Reince Tyler

Subject: FW: Please distribute to all ANAC members before next meeting.
Attachments: Portable Noise Measrements October 18 2022.pptx

From: Gary Wonacott <wildcatwonacott@gmail.com>
Sent: Saturday, February 11, 2023 8:50 PM
To: SDCRAA clerk <clerk@san.org>
Subject: Please distribute to all ANAC members before next meeting.

Dear ANAC members:

During the Part 150 Study, I complained because the Airport Authority repeatedly dismissed Mission Beach, using the excuse that those living in the 65 dB CNEL were the only ones to be considered. Since the FAA Satellite Navigation was implemented, it is documented that Mission Beach has had the largest number of noise complaints, almost all from South Mission Beach. Rather than accept the validity of the complaints, our own representative to ANAC questioned whether they could all real. After twelve years, our representative to ANAC stepped down this year.

Twenty to thirty years ago, two fixed noise monitors were removed in Mission Beach. The reason was that noise measured from aircraft crossing overhead could not be differentiated from ambient noise. We believe it was a mistake to remove the noise monitors then, but absolutely since the implementation of the FAA satellite navigation system. The residents, particularly in South Mission Beach have requested for some time that this whole issue of fixed noise monitors in SMB be revisited. The Airport Authority has ignored our requests, but now we believe we have strong evidence, noise data, that confirms higher noise levels in SMB and therefore the need for additional fixed monitors.

We also believe that additional portable noise monitor studies are warranted at the earliest possible date, but in any case before the NADP testing is to commence.We believe these added monitors will be critical ensuring that NADP also serves the residents of Mission beach.

Gary Wonacott
South Mission Beach

SECOND REPORT ON LARSON MILLER PORTABLE NOISE MEASUREMENTS IN MISSION BEACH

G Wonacott

February 2023

REASON AND OBJECTIVE FOR STUDY

- The implementation of the FAA satellite navigation concentrated the aircraft over South Mission Beach resulting in greater noise with a nominal track that is a short distance farther north.
- S. Knack indicated several years ago the possibility of putting in additional fixed noise monitors in SMB.[1]
- The current NM#23, located at the jetty in SMB, is on the southern fringe of the PADRZ SID and is subject to loud motor cycles and cars.
- These studies are intended to show comparable or higher noise levels farther north into SMB; this might influence the 65 dB contour if noise monitors are used to adjust the contour.
- This is step one using the Larson Davis LxT portable noise monitor using 24 test times; step two would be for the Airport Authority to setup their portable noise monitor for two to four weeks that confirms the higher noise levels.
- The final step is to move forward with fixed noise monitors

[1]So that it is clear to residents in north Mission Beach, this is not an attempt to move airport noise north

TEST APPROACH

- Identify 3-5 locations, residences, in South Mission Beach that have unobstructed views of the airport skies.
- Set up and run 24 hour tests; this provides representative CNEL values, although the CNEL values at the same monitor location can vary from day to day.
  - A minimum of two weeks is needed, although one month is preferred.
- While the Larson Davis software provides a CNEL[1] value, much of the comparison of NM#23 and the Larson Davis Davis is based on single event numbers.
  - The average of the single event numbers can be compared or just a visual inspection can assess if the Larson Davis measured numbers are about the same, greater, or smaller.
- The next chart shows the location of the three measurements and their distance from NM#23 as well as approximate upper and lower boundaries for the PADRZ SID and lastly, the nominal flight track for the FAA nighttime noise abatement procedure

1 – one approach proposed by others is to add together three CNEL components, the day time divided by 24 hours, the evening divided by 3 hours, including the penalty, and the nighttime also including the penalty, but divided by 2 hours.

