

Public Comments Received

May 28, 2022

Please distribute to ANAC members prior to the next meeting on June 15, 2022 at 4:00 PM.

At the last ANAC meeting in March, I submitted data that supported my claim that the Airport Authority had submitted two 65 dB CNEL contours differing by about 1 square mile, one that went to the State of California under Title 21 and one to the FAA for the Part 150 Study. The CEO of the Airport Authority at the time, Ms. Kimberly Becker, signed off on both of the reports.

Recently, I received a letter from a SDCRAA Board Member providing an explanation for the difference between the two noise contours. The explanation was that the State of California allows noise monitors to be used to adjust the analytically derived contours, while the FAA does not. While there is evidence that at least one other airport in California has regularly used noise monitors to adjust their 65 dB CNEL contour that goes to the State, there is no evidence that this has ever been done at SDIA.¹

The body of evidence disputing the quality of the Part 150 2018 65 dB CNEL has only grown over the past couple of months. My reason for pursuing this issue is that I don't believe that Mission Beach was adequately represented in any of the recent studies. The resulting impact on Mission Beach is substantial, given the narrowing of the PADRZ corridor compared to the previously fanned out vector departure as well as the attempt to formalize the 290 nighttime noise abatement agreement.

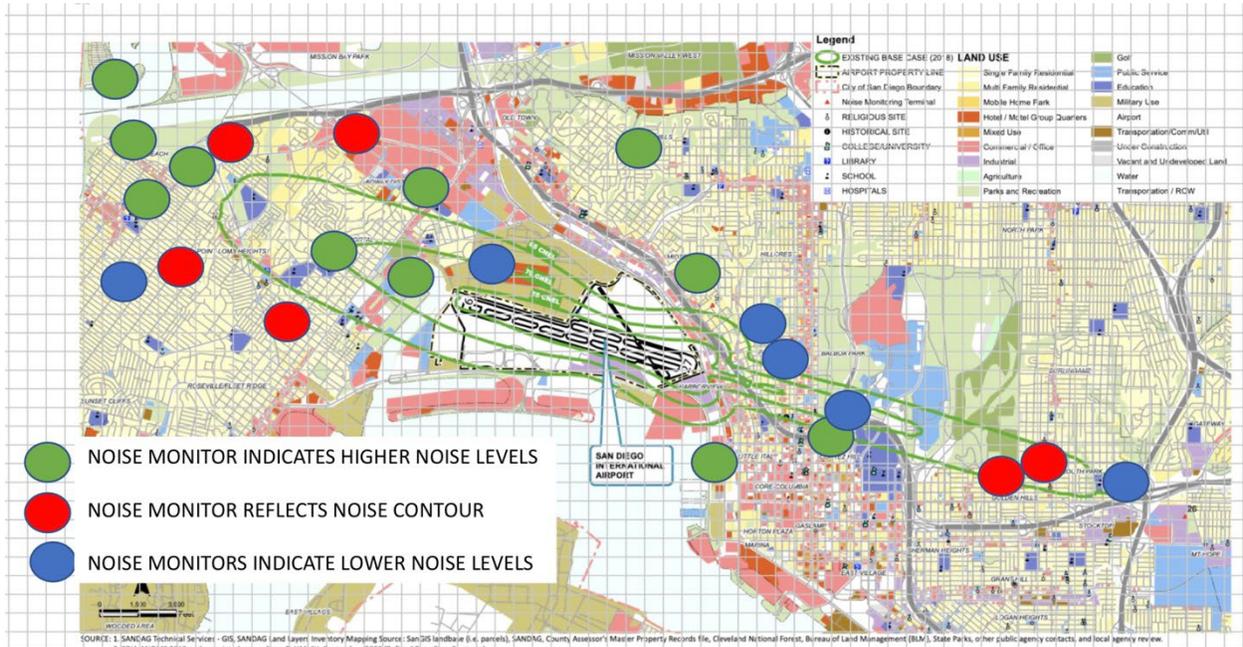
My contention is that if the larger 2018 65 dB CNEL contour was used, it would result in a much larger population and number of houses eligible for the Quiet Home Program in the Part 150 Study. I don't expect a repeat of the Part 150, particularly if the number of operations is updated reflecting the pandemic effects. This would have the opposite effect, resulting in a smaller QHP population and housing. And, no one in Loma Portal, Pt. Loma and Ocean Beach want to see this happen.

But regardless of whether there is a recall of the Part 150, there are still many questions that the Airport Authority needs to answer:

1. Is the Airport Authority regularly using noise monitors to modify the 65 dB CNEL contours submitted to the State of California?
2. Why has the Airport Authority never referenced the possible use of noise monitors to adjust the AEDT analytically derived contours for the Title 21 submittals?
3. There is a 22.2 percent difference between the two 65 dB CNEL contours. This difference can only be explained if the FAA AEDT code is grossly flawed or the inputs to the two AEDT analyses are substantially different (i.e., types of aircraft and number of operations). Which is it?
4. Acoustical Analysts Associates, Inc. has a proprietary methodology for enabling noise monitors to be used to adjust analytically generated noise contours. This is first done by plotting out a grid with CNEL noise levels for each grid as well as multiple contours at 1 dB intervals out to 60 dB. This allows the CNEL values to be quantified for each of the noise monitor locations. It is strongly recommended that the Airport Authority add this analysis to its quarterly ANAC report to allow committee members and the public to do their own comparison with noise monitor data.

¹ The one exception was when the Airport Authority requested the FAA to allow them to adjust the noise contour for the 2009 Part 150. This request, which was rejected by the FAA, was to correct errors in the analytical code that did not account correctly for hill effects for arrivals.

- I, supported by senior engineering students at the University of Arizona, developed a similar methodology this past academic year to use noise monitor data to assess AEDT generated noise contours. I have included a plot below showing the results of the noise monitors adjustment to the 2018 Part 150 65 dB CNEL. Perhaps the Airport Authority can explain the substantial differences for many of the noise monitors. Of significant concern to us are the number of noise monitors in Mission Beach or across the waterway in OB that indicate the contour understates the level of noise.



In reviewing the noise monitor data, one of the noise monitors stands out more than the others, NM#6, located on the military facilities just to the north of the runway. The noise levels for this monitor seem to be inconsistent with those around it.

So far, the Airport Authority has not addressed my concern about the contours submitted and legally signed off by the SDCRAA CEO at the time. While they have provided a framework for the twenty-two percent difference, they have provided no supporting data. Until the Airport Authority provides the answers to the questions I have posed above, it is my opinion that the credibility of this organization is in question. The ANAC can provide some degree of accountability. I would hope that the ANAC members would pursue the questions I have included in this status letter.

Regards,

Gary Wonacott
Mission Beach

June 8, 2022

Dear members of the ANAC:

There are few organizations that have less check and balance and accountability than the SDCRAA. I believe your committee was formed with many barriers to keep you from providing this check and balance on airport noise. By barriers, I primarily mean the one that prevents us from having a discussion, so you can ask questions to gain a better understanding of what is in this document. Certainly there are pragmatic issues associated with the Part 150 that I am sure the Noise Abatement Office personnel will point out, but then there is trust. If the Airport Authority personnel did manipulate the data supporting political objectives and they are not called out, how can they ever be trusted on other issues now and in the future. You are the only ones who can ask questions and search for answers.

