

**JOHN WAYNE AIRPORT
ORANGE COUNTY**



NOISE ABATEMENT PROGRAM QUARTERLY REPORT

**For the period:
April 1, 2022 through June 30, 2022**

Prepared in accordance with:

AIRPORT NOISE STANDARD

STATE OF CALIFORNIA

California Code of Regulations

Airport Noise Standards

Title 21: Public Works

Division of Aeronautics (Department of Transportation)

Chapter 6. Noise Standards

Submitted by:

A handwritten signature in blue ink that reads "C.V. Reynolds".

Charlene V. Reynolds

Airport Director

John Wayne Airport, Orange County

INTRODUCTION

This is the 198th Quarterly Report submitted by the County of Orange in accordance with the requirements of the California Airport Noise Standards (California Code of Regulations, Title 21: Public Works, Division 2.5, Division of Aeronautics (Department of Transportation), Chapter 6. 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:

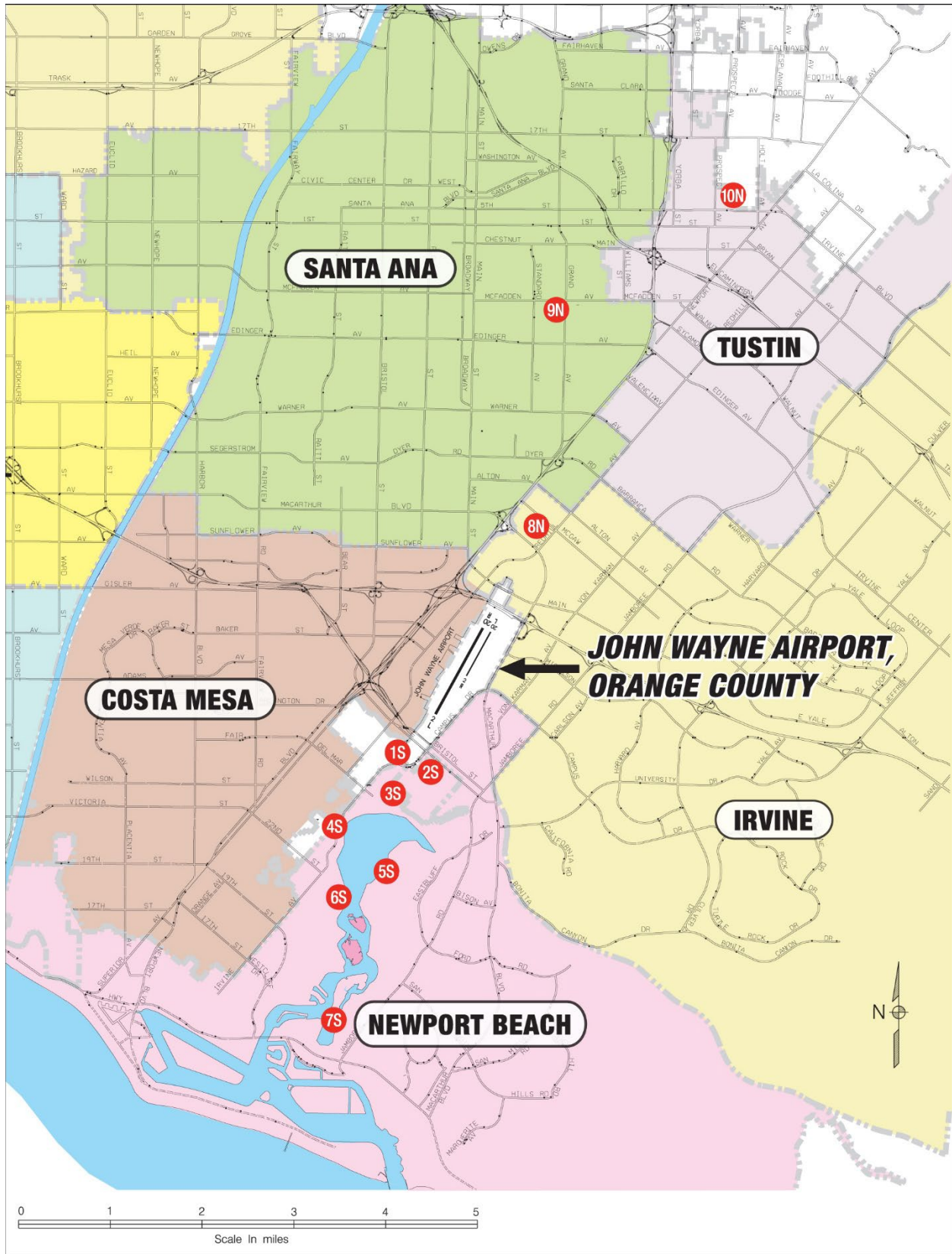
MONITOR STATIONS

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

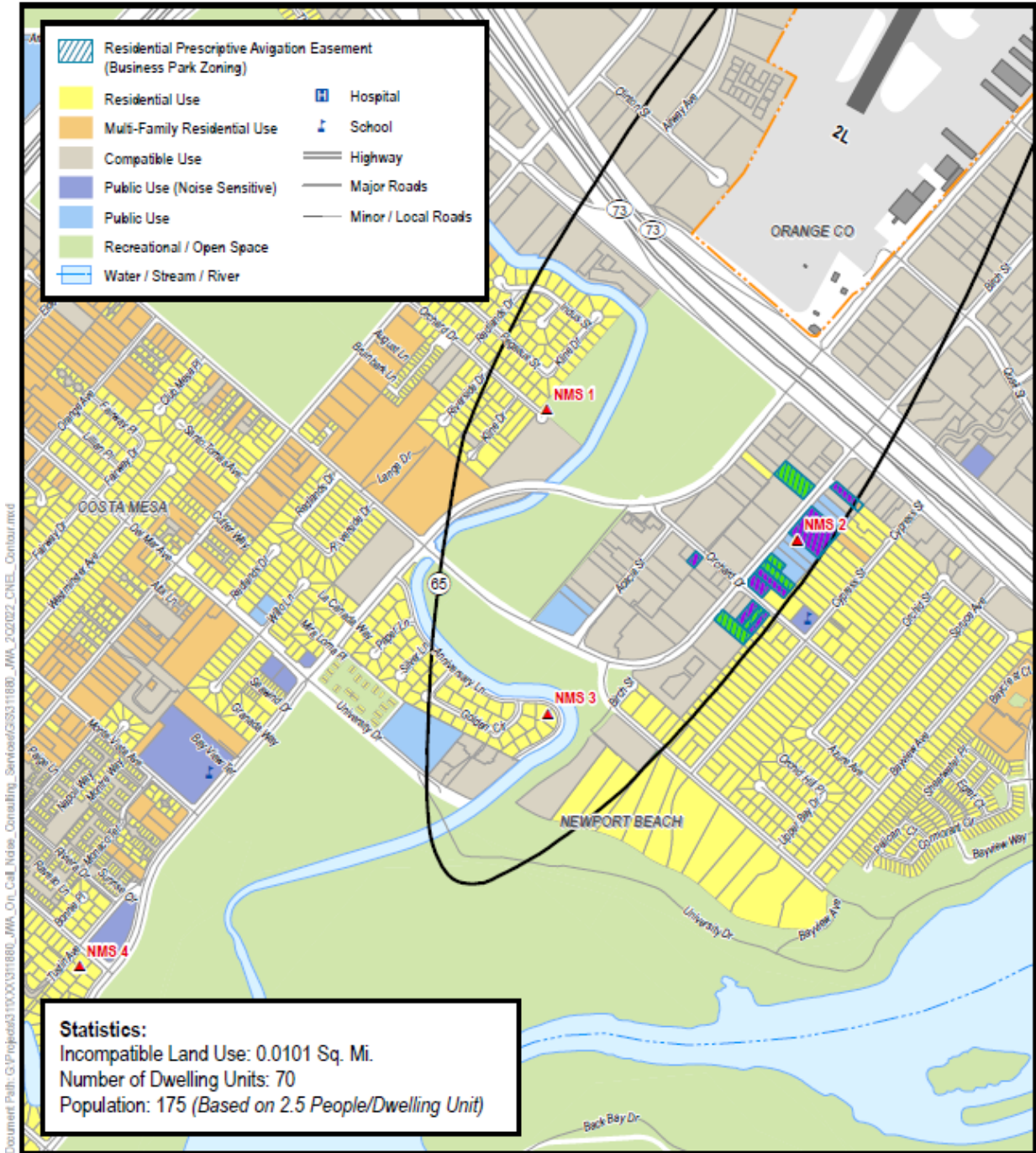
The map in Figure 1 shows the general location of each permanent remote monitor station.

Figure 2 shows the Airport's "Noise Impact Area" for the previous year (July 1, 2021 - June 30, 2022). The Figure 2 information was developed by Harris Miller Miller and Hanson Inc., 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



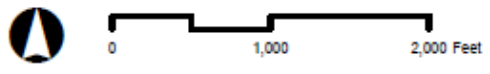
**FIGURE 2
2022 SECOND QUARTER**



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Statistics:
 Incompatible Land Use: 0.0101 Sq. Mi.
 Number of Dwelling Units: 70
 Population: 175 (Based on 2.5 People/Dwelling Unit)

- ▲ RMT Location
- 2022 Second Quarter 65 dB CNEL Contour
- Incompatible Single Family Residential
- Incompatible Multi-Family Residential
- Airport Property (Approx.)
- Runways / Taxiways
- Airport Buildings



**JOHN WAYNE AIRPORT
ORANGE COUNTY**



2022 Second Quarter 65 dB
Community Noise Equivalent Level
(CNEL) Contour



