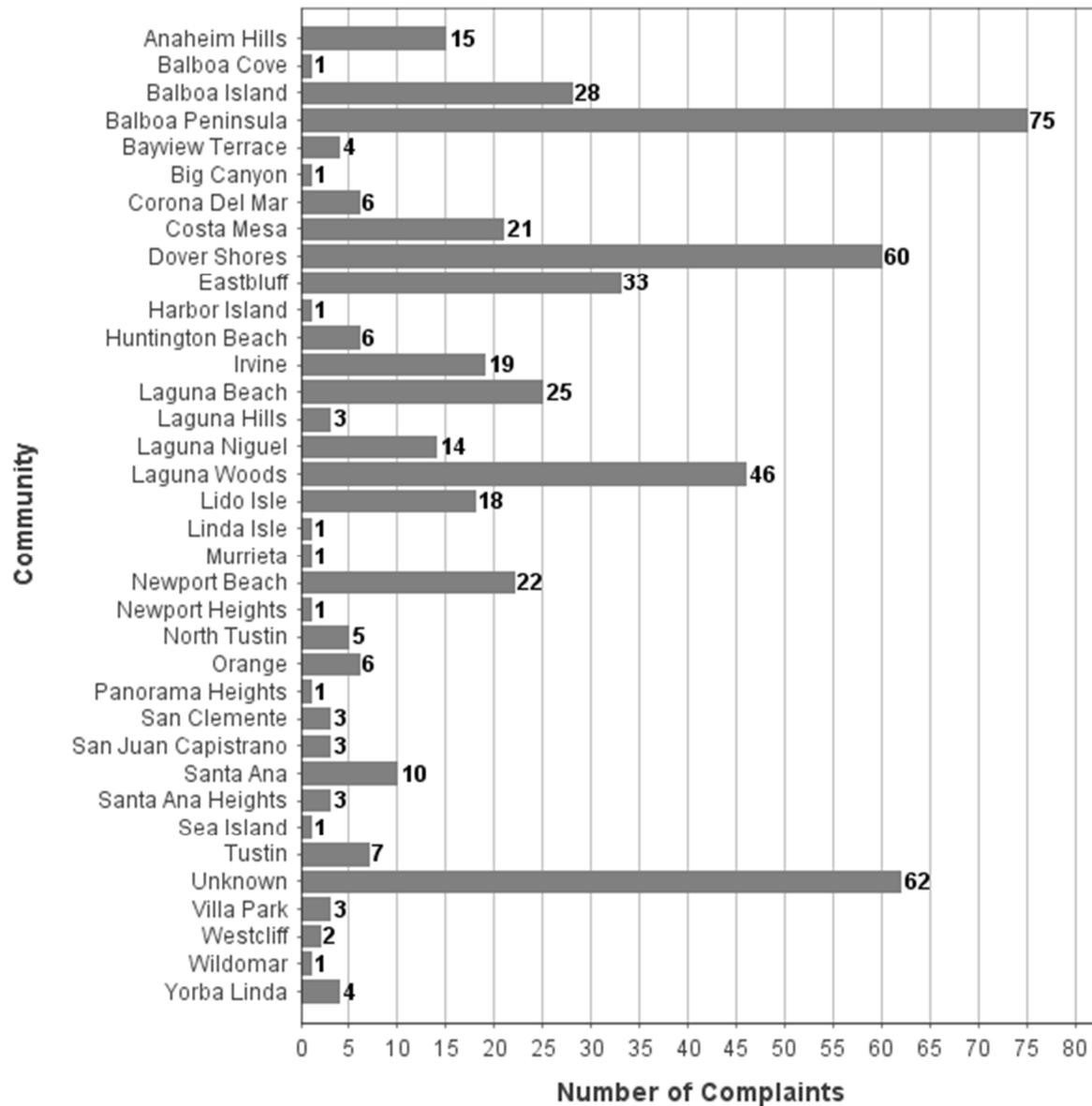
ACOUSTICAL INSULATION PROGRAM

Four hundred eighteen residences in the Santa Ana Heights area have been sound attenuated and an avigation easement reserved through the County’s Acoustical Insulation Program, which closed in December 2009. The County has also acquired 46 residences as part of the Purchase Assurance Program, many of which were acoustically insulated, an avigation easement reserved and then resold. Among these County acquired homes, those located within areas designated for Business Park uses were razed, avigation easements were reserved, and the land resold for compatible Business Park uses. A total of 464 residences in the Santa Ana Heights area have been purchased or otherwise made compatible through the County’s Purchase Assurance and Acoustical Insulation Programs. Seventy-seven dwelling units in Santa Ana Heights remain in the “Noise Impacted Area” (within 65 dB CNEL contour).