- Avalon Court is 1065 ft @ 313 deg
- Capistrano Pl is 1311 ft @365 deg
- Deal Court is 2070 ft @355 deg

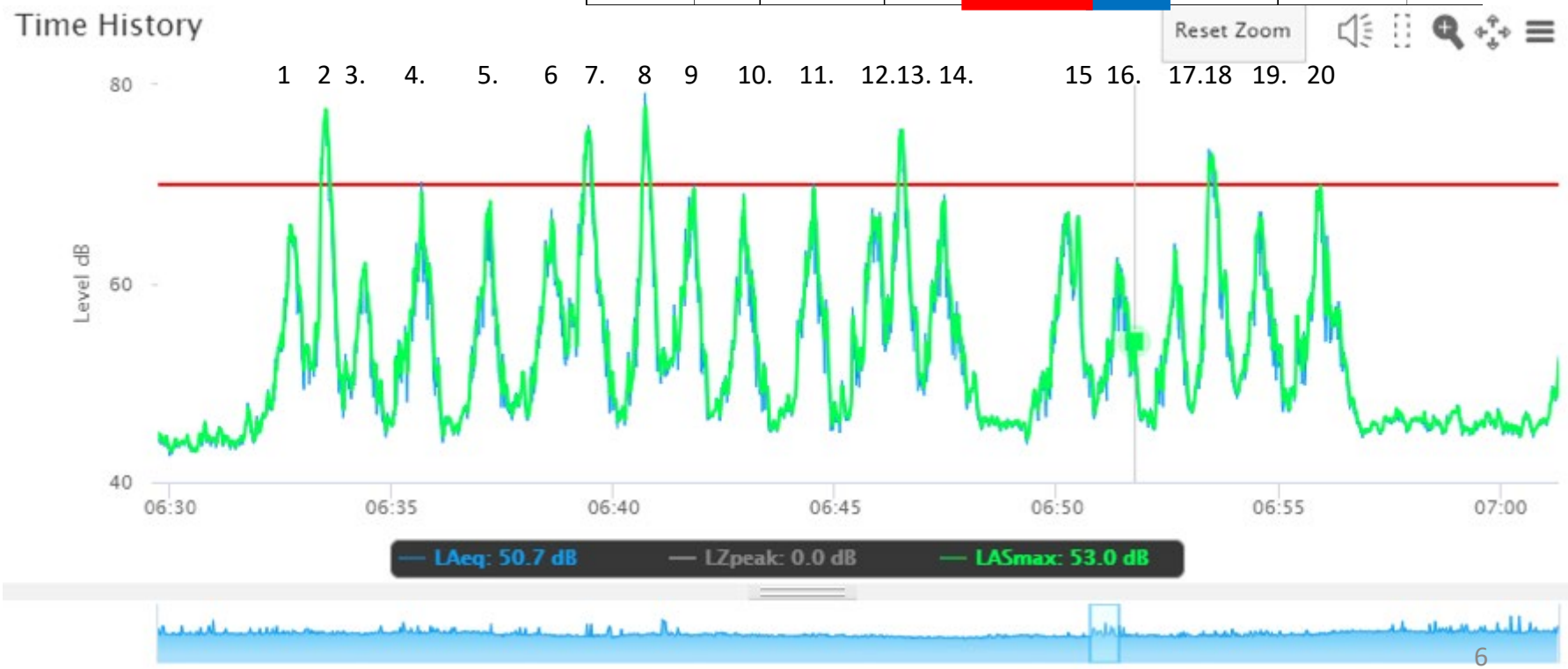
RESULTS

- AVALON COURT JANUARY 28-29 2023
  - Community noise is 60.4 dB CNEL
- CAPISTRANO PLACE
  - Community noise is 62.6 dB CNEL
- DEAL COURT ON JANUARY 31 – FEBRUARY 1 2023
  - Community noise is 59.2 dB CNEL

Avalon Court data and analysis – January 28/29 2023

- The bad news is that there are 20 departures between 6:30 and 7 am. The good news is that all but 4 are on the ZZOOO SID, reducing the noise impact on Mission Beach
- Average single event numbers are 69.6 dB for Larson Davis LxT and 72.4 dB for LxT
- Larson Davis LxT CNEL is 60.4 dB