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 2022

Period	Carriers		GA Jet (1)	Total Operations (2)	Average Daily Jet Operations
	Jet	Prop			
April	8,293	0	4,026	25,729	411
May	8,798	0	4,223	25,126	420
June	8,548	0	4,005	25,893	418
Second Quarter	25,639	0	12,254	76,748	416
Twelve Months 07/01/21 - 06/30/22	95,593	0	49,725	312,900	398

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.

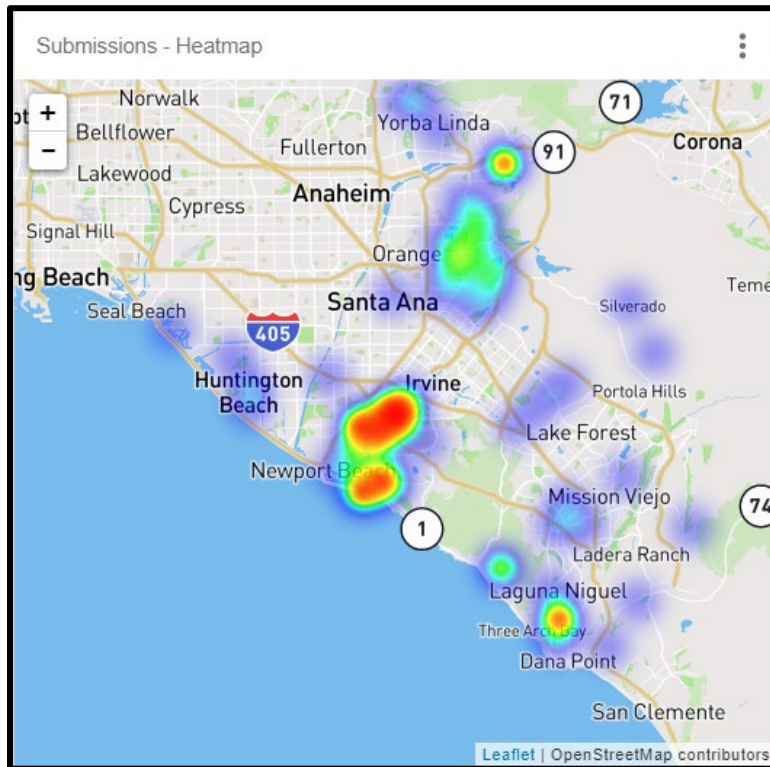
ACOUSTICAL INSULATION PROGRAM

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** dwelling units in Santa Ana Heights remain in the “Noise Impacted Area” (within 65 dB CNEL contour).

COMPLAINT TOTALS (April 1, 2022 - June 30, 2022)

The Airport's Access and Noise Office receives and investigates noise complaints from local citizens and all other sources. During April 1, 2022 through June 30, 2022, the Office received 121,988 complaints from local citizens. This is a 38.5% increase from the 88,075 complaints received last quarter. It is a 113.3% increase from the 57,197 complaints received during the same quarter last year. Figure 3 shows the distribution of the quarterly complaints from local communities.

FIGURE 3
REPORTED NOISE EVENTS BY COMMUNITY



Notes:

- Anaheim – 75,013 submissions from 9 different points of contact.
- Newport Beach – 40,811 submissions from 30 different points of contact.
- Costa Mesa – 1,956 submissions from 8 different points of contact.
- Laguna Niguel – 1,495 submissions from 3 different points of contact.
- Laguna Beach – 831 submissions from 1 point of contact.
- Irvine – 491 submissions from 7 different points of contact.
- Huntington Beach – 468 submissions from 7 different points of contact.
- Orange – 420 submissions from 16 different points of contact.
- Other – 325 submissions from 36 different points of contact.
- Villa Park – 178 submissions from 2 different points of contact.
- 8% of submissions were from a complaint subscription service.