COMPLAINT TOTALS (April 1, 2018 - June 30, 2018)

The Airport's Access and Noise Office receives and investigates noise complaints from local citizens and all other sources. During the April 1, 2018 through June 30, 2018, the Office received 512 complaints from local citizens. This is a 24.9% increase from the 410 complaints received last quarter. It is a 27.7% increase from the 401 complaints received during the same quarter last year. Figure 4 shows the distribution of the quarterly complaints from local communities.

FIGURE 3
HISTOGRAM BY COMMUNITY



Notes:

- City of Newport Beach – 257 total complaints.
- 75% of the complaints from the “Balboa Peninsula” category were from one household.
- 53% of the complaints from the “Dover Shores” category were from one household.
- 72% of the complaints from the “Laguna Beach” category were from one household.
- 100% of the complaints from the “Laguna Woods” category were from one household.
- 84% of the complaints from the “Unknown” category were from one household.

TABLE 2
LONG TERM MEASURED LEVELS
Aircraft CNEL from 07/01/17 through 06/30/18
Values in dB at Each Site

Period	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Jul 2017	68.0	67.0	66.6	59.1	59.0	60.1	56.2	68.0	43.3	54.9
# Days	27	31	31	31	31	31	31	31	29	31
Aug 2017	68.4	67.4	67.0	59.6	59.5	60.6	56.7	68.3	43.3	55.4
# Days	31	31	31	31	31	31	31	31	24	31
Sep 2017	68.0	67.1	66.6	59.3	59.4	60.4	56.7	67.8	42.2	55.1
# Days	30	30	30	30	30	30	30	30	28	30
Q-3 2017	68.1	67.2	66.8	59.3	59.3	60.3	56.5	68.0	43.0	55.2
# Days	88	92	81	92						
Oct 2017	68.1	67.0	66.8	59.6	59.2	60.7	56.7	68.0	45.0	55.8
# Days	31	31	31	31	26	31	30	31	26	31
Nov 2017	68.4	67.4	67.0	60.1	59.4	60.7	56.9	68.0	43.4	56.4
# Days	30	30	30	30	30	30	22	30	30	30
Dec 2017	66.7	65.7	66.3	57.9	57.3	60.6	54.4	66.7	43.4	54.5
# Days	31	31	31	31	31	31	31	31	26	27
Q-4 2017	67.8	66.8	66.7	59.3	58.7	60.7	56.0	67.6	44.0	55.7
# Days	92	92	92	92	87	92	83	92	82	88
Jan 2018	67.8	66.8	66.3	59.6	59.2	60.5	56.4	67.5	44.0	55.6
# Days	31	31	31	31	31	31	31	31	31	31
Feb 2018	67.7	66.9	66.1	59.8	59.3	60.4	56.6	67.5	44.5	56.0
# Days	28	28	28	28	28	28	28	28	28	28
Mar 2018	68.2	67.4	66.5	60.3	59.8	60.7	57.4	68.3	43.2	57.0
# Days	31	30	31	31	31	31	31	31	29	31
Q-1 2018	67.9	67.0	66.3	59.9	59.4	60.6	56.9	67.8	43.9	56.3
# Days	90	89	90	90	90	90	90	90	88	90
Apr 2018	68.3	67.5	66.5	60.3	59.8	60.8	57.3	68.3	42.7	57.1
# Days	30	30	30	30	30	30	30	30	29	30
May 2018	68.5	67.6	66.7	60.9	60.1	60.9	57.5	68.7	49.4	57.8
# Days	31	31	31	31	31	31	31	31	25	31
Jun 2018	68.6	67.6	67.0	60.7	60.1	60.9	57.4	68.8	44.3	57.5
# Days	30	30	30	30	27	30	30	30	27	30
Q-2 2018	68.5	67.5	66.7	60.6	60.0	60.9	57.4	68.6	46.3	57.5
# Days	91	91	91	91	88	91	91	91	81	91
Q-3 2017 thru Q-2 2018										
Total	68.1	67.1	66.6	59.8	59.4	60.6	56.8	68.0	44.4	56.2
# Days	361	364	365	365	357	365	356	365	332	361
Q-2 2017 thru Q-1 2018 (Previous 4 Quarters)										
Total	67.9	67.0	66.6	59.4	59.3	60.2	56.5	67.9	43.3	55.7
# Days	361	364	365	365	360	365	356	365	335	361
Change from Previous 4 Quarters										
	0.2	0.1	0.0	0.4	0.1	0.4	0.3	0.1	1.1	0.5