DEPARTURE	TIME	ACRFT TYPE	ALTITUDE	LARSON DAVIS	NM#23	NM#14	Destination	Departure
1	6:32:43	A321-211	2100	65.9	70	79	Phoenix	Z
2	6:33:31	737-924ER	2100	77.5	79	66	San Francisco	P
3	6:34:24	737-8	1800	62	65	79	Dallas	Z
4	6:35:40	767-300	2400	69.1	70	79	Memphis	Z
5	6:37:13	737-823	1900	68.3	70	82	Chicago	Z
6	6:38:36	A321-231	2400	66.4	70	79	Dallas	Z
7	6:39:26	737-7H4	2700	75.4	74	Unk	Las Vegas	P
8	6:40:43	ERJ 170-200ER	1800	77.9	76	UNK	SEATTLE	P
9	6:41:48	A321-211	2200	69.5	78	71	SALT LAKE CITY	Z
10	6:42:56	737-800	1700	69.5	72	84	CHICAGO	Z
11	6:44:27	737-800	2300	66.9	71	79	HOUSTON	Z
12	6:45:50	737-7QB	2200	75.5	71	80	DENVER	Z
13	6:46:30	ERJ 170-200ER	2200	75.5	76	unk	LAX	P
14	6:47:27	A321-211	2400	68.3	72	79	Minn St Paul	Z
15	6:50:14	A321-211	2500	67.1	70	79	Atlanta	Z
16	6:50:29	737-8	2700	66.7	unk	74	Phoenix	Z
17	6:51:21	A321-253NX	2300	62	unk	77	Philadelphia	Z
18	6:52:40	ERJ 170-200ER	2400	73	74	unk	San Francisco	P
19	6:53:29	A321-231	1800	66.6	unk	82	Charlott	Z
20	6:54:34	A321-211	2500	69.9	unk	78	Detroit	Z

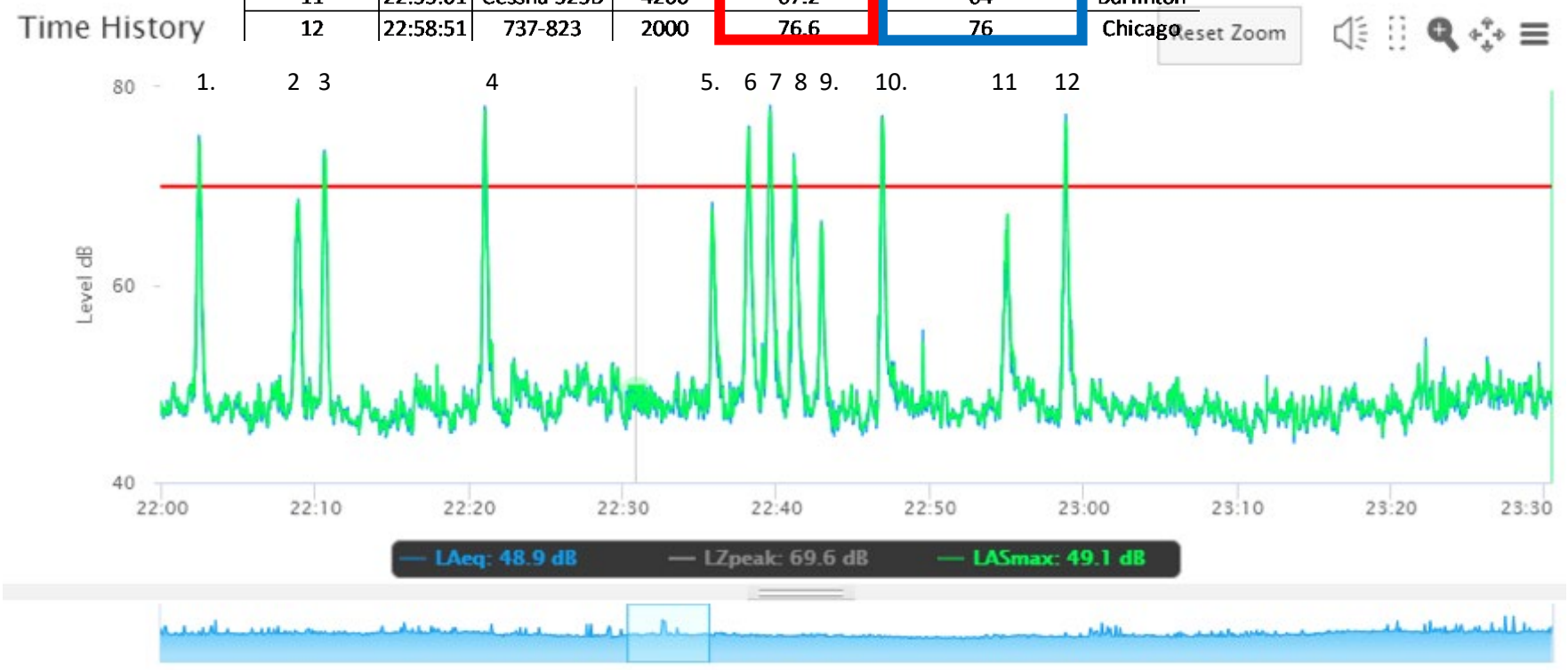


COMPARISON OF LARSON DAVIS LXT PORTABLE NOISE MONITOR AND NM#23 FIXED MONITOR JANUARY 28-29, 2023, NM LOCATED ON AVALON COURT OCEAN SIDE