TABLE 2
LONG TERM MEASURED LEVELS
Aircraft CNEL from 07/01/21 through 06/30/22
Values in dB at Each Site

Period	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Jul 2021	67.9	64.4	67.0	60.0	59.1	60.3	55.5	67.9	39.4	57.2
# Days	31	31	31	31	31	31	31	31	24	31
Aug 2021	67.7	66.1	66.7	59.8	58.9	60.1	55.5	67.7	38.4	57.1
# Days	31	31	31	31	31	31	31	31	23	31
Sep 2021	67.8	66.8	66.8	59.8	59.2	60.1	55.8	67.5	41.9	57.0
# Days	30	30	30	30	30	30	30	30	23	30
Q-3 2021	67.8	65.9	66.8	59.9	59.1	60.1	55.6	67.7	40.1	57.1
# Days	92	92	92	92	92	92	92	92	70	92
Oct 2021	67.7	66.5	67.0	59.9	59.4	60.4	56.8	67.7	42.3	57.1
# Days	31	31	31	31	31	31	31	30	25	31
Nov 2021	67.3	66.0	66.9	59.1	58.6	60.4	55.9	67.1	41.8	56.8
# Days	30	30	30	30	30	30	29	30	21	17
Dec 2021	67.9	66.2	66.8	60.2	59.8	60.5	57.3	67.9	43.1	57.9
# Days	31	31	31	31	31	31	31	31	28	31
Q-4 2021	67.7	66.2	66.9	59.8	59.3	60.4	56.7	67.6	42.5	57.4
# Days	92	92	92	92	92	92	91	91	74	79
Jan 2022	66.5	65.0	66.0	59.3	58.4	60.0	55.8	66.5	43.0	55.8
# Days	31	31	31	30	31	31	29	31	22	29
Feb 2022	66.5	65.3	66.0	58.5	58.1	60.0	55.5	66.6	41.0	55.3
# Days	28	28	28	28	28	28	28	28	22	28
Mar 2022	67.9	66.5	67.0	60.0	59.5	60.4	56.9	68.0	44.2	57.6
# Days	31	31	31	31	31	31	31	31	26	31
Q-1 2022	67.0	65.6	66.4	59.3	58.7	60.1	56.1	67.1	43.0	56.4
# Days	90	90	90	89	90	90	88	90	70	88
Apr 2022	67.6	66.3	66.8	59.8	59.4	60.1	56.7	68.1	42.8	57.5
# Days	30	30	30	30	30	30	30	29	25	30
May 2022	68.0	66.5	67.1	60.5	59.6	60.2	57.1	68.3	41.9	57.9
# Days	31	31	31	31	31	31	31	31	23	31
Jun 2022	68.1	66.8	67.3	60.0	58.9	60.0	56.2	68.8	40.8	57.5
# Days	30	28	30	30	30	30	30	30	21	30
Q-2 2022	67.9	66.5	67.1	60.1	59.3	60.1	56.7	68.4	42.0	57.7
# Days	91	89	91	91	91	91	91	90	69	91
Q-3 2021 thru Q-2 2022										
Total	67.6	66.1	66.8	59.8	59.1	60.2	56.3	67.7	42.0	57.2
# Days	365	363	365	364	365	365	362	363	283	350
Q-2 2021 thru Q-1 2022 (Previous 4 Quarters)										
Total	67.2	65.3	66.4	59.5	58.8	59.9	55.9	67.3	42.2	56.8
# Days	365	365	365	364	365	365	362	364	288	350
Change from Previous 4 Quarters										
	0.4	0.8	0.4	0.3	0.3	0.3	0.4	0.4	-0.2	0.4

TABLE 3
DAILY CNEL VALUES AT EACH MONITOR STATION
April 2022

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.4	67.3	67.4	60.8	60.5	59.9	57.9	68.6	*#N/A	58.5
2	67.3	66.0	66.7	59.6	59.3	59.6	55.9	67.8	40.9	57.5
3	68.4	67.2	67.4	60.6	60.7	60.8	57.5	69.1	39.6	59.0
4	69.0	67.3	67.8	60.9	60.5	61.4	57.5	65.6	42.4	58.6
5	68.1	65.9	66.9	60.3	59.3	60.0	56.7	#N/A	45.1	57.6
6	68.3	66.9	67.6	60.0	59.5	60.1	56.7	70.5	39.1	56.6
7	62.6	59.2	68.0	53.1	51.1	62.8	48.1	62.4	35.7	38.4
8	65.4	64.7	64.7	54.9	55.4	57.1	52.4	66.5	*#N/A	52.8
9	67.0	65.1	65.8	59.3	57.8	58.8	55.5	67.2	31.5	56.5
10	68.4	66.7	67.2	60.1	59.0	60.5	56.7	69.1	36.2	58.5
11	67.9	67.1	67.0	61.0	60.6	60.6	58.6	69.5	32.1	59.2
12	64.8	63.9	65.6	55.0	56.7	58.8	51.7	67.2	29.2	54.7
13	67.5	66.3	66.5	59.5	59.1	58.6	55.9	68.3	39.2	57.4
14	68.0	66.9	67.1	60.4	60.1	60.5	57.3	69.1	44.7	58.6
15	68.2	66.9	67.3	60.8	60.5	60.5	58.2	68.2	41.9	58.0
16	66.1	65.4	65.2	58.9	58.9	58.8	56.3	67.3	42.4	56.5
17	67.9	66.9	67.1	60.5	60.2	60.9	57.7	68.4	38.7	57.8
18	68.2	67.1	67.5	60.5	60.2	60.4	57.4	68.7	42.6	58.2
19	67.8	66.8	66.6	60.2	60.2	60.1	57.6	67.9	*#N/A	57.4
20	67.7	66.7	66.6	60.7	59.6	60.0	57.6	68.4	44.4	58.4
21	68.4	67.4	67.7	60.6	60.6	60.5	57.4	69.1	*#N/A	59.0
22	68.3	67.5	67.3	60.9	61.7	61.5	58.7	68.8	*#N/A	59.0
23	66.5	66.0	66.2	58.9	58.5	59.0	56.6	66.4	42.8	55.7
24	66.4	65.2	66.6	58.0	57.4	59.6	54.7	66.3	41.7	54.9
25	67.2	65.7	65.9	57.9	57.4	57.9	54.9	67.1	43.2	55.4
26	67.6	65.3	66.5	59.7	58.1	58.7	55.9	68.2	41.6	57.9
27	67.8	66.3	66.8	61.1	59.7	60.7	58.0	68.9	50.2	59.1
28	68.1	66.8	67.2	60.8	59.3	60.5	56.6	68.9	46.2	58.8
29	68.1	67.0	67.2	60.9	59.9	60.8	58.0	68.3	46.8	58.0
30	66.8	65.7	66.0	59.2	58.7	59.4	56.2	66.5	30.1	56.5
Days	30	30	30	30	30	30	30	29	25	30
En. Avg	67.6	66.3	66.8	59.8	59.4	60.1	56.7	68.1	42.8	57.5

#N/A indicates insufficient data.