TABLE 3
DAILY CNEL VALUES AT EACH MONITOR STATION
April 2018

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.1	67.0	66.3	61.2	59.9	60.7	57.5	68.7	42.9	58.0
2	68.8	68.0	67.2	61.7	60.0	61.4	58.4	68.4	40.4	57.9
3	68.6	67.8	67.2	60.9	60.6	61.5	58.3	68.4	42.8	57.2
4	68.3	66.7	66.1	58.7	58.2	59.5	55.3	68.8	37.4	56.9
5	68.6	67.8	66.7	60.1	59.8	60.7	57.4	68.9	41.5	57.6
6	68.8	67.9	67.2	61.3	60.1	61.9	58.7	69.3	43.9	58.3
7	67.3	66.5	65.3	59.4	58.3	59.7	56.7	67.1	36.0	56.0
8	68.1	67.6	66.5	60.1	59.7	60.9	57.7	68.4	45.9	57.6
9	67.9	67.3	66.3	59.1	58.1	60.0	55.9	67.8	39.7	55.7
10	67.5	66.7	65.8	59.3	58.0	59.6	55.8	67.1	40.2	56.5
11	68.3	67.8	66.6	60.7	60.2	61.6	58.0	69.1	44.9	57.7
12	68.2	67.9	66.3	59.5	60.7	61.1	58.1	68.2	45.4	56.5
13	68.2	67.7	67.2	59.6	59.4	61.6	56.8	67.4	42.5	51.3
14	65.7	64.9	63.7	56.3	56.2	57.1	53.1	64.6	38.6	52.0
15	68.2	67.4	65.9	59.8	59.1	59.9	56.6	68.7	39.8	57.4
16	68.6	68.6	66.8	60.5	61.5	61.8	58.9	69.3	39.3	58.3
17	67.7	67.1	65.9	59.7	59.8	60.4	56.9	67.4	42.9	55.8
18	67.8	67.3	66.0	60.7	59.6	60.3	56.9	68.7	35.4	58.0
19	69.1	68.2	67.0	61.2	61.2	61.6	58.8	68.8	36.4	58.5
20	68.5	67.5	67.1	60.7	60.4	61.8	57.8	69.1	45.7	58.0
21	66.8	65.7	65.2	58.6	58.6	58.9	55.2	65.9	37.3	54.2
22	68.3	67.4	66.5	60.0	59.7	60.4	57.1	68.7	42.6	57.2
23	69.0	67.7	67.1	60.6	60.0	60.6	55.9	68.7	48.6	57.0
24	68.4	67.6	66.5	60.4	59.6	59.9	55.2	68.2	42.5	56.8
25	67.9	67.8	66.8	60.6	60.0	60.7	56.6	68.8	47.4	57.5
26	69.4	68.3	67.2	61.4	60.9	61.9	58.6	69.0	32.3	58.4
27	69.2	68.3	67.5	61.4	61.0	62.0	58.2	68.7	44.0	58.0
28	66.7	65.8	64.9	59.4	58.0	59.7	56.2	65.8	30.6	55.2
29	68.5	67.7	66.3	61.2	59.7	60.9	58.0	68.5	41.0	57.8
30	69.1	68.2	67.4	62.0	60.9	61.9	58.7	69.0	*#N/A	58.5
Days	30	30	30	30	30	30	30	30	29	30
En. Avg	68.3	67.5	66.5	60.3	59.8	60.8	57.3	68.3	42.7	57.1

#N/A indicates insufficient data.

*#N/A indicates no aircraft-related noise events.