The document is long and there are references to documents and data I obtained from a Port of San Diego public records request. If you have questions, my contact email is gwonacott@hotmail.com. Also, if there is a specific document that might help you to understand the history, please let me know.

Gary Wonacott
Mission Beach

Summary

The bottom line is that the SDCRAA CEO, Ms. Kim Becker, knowingly or not, signed off on two documents containing contradictory data in 2021, one in response to Title 21, required as part of the SDIA operating variance, and a second one to the FAA, integral to the Part 150 Study. Two 65 dB CNEL contours were submitted, one to Title 21 that is five square miles and the other to Part 150 that is four square miles. In my view, given I believe that some Airport Authority staff purposefully, to support their Part 150 objectives, manipulated data to decrease the size of the 65 dB CNEL contour.

The information supporting my claim follows:

- 1. Demonstration that there is a 5 square mile Title 21 65 dB CNEL contour and a 4 square mile Part 150 contour.*
- 2. Airport Authority motivation to manipulate the Part 150 contour data.*
- 3. Key historical information on the nighttime noise abatement agreement*
- 4. Rebuttal to Airport Authority explanation for two different contour sizes.*
- 5. Approach used to reduce the Part 150 contour by the one square mile.*
- 6. Conclusions and final thoughts*

Demonstration that there is a 5 square mile Title 21 65 dB CNEL contour and a 4 square mile Part 150 contour

This past academic year, I sponsored a Senior Design Project to develop a methodology that would use noise monitors to verify the quality of AEDT generated noise contours. We used SDIA as the baseline case, because of the large amount of Title 21 data available. And we focused on 2018 because this was the Baseline year for the SDIA Part 150 Study. One of the first steps was to measure the area contained within the 2018 Title 21 Baseline year contour. We used Sketch and Calc to quantify it at five square miles. I used the same on-line tool to measure the Part 150 contour and found its area to be 3.96 square miles. The difference between the two contours is even more obvious when the peaks for the two contours are compared with respect to the noise monitor locations.

The two contours are shown superimposed in Figure 1. The outside contour is for Title 21. The double arrow line points to the peaks of the two contours. Note also that the contours on the arrival side are nearly identical. The one square mile difference is all on the departure side. We can conclude that the manipulation of data is likely on the departure side of the equation.

It is not just a matter that the two contours are different sizes. What matters is that Kimberly Becker, the CEO in 2021, signed off on both the Title 21 report that went to the State of California and the Part 150 document that went to the FAA. If there is no viable explanation for the difference, then this is misrepresentation, which would represent a clear ethics violation at the least.

Comparison of contours

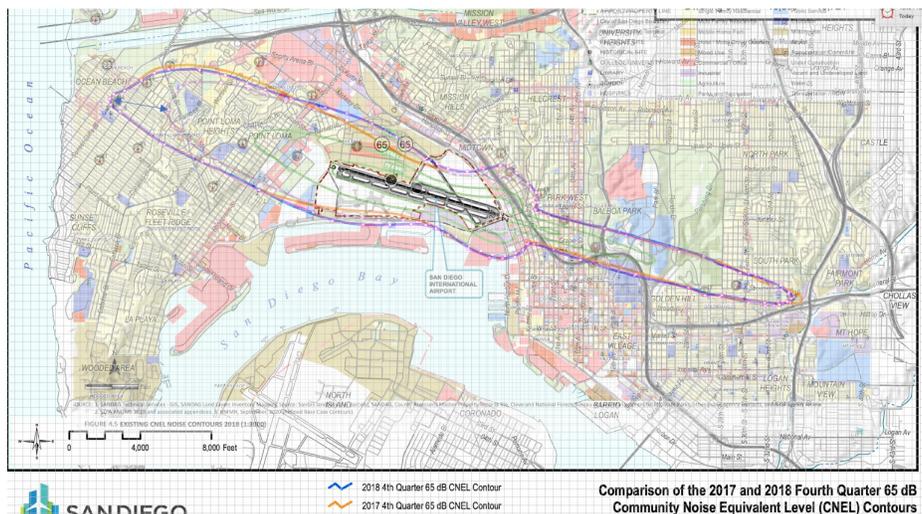


Figure 3 Comparison of Title 21 and Part 150 65 dB CNEL contours

Putting this into perspective, if the Part 150 65 dB CNEL contour is only four square miles, and this point was not disputed in an email to me from an Airport Authority Director, then the projected 2026 contour that is used to determine QHP eligibility is also artificially too small. This translates to a more serious violation because it involves holding back dollars for residents who should be eligible for the QHP. I don't believe that this is the only reason for a four square mile contour.

As stated previously, the last result that the Airport Authority wanted to see was a Part 150 2026 65 contour that broached the Mission Beach boundary. If this happened, it would put Mission Beach on the same level as the 65ers in Pt. Loma and OB. It can be estimated that a contour with an area of about 7 square miles would result in Mission Beach being reached by the 65 dB CNEL contour. The data in Figure 2 is key to making this assessment, which shows the relationship between contour area and year. The red line represents the contour area that potentially adds Mission Beach to the 65er club.

AEM, Area Equivalent Method, is a FAA tool for preliminary screening. I calculated this line by inputting all of the operations by aircraft type into the code for 2018 and 2026 (Part 150 data)¹. It is likely that the contour for this case is too large because the dispersion to the two departures, ZZOOO and PADRZ, is not taken into consideration, which would reduce the peak value. Note that the line slopes for all four cases are almost the same.

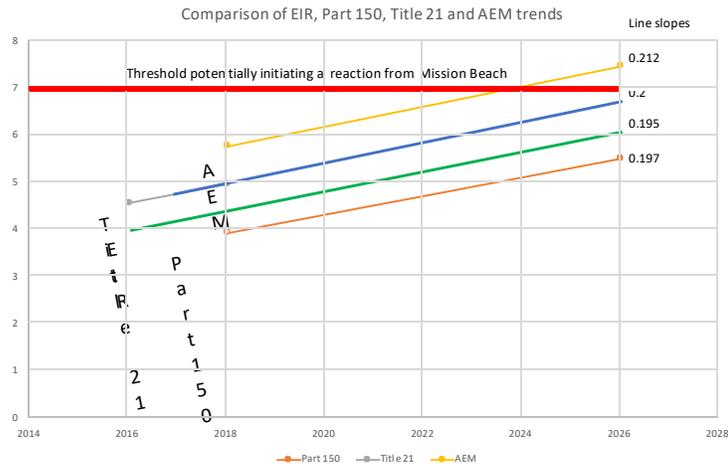


Figure 2 Comparison of slopes of lines connecting contour areas for 2018 and 2026

¹ SOURCE: HMMH Technical Report, Noise Appendix, 2020. Some types are combined; full split is listed in the Noise Appendix.

The 2026 value for the EIR and the Part 150 were obtained using the contours from the published documents, while the 2026 value for the Title 21 line was extrapolated. Comparing a four square mile versus a five square mile establishes the end points with the Part 150 2026 value at about 5.5 square miles and the Title 21 at about 6.7 square miles. Seven square miles is 27 percent larger than the Airport Authority doctored 2026 contour area, while the seven square miles is only 16 percent larger than the estimated Title 21 2026 contour area.

