Noise Thresholds and Carrier Operations

Many of you may recall from the Airport Forum\(^1\) concerning airport issues of March 9, that the following question came up:

Q: (This is paraphrased) “I understand that the noise limitations are calculated based on an entire quarter’s worth of averaging the same carrier’s specific plane (like an American Boeing 737-800) as it flies over, say NMS #5S. In other words, a carrier could exceed 105 dB twenty times in a quarter, and as long as that same carrier and plane type also stayed below 95 dB twenty more times, the quarterly average would be 100 dB. Instead of knowing that, I want to know how many times a carrier’s plane exceeds each specific NMS’ limits per month. Can the JWA noise office show that to us?”

A: Yes. From the JWA Noise Office, here it is for a month’s worth of flight-by-flight specifics for American’s Boeing 737-800 (this older plane tends to be one of if not THE loudest flown from JWA). The charts show that in January 2018 the AA B737-800 did not exceed (even one time) the dB level for any of the seven NMS’ on the departure corridor. A number of flights came close at NMS #3S (which is located at 2138 Anniversary Lane, near the University YMCA), but even then did not exceed the dB level there (closest flight was at 100.8dB, limit is 101.1 dB).

Note how at the latter NMS’, like NMS #4S, #5S, #6S, and NMS #7S (where more folks live), the noise distance between the NMS’ limit and the actual flights’ single event noise gets wider.

Thank you to Nick Gaskins and the JWA Noise Office for providing this information.

\(^1\) It should also be noted that much of the subject matter of the March 9 forum as well as the previous forums may be accessed on the City’s web page; and can be accessed by going to the Aviation Committee section on the City’s web page and going to “special reports.”
To put the findings, which follow the diagram below, in context see the location of the noise monitors.

Location of the Seven (7) Departure Noise Monitors

What follows on the next number of pages are the reports at each of the seven (7) Departure Noise Monitors

\[2\] The following information is voluminous, so if you wish to avoid you can skip ahead at this juncture.
Noise Monitoring Station (NMS) 1S

- Noise events at each of the Noise Monitoring Stations (NMS) are in chronological order from January 1, 2018 through January 31, 2018.
- There was a total of 405 American Airlines Boeing 737-800 series Class A Departures in January 2018.
- Missing noise events at each of NMS are a result of either no noise event recorded, or the noise event was disassociated due to contamination.
- Highest Noise Event at NMS 1S = 100.9 dB SEL.
Noise Monitoring Station (NMS) 2S

- Noise events at each of the Noise Monitoring Stations (NMS) are in chronological order from January 1, 2018 through January 31, 2018.
- There was a total of 405 American Airlines Boeing 737-800 series Class A Departures in January 2018.
- Missing noise events at each of NMS are a result of either no noise event recorded, or the noise event was disassociated due to contamination.
- Highest Noise Event at NMS 2S ~ 99.8 dB SENEL.
Noise Monitoring Station (NMS) 3S

- Noise events at each of the Noise Monitoring Stations (NMS) are in chronological order from January 1, 2018 through January 31, 2018.
- There was a total of 405 American Airlines Boeing 737-800 series Class A Departures in January 2018.
- Missing noise events at each of NMS are a result of either no noise event recorded, or the noise event was disassociated due to contamination.
- Highest Noise Event at NMS 3S = 100.8 dB SENEL.
Noise Monitoring Station (NMS) 4S

- Noise events at each of the Noise Monitoring Stations (NMS) are in chronological order from January 1, 2018 through January 31, 2018.
- There was a total of 405 American Airlines Boeing 737-800 series Class A Departures in January 2018.
- Missing noise events at each of NMS are a result of either no noise event recorded, or the noise event was disassociated due to contamination.
- Highest Noise Event at NMS 4S = 92.4 dB SENEL.
Noise Monitoring Station (NMS) 5S

- Noise events at each of the Noise Monitoring Stations (NMS) are in chronological order from January 1, 2018 through January 31, 2018.
- There was a total of 405 American Airlines Boeing 737-800 series Class A Departures in January 2018.
- Missing noise events at each of NMS are a result of either no noise event recorded, or the noise event was disassociated due to contamination.
- Highest Noise Event at NMS 5S = 92.4 dB SE(NL)
Noise Monitoring Station (NMS) 6S

- Noise events at each of the Noise Monitoring Stations (NMS) are in chronological order from January 1, 2018 through January 31, 2018.
- There was a total of 405 American Airlines Boeing 737-800 series Class A Departures in January 2018.
- Missing noise events at each of NMS are a result of either no noise event recorded, or the noise event was disassociated due to contamination.
- Highest Noise Event at NMS 6S = 92.1 dB SENEL.
Noise Monitoring Station (NMS) 7S

- Noise events at each of the Noise Monitoring Stations (NMS) are in chronological order from January 1, 2018 through January 31, 2018.
- There was a total of 405 American Airlines Boeing 737-800 series Class A Departures in January 2018.
- Missing noise events at each of NMS are a result of either no noise event recorded, or the noise event was disassociated due to contamination.
- Highest Noise Event at NMS 7S = 88.9 dB SENEL.
STAYY Departure

On March 29, 2018, Southwest Airlines began flying a limited number of STAYY departure procedures. Below is the first STAYY procedure which was flown the morning of March 29, 2018.