TABLE 4
DAILY CNEL VALUES AT EACH MONITOR STATION
May 2018

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.3	66.3	66.1	61.8	59.6	60.9	58.4	68.5	42.3	58.2
2	68.8	67.6	66.9	61.5	60.7	60.8	58.3	69.0	*#N/A	58.7
3	69.2	68.5	67.4	60.7	61.1	61.2	58.6	68.9	45.2	57.3
4	69.0	68.2	67.3	59.9	59.9	60.5	56.8	68.1	38.6	56.6
5	66.7	65.9	64.9	57.3	57.8	57.8	54.5	65.2	41.8	53.0
6	68.5	67.8	66.7	60.3	59.6	60.6	56.2	68.7	*#N/A	56.9
7	68.7	67.9	67.0	60.8	60.0	61.1	55.8	68.8	44.3	57.2
8	68.0	66.7	66.0	59.9	58.8	59.6	55.5	68.8	36.0	57.4
9	68.4	67.7	66.8	61.0	60.2	60.1	57.5	69.4	42.5	57.9
10	69.3	67.9	67.6	61.6	60.4	61.8	57.9	69.4	42.4	58.1
11	69.5	68.0	67.5	62.3	59.8	62.2	58.3	69.5	*#N/A	59.2
12	67.5	66.2	65.0	60.0	58.3	59.5	56.4	66.4	43.0	56.1
13	67.9	67.5	66.2	60.5	60.3	60.9	58.1	68.9	47.1	57.7
14	68.8	68.2	67.0	60.9	61.1	61.9	58.7	68.8	44.5	58.0
15	68.1	67.4	66.5	60.2	60.0	61.0	57.5	69.1	42.5	58.3
16	68.6	67.8	66.8	60.9	60.7	61.2	58.1	68.9	62.3	58.0
17	69.2	67.9	67.5	62.5	60.8	62.3	59.3	69.2	33.2	58.7
18	69.1	67.8	67.0	61.8	60.6	61.9	58.6	68.9	38.5	58.2
19	67.0	65.8	64.9	59.4	58.1	59.7	56.4	67.3	47.7	55.8
20	68.8	68.1	67.2	60.9	60.7	61.6	58.0	69.3	*#N/A	58.8
21	69.2	68.1	67.3	62.2	60.7	61.8	58.7	69.1	*#N/A	59.0
22	68.7	67.6	67.0	61.1	60.6	61.3	58.1	68.5	46.1	57.8
23	69.1	68.3	67.2	61.2	61.0	61.8	58.7	69.1	44.2	59.0
24	69.5	68.7	67.7	61.7	61.4	62.1	59.3	69.5	29.2	58.9
25	69.0	68.5	67.5	61.1	61.5	61.8	57.4	69.4	31.7	58.6
26	66.9	66.1	65.1	59.9	58.8	59.4	55.3	66.4	41.5	55.5
27	66.9	66.0	65.2	59.7	58.7	59.9	54.6	67.0	42.9	56.1
28	68.4	67.5	66.8	60.4	60.0	60.4	56.7	69.4	41.6	58.2
29	68.8	67.4	66.9	60.0	58.4	59.1	54.7	68.8	*#N/A	58.0
30	68.3	67.3	66.4	61.3	59.7	60.7	57.0	68.7	38.5	58.1
31	68.6	67.6	66.8	61.1	60.2	60.0	57.8	68.7	40.7	57.8
Days	31	31	31	31	31	31	31	31	25	31
En. Avg	68.5	67.6	66.7	60.9	60.1	60.9	57.5	68.7	49.4	57.8

#N/A indicates insufficient data.

*#N/A indicates no aircraft-related noise events.

TABLE 5
DAILY CNEL VALUES AT EACH MONITOR STATION
June 2018

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.6	67.4	66.9	60.8	59.3	60.8	57.7	68.7	46.4	57.0
2	66.8	64.8	64.9	58.9	#N/A	58.1	55.8	66.3	39.9	54.7
3	68.4	67.5	66.9	60.4	#N/A	60.4	57.6	68.8	48.4	57.1
4	68.3	66.6	66.8	60.7	#N/A	60.2	56.8	69.1	33.9	58.3
5	68.1	66.0	66.7	60.6	59.7	60.2	56.8	68.6	49.4	58.1
6	68.6	67.7	66.9	60.8	61.0	60.9	58.1	68.9	40.8	57.9
7	69.3	68.2	67.6	61.5	61.2	61.8	58.7	68.8	39.6	58.0
8	68.8	67.8	66.8	60.5	60.3	60.8	56.1	68.8	43.9	57.5
9	67.5	66.7	65.7	59.2	58.7	59.3	55.6	66.9	43.8	55.3
10	68.9	68.0	67.1	60.5	60.2	61.0	58.0	68.5	35.2	56.9
11	68.9	68.1	67.5	60.7	60.4	61.4	58.1	68.6	45.7	56.8
12	68.4	67.3	66.7	60.8	60.0	60.8	56.9	68.9	39.6	57.4
13	68.9	68.2	67.5	60.6	60.3	60.6	56.8	68.8	41.9	57.8
14	69.6	68.7	67.6	60.7	60.1	61.0	56.3	68.8	39.9	57.2
15	69.1	68.3	67.6	61.2	60.5	61.4	57.8	69.1	43.4	57.7
16	67.6	65.8	65.3	60.7	58.5	59.6	57.3	67.5	44.3	56.6
17	68.8	67.9	67.1	61.2	60.4	61.5	58.3	68.9	*#N/A	58.2
18	69.1	68.4	67.4	60.4	60.8	61.8	58.7	68.8	48.3	57.7
19	68.2	67.4	66.2	60.5	59.7	60.6	57.6	68.8	46.3	57.2
20	68.9	67.3	67.1	60.4	59.4	60.5	56.5	69.1	*#N/A	58.0
21	69.6	68.5	67.9	60.6	60.0	61.0	56.7	69.3	34.3	57.6
22	69.1	68.1	67.7	60.5	60.2	61.1	57.1	68.4	30.5	57.1
23	67.7	66.2	65.8	60.3	58.0	59.2	55.3	67.4	*#N/A	56.4
24	68.8	68.0	67.4	61.8	60.5	61.9	58.0	68.9	45.9	57.3
25	68.8	68.0	67.7	60.9	60.8	62.0	58.3	72.4	40.0	61.0
26	68.6	67.5	67.1	60.3	60.5	61.1	56.7	68.5	45.7	57.3
27	68.6	68.2	67.3	60.6	60.0	60.9	56.4	68.8	40.6	57.2
28	69.2	67.4	67.5	61.4	60.3	62.0	58.1	68.9	44.7	57.9
29	69.2	67.6	67.5	62.1	60.4	62.0	58.7	69.6	47.0	57.8
30	67.4	66.4	65.8	59.9	59.0	60.3	56.8	67.2	44.6	55.5
Days	30	30	30	30	27	30	30	30	27	30
En. Avg	68.6	67.6	67.0	60.7	60.1	60.9	57.4	68.8	44.3	57.5

#N/A indicates insufficient data.