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

TABLE 4
DAILY CNEL VALUES AT EACH MONITOR STATION
 May 2022

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	68.3	66.8	67.1	60.6	59.1	60.7	57.3	68.8	45.9	58.7
2	68.3	67.2	67.7	61.0	60.3	61.5	57.7	68.5	42.9	58.6
3	67.5	66.1	66.8	61.0	59.9	61.0	58.0	68.1	34.6	58.1
4	68.0	67.0	67.4	60.2	59.7	60.4	57.3	68.1	38.8	58.1
5	68.4	67.3	67.6	60.5	59.8	60.3	56.7	68.5	37.7	58.0
6	67.6	67.0	67.7	61.0	59.4	60.3	56.5	68.7	31.7	58.3
7	66.5	63.9	66.0	59.3	57.6	58.6	55.0	67.1	46.6	56.5
8	67.9	66.7	66.8	60.9	59.8	60.8	58.4	69.0	30.5	58.9
9	68.3	66.8	67.3	60.9	60.4	60.4	58.4	68.9	45.4	58.8
10	67.6	66.2	66.5	60.0	59.6	59.8	57.2	67.9	*#N/A	57.4
11	66.9	66.5	66.6	60.1	59.5	60.0	57.6	68.0	42.7	57.6
12	67.3	67.1	67.0	59.2	59.2	59.4	56.7	67.7	46.0	56.6
13	68.1	67.0	67.0	59.6	59.2	59.0	56.5	67.4	38.3	56.7
14	67.0	65.5	65.9	58.4	57.7	57.3	55.1	66.2	*#N/A	54.3
15	68.2	66.8	67.2	59.9	59.2	59.4	56.7	68.9	39.5	58.1
16	68.2	66.2	67.3	60.5	59.7	60.1	56.6	68.3	*#N/A	57.2
17	68.5	66.2	67.2	61.2	60.0	60.4	57.7	68.3	*#N/A	57.9
18	68.7	66.6	67.7	60.9	59.8	60.5	57.2	68.3	*#N/A	57.6
19	69.4	67.5	68.2	61.0	59.3	59.6	54.8	69.3	41.2	58.6
20	68.8	66.5	67.7	61.5	60.0	61.0	58.1	69.3	34.0	58.9
21	67.5	65.6	66.5	59.9	59.1	59.9	56.8	67.0	43.0	56.8
22	67.9	66.7	67.0	60.2	59.9	60.7	56.9	68.9	40.3	58.2
23	68.4	66.3	67.2	59.9	58.9	59.9	55.7	69.0	*#N/A	58.5
24	68.1	66.5	67.3	60.7	60.0	60.8	57.3	68.2	46.1	57.5
25	67.7	66.5	67.1	60.6	59.8	60.4	56.9	67.9	36.9	58.8
26	68.7	67.2	67.8	61.4	60.4	61.0	58.1	68.9	36.6	58.8
27	68.0	67.0	67.1	60.9	60.5	60.8	57.9	68.7	36.6	58.7
28	66.8	65.3	66.3	60.1	59.6	59.5	56.7	67.6	38.8	57.2
29	67.2	65.8	66.0	60.4	59.4	60.4	57.5	68.4	42.2	57.8
30	68.2	66.8	67.3	60.6	60.2	60.9	56.9	68.4	*#N/A	57.8
31	68.2	64.5	67.1	60.7	60.2	60.7	58.0	67.5	*#N/A	57.9
Days	31	31	31	31	31	31	31	31	23	31
En. Avg	68.0	66.5	67.1	60.5	59.6	60.2	57.1	68.3	41.9	57.9

#N/A indicates insufficient data.

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

TABLE 5
DAILY CNEL VALUES AT EACH MONITOR STATION
 June 2022

Date	NMS Site									
	1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
1	67.5	#N/A	66.8	60.2	59.4	60.9	57.2	68.2	39.1	57.7
2	68.4	#N/A	67.3	60.8	59.1	61.3	58.0	68.6	28.7	58.1
3	67.8	68.0	67.3	60.4	59.5	60.5	56.8	69.1	33.3	58.3
4	67.5	65.9	66.4	59.9	58.9	59.9	56.5	67.1	*#N/A	56.5
5	68.6	66.9	67.7	60.9	59.2	61.2	58.2	69.5	28.0	57.5
6	68.4	66.6	67.4	60.5	58.4	60.3	57.0	69.3	*#N/A	57.6
7	68.0	66.4	67.0	59.6	58.5	59.8	56.0	68.9	37.7	57.0
8	67.8	66.7	67.2	59.9	59.2	60.3	56.1	68.9	*#N/A	57.7
9	68.6	67.1	67.7	60.5	59.0	60.7	55.9	69.5	*#N/A	58.3
10	68.2	66.9	67.4	60.1	59.1	60.2	56.3	69.7	*#N/A	58.1
11	67.6	66.4	66.7	59.1	57.6	59.1	55.4	67.7	*#N/A	55.9
12	68.1	66.8	67.2	60.4	58.6	60.5	56.5	69.3	35.3	57.5
13	68.7	66.7	67.9	60.7	58.7	61.2	56.8	69.2	39.0	57.4
14	68.2	66.9	67.5	60.5	59.7	60.9	57.2	68.5	45.2	57.8
15	68.1	66.2	67.3	60.4	59.4	60.9	56.8	68.9	47.2	57.4
16	68.9	67.5	68.0	59.4	58.3	60.0	55.4	69.9	37.4	58.2
17	68.3	67.2	67.5	60.7	60.1	61.3	57.8	69.4	*#N/A	58.7
18	67.5	66.3	66.6	59.8	59.0	59.9	56.0	67.6	*#N/A	56.6
19	67.6	66.7	66.8	59.8	59.3	60.1	56.6	68.6	44.6	57.6
20	67.9	66.9	67.3	59.3	58.5	59.4	55.9	68.9	40.6	57.0
21	67.8	66.8	67.0	60.2	58.9	58.7	54.6	67.9	29.9	57.5
22	67.8	66.9	66.9	59.1	58.0	57.7	53.5	68.3	38.5	57.1
23	68.5	67.5	67.6	59.2	58.6	58.2	54.2	68.6	37.6	57.3
24	68.4	67.4	68.1	59.6	58.9	59.2	54.5	68.8	*#N/A	57.2
25	66.8	65.7	66.1	58.3	57.2	57.0	53.1	67.5	41.5	56.1
26	68.5	67.4	67.7	59.8	59.0	58.9	55.7	69.2	34.0	57.3
27	68.1	66.7	67.4	59.1	58.7	59.2	55.4	68.8	40.3	57.4
28	67.7	66.4	66.8	59.6	58.2	59.6	55.6	68.5	41.9	57.3
29	67.8	66.2	66.8	60.1	58.5	59.7	55.3	68.6	43.5	57.1
30	68.5	67.4	67.6	60.5	59.8	60.4	56.4	69.6	40.7	58.0
Days	30	28	30	30	30	30	30	30	21	30
En. Avg	68.1	66.8	67.3	60.0	58.9	60.0	56.2	68.8	40.8	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 2022