LARSON DAVIS NOISE MEASUREMENTS ARE EQUAL TO OR HIGHER THAN NM#23 → STRONGLY SUPPORTS ADDITION OF NOISE MONITOR(S)

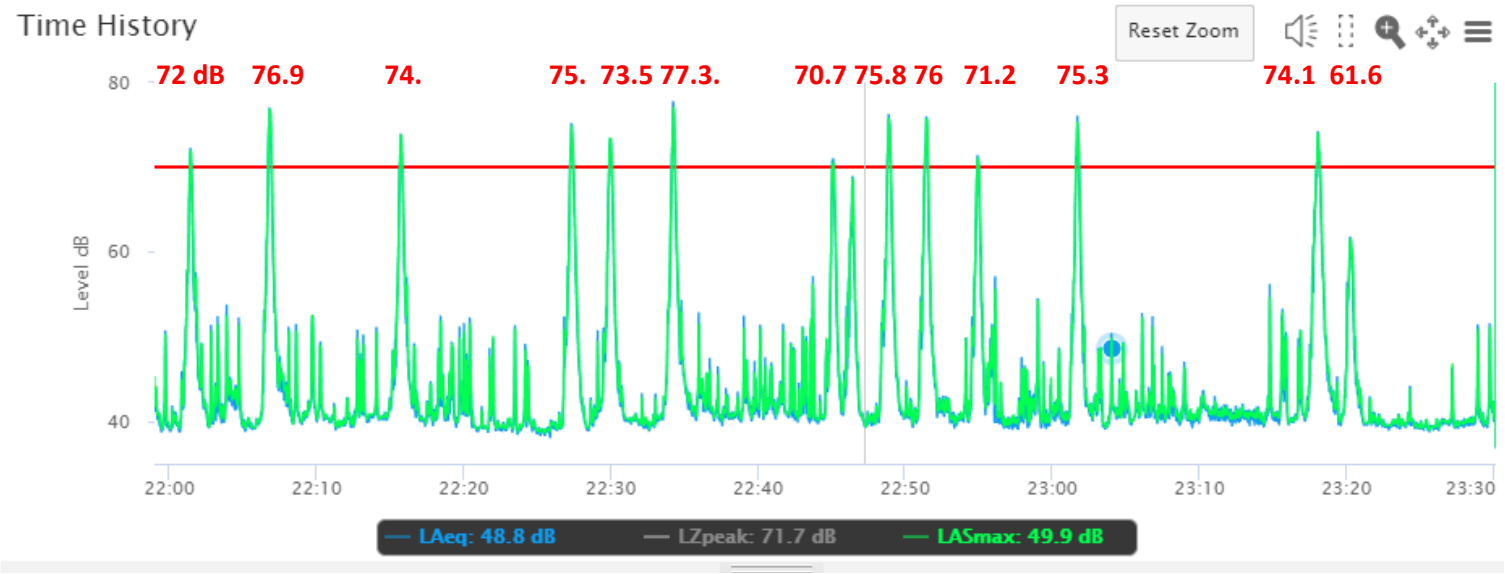
DEPARTURE	TIME	ACRFT TYPE	ALTITUDE	LARSON DAVIS	NM#23	Destination
1	22:02:25	A320-270N	2700	74.6	74	Las Vegas
2	22:08:52	Textron 680A	3600	68.6	69	Moffet
3	22:10:34	737-8	1800	73.5	75	Newark
4	22:21:01	A321-231	2200	77.8	76	Phl
5	22:35:39	Unk	2300	67.8	68	Las Vegas
6	22:38:11	A321-211	2500	75.9	74	Detroit
7	22:39:35	737-824	2000	77.7	77	Chicago
8	22:41:08	A321-253NX	3100	72.9	69	Miami
9	22:42:57	SAAB 2000	2400	66.3	67	Oakland
10	22:46:53	757-351	1900	76.9	77	Atlanta
11	22:55:01	Cessna 525B	4200	67.2	64	Burlinton
12	22:58:51	737-823	2000	76.6	76	Chicago