I can respond to any questions or send raw data that would further convince you that the two contours are different by a mile. But, the SDCRAA Director effectively agreed that this is the case.

Airport Authority motivation to manipulate the Part 150 contour data.

The question is, why is the Airport Authority in such a great hurry to formalize the nighttime departure agreement after such a long period of time? It is believed that there was a sudden realization with the implementation of the satellite navigation PADRZ SID over Mission Beach, and the associated activism in Mission Beach, dictated that steps needed to be taken quickly, particularly since there was no justification for the post 10 pm right turn procedure to continue (in my opinion).

Keep in mind that the FAA satellite navigation implementation has changed the calculus; a number of discussions at the recent UC Davis Aviation Noise and Emissions Symposium addressed alternative approaches to the 65 dB CNEL, concluding that it should not be the only criterion considered with regard to the QHP eligibility. The residents of Mission Beach are now subject to repeated departures over a relatively narrow corridor, which includes one-hundred percent of the post 10 pm departures.

Also, until now no one has known the origin of the post 10 pm nighttime departure; now it appears to have been implemented in or around 1980 along with the unusual 30-70 split on runway flightpaths. What we have referred to as the 290 degree nighttime noise abatement agreement is in fact a FAA procedure called, a FAA operational noise abatement procedure. Historically, the FAA has claimed no knowledge of this procedure (now we know, that was a lie)!

In 2019, the Airport Authority was balancing the Flight Procedures, the Part 150 and the Terminal 1 refurbishment. The Airport Authority number one priority was to ensure that the Terminal 1 funding and implementation proceeded with minimal turmoil. This carried over to the Part 150 and the move of the nighttime noise abatement departures to the PADRZ SID in the Flight Procedures Study (Figure 3). All of the alternative nighttime departures included an initial segment using the PADRZ SID.

But, there was concern that if the correct 2018 65 dB CNEL contour area of 5 square miles was used, then there was a possibility that the 2026 contour area would be of sufficient size to include a portion of Mission Beach. This would change the calculus of the meeting conversation. Mission Beach would now be part of the 65 dB CNEL and could not be pushed aside by the members from Pt. Loma and Ocean Beach.



Figure 3 Nighttime alternative presented includes use of PADRZ SID for initial departure segment²

Key historical information on the nighttime noise abatement agreement

Before there was a San Diego County Regional Airport Authority, the Port of San Diego managed SDIA. To a large degree, what is now Caltrans, Division of Aeronautics and the City of San Diego were the primary interfaces with the Port. The FAA and its predecessors were involved in the final sign-off of the noise abatement plans forwarded by the Port.

While it is true that the noise levels were substantially greater in the mid-1980’s than today (see Figure 4), Caltrans and Port staff worked together to implement a wide range of noise abatement measures.

² San Diego County Regional Airport Authority, Flight Procedure Evaluation, Technical Advisory Committee and Citizen Advisory Committee Meeting Number 3, August 2018.

identified above. The extreme noise levels (a 65 dB CNEL in 1990 that is 287 percent larger than the 65 value calculated in the recent Part 150) justified these actions without a NEPA at the time, but it should be recognized that these were temporary measures. The flight path and operations were partially reversed when the 65 dB CNEL area decreased substantially. The 70 percent allocation of departures on the 295 was changed to a basis that was determined by the destination. However, the post 10 pm allocation of all aircraft to a right turn was not. Since this temporary change was never subject to NEPA, I consider it illegal in spite of the time that has passed since it was implemented.

Rebuttal to Airport Authority explanation for two different contour sizes.

The Airport Authority in a response to a complaint I filed provided an explanation for the difference in the contour sizes. First, is the Airport Authority response and then my assessment.

“Federal Aviation Administration – Part 150 Study

The FAA, via [Title 14, Code of Federal Regulations \(CFR\) Part 150 Noise Compatibility Planning](#) (Title 14 CFR Part 150) requires existing and future (at least five year) base case noise conditions. Community Noise Equivalent Level (CNEL) noise contours for this Part 150 Study update were prepared based upon existing (2018) and FAA-approved forecast operational conditions for at least five years from submittal (2026) at San Diego International Airport (SDIA).

The contours show the 65 CNEL, 70 CNEL, and 75 CNEL contours per Title 14 CFR Part 150. Both the existing and future noise contours were generated using the FAA approved noise model, AEDT, Version 2d. This is the FAA required model for generating aircraft noise contours for Title 14 CFR Part 150 noise studies. A full year of data from ANOMS was used to develop average annual day operational conditions for 2018. *Noise measurements were not used to calibrate the AEDT model, which is consistent with FAA noise model guidelines.* All SAN-specific inputs were approved by FAA for purposes of this Part 150 Study update.

State of California (Caltrans) – Quarterly Noise Contours

For the Quarterly Noise Contours, Caltrans requires the extent of the contours to be validated with actual aircraft noise measurements. [Section 5032 of California Title 21, Subchapter 6. Noise Standards, states:](#)

“The noise impact boundary (65 CNEL) shall be validated by measurements made at locations approved for this purpose by the department (Caltrans)... The noise impact boundary may be ascertained directly from information gathered from monitors or from the combined use of an

approved computer model (AEDT) and the data reported by the noise monitoring system. Monitoring shall be accomplished at locations in the approved monitoring system layout plan. The locations shall be selected to facilitate locating the maximum extent (closure points) of the noise impact boundary...”

To comply with the above-cited Caltrans (Title 21) requirement for the development of noise exposure contours for the quarterly noise reports, our acoustical consultant uses a complete year of flight track and aircraft identification data to generate the CNEL contours using AEDT and then adjusts the maximum extent of the 65 CNEL (noise impact boundary) using the measurements from the Airport’s noise monitoring system, which collects the data in accordance with the Caltrans-approved monitoring system plan.”⁵

The Airport Authority Board member statement in red above is correct, but what he has left out is that the FAA does allow the use of noise monitors to refine or adjust the contours, although this is rarely done.

My first question to the Airport Authority, and I hope it is yours as well is, has the Airport Authority regularly adjusted the 65 dB CNEL contour using the NMS prior to submitting it to the State in the Quarterly Reports? If so, why is there never any reference, any mention of this procedure in the quarterly reports? And, what is the implication of a 65 dB CNEL contour generated using the FAA AEDT software that is one square mile different once adjusted by the NMS?

I contacted two airports in California and a company that uses noise monitors to make adjustments to noise contours. The Noise Abatement Offices at San Francisco International Airport and Bob Hope Hollywood-Burbank airports both acknowledged using noise monitors to make adjustments to their 65 dB contours, but only in a very limited sense. Also, in the 2009 part 150 Study at SDIA, the staff were concerned that the FAA noise model was not adequately representing the noise due to hill effects for arrivals on the east side of the airport. The request to the FAA to calibrate the software using the noise monitors was denied.