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Air Canada	A223	29	Average Count	89.5 (28)	89.9 (25)	88.5 (28)	82.5 (24)	82.1 (25)	82.5 (22)	80.0 (9)	78.8 (1)	#N/A (0)	#N/A (0)
	B38M	62	Average Count	92.2 (61)	90.8 (51)	92.3 (62)	84.8 (61)	83.6 (55)	84.4 (47)	80.7 (42)	#N/A (0)	#N/A (0)	#N/A (0)
Alaska	A320	479	Average Count	95.8 (465)	94.3 (421)	95.2 (468)	88.1 (447)	86.2 (444)	87.2 (410)	84.7 (452)	87.8 (7)	#N/A (0)	#N/A (0)
	B737	10	Average Count	95.4 (10)	94.4 (10)	94.7 (10)	88.9 (10)	89.4 (10)	89.5 (9)	85.7 (9)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	407	Average Count	97.7 (387)	96.2 (354)	95.4 (394)	89.4 (386)	89.1 (374)	90.1 (351)	86.9 (389)	92.7 (8)	88.4 (3)	#N/A (0)
Allegiant	A319	125	Average Count	93.5 (117)	92.2 (107)	92.6 (117)	87.1 (109)	85.8 (104)	87.1 (96)	83.0 (105)	86.3 (5)	#N/A (0)	#N/A (0)
	A320	160	Average Count	94.6 (152)	93.4 (147)	92.7 (153)	87.1 (151)	85.8 (141)	87.1 (133)	83.0 (151)	86.6 (2)	#N/A (0)	#N/A (0)
American	A21N	1	Average Count	90.9 (1)	90.4 (1)	90.7 (1)	84.5 (1)	82.4 (1)	81.9 (1)	77.7 (1)	#N/A (0)	#N/A (0)	#N/A (0)
	A319	71	Average Count	93.9 (69)	92.7 (63)	93.3 (69)	86.7 (67)	85.4 (66)	85.6 (59)	81.4 (55)	#N/A (0)	#N/A (0)	#N/A (0)
	A320	131	Average Count	94.5 (122)	93.7 (113)	93.5 (126)	86.0 (122)	84.8 (118)	84.7 (111)	81.0 (87)	87.0 (4)	#N/A (0)	#N/A (0)
	A321	119	Average Count	99.0 (109)	98.2 (105)	98.3 (113)	90.5 (107)	89.0 (102)	88.4 (91)	84.7 (104)	92.7 (2)	#N/A (0)	#N/A (0)
	B38M	248	Average Count	93.0 (234)	91.7 (213)	93.0 (237)	84.7 (232)	84.5 (211)	86.0 (195)	81.8 (210)	90.4 (6)	84.0 (3)	#N/A (0)
	B738	1019	Average Count	98.5 (962)	97.3 (884)	97.2 (981)	90.0 (930)	89.6 (874)	90.3 (809)	87.2 (887)	92.9 (23)	87.7 (4)	80.9 (4)
Delta	A220	251	Average Count	88.4 (244)	88.0 (220)	88.1 (249)	80.6 (217)	79.6 (166)	80.6 (184)	78.0 (15)	80.5 (1)	#N/A (0)	#N/A (0)
	A223	149	Average Count	89.4 (141)	89.2 (136)	88.8 (147)	80.9 (124)	80.3 (111)	81.0 (106)	78.1 (24)	81.0 (1)	#N/A (0)	#N/A (0)
	A319	166	Average Count	95.8 (155)	94.6 (140)	95.6 (159)	89.2 (150)	87.6 (142)	87.9 (121)	83.6 (147)	92.9 (7)	85.0 (3)	#N/A (0)
	A320	1	Average Count	94.9 (1)	94.8 (1)	94.6 (1)	86.0 (1)	85.1 (1)	85.0 (1)	81.9 (1)	#N/A (0)	#N/A (0)	#N/A (0)
	B738	2	Average Count	98.0 (2)	96.2 (2)	97.3 (2)	90.0 (2)	88.6 (2)	#N/A (0)	84.2 (2)	#N/A (0)	#N/A (0)	#N/A (0)
	B752	215	Average Count	96.4 (202)	95.3 (187)	96.3 (207)	88.9 (200)	87.9 (193)	88.3 (181)	84.1 (196)	92.2 (4)	86.3 (4)	84.4 (1)
FedEx	A306	64	Average Count	96.9 (63)	96.1 (53)	94.5 (63)	88.6 (63)	88.1 (62)	89.4 (58)	85.5 (61)	90.3 (1)	#N/A (0)	#N/A (0)
Frontier	A20N	225	Average Count	88.0 (218)	87.4 (204)	87.5 (217)	81.3 (201)	79.7 (126)	81.8 (169)	79.3 (68)	82.0 (5)	#N/A (0)	#N/A (0)
	A320	46	Average Count	94.5 (46)	93.6 (44)	92.0 (45)	86.0 (45)	84.9 (45)	86.5 (43)	84.2 (45)	#N/A (0)	#N/A (0)	#N/A (0)
Horizon Air	E175	240	Average Count	92.5 (229)	91.5 (206)	90.3 (227)	85.0 (224)	84.9 (212)	86.7 (198)	83.5 (215)	88.3 (7)	#N/A (0)	#N/A (0)
Southwest	B38M	72	Average Count	89.4 (71)	88.1 (68)	87.7 (72)	80.7 (62)	80.9 (53)	82.8 (57)	79.5 (33)	#N/A (0)	#N/A (0)	#N/A (0)
	B737	1615	Average Count	93.4 (1554)	92.3 (1412)	91.4 (1546)	85.8 (1525)	85.9 (1460)	86.8 (1351)	83.9 (1442)	90.9 (36)	#N/A (0)	#N/A (0)
	B738	211	Average Count	94.8 (207)	93.6 (201)	91.7 (209)	85.6 (203)	86.1 (197)	87.0 (173)	84.5 (197)	#N/A (0)	#N/A (0)	#N/A (0)
Spirit	A20N	304	Average Count	88.1 (293)	87.4 (276)	87.7 (297)	81.9 (284)	80.9 (230)	82.5 (249)	79.4 (172)	82.8 (4)	#N/A (0)	#N/A (0)
	A320	136	Average Count	92.0 (128)	91.5 (116)	90.2 (130)	84.6 (126)	83.4 (118)	84.5 (115)	81.2 (92)	83.0 (2)	#N/A (0)	#N/A (0)