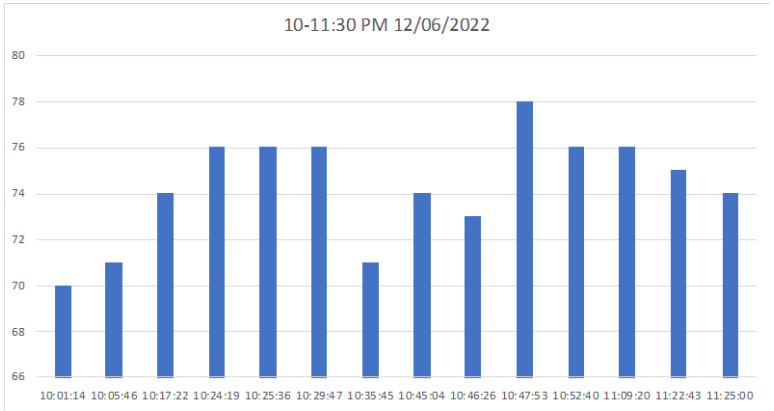
Community noise for 24 hour period is 60.4 dB CNEL



LARSON DAVIS LxT MEASUREMENTS ON CAPISTRANO PLACE ON 10/31/2022

WEBTRAX DATA NOT AVAILABLE ON 10/31; FIRST DATE DATA AVAILABLE IS 12/6/2022 AT NM#23; NM#23 VALUES ARE SLIGHTLY HIGHER, BUT AGAIN NOT DIRECTLY COMPARABLE