I also contacted a company, Acoustic Analysts Associates, Inc., which has proprietary software for use refining or adjusting contours using noise monitors. They would not describe their process beyond what is in the Title 21 Quarterly reports....not just in one report, but in virtually every quarterly report submitted to the State. There is a paragraph in each of the quarterly reports that describes using the AEDT or INM software to calculate and present CNEL values at grid points on the contour along with additional contours at 1 dB intervals. In contrast, I have

⁵ Email from Brendan J. Reed A.A.E., Director of Airport Planning & Environmental Affairs Office, dated May 17 2022.

reviewed many of the quarterly reports submitted by SDIA to the State and have not ever found any reference to use of noise monitors to refine the contours.

When the senior engineering students used the methodology developed in the last academic year, we found disparities with the Part 150 four square mile contour. The areas where the 65 dB CNEL contour was found to be too small are shown by green circles. Of additional concern is that many of the low areas are on the departure side towards Mission Beach.

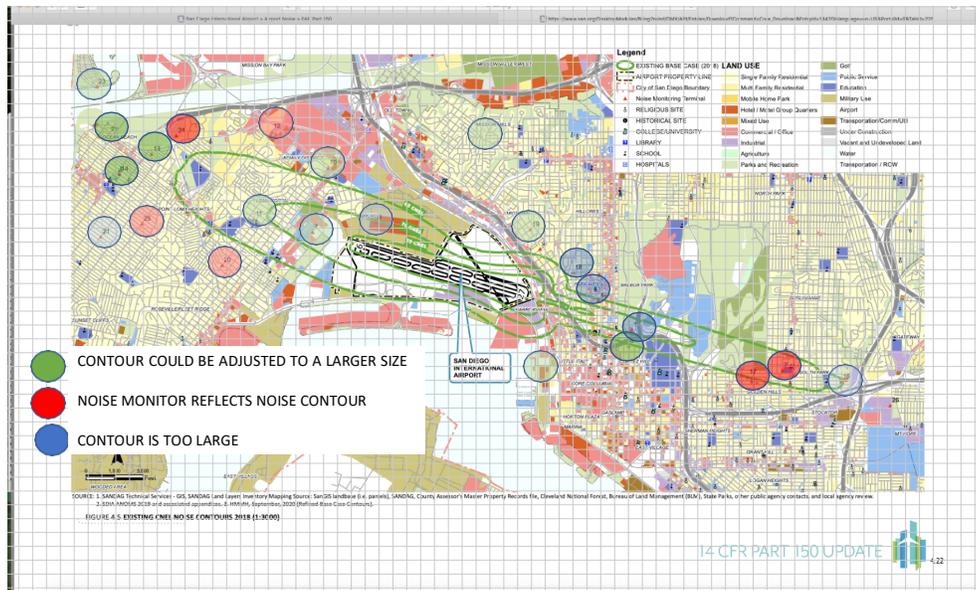


Figure 5 Part 150 2018 noise contour showing areas how noise monitors would adjust or refine the contour

Based on the discussion above, I have rejected the response from the Airport Authority Director. I continue to contend that there was no refinement of the Title 21 contour data using noise monitors. I therefore believe that the Part 150 Study 65 dB CNEL contour data was manipulated intentionally to achieve a four square mile 65 dB contour area. The final question is how was this done?

Approach used to reduce the Part 150 contour by the one square mile.

The explanation is included in the Part 150 report, Chapter 4, Existing and Future Noise Exposure, Table 4.3, **MODELED AVERAGE DAILY AIRCRAFT OPERATIONS BY GENERALIZED AIRCRAFT TYPE (2018)**. As it turns out, the data manipulation is so obvious; I pointed it out to Ms. Knack a couple of years ago in an email.

By comparing the Title 21 and the Part 150 data, we can verify the approach used to achieve the 4 square mile contour. The comparable data in the Title 21 2018 report is in Table 7 for each of

the four quarters. If we average the Title 21 data we have 35 arrivals and 40 departures at nighttime. This compares with 40 arrivals and only 11 departures for the Part 150 Study.

Because these are nighttime, there is a 10 decibel penalty, or an equivalent of ten times the number of operations. This results in the following equivalent number of operations:

	<i>No Penalty</i>		<i>Ten Decibel Penalty</i>	
	<i>Arrivals</i>	<i>Departures</i>	<i>Arrivals</i>	<i>Departures</i>
<i>Title 21</i>	<i>35</i>	<i>40</i>	<i>350</i>	<i>400</i>
<i>Part 150</i>	<i>40</i>	<i>11</i>	<i>400</i>	<i>110</i>

We can make an estimate of the effect of this difference in the data using the FAA Area Equivalent Method (AEM). Inputting the data in the table above using only the 737-800 as a representative aircraft, we find a 2.1 square mile difference between the Title 21 and the Part 150 data. Clearly, this is a significant difference. But, it gets better.

There appears to be another significant error in the Part 150 Study data. The predominant aircraft included in the Part 150 Study are the 737-300, 737-700, and 737-800. Stage lengths are used to differentiate between destinations by aircraft, which is important, because aircraft flying longer stage lengths are fully fueled, generally have a full load of passengers and are therefore louder on take-off. They do not attain the same altitude, for example, as they pass over Mission Beach. I have proof of this using my Larson Davis LxT portable noise monitor system.

- Stage Length Definition:*
- 1 – 0 to 500 miles*
 - 2 – 500 to 1,000 miles*
 - 3 – 1,000 to 1,500 miles*
 - 4 – 1,500 to 2,500 miles*
 - 5 – 2,500 to 3,500 miles*

A review of the data in Table 4 of Chapter 4 shows that there are no nighttime departures with Stage Lengths of 4 or 5 and only four percent of the operations are in Stage Length 3 for 2018. For those of us living in Mission Beach, we can attest to multiple nighttime departures to the east coast nightly. On the other hand, the 2026 data in the same chapter shows 11 percent nighttime operations that are Stage four Length. This effect is difficult to quantify without AEDT, but it would seem to be wrong!

Conclusions and final thoughts

What I have shown above does not require rocket science. But, it is a clever way to artificially reduce the size of the 2018 65 dB CNEL contour.

During the FAA funded Part 150 Study, the Airport Authority Staff clearly established a political priority that drove their technical approach. There has been a new sense of urgency at the Airport Authority and the FAA to address the Noise Abatement Operational Procedure referred to as the 290 nighttime noise abatement agreement. To achieve this goal while avoiding pushback from Mission Beach residents, the Airport Authority artificially reduced the size of the 65 dB noise contour by one square mile. This created the possibility that their CEO would be signing off on two legal documents with conflicting data.

The bottom line is that the CEO, Ms. Kim Becker, knowingly or not, signed off on two documents containing contradictory data, one in response to Title 21, required as part of the SDIA operating variance, and a second one to the FAA, part of the Part 150 Study. Two 65 dB CNEL contours, one for Title 21 that is five square miles and the other to Part 150 that is four square miles.

The implications of a smaller 65 dB CNEL contour for the part 150 is that fewer residents in Pt. Loma and Ocean Beach would be eligible for the Quiet Home Program that covers cost of noise insulating windows and air conditioning in homes. Perhaps the greater motivation for a smaller 2018 Baseline contour and therefore a smaller 2026 projected contour is less push back formalizing the current “290 nighttime noise abatement agreement” over Mission Beach.

There is no formal history of the “FAA operational noise abatement procedure” at the FAA, meaning there was no environmental assessment associated with the action to move all nighttime departures from what is currently the ZZOOO SID over Ocean Beach to the 290 vector departure over Mission Beach.