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
United	A319	144	Average Count	94.2 (135)	92.8 (122)	93.3 (139)	86.7 (131)	85.5 (124)	86.4 (110)	82.8 (119)	87.6 (5)	#N/A (0)	#N/A (0)
	A320	227	Average Count	95.2 (218)	94.1 (211)	94.1 (218)	86.8 (200)	85.7 (194)	86.3 (174)	82.9 (191)	88.7 (4)	#N/A (0)	#N/A (0)
	B737	538	Average Count	97.1 (504)	95.2 (468)	97.1 (519)	90.7 (502)	90.2 (471)	90.8 (427)	86.8 (473)	93.5 (14)	87.6 (5)	81.2 (4)
	B738	793	Average Count	98.7 (744)	97.1 (697)	98.1 (754)	90.2 (728)	89.7 (670)	90.2 (602)	87.2 (663)	93.7 (23)	89.1 (14)	83.3 (6)
UPS	B752	51	Average Count	94.8 (50)	94.1 (43)	93.2 (49)	86.7 (49)	86.2 (48)	87.2 (47)	82.3 (46)	86.8 (1)	#N/A (0)	#N/A (0)
WestJet	B737	86	Average Count	95.5 (84)	94.2 (79)	94.9 (85)	89.8 (75)	89.0 (80)	89.9 (75)	84.9 (81)	91.3 (1)	#N/A (0)	#N/A (0)

TABLE 7
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commercial Class E
April - June 2022

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delta	A220	206	Average Count	88.5 (197)	88.2 (177)	88.1 (197)	80.6 (164)	79.7 (128)	80.7 (140)	77.5 (11)	80.8 (7)	#N/A (0)	#N/A (0)
	A223	119	Average Count	89.6 (116)	89.2 (109)	89.0 (113)	80.8 (87)	80.1 (69)	80.8 (71)	77.8 (7)	80.9 (1)	#N/A (0)	#N/A (0)
SkyWest Coml.	E175	654	Average Count	90.9 (627)	89.9 (584)	89.4 (621)	84.9 (619)	84.2 (604)	85.9 (562)	82.9 (597)	89.3 (11)	85.4 (1)	81.7 (1)
Southwest	B38M	309	Average Count	89.6 (303)	88.3 (278)	88.1 (301)	81.3 (257)	81.6 (256)	83.4 (268)	80.4 (187)	#N/A (0)	#N/A (0)	#N/A (0)
	B737	2279	Average Count	91.2 (2184)	90.7 (1984)	89.6 (2181)	84.8 (2147)	84.6 (2087)	85.4 (1924)	82.7 (2029)	89.8 (46)	#N/A (0)	#N/A (0)
	B738	112	Average Count	92.4 (98)	91.6 (97)	89.8 (97)	84.5 (96)	84.9 (97)	85.6 (88)	83.1 (92)	92.2 (11)	87.8 (1)	#N/A (0)

TABLE 8
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
Commuter
April - June 2022

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
Delux Public Charters	E135	616	Average Count	85.2 (582)	85.0 (547)	86.1 (584)	79.3 (362)	78.6 (120)	80.0 (332)	78.4 (7)	82.0 (12)	#N/A (0)	#N/A (0)
	E145	13	Average Count	85.8 (13)	85.8 (13)	86.5 (13)	78.9 (7)	78.5 (3)	80.4 (7)	#N/A (0)	#N/A (0)	#N/A (0)	#N/A (0)
SkyWest	CRJ7	78	Average Count	87.5 (76)	86.9 (66)	86.9 (76)	80.9 (40)	81.5 (51)	81.8 (67)	80.9 (63)	87.4 (1)	#N/A (0)	#N/A (0)
	E175	8	Average Count	90.0 (6)	89.5 (5)	88.3 (5)	84.0 (6)	84.6 (5)	86.3 (4)	82.1 (6)	88.2 (1)	#N/A (0)	#N/A (0)

TABLE 8-GA
MEASURED AVERAGE SINGLE EVENT NOISE EXPOSURE LEVELS
General Aviation
April - June 2022

Carrier	AC Type	# Deps		NMS Site									
				1S	2S	3S	4S	5S	6S	7S	8N	9N	10N
General Aviation	Jet	5835	Average Count	87.9 (5424)	87.0 (4942)	89.0 (5377)	82.6 (2980)	82.2 (2300)	83.5 (3000)	81.5 (1274)	84.2 (122)	81.8 (3)	81.1 (2)

**TABLE 9
AIR CARRIER OPERATIONAL HISTORY**

Carrier	AC Type	Year					
		2018	2019	2020	2021	2022	
Air Canada	AC	A223				102	192
		B38M				6	130
Alaska	AS	A319	64	244	314		
		A320	262	3,403	1,733	4,038	1,643
		B737	384	160	14	24	104
		B738	8,260	5,247	767	1,327	1,631
Allegiant	G4	A319				1,076	526
		A320				488	558
American	AA	A21N		2	2	88	4
		A319	722	432	474	220	148
		A320	78	634	488	783	341
		A321	4	214	571	1,035	414
		B38M				17	497
		B738	11,457	10,972	5,201	8,144	4,656
		B752	4	36			
Compass	CP	E175	3,188	3,150	656		
Delta	DL	A220		851	1,954	4,036	1,900
		A223				4	671
		A319	1,979	1,987	828	952	848
		A320	12	11	8	3	4
		B712	3,379	2,495			
		B737	188	8	24		
		B738	18	40	2	12	20
		B739	2				
		B752	2,889	2,889	1,065	1,423	782
		MD90	2				
FedEx	FM	A306	508	510	512	502	246
Frontier	F9	A20N	600	900	550	1,363	880
		A319	190	100	2	88	
		A320	654	428	392	361	166
Horizon	QX	DH8D	728	12			
		E175	2,716	4,257	2,986	3,293	802
SkyWest Coml.	SC	CRJ9	6		2		
		E175	6,960	7,686	3,535	3,711	2,342
Southwest	WN	B38M	14	10		683	891
		B737	32,380	29,360	14,268	22,212	15,703
		B738	64	134	3,780	7,738	1,340
Spirit	NK	A20N			180	1,735	1,149
		A319				250	158
		A320			19	346	396
Sun Country	SY	B737				238	8
		B738				24	2
United	UA	A319	999	1,216	590	819	581
		A320	3,927	3,151	1,227	1,020	1,150
		B737	2,987	2,816	999	2,622	2,121
		B738	5,154	5,627	2,645	2,946	2,542
		B752	4			2	
UPS	5X	A306	22	12	18	18	
		B752	394	404	404	392	204
WestJet	WS	B736	10	58	34		
		B737	666	618	126	112	282
Total			91,875	90,074	46,370	74,253	46,032