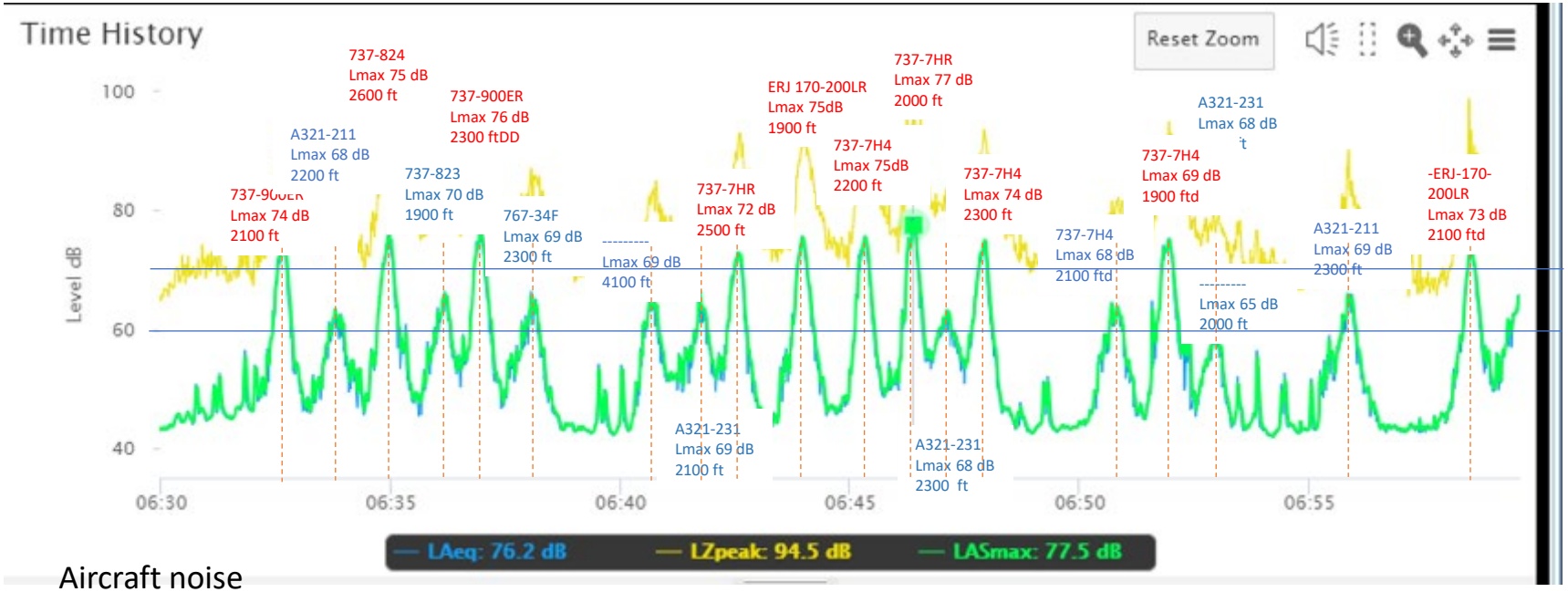




LARSON DAVIS LxT MEASUREMENTS ON CAPISTRANO PLACE ON 11/1/2022

WEBTRAX DATA NOT AVAILABLE for 11/1

- Substantial values comparable to NM#23
  - Capistrano measurement is



Aircraft noise events 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

COMPARISON OF NM#23 AND LARSON DAVIS AT PROPERTY ON DEAL COURT OCEANSIDE 0630 TO 0700

NUMBER	DEPARTURE TRACK	TIME	DELTA TIME	AIRCRAFT TYPE	DESTINATION	HORIZONTAL DIST TO NM FT	ALTITUDE FT	LMAX NM#23	LMAX LARSON DAVIS
1	ZZOOO	6:33:06	N/A	A321-214	SALT LAKE CITY	5808	2400	66	60.8
2	PADRZ	6:34:10	0:01:04	737-800	PORTLAND	901	2200	73	71.2
3	ZZOOO	6:35:13	0:01:03	A321-211	MINN-ST PAUL	5808	1900	67	62.1
4	PADRZ	6:36:03	0:00:50	737-924	SAN FRANCISCO	1276	2300	77	73.9
5	ZZOOO	6:37:14	0:01:11	737-8H4	CHICAGO	5808	2000	70	62.2
6	PADRZ	6:38:12	0:00:58	ERJ 170-200LR	SAN FRANCISCO	909	2600	71	69.1
7	ZZOOO	6:39:51	0:01:39	A321-211	DETROIT	5808	2200	67	61.8
8	PADRZ	6:41:30	0:01:39	737-7H4	LAS VEGAS	944	2400	73	71.8
9	ZZOOO	6:42:20	0:00:50	A320-251N	DENVER	5808	2700	61	55.2
10	PADRZ	6:43:16	0:00:56	737-7H4	SAN JOSE	710	2500	71	69.3
11	ZZOOO	6:44:12	0:00:56	A321-231	PHOENIX	5808	2000	66	60.7
12	PADRZ	6:45:48	0:01:36	737-7H4	SACRAMENTO	449	3600	68	66.5
13	ZZOOO	6:46:43	0:00:55	A321-231	CHARLOTTE	5808	2200	67	59.5
14	PADRZ	6:47:47	0:01:04	737-7H4	OAKLAND	758	2600	72	70.3
15	ZZOOO	6:48:43	0:00:56	A321-211	ATLANTA	5808	2100	67	62.9
16	PADRZ	6:51:23	0:02:40	ERJ 170-200LR	LAX	915	2500	71	69.4
17	ZZOOO	6:52:11	0:00:48	737-7H4	DENVER	5808	1900	66	60.5
18	PADRZ	6:52:49	0:00:38	BLANK	VAN NUYS	389	53--	65	64
19	ZZOOO	6:53:58	0:01:09	767-34AF	LOUISVILLE	5808	2100	67	60.3
20	ZZOOO	6:56:34	0:02:36	737-924ER	CHICAGO	5808	1800	70	63.3
21	ZZOOO	7:01:08	0:04:34	ERJ 170-200LR	SAN JOSE	553	2700	70	68
						AVERAGE PADRZ HORIZONTAL DIST 780 FT			

COMPARISON OF NM#23 AND LARSON DAVIS DATA

COLLECTED ON JANUARY 31, 2023 ON DECK AT DEAL COURT ON OCEANSIDE OF MISSION BLVD, 10 pm to 11:30 pm analysis

Only one departure on PADRZ SID

- 737 Max 8
- Newark
- Hor – 2450 ft
- Alt – 1800 ft
- Lmax-23= 73 dB
- Lmax-LD= 68.1dB