*#N/A indicates no aircraft-related noise events.

TABLE 6
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class A
April - June 2018

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Alaska Air	B737	45	Average Count	95.4 (44)	94.8 (40)	93.7 (44)	89.1 (44)	88.3 (40)	88.9 (36)	84.4 (40)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	1092	Average Count	98.0 (1079)	96.9 (1023)	95.3 (1070)	89.3 (1064)	89.1 (1009)	90.0 (1014)	86.6 (1054)	92.3 (3)	#N/A (0)	#N/A (0)
American	A320	104	Average Count	94.4 (100)	93.7 (93)	92.5 (101)	86.5 (102)	85.3 (90)	86.6 (92)	83.7 (97)	86.4 (1)	#N/A (0)	#N/A (0)
	B738	1527	Average Count	99.0 (1500)	97.8 (1400)	96.9 (1486)	89.8 (1484)	89.1 (1378)	90.0 (1376)	86.5 (1463)	94.1 (11)	88.8 (5)	81.8 (3)
	B752	1	Average Count	95.7 (1)	96.2 (1)	92.5 (1)	89.2 (1)	87.4 (1)	#N/A (0)	84.0 (1)	#N/A (0)	#N/A (0)	#N/A (0)
Compass	E175	414	Average Count	95.8 (407)	95.1 (391)	95.8 (408)	89.7 (402)	88.8 (381)	89.4 (385)	85.0 (391)	94.4 (1)	#N/A (0)	#N/A (0)
Delta	A319	258	Average Count	96.4 (235)	95.6 (216)	95.6 (236)	89.3 (231)	87.9 (216)	88.3 (217)	83.7 (218)	94.4 (20)	86.4 (18)	84.5 (3)
	A320	1	Average Count	96.3 (1)	95.4 (1)	95.2 (1)	88.1 (1)	86.8 (1)	87.1 (1)	84.8 (1)	#N/A (0)	#N/A (0)	#N/A (0)
	B712	88	Average Count	92.1 (87)	92.0 (81)	88.1 (85)	80.9 (73)	80.2 (69)	82.5 (74)	79.5 (58)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	4	Average Count	94.8 (4)	94.3 (4)	92.6 (4)	87.5 (4)	87.1 (4)	88.7 (4)	85.6 (4)	#N/A (0)	#N/A (0)	#N/A (0)
	B752	396	Average Count	96.7 (375)	96.0 (352)	96.1 (376)	89.3 (376)	87.9 (356)	88.4 (351)	84.3 (359)	95.1 (13)	86.7 (12)	80.3 (3)
FedEx	A306	64	Average Count	97.2 (64)	97.0 (62)	94.7 (63)	89.1 (64)	88.3 (61)	89.7 (59)	85.8 (61)	#N/A (0)	#N/A (0)	#N/A (0)
Frontier Airlines	A20N	75	Average Count	89.8 (74)	89.3 (70)	88.7 (74)	83.1 (68)	80.5 (59)	83.3 (65)	79.6 (42)	83.8 (1)	#N/A (0)	#N/A (0)
	A319	6	Average Count	94.7 (6)	94.2 (5)	93.0 (6)	87.6 (6)	86.1 (6)	87.5 (5)	84.5 (6)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	99	Average Count	95.9 (98)	95.4 (95)	93.3 (98)	87.1 (97)	85.7 (91)	87.7 (89)	85.5 (92)	#N/A (0)	#N/A (0)	#N/A (0)
Horizon Air	E175	180	Average Count	91.6 (180)	91.1 (173)	89.4 (178)	85.8 (176)	84.6 (166)	86.1 (163)	83.5 (169)	#N/A (0)	#N/A (0)	#N/A (0)
Southwest	B38M	2	Average Count	88.8 (2)	88.0 (2)	86.6 (2)	81.8 (2)	82.2 (2)	83.2 (2)	79.8 (1)	#N/A (0)	#N/A (0)	#N/A (0)
	B737	1626	Average Count	92.8 (1600)	92.4 (1513)	90.5 (1577)	85.5 (1597)	85.6 (1505)	86.2 (1523)	83.2 (1503)	93.2 (3)	#N/A (0)	#N/A (0)
	B738	12	Average Count	93.1 (12)	92.7 (12)	89.9 (12)	84.9 (12)	85.0 (11)	85.8 (9)	83.4 (12)	#N/A (0)	#N/A (0)	#N/A (0)
United	A320	768	Average Count	94.3 (741)	93.6 (696)	92.3 (731)	86.4 (725)	86.1 (691)	88.6 (680)	86.3 (723)	94.3 (17)	86.4 (16)	81.8 (4)
	B737	468	Average Count	96.9 (461)	95.5 (435)	96.2 (459)	90.2 (460)	90.0 (423)	90.9 (440)	86.1 (454)	95.4 (1)	89.8 (1)	#N/A (0)
	B738	444	Average Count	98.3 (435)	96.9 (402)	95.9 (432)	89.9 (427)	89.7 (396)	90.7 (402)	86.9 (430)	95.5 (6)	89.5 (3)	82.0 (2)
	B752	1	Average Count	95.1 (1)	94.4 (1)	93.9 (1)	88.8 (1)	#N/A (0)	89.8 (1)	86.3 (1)	#N/A (0)	#N/A (0)	#N/A (0)
UPS	B752	52	Average Count	96.0 (52)	96.1 (50)	93.8 (52)	87.0 (51)	86.4 (50)	87.3 (48)	82.6 (48)	#N/A (0)	#N/A (0)	#N/A (0)
WestJet	B736	2	Average Count	95.1 (2)	95.0 (1)	93.3 (2)	88.8 (2)	86.8 (2)	87.8 (2)	83.3 (2)	#N/A (0)	#N/A (0)	#N/A (0)
	B737	85	Average Count	95.9 (83)	94.7 (79)	94.9 (83)	89.8 (83)	89.2 (75)	90.1 (73)	84.8 (76)	93.3 (1)	#N/A (0)	#N/A (0)