A more detailed analysis will be provided at a later date once the data on the flights has been provided and analyzed. The City will continue to monitor the departures.

Calibration of Noise Monitors

As many of you recall, the community at large requested that the City retain a third party to verify the readings of the Noise Monitors at John Wayne Airport. Accordingly the City retained a third party who has now issued a report confirming the accuracy of the noise
monitors at JWA. The full report can be viewed on the City’s website at:
http://www.newportbeachca.gov/government/departments/city-manager-s-
office/aviation-committee/special-reports

This is a portion of the overall scope of work to be performed by HMMH, which
was two-fold. One was to monitor the monitors, that report is not completed but it should
be soon. The other was to have some outside verification of the County’s calibration of
its own system. That is what this current document from HMMH represents.

Noise Report from the 4th Quarter

Below is a comparison of the three top Class A carriers and the noise readings at
the seven (7) departure noise monitors for the 4th Quarter of 2016 vs. 2017.

<table>
<thead>
<tr>
<th>Airline</th>
<th>Aircraft</th>
<th>Ops.</th>
<th>NMS1</th>
<th>NMS2</th>
<th>NMS3</th>
<th>NMS4</th>
<th>NMS5</th>
<th>NMS6</th>
<th>NMS7</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Quarter 2016</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>B737</td>
<td>2001 Average Count</td>
<td>93.3 (1863)</td>
<td>92.6 (1806)</td>
<td>89.6 (1863)</td>
<td>83.7 (1848)</td>
<td>84.0 (1855)</td>
<td>84.7 (1843)</td>
<td>81.7 (1765)</td>
</tr>
<tr>
<td></td>
<td>B738</td>
<td>16 Average Count</td>
<td>93.8 (16)</td>
<td>93.4 (16)</td>
<td>90.7 (16)</td>
<td>85.5 (15)</td>
<td>85.7 (16)</td>
<td>86.2 (14)</td>
<td>84.0 (15)</td>
</tr>
<tr>
<td></td>
<td>A320</td>
<td>637 Average Count</td>
<td>94.1 (549)</td>
<td>93.2 (528)</td>
<td>92.1 (546)</td>
<td>86.3 (542)</td>
<td>85.6 (543)</td>
<td>87.7 (539)</td>
<td>85.9 (539)</td>
</tr>
<tr>
<td>United</td>
<td>B737</td>
<td>620 Average Count</td>
<td>96.0 (569)</td>
<td>94.6 (555)</td>
<td>95.9 (571)</td>
<td>89.2 (565)</td>
<td>89.7 (573)</td>
<td>90.2 (566)</td>
<td>85.8 (564)</td>
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<tr>
<td></td>
<td>B738</td>
<td>139 Average Count</td>
<td>98.1 (177)</td>
<td>96.6 (173)</td>
<td>96.2 (176)</td>
<td>89.6 (177)</td>
<td>89.2 (177)</td>
<td>90.3 (172)</td>
<td>86.4 (173)</td>
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<tr>
<td>American</td>
<td>A320</td>
<td>35 Average Count</td>
<td>94.8 (35)</td>
<td>94.1 (35)</td>
<td>92.7 (34)</td>
<td>85.4 (34)</td>
<td>85.1 (35)</td>
<td>86.3 (35)</td>
<td>84.7 (33)</td>
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<tr>
<td></td>
<td>A321</td>
<td>3 Average Count</td>
<td>98.9 (2)</td>
<td>97.4 (2)</td>
<td>95.8 (2)</td>
<td>87.5 (2)</td>
<td>85.4 (2)</td>
<td>84.5 (2)</td>
<td>80.3 (2)</td>
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<tr>
<td></td>
<td>B738</td>
<td>1462 Average Count</td>
<td>98.8 (131)</td>
<td>97.4 (129)</td>
<td>97.2 (1326)</td>
<td>89.2 (1318)</td>
<td>89.1 (1337)</td>
<td>89.4 (1307)</td>
<td>86.2 (1314)</td>
</tr>
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<tr>
<td>4th Quarter 2017</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>American</td>
<td>A320</td>
<td>88 Average Count</td>
<td>94.9 (75)</td>
<td>94.2 (75)</td>
<td>92.9 (75)</td>
<td>85.6 (74)</td>
<td>84.9 (64)</td>
<td>86.5 (72)</td>
<td>84.2 (66)</td>
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<tr>
<td></td>
<td>B738</td>
<td>1381 Average Count</td>
<td>99.0 (1193)</td>
<td>97.6 (1153)</td>
<td>97.3 (1207)</td>
<td>89.3 (1204)</td>
<td>88.6 (1072)</td>
<td>89.6 (1198)</td>
<td>86.1 (1076)</td>
</tr>
</tbody>
</table>
The foregoing equates to 126.4 ADDS for the 12 Month period and 126.24 Commercial ADDS for the quarter.
A further breakdown of Class A and E Operations for 2015-17 and also looking back to 2008

2008: Total for 4th Qtr.: 122.68 ADDs
A: 71.72 ADDs  
E: 50.96 ADDs

2015: Total for 4th Qtr.: 120.39
A: 81.77  
E: 38.62

2016: Total for 4th Qtr: 126.24
A: 81.61  
E: 44.63

2017: Total for 4th Qtr: 127.91
A: 84.94  
E: 42.97

In the 4th Quarter of 2016 the JWA Noise Office received 1,036 complaints; in the 4th Quarter of 2017, the JWA Noise Office received 672 complaints.