During the course of the Flight Procedures Analyses and the Part 150 Study, there was a cumulative effect as I did a fairly deep dive into these data that led me to the conclusion that there is a willingness at the Airport **Authority** to play fast and loose with the data to match their programmatic objectives. Their number one priority was to integrate all of the nighttime departures on to the PADRZ SID, which we successfully avoided. Ultimately, the Airport Authority submitted to the FAA portal the current 290 vector departure for consideration to be formalized to a procedure; it is unclear if the proposal includes a waypoint in the ocean for these departures.

In any case, the exercise of the last four years has demonstrated a San Diego County Regional Airport Authority (SDCRAA) that is arrogant, is not subject to any substantial checks and balances, and uses a very controlling, closed communication approach that has led to a systemic

failure to adhere to fundamental truths. The question is can this organization as it currently is structured prioritize technical quality over political expediency.

In my view it is imperative that the Part 150 be revisited, perhaps in its total, but the question needs to be asked and answered, should the organization first be changed to ensure a more direct line of communication and accountability of its Board, staff, and the FAA to the residents living in the impacted communities.

My last comment pertains to the potential use of noise monitors to adjust the 65 dB CNEL contour. While I don't believe there is any evidence supporting the claim that the Airport Authority adjusted the contour from 4 to 5 square miles, I did see how this technique is used at Hollywood Burbank. I strongly advise that the ANAC members vote to incorporate the idea of providing CNEL values at grid points and output of CNEL contours at 1 dB intervals. See below for approach.

“The contours shown in Figures 1 and 2 are based upon computer-generated "master" contours which are adjusted to reflect the monitoring data. Beginning with the second quarter 2009, noise contours are developed using the master contours produced by Version 7.0 of the Integrated Noise Model (INM), a sophisticated aircraft noise modeling program developed for the Federal Aviation Administration. Inputs to the program consist of aircraft types and performance data, flight paths, numbers of operations, and day/evening/night distribution of flights. **The program calculates CNEL values at equally spaced grid points and produces CNEL contour lines at 1 dB intervals. The annual average CNEL values at each site were marked at the appropriate locations on the contour map and the locations of the 65 and 70 dB CNEL contours were determined in the vicinity of each measuring point. These points were then joined following the general shape of the computed contours.** The master contours used in developing the contours for this quarter are based on operations for the 12-month period from January 1, 2014 through December 31, 2014. These replaced the previous master set of CNEL Contours which were based on operations for the 12-month period from July 2008 through June 2009.”⁶

⁶ QUARTERLY NOISE MONITORING AT HOLLYWOOD BURBANK AIRPORT FIRST QUARTER 2018

From: User <wildcatwonacott@gmail.com>
Sent: Thursday, June 9, 2022 7:22 AM
To: SDCRAA clerk
Subject: Origin of temporary measure for nighttime noise abatement
Attachments: PastedGraphic-1.tiff

Please distribute to ANAC Members before the next meeting on June 15th.

Also, until now no one has known the origin of the post 10 pm nighttime departure; now it appears to have been implemented in or around 1980 along with the unusual 30-70 split on runway flightpaths. These two noise mitigation approaches, which are far from mitigation for Mission Beach were implemented, it is believed, as temporary measures so that the 1986 65 dB CNEL contour area requirement could be met. Apparently, because these were temporary measures, they did not violate the 1970 NEPA Act. The 70/30 split was stopped in the early 1990's going back to a destination driven departure SID; however, the post 10 pm departures, 100 percent to 295, continued to be enforced without a NEPA to this day.

What we have referred to as the 290 degree nighttime noise abatement agreement is in fact a FAA procedure identified in the 1981 "Noise Abatement Implementation Plan" called, a FAA operational noise abatement procedure. Presumably, this procedure was also implemented as a temporary measure to achieve a specific noise abatement objective in 1986, since there is no history of this departure being subject to NEPA. Given that the FAA has not been able to identify any evidence of this FAA operational noise abatement procedure being subject to NEPA, its continuation beyond the 1990's violates NEPA and should be stopped.

RESTRICTED NUMBER OF OPERATIONS

The number of major (greater than 75,000 lbs.) aircraft jet operations (either landing or takeoff) for the calendar year 1986 shall not exceed 87,000 unless the Board of Port Commissioners expressly consents to additional operations.

CONTROL OF FLIGHT PATHS AND AIRCRAFT OPERATIONS

Control of aircraft on the ground and in flight is at the discretion of the pilot as regulated by the Federal Aviation Administration (FAA). The prevailing noise abatement operational procedures are expected to be continued unless a more effective means is developed and implemented by the FAA. To achieve the 1986 non-compatible noise impact area, it is necessary that the 1979 flight pattern be maintained (approximately 90 percent departures on Runway 27 of which 30 percent continue straight out, while 70 percent are cleared for a heading of 295 degrees after takeoff; approximately 90 percent arrivals occur on Runway 27 and 10 percent on Runway 9, primarily on the basis of weather conditions).

FAA operational noise abatement procedures are directing all aircraft departing Runway 27 after 10 p.m. to a heading of 295 degrees.

By voluntary agreement, no military operations or practice involving Lindbergh Field are carried out during the nighttime period.

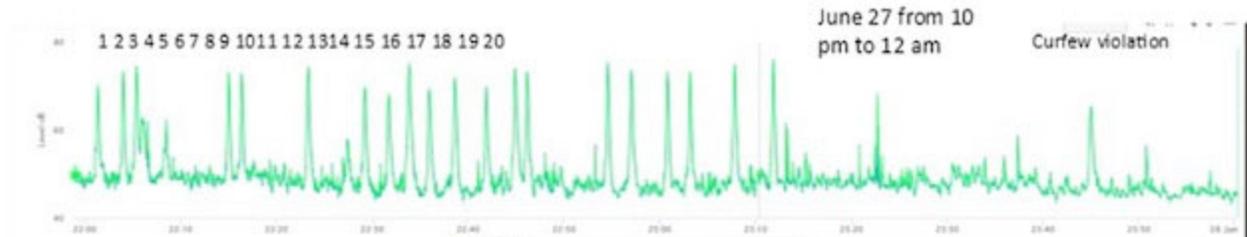
From: Gary Wonacott <gwonacott@hotmail.com>

Sent: Wednesday, June 29, 2022 3:51 PM

To: SDCRAA clerk <clerk@san.org>

Subject: Portable noise monitor value

Please distribute to the ANAC members prior to the next ANAC meeting.



There is a substantial benefit to studying time history data of departures and or arrivals. Also, there is data collected that allows sensitivity studies to be performed.

- The Noise monitor was located on the ocean side of Avalon Court
- Slant distance is from the noise monitor to the acrft as it passes by; horizontal distance + sign is acrft is north of residence
- LxT is personal noise monitor
- Reference point is the most southwest corner of SMB; + sign indicates that acrft is north of the reference point.