TABLE 7
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class E
April - June 2018

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delta	B712	338	Average Count	91.6 (335)	91.9 (318)	87.6 (333)	80.4 (255)	80.5 (259)	81.9 (293)	79.5 (192)	#N/A (0)	#N/A (0)	#N/A (0)
	MD90	1	Average Count	89.4 (1)	88.2 (1)	87.4 (1)	79.2 (1)	79.7 (1)	83.1 (1)	78.2 (1)	#N/A (0)	#N/A (0)	#N/A (0)
Horizon Air	DH8D	91	Average Count	84.7 (87)	85.5 (85)	85.5 (87)	79.0 (35)	78.6 (47)	79.3 (64)	77.3 (2)	85.4 (1)	#N/A (0)	#N/A (0)
	E175	131	Average Count	91.4 (130)	91.1 (120)	89.4 (127)	85.8 (129)	84.5 (119)	86.1 (122)	83.3 (121)	91.9 (1)	#N/A (0)	#N/A (0)
SkyWest Coml.	CRJ9	2	Average Count	87.7 (2)	88.0 (2)	86.7 (2)	79.7 (1)	80.2 (2)	81.7 (2)	80.7 (2)	#N/A (0)	#N/A (0)	#N/A (0)
	E175	821	Average Count	90.5 (809)	90.3 (742)	89.0 (809)	85.5 (801)	84.3 (746)	85.5 (757)	83.3 (749)	90.5 (1)	#N/A (0)	80.4 (1)
Southwest	B737	2443	Average Count	91.8 (2399)	91.7 (2251)	89.7 (2371)	85.3 (2372)	85.0 (2247)	85.7 (2254)	82.6 (2261)	92.9 (11)	#N/A (0)	78.9 (1)

TABLE 8
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commuter
April - June 2018

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delux Public Charters	E135	5	Average Count	85.4 (5)	85.6 (5)	85.1 (5)	81.2 (5)	#N/A (0)	80.9 (3)	#N/A (0)	#N/A (0)	#N/A (0)	#N/A (0)
SkyWest	CRJ7	89	Average Count	88.1 (88)	88.1 (86)	87.0 (87)	80.0 (59)	81.0 (69)	82.0 (80)	80.3 (67)	89.9 (1)	#N/A (0)	80.6 (1)

TABLE 8-GA
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
General Aviation
April - June 2018

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
General Aviation	Jet	4319	Average Count	88.6 (4088)	87.9 (3852)	89.1 (4020)	83.3 (2420)	82.7 (1703)	84.0 (2376)	82.1 (922)	84.4 (44)	80.6 (5)	78.1 (1)