Possible Helicopter Operations at JWA

It is reported that Surf Air is apparently entertaining the idea of helicopter shuttles between John Wayne Airport in Santa Ana and Hawthorne Airport near Los Angeles, where you can catch Surf Air flights to destinations throughout California.
Slow Plane Movement

An MIT scientist may have discovered a simple way to battle the airplane noise that’s become a major nuisance in several cities: Slow the planes down. If you would like to read more, you can access an article on the study which appeared in the Wall Street Journal at:
https://www.wsj.com/amp/articles/a-new-antidote-for-noisy-airports-1520429994

**JWA- Passenger Statistics**

Airline passenger traffic at John Wayne Airport increased in both January and February 2018 as compared with January and February 2017. In January 2018, the Airport served 817,258 passengers, an increase of 3.0% when compared with the January 2017 passenger traffic count of 793,774. The top three airlines in January 2018 based on passenger count were Southwest Airlines (311,854) or 38.1%, United Airlines (134,898) or 16.5% and American Airlines (127,165) or 15.6%.

The Average Daily Departures (ADDs) for January 2018 were 119.08 ADDs vs. 117.79 ADDs for January of 2017.

Meanwhile, airline passenger traffic at John Wayne Airport increased in February 2018 as compared with February 2017. In February 2018, the Airport served 763,505 passengers, an increase of 7.4% when compared with the February 2017 passenger traffic count of 711,010. Commercial aircraft operations increased 5.6% and commuter aircraft operations decreased 34.8% when compared with February 2017 levels. Total aircraft operations increased in February 2018 as compared with the same month in 2017. In February 2018, there were 23,348 total aircraft operations (take-offs and landings), an 18.8% increase compared to 19,649 total aircraft operations in February 2017.

The ADDs for February 2018 were 118.32 ADDS vs. 112.38 ADDs for 2017.
Long Beach-January 2018

In the first month of January 2018, Long Beach Airport saw an increase of +7% in passenger traffic as compared to 2017. The airport served 321,165 passengers for the first month of 2018.

The Airport is also in the process of considering an amendment to their Noise Ordinance, in order to increase fines for violations of their curfew. The proposal has met stern opposition from JetBlue, the major carrier at the airport. JetBlue has alleged among other things that the proposal is unreasonable; statement by JetBlue asserting that the proposed amendments violate Federal Aviation Administration (FAA) rules and the 1990 Airport Noise and Capacity Act (ANCA), under which the noise ordinance is “grandfathered.” for the year. At the month-end, Long Beach Airport had all 50 Air Carrier flight slots allocated to JetBlue (35). Southwest (6), Delta (4), American (3), FedEx (1) and UPS (1). One Commuter Carrier is allocated to American and 24 Commuter Carrier slots remain available for allocation.

Ontario

Flying on the heals of strong gains in 2017, Ontario International Airport (ONT) recorded double-digit increases in traffic volumes for the second consecutive month of 2018, with passenger levels up more than 10% and freight tonnage nearly 20% higher in February. Passengers totaled 353,883 in February, 10.2% higher than February 2017 when ONT welcomed 321,267 customers. Cargo continued to grow at a nearly 20% rate with freight shipments up 19.8%, while mail shipments increased 2.6% compared with the same month a year ago. That ONT continued to grow and succeed in February bodes well as it prepares to take on their next role as Southern California’s new gateway to Asia in March. China Airlines launched daily trans-oceanic service between Taiwan and Ontario on March 25. After initially planning to service the route four days a week, China Airlines increased flight frequency to seven days a week as customer demand exceeded expectations. For January and February combined, passenger and cargo volumes were higher by 10.4% and 20.7%, respectively, over the first two months of 2017.
Ontario meanwhile posted robust gains in passengers for 2017 as volume reached 4.55 MAP, the highest since 2010. Southwest had 56% of the passengers in 20173.

**LAX**

LAX passenger figures for 2017 reached a new level of 84.56 MAP, an increase of 4.5% over 2016. Already for the first month of January 2018, LAX shows an increase of +3.76% in passengers vs. the same month in 2017.

*Questions about the Airport or Operations*

This is a friendly reminder that if you have any questions about John Wayne Airport and its departures and/or operations do not hesitate to contact the City. In addition, the City is willing to go to various locations in the City to observe airport operations. Regarding any questions, the City will try and get you an answer or response as quickly as possible. If you wish to lodge a complaint about noise with the FAA, the City’s link on its website is:

http://www.newportbeachca.gov/trending/nextgen-departure-concerns

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3 Current statistics reveal that Southwest has 55.76% of the passengers at ONT; 11.48% at Long Beach; 40.9% at JWA.