Peak number	Route	Time	Type of acrft	Altitude	Slant	Horizontal	LASpeak		Dest	Dist f ref
							LxT	NM2		
1	PADRZ	10:01:23	737-7H	2300	2776	564	69.1	69	LAS	
2	PADRZ	10:04:02	737-7H4	1900	2011	567	73.3	73	SJC	
3	FAA NA	10:05:25	737-832	1900	2293	-1265	73.3	75	JFK	-146
4	PADRZ	10:15:02	737-8H4	2000	1978	530	72.1	73	SMF	1294
5	FAA NA	10:16:24	737-7H4	2200	2161	-563	72.6	72	DEN	729
6	FAA NA	10:23:23	A321-211	2000	2278	-1085	74.1	74	ATL	0
7	FAA NA	10:29:15	A320-232	2300	2582	-1439	69.6	71	FLL	-348
8	PADRZ	10:31:45	ERJ-170 200LR	2400	2491	197	68.2	68	SFO	1189
9	FAA NA	10:33:53	A321-231	3300	3215	-1158	74.9	75	MIA	0
10	PADRZ	10:35:59	ERJ-170 200LR	2300	2330	427	68.6	69	SMF	1459
11	FAA NA	10:38:39	A321-231	1900	2438	-1509	71.7	73	PHL	-395
12	PADRZ	10:41:57	737-8H4	2750	2743	734	69.7	69	LAS	1649
13	FAA NA	10:44:57	A320-214	2300	2149	-508	74	74	BWA	693
14	FAA NA	10:46:11	A321-211	1900	2237	-1154	73.1	74	DTW	0
15	FAA NA	10:54:36	737-824	1700	2218	-1436	75.1	77	ORD	-327
16	FAA NA	10:57:04	A300-605R	2800	2928	-652	73.3	73	IND	508.6
17	PADRZ	11:00:50	A320-214	2300	2386	55	73	73	LAS	1221
18	FAA NA	11:03:11	737-8H4	2000	1929	-497	72.9	73	PHX	726
19	FAA NA	11:07:50	737-824	1700	2074	-1148	74.8	76	EWR	0
20	FAA NA	11:11:51	737-900ER	1600	2069	-1244	75.8	77	JFK	-100

Sent from my iPad

From: Gary Wonacott <gwonacott@hotmail.com>

Sent: Sunday, July 3, 2022 11:20 AM

To: SDCRAA clerk <clerk@san.org>

Subject: Noise Monitors need to be integrated into the Noise Abatement Program

Please distribute this Power Point presentation to the ANAC members prior to the next ANAC meeting.

Thanks



Title Lorem Ipsum

Dolor Sit Amet

Consectetur Elit

Nunc Viverra

Pellentesque Habitant

Lorem Ipsum

Noise measurements

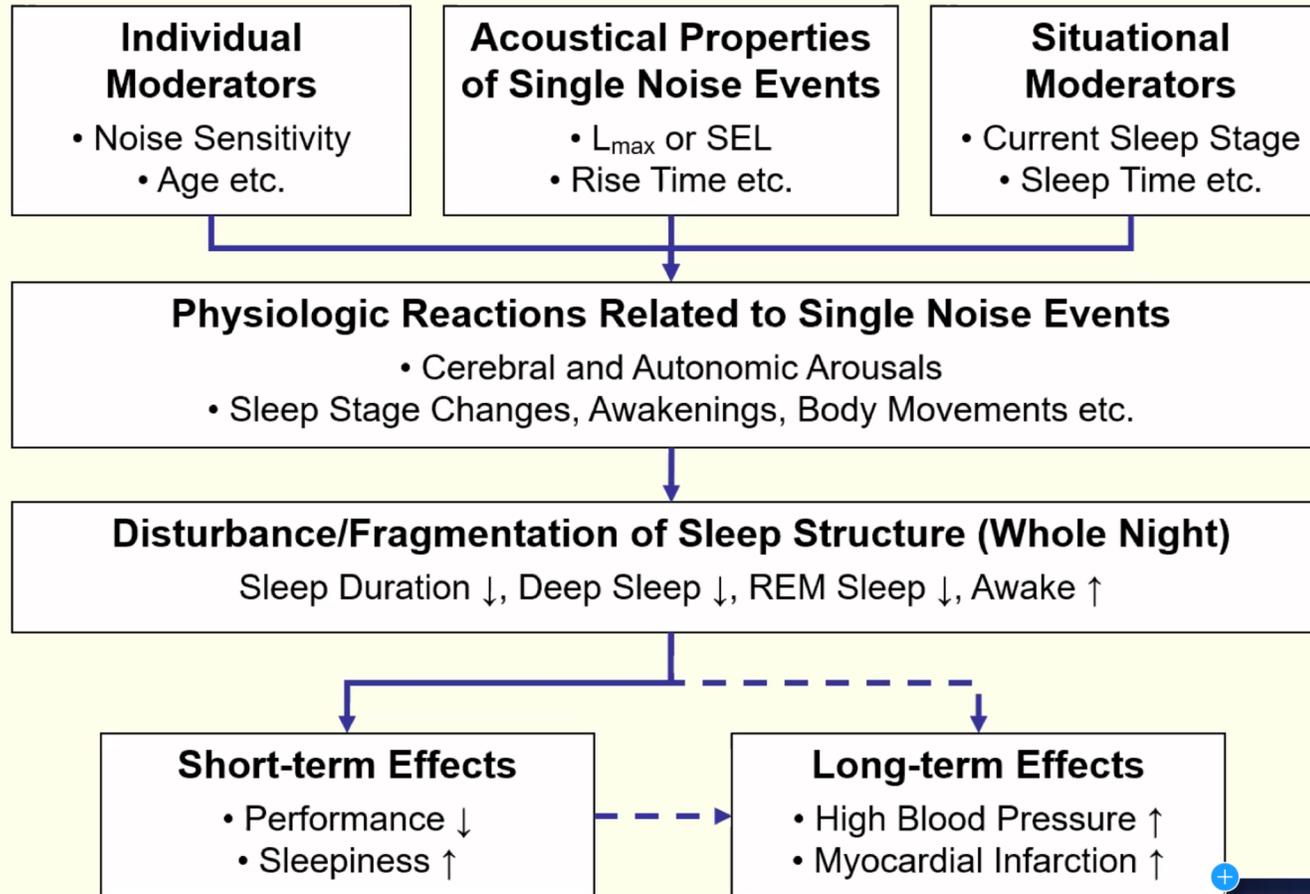
- A Larson Davis Model LxT Soundtrack portable noise monitor was used for all measurements and compared with noise monitor #23 data from the WebTrax website



Background

- The State of California Department of Transportation Aeronautics Division encourages airports to use the Noise Monitor System (NMS) to adjust analytically generated noise contours (FAA AEDT); FAA allows adjustment, but not calibration of the AEDT models.
- A methodology was investigated at the UA Senior Design Project for academic year 2021-22 that when applied to SDIA indicated that the analytical models understated the contour size when correlated with the NMS.
- There are companies that have proprietary software that is used by some airports (e.g., Hollywood Burbank) to routinely adjust contours for the Title 21 program.
 - An integral element of this program requires the Airport Authority consultant to output CNEL and or SENEL noise values at numerous grid points for direct comparison with NMS readouts.
- In the charts that follow, substantial data was acquired from the LxT and correlated with WEBTRAK output for NM#23 in Mission Beach.
 - By studying this data, it becomes possible to see trends that opens the possibility for future noise abatement
- There is new medical evidence showing a cause and effect relationship between emissions pollution and sleep disruptions that mandates that these issues be addressed in residential communities at both ends of the airport.