TABLE 10
AIRCRAFT OPERATIONAL HISTORY

Aircraft	Year				
	2018	2019	2020	2021	2022
A20N	600	900	730	3,098	2,029
A21N		2	2	88	4
A220		851	1,954	4,036	1,900
A223				106	863
A306	530	522	530	520	246
A319	3,954	3,979	2,208	3,405	2,261
A320	4,933	7,627	3,867	7,039	4,258
A321	4	214	571	1,035	414
B38M	14	10		706	1,518
B712	3,379	2,495			
B736	10	58	34		
B737	36,605	32,962	15,431	25,208	18,218
B738	24,953	22,020	12,395	20,191	10,191
B739	2				
B752	3,291	3,329	1,469	1,817	986
CRJ9	6		2		
DH8D	728	12			
E175	12,864	15,093	7,177	7,004	3,144
MD90	2				
Total	91,875	90,074	46,370	74,253	46,032

TABLE 11
AIR CARRIER AVERAGE DAILY DEPARTURE HISTORY

Carrier	AC Type	AC	Year				
			2018	2019	2020	2021	2022
Air Canada	AC	A223				.140	.263
		B38M				.008	.178
Alaska	AS	A319	.088	.334	.432		
		A320	.359	4.660	2.363	5.534	2.247
		B737	.526	.219	.022	.033	.142
		B738	11.315	7.189	1.046	1.816	2.236
Allegiant	G4	A319				1.474	.721
		A320				.668	.764
American	AA	A21N		.003	.003	.121	.005
		A319	.989	.592	.648	.296	.203
		A320	.107	.868	.664	1.082	.466
		A321	.005	.293	.779	1.414	.567
		B38M				.022	.679
		B738	15.696	15.030	7.107	11.156	6.381
		B752	.005	.049			
Compass	CP	E175	4.367	4.315	.896		
Delta	DL	A220		1.164	2.667	5.529	2.603
		A223				.005	.918
		A319	2.712	2.723	1.131	1.304	1.162
		A320	.016	.014	.014	.003	.005
		B712	4.627	3.419			
		B737	.258	.011	.033		
		B738	.025	.055	.003	.016	.027
		B739	.003				
		B752	3.959	3.956	1.454	1.948	1.071
		MD90	.003				
FedEx	FM	A306	.696	.699	.699	.688	.337
Frontier	F9	A20N	.822	1.233	.751	1.866	1.205
		A319	.260	.137	.003	.121	
		A320	.896	.586	.536	.496	.227
Horizon	QX	DH8D	.997	.016			
		E175	3.721	5.830	4.079	4.512	1.099
SkyWest Coml.	SC	CRJ9	.008		.003		
		E175	9.534	10.529	4.833	5.085	3.208
Southwest	WN	B38M	.019	.014		.937	1.219
		B737	44.351	40.216	19.497	30.416	21.518
		B738	.088	.184	5.161	10.605	1.830
Spirit	NK	A20N			.246	2.381	1.573
		A319				.342	.216
		A320			.025	.471	.542
Sun Country	SY	B737				.326	.011
		B738				.033	.003
United	UA	A319	1.373	1.666	.806	1.123	.795
		A320	5.375	4.315	1.675	1.397	1.575
		B737	4.093	3.855	1.366	3.589	2.907
		B738	7.058	7.712	3.612	4.036	3.482
		B752	.005			.003	
UPS	5X	A306	.030	.016	.025	.025	
		B752	.540	.553	.552	.537	.279
WestJet	WS	B736	.014	.079	.046		
		B737	.912	.847	.172	.153	.386
Total			125.852	123.384	63.347	101.712	63.052

TABLE 12
AIRCRAFT Glossary

AC Type	Make	Model/Series
A20N	Airbus	320-200 Neo
A220	Airbus	220-100
A223	Airbus	220-300
A306	Airbus	300-600
A319	Airbus	319
A320	Airbus	320
B38M	Boeing	737-800 Max
A321	Airbus	321
A21N	Airbus	321 Neo
B712	Boeing	717-200
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
E145	Embraer	145
E175	Embraer	175
MD90	McDonnell Douglas	90

QUARTERLY NOISE MEETING

Date: June 28, 2022

Time: 2:00 PM

Place: Virtual (Zoom)

ITEMS DISCUSSED

A summary of the John Wayne Airport (JWA) May 2022 airport statistics was provided by Ms. Cristina Magaña, ANO Specialist. Ms. Magaña stated there was a 71.3% increase in passenger volume compared to the same period last year. Mr. Anthony Cangey, ANO Specialist, informed the attendees that for May, JWA broke a record of 1,003,510 passengers. The previous record was in August 2018 at 991,112 passengers. Mr. Cangey shared that JWA has been breaking weekly records over the past few weeks for passenger totals. Mr. Cangey also mentioned that, currently, passenger levels are 7% higher than 2019 levels. In addition, Mr. Cangey stated that load factors are near pre-pandemic percentages. Dennis Bress, a Newport Beach resident, requested a copy of the information presented.

Ms. Cassandra Linares, ANO Specialist, discussed the recently published general aviation (GA) voluntary visual flight rules (VFR) traffic pattern procedure. Ms. Linares stated that the ANO was made aware of an increase in traffic pattern activity over the Bayview Heights/Terrace neighborhoods. Ms. Linares stated that JWA worked with the Federal Aviation Administration (FAA) to approve the voluntary pattern procedure.

Mr. Cangey provided a brief update on the Fly Friendly (FF) program, which was originally scheduled to launch in July, but now is scheduled to launch in August 2022. Mr. Cangey explained that FF is a voluntary program that rewards points to GA jet operators whose aircraft produce the least measurable noise when departing JWA on an annual basis. Mr. Cangey went on to explain that operators will be rewarded for trying to make an effort to fly quietly. Mr. Cangey added that the FF Working Group consists of County Board of Supervisors and staff, City of Newport Beach officials and residents, professional associations, JWA staff, and GA jet operators.