- Shorts 360
- Philadelphia
- Hor – 2131 ft
- Alt – 2200 ft
- Lmax-23= 71 dB
- Lmax-LD= 65.8 dB

- 737-824
- Chicago
- Hor – 2004 ft
- Alt – 2300 ft
- Lmax-23= 75 dB
- Lmax-LD= 70.5 dB

- A321-211
- Atlanta
- Hor – 2524 ft
- Alt – 2000 ft
- Lmax-23= 75 dB
- Lmax-LD= 71.5 dB

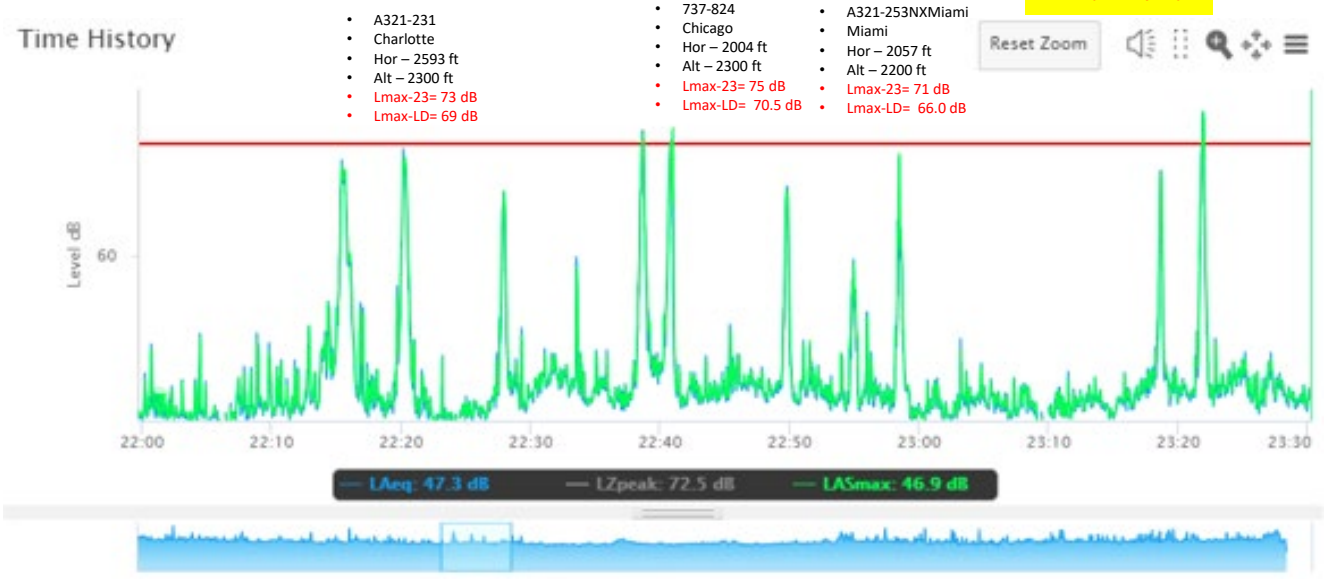
- A330-941
- chicago
- Hor – 1548 ft
- Alt – 1900 ft
- Lmax-23= 76 dB
- Lmax-LD= 73.0 dB