TABLE 9
AIR CARRIER OPERATIONAL HISTORY

Carrier	AC Type	Year					
		2014	2015	2016	2017	2018	
Alaska Air	AS	B734	89	80	76	24	
		B737	4,381	2,666	3,258	1,233	216
		B738	2,486	4,590	4,439	6,420	4,241
American	AA	A319		42	178	332	368
		A320		344	868	266	19
		A321		326	563	56	
		B738	9,339	9,090	10,538	11,556	5,630
		B752	4	22	74	4	2
Compass	CP	E170			152	78	
		E175			1,669	2,726	1,592
Delta	DL	A319	3,290	3,352	3,444	2,053	979
		A320	142	162	160	94	8
		B712				3,267	1,695
		B737				146	56
		B738	4	4		40	10
		B739		2			
		B752	2,196	2,130	2,128	2,137	1,399
		MD90					2
FedEx	FM	A306	508	508	510	506	256
		A310	2				
Frontier Airlines	F9	A20N*					226
		A319	2,381	1,497	646	356	190
		A320		154	740	628	300
		A321			2		
		A32N*			12	438	
Horizon Air	QX	DH8D			1,156	1,456	366
		E175				339	1,196
Interjet	4O	A320	428				
SkyWest Coml.	SC	CRJ9	2,007	1,922	1,899	1,440	4
		E175			3,554	4,761	3,234
Southwest	WN	B38M				2	4
		B733	2				
		B737	33,490	37,101	41,806	35,971	15,729
		B738	1,385	2,586	1,144	58	36
United	UA	A319	1,926	1,393	1,999	1,470	476
		A320	2,774	3,207	2,670	3,957	2,073
		B737	4,436	4,523	5,246	4,044	1,626
		B738	1,748	1,853	1,252	3,302	2,372
		B752	237	44		2	4
UPS	5X	A306		52	52	45	
		B752	414	366	370	369	206
US Airways	AW	A319	808	240			
		A320	1,426	1,476			
		A321	934	740			
		B752	46	98			
WestJet	WS	B736	4		32	30	4
		B737	728	718	642	644	324
Total			77,615	81,288	91,279	90,250	44,843

*In 2018, the code for the Airbus A320neo was changed from A32N to A20N.

TABLE 10
AIRCRAFT OPERATIONAL HISTORY

Aircraft	Year				
	2014	2015	2016	2017	2018
A20N*					226
A306	508	560	562	551	256
A310	2				
A319	8,405	6,524	6,267	4,211	2,013
A320	4,770	5,343	4,438	4,945	2,400
A321	934	1,066	565	56	
A32N*			12	438	
B38M				2	4
B712				3,267	1,695
B733	2				
B734	89	80	76	24	
B736	4		32	30	4
B737	43,035	45,008	50,952	42,038	17,951
B738	14,962	18,123	17,373	21,376	12,289
B739		2			
B752	2,897	2,660	2,572	2,512	1,611
CRJ9	2,007	1,922	1,899	1,440	4
DH8D			1,156	1,456	366
E170			152	78	
E175			5,223	7,826	6,022
MD90					2
Total	77,615	81,288	91,279	90,250	44,843

*In 2018, the code for the Airbus A320neo was changed from A32N to A20N.

TABLE 11
AIR CARRIER AVERAGE DAILY DEPARTURE HISTORY

Carrier	AC Type	Year					
		2014	2015	2016	2017	2018	
Alaska Air	AS	B734	.121	.110	.104	.033	
		B737	6.000	3.652	4.451	1.693	.296
		B738	3.408	6.288	6.066	8.789	5.811
American	AA	A319		.058	.243	.455	.504
		A320		.471	1.186	.364	.025
		A321		.447	.770	.077	
		B738	12.792	12.452	14.402	15.827	7.715
		B752	.005	.030	.101	.005	.003
Compass	CP	E170			.208	.107	
		E175			2.279	3.734	2.181
Delta	DL	A319	4.507	4.592	4.705	2.811	1.342
		A320	.195	.222	.219	.129	.011
		B712				4.471	2.321
		B737				.200	.077
		B738	.005	.005		.055	.014
		B739		.003			
		B752	3.008	2.918	2.910	2.926	1.918
		MD90					.003
FedEx	FM	A306	.696	.696	.697	.693	.351
		A310	.003				
Frontier Airlines	F9	A20N*					.310
		A319	3.260	2.052	.883	.488	.260
		A320		.211	1.011	.860	.411
		A321			.003		
		A32N*			.016	.600	
Horizon Air	QX	DH8D			1.579	1.995	.501
		E175				.466	1.638
Interjet	4O	A320	.586				
SkyWest Coml.	SC	CRJ9	2.748	2.633	2.593	1.975	.005
		E175			4.855	6.523	4.430
Southwest	WN	B38M				.003	.005
		B733	.003				
		B737	45.874	50.819	57.104	49.274	21.542
		B738	1.901	3.542	1.563	.079	.049
United	UA	A319	2.636	1.910	2.730	2.014	.652
		A320	3.803	4.395	3.648	5.422	2.836
		B737	6.077	6.195	7.169	5.534	2.227
		B738	2.395	2.537	1.710	4.526	3.252
		B752	.326	.060		.003	.005
UPS	5X	A306		.071	.071	.060	
		B752	.567	.501	.505	.507	.282
US Airways	AW	A319	1.107	.329			
		A320	1.953	2.022			
		A321	1.279	1.014			
		B752	.063	.134			
WestJet	WS	B736	.005		.044	.041	.005
		B737	.997	.984	.877	.882	.444
Total			106.321	111.351	124.699	123.622	61.427

*In 2018, the code for the Airbus A320neo was changed from A32N to A20N.