Newport Beach resident Dennis Bress asked if the Fly Friendly software is available to use before the launch date to produce daily and/or weekly reports that determine which commercial carriers and GA operators are not flying high, slow, and quiet. Mr. Cangey stated the ANO did not have those details available at that moment and would forward Mr. Bress's question to Mr. Nikolas Gaskins, JWA Access and Noise Manager.

Airport Commissioner and Newport Beach resident, Sue Dvorak, asked if the new voluntary traffic pattern procedure had already been approved for some time but had not been enforced. Ms. Linares explained that the voluntary GA VFR traffic pattern procedure was reviewed for several months by the FAA before its approval. Commissioner Dvorak asked how it was approved so quickly when compared to the proposed FF JWA-modified National Business Aviation Association (NBAA) Noise Abatement Departure Procedure (NADP). Ms. Linares stated that the voluntary traffic pattern procedure took over six months to implement. Ms. Linares also stated that the ANO does not have details regarding the proposed modified NBAA NADP, but that those discussions regarding the modified NBAA NADP do take place in the FF Working Group meetings.

Commissioner Dvorak asked ANO staff why the launch date for Fly Friendly had been delayed two additional months. Commissioner Dvorak added that she already knew the reason, but that she wanted to hear what details ANO staff would report to the group regarding the delay. Commissioner Dvorak proceeded to state that the delay was due to a Part 150 study, but also stated that the original delay was due to the new Airport Director's start date at JWA. Mr. Cangey explained that the ANO did not have those details available at that moment.

Newport Beach resident Jim Mosher asked for clarification on the noise impact area contour since there are very few residential properties within the 65 dB. Dr. Mosher stated that the properties shown as non-impacted are, indeed, impacted. Mr. Mosher also asked if the 65 dB contour expanded, which properties would be impacted as it is unclear why some residential properties are being counted and others are not.

Eugene Reindel, HMMH consultant, explained that the 65 dB CNEL contour only includes properties that are incompatible based on the definition found in Title 21. Mr. Reindel added, that the County of Orange has documents on property parcels with agreements. Mr. Mosher inquired why the contours agree at Noise Monitoring Stations (NMS) 1S-3S. Mr. Reindel informed Dr. Mosher that the Aviation Environmental Design Tool (AEDT) program is adjusted to agree at those sites. Mr. Mosher continued by asking if weather effects on noise were considered in the model; to which Mr. Reindel confirmed the effects are considered. Dr. Mosher questioned if noise events generated by evening arrivals, which sometimes register at the Airport's southern NMS sites were also incorporated into the model; to which Mr. Reindel once more confirmed.

Newport Beach resident Joe August requested an update on the status of the ANEEM software. Mr. Cangey informed Mr. August that there were no updates at this time. Mr. August advised he will be emailing Mr. Gaskins for an update.

Mr. August stated that NMS 6S needs bird spikes. Mr. Cangey stated he would contact BridgeNet to have a technician make a site visit. Mr. August asked if it is possible to request a report that shows the contamination at NMS 6S with ANEEM software. Mr. Cangey stated that ANEEM software cannot be used for enforcement purposes, and the Airport does not have that ability. Mr. Bress requested that the ANO use the latest software to include a section in the quarterly noise report that shows the contaminated noise. Mr. Bress went on to state that if ANEEM software is not approved to use, the ANO should find a way to have it approved in the 1985 Settlement Agreement. Mr. Bress continued to demand change in the Airport's culture. Mr. Bress stated that he hopes the change will take place with Ms. Charlene Reynolds as the new Airport Director.

Dr. Mosher had a comment regarding the CNEL table in the quarterly report needing to be adjusted since the average is only based on a few contaminated noise events, and are disassociated from operations. Mr. Reindel explained that the manner in which JWA reports its data meets the requirements of Title 21.

Mr. August mentioned that Title 21 shows a threshold at 55 dB. Mr. August added he has spoken to Mr. Gaskins about this item in the past. Mr. Reindel explained that airports can request a waiver to increase a threshold. Mr. Reindel mentioned that the Settlement Agreement includes a 65 dB threshold and a study would need to be conducted for any type of change to the threshold. Mr. August stated there should not be a waiver when there are NMS located in communities.

Mr. Bress asked if the ANO can run daily/weekly reports to show the comparison between 55 dB and 65 dB thresholds. Mr. Cangey informed Mr. Bress that this is something the ANO cannot produce and would reach out to Mr. Gaskins regarding this topic. Mr. Bress added this can be part of the new culture with Ms. Reynolds as the new Airport Director. Mr. Cangey suggested an email be sent by Mr. Bress with details.

Mr. Bress stated that Ms. Reynolds did not sign the Quarter 1 quarterly noise report, and asked if the ANO signed the report. Ms. Magaña explained that Ms. Reynolds was attending a conference during the time the report was ready for signature and was signed by Mr. Rick Francis, Assistant Airport Director.

Ms. Beatrice Siercke, ANO Specialist, asked Mr. Bress whether he needed aggregate noise to be calculated arithmetically or logarithmically. Mr. Bress did not directly answer Ms. Siercke's question.

Dr. Mosher asked what subscription service is being used for complaint submission. Mr. Cangey informed Dr. Mosher that the subscription service noted in the quarterly report is the airnoise.io button.

Mr. Bress asked when the quarterly report was posted on the website because he stated he did not receive an alert notification. Ms. Magaña stated the report was posted last week and a notification was sent to all subscribed users, including Mr. Bress.

QUARTERLY NOISE MEETING ROSTER

June 28, 2022

<u>NAME</u>	<u>ORGANIZATION</u>
Dennis Bress	Resident – Newport Beach
Jim Mosher	Resident – Newport Beach
Joe August	Resident – Newport Beach
Jon Katzenstein	Resident – Santa Ana
Sue Dvorak	Resident – Newport Beach
Steve Livingston	Newport Beach Aviation Committee Member
Sue Dvorak	Second District Airport Commissioner
Tara Finnigan	Newport Beach City Manager
Tri Ho	Unknown
Eugene Reindel	HMMH
Anthony Cangey	John Wayne Airport
Beatrice Siercke	John Wayne Airport
Cassandra Linares	John Wayne Airport
Cristina Magaña	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):

0.0101 Sq. Mi.
2. Estimated Number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:

70
3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:

175 (Based on 2.5 People/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:

B752 – 542 (Arrivals + Departures)
5. Total number of aircraft operations during the calendar quarter:

76,748
6. Number of Air Carrier operations during the calendar quarter:
(Not mandatory)

25,639
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)

51,006
9. Estimated number of operations by Military aircraft during the calendar quarter:
(Not mandatory)

103