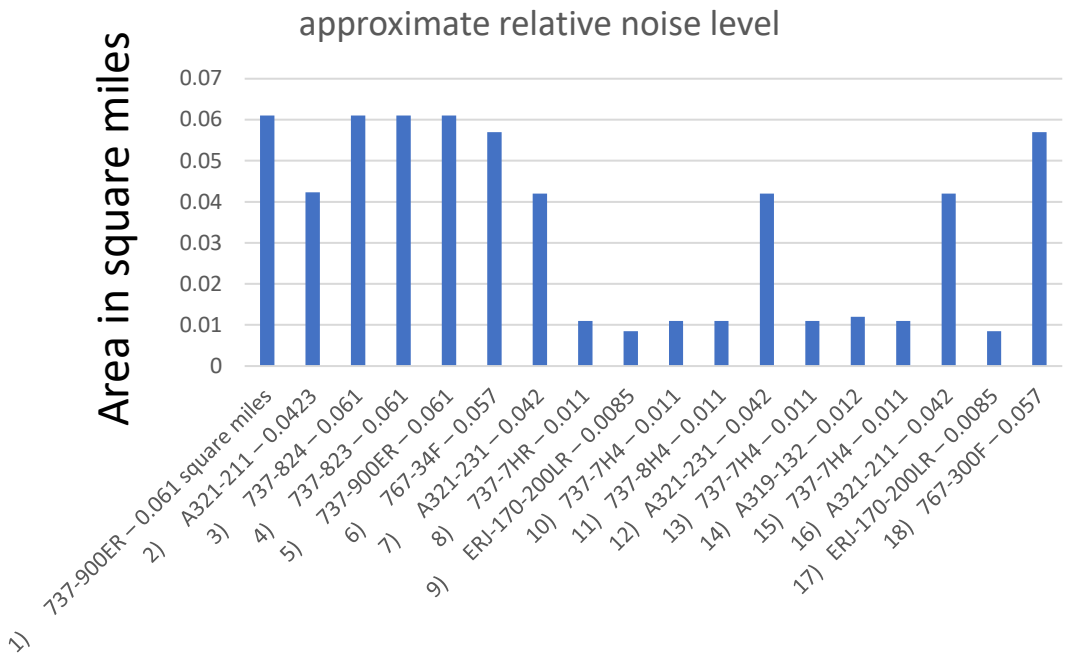
- 737-900Max
- Portland
- Hor – 738 ft
- Alt – 2400 ft
- Lmax-23= 69 dB
- Lmax-LD= 67.4 dB

- A321-231
- Charlotte
- Hor – 2593 ft
- Alt – 2300 ft
- Lmax-23= 73 dB
- Lmax-LD= 69 dB

- 737-824
- Chicago
- Hor – 2004 ft
- Alt – 2300 ft
- Lmax-23= 75 dB
- Lmax-LD= 70.5 dB

- A321-253NXMiami
- Miami
- Hor – 2057 ft
- Alt – 2200 ft
- Lmax-23= 71 dB
- Lmax-LD= 66.0 dB





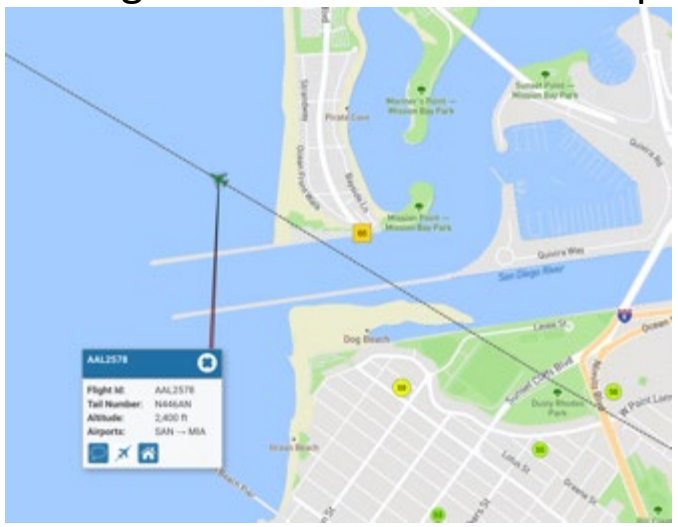
The morning departures are primarily the loudest aircraft in the fleets

CONCLUSIONS[1]

PADRZ Lower boundary.

PADRZ Upper boundary

FAA nighttime noise abatement pro



- The most recent Title 21 publication provides the annual CNEL value for NM#23 at 60.4[2] dB, compared to:
  - 59.2 dB for Deal Court, which is o.39 miles north of NM#23
  - 62.6 dB for Capistrano Place, which is ~1311 feet north of NM#23, and
  - 60.4 dB for Avalon Court, which is ~1065 feet north of NM#23
- This data supports, as a minimum, the Airport Authority conducting its own portable noise monitor tests at multiple locations to be determined. But it is believed that there is sufficient data presented to move forward with planning for additional fixed monitors in SMB.
- This should be completed before the Airport Authority moves forward with NADP test.

1 – This study in no way promotes the idea of moving noise from south to north Mission Beach

2 – This number will be updated as soon as the Airport Authority publishes new quarterly reports