Noise and Sleep



Exposure-Response Relationships (EEG Awakenings)

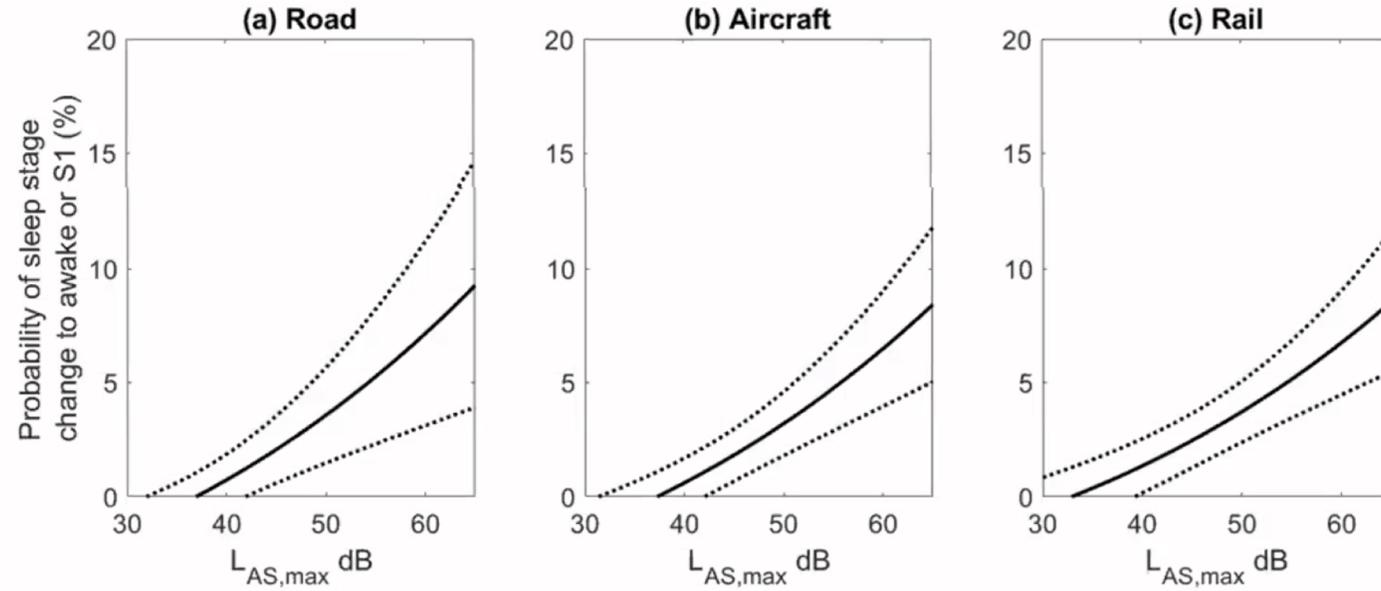


Figure 6. Probability of additional sleep stage changes to wake or S1 in a 90 second time window following noise event onset depending on the maximum indoor sound pressure level ($L_{AS,max}$) for (a) road (STRAIN and DEUFRAKO), (b) aircraft (STRAIN), and (c) rail noise (DEUFRAKO). 95% confidence intervals (dashed lines). Results are for the three unadjusted models.

Basner M and McGuire S: WHO Environmental Noise Guidelines for the European Region: A systematic Review on Environmental Noise Effects on Sleep. IJERPH15(3), 2018.



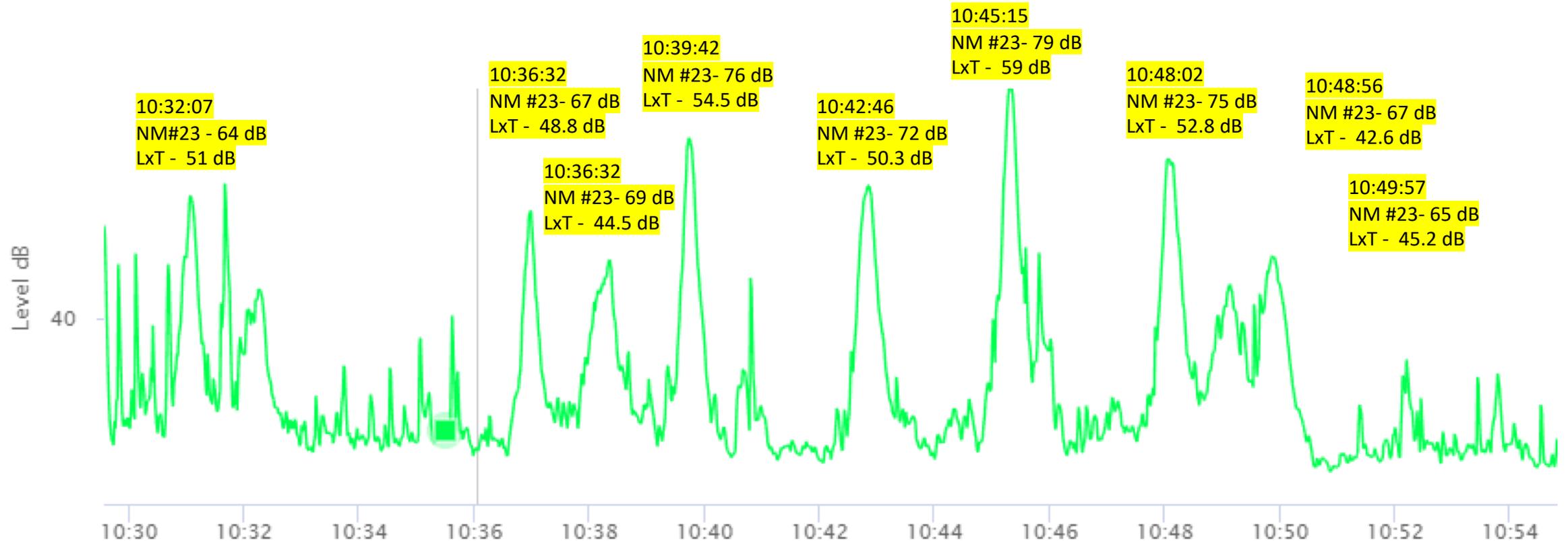


There is a substantial benefit to studying time history data of departures and or arrivals. Also, there is data collected that allows sensitivity studies to be performed.