TABLE 12
AIRCRAFT Glossary

AC Type	Make	Model/Series
A20N	Airbus	320-200 Neo
A306	Airbus	300-600
A310	Airbus	310-200
A320	Airbus	320
A32N	Airbus	320-200 Neo
B38M	Boeing	737-800 Max
B712	Boeing	717-200
B733	Boeing	737-300
B734	Boeing	737-400
B736	Boeing	737-600
B737	Boeing	737-700
B738	Boeing	737-800
B739	Boeing	737-900
B752	Boeing	757-200
CRJ7	Canadair Regional Jet	700
CRJ9	Canadair Regional Jet	900
DH8D	Bombardier	Dash 8
E135	Embraer	135
E170	Embraer	170
E175	Embraer	175
MD90	McDonnell Douglas	90



Barry A. Rondinella
A.A.E./C.A.E.
Airport Director

QUARTERLY NOISE MEETING

Date: June 13, 2018

Time: 2:00 PM

Place: Airport Commission Room

ITEMS DISCUSSED

A summary of the JWA airport statistics for the month of April 2018 was provided by Bonnie Frisch. Louie Ilustrisimo presented an overview of the new STAYY departure procedure and attendees discussed their impressions of the procedure. Nick Gaskins mentioned a study conducted by HMMH, a consulting firm hired by Newport Beach, entitled "Portable Short-Term Noise Monitoring".

Nick Gaskins discussed new commuter carrier Delux, noting that they fly small commuter aircraft which generate low noise readings. Mr. Gaskins also mentioned that Southwest Airlines will begin flights to Albuquerque in July, Frontier Airlines will be starting service to San Antonio and Austin in August, and Delta Air Lines will be starting flights to New York (JFK) in October.

Jim Mosher shared some observations regarding the HMMH noise monitoring analysis and asked about the status of the EIR for the General Aviation Improvement Program (GAIP). Mr. Gaskins explained that there were no status updates to provide at that time. Mr. Mosher also discussed displaying noise values in the VOLANS flight track viewer. Mr. Gaskins said he would discuss this with the vendor.

Joe August asked for an explanation of the noise contour provided in the JWA Noise Abatement Program Quarterly Report and how it compared to contours he had seen in a draft HMMH departure analysis report. Mr. Gaskins explained that the HMMH contours used the SEL noise metric, while the contours in the JWA Quarterly Report used the CNEL noise metric, and also explained to the attendees that this HMMH departure analysis report was not publicly available at that time.

Nick Gaskins suggested that the attendees visit the website of the Metropolitan Washington Airports Authority web page to view their public display of noise events and share their impressions with the Access and Noise Office.

QUARTERLY NOISE MEETING ROSTER

June 13, 2018

<u>NAME</u>	<u>ORGANIZATION</u>
W. David Cook	Newport Beach Resident/ Aviation Committee
Jim Mosher	Resident – Newport Beach
Joe August	Resident – Newport Beach
Sally Peterson	Resident – Newport Beach
Nick Gaskins	John Wayne Airport
Anthony Cangey	John Wayne Airport
Bonnie Frisch	John Wayne Airport
Louie Ilustrisimo	John Wayne Airport
Beatrice Siercke	John Wayne Airport

SUMMARY OF STATISTICAL INFORMATION
FOR
CALIFORNIA DEPARTMENT OF TRANSPORTATION

1. Size of Noise Impact Area as defined in the Noise Standards (California Code of Regulations, Title 21, chapter 2.5, Subchapter 6):

8.35 acres or 0.013 square miles
2. Estimated Number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:

77 dwelling units
3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:

193 (based on 2.5 people per dwelling unit)
4. Identification of aircraft of type having highest takeoff noise level operating at this airport together with estimated number of operations by this aircraft type during the calendar quarter reporting period:

B737-800, 6,165 ops (arrivals + departures)
5. Total number of aircraft operations during the calendar quarter:

78,214
6. Number of Air Carrier operations during the calendar quarter:
(Not mandatory)

23,495
7. Percentage of Air Carrier operations by aircraft certified under Federal Aviation Regulation (FAR) Part 36, Stage III:
(Not mandatory)

100%
8. Estimated number of operations by General Aviation aircraft during the calendar quarter:
(Not mandatory)

54,500
9. Estimated number of operations by Military aircraft during the calendar quarter:
(Not mandatory)

219