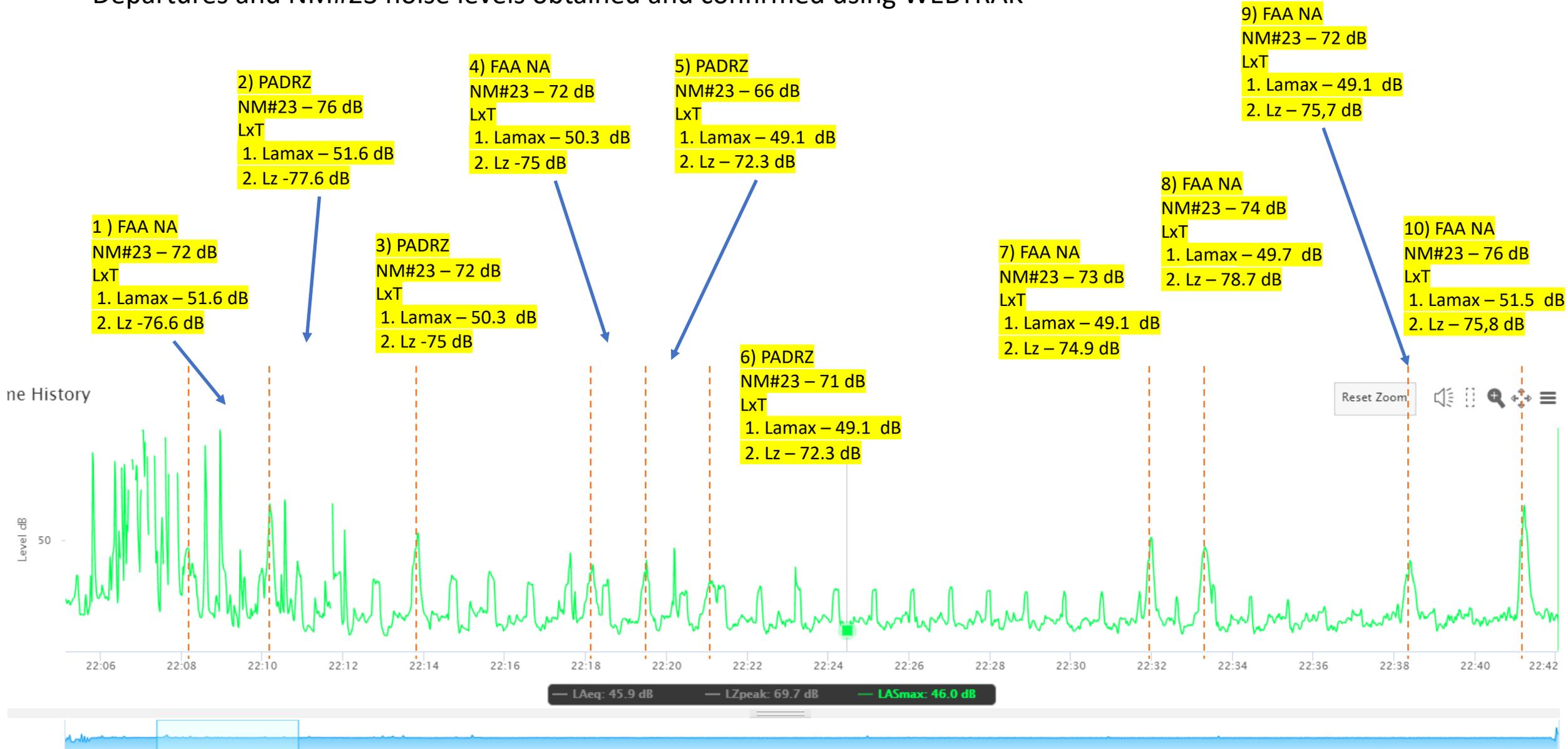
- The Noise monitor was located on the ocean side of Avalon Court
- Slant distance is from the noise monitor to the acft as it passes by; horizontal distance + sign is acft is north of residence
- LxT is personal noise monitor
- Reference point is the most southwest corner of SMB; + sign indicates that acft is north of the reference point.

Peak number	Route	Time	Type of acft	Altitude	Slant	Horizontal	LASpeak		Dest	Dist f ref
							Lxt	NM2		
1	PADRZ	10:01:23	737-7H	2700	2776	564	69.1	69	LAS	
2	PADRZ	10:04:02	737-7H4	1900	2011	567	73.3	73	SJC	
3	FAA NA	10:05:25	737-832	1900	2293	-1265	73.3	75	JFK	-146
4	PADRZ	10:15:02	737-8H4	2000	1978	530	72.1	73	SMF	1294
5	FAA NA	10:16:24	737-7H4	2200	2161	-563	72.6	72	DEN	729
6	FAA NA	10:23:23	A321-211	2000	2278	-1085	74.1	74	ATL	0
7	FAA NA	10:29:15	A320-232	2100	2582	-1439	69.6	71	FLL	-348
8	PADRZ	10:31:45	ERJ-170 200LR	2400	2491	197	68.2	68	SFO	1189
9	FAA NA	10:33:53	A321-231	3100	3215	-1158	74.9	75	MIA	0
10	PADRZ	10:35:59	ERJ-170 200LR	2300	2330	427	68.6	69	SMF	1459
11	FAA NA	10:38:39	A321-231	1900	2438	-1509	71.7	73	PHL	-395
12	PADRZ	10:41:57	737-8H4	2750	2743	724	69.7	69	LAS	1649
13	FAA NA	10:44:57	A320-214	2100	2149	-508	74	74	IWA	693
14	FAA NA	10:46:11	A321-211	1900	2237	-1154	73.1	74	DTW	0
15	FAA NA	10:54:36	737-824	1700	2218	-1436	75.1	77	ORD	-327
16	FAA NA	10:57:04	A300-605R	2800	2928	-652	73.3	73	IND	508.6
17	PADRZ	11:00:50	A320-214	2300	2386	55	73	73	LAS	1221
18	FAA NA	11:03:11	737-8H4	2000	1929	-497	72.9	73	PHX	726
19	FAA NA	11:07:50	737-824	1700	2074	-1148	74.8	76	EWR	0
20	FAA NA	11:11:51	737-900ER	1600	2069	-1244	75.8	77	JFK	-100

- Compares noise levels outside at NM#23 and inside at LxT on June 30th 2022
- LxT located inside on 3rd story (top floor) with all windows closed, but a door on the north side of room open.
- In general, aircraft on PADRZ pass by house to the north and ZZOOO departures are to the south, so in general, ZZOOO departures should result in larger differences between the two readings, which it does.
- On average, the readings inside the room were 20-24 dB lower than outside.
- Ambient noise levels inside the house are about 30 dB.
- Noise levels from an event are from 13 dB to 29 dB greater than ambient, with the maximum noise level inside of 59 dB



- LxT comparison with NM#23 from 10:08:09 to 10:41:06
- Similar to previous study except the north facing door was closed
- Departures and NM#23 noise levels obtained and confirmed using WEBTRAK



Summary and Conclusions

- ▶ Undisturbed sleep of sufficient duration is of paramount importance for health and well-being.
- ▶ Different scientific methods can be used to investigate noise effects on sleep, all with their pros and cons.
- ▶ Traffic noise can disturb and fragment sleep, impair recuperation and is likely a key contributor to long-term negative health consequences.
- ▶ Current and precise exposure-response functions representative for the affected population are needed to inform noise policy in general and limit values more specifically.



Using portable NMS in and around homes provides important information

- Those who have participated in the Quiet Home Program have signed an avigation easement, but they have not signed over their lives
- Placement of the portable system both outside and inside of your home provides important information that you can use to make decisions
- This is important for both those properties inside and outside of the 65 dB CNEL
- SENEL causes the disrupted sleep, not the CNEL
 - If you average a bomb explosion over 6 hours, it is not much of an explosion

From: User <gwonacott@hotmail.com>
Sent: Monday, July 18, 2022 9:30 AM
To: SDCRAA clerk <clerk@san.org>
Subject: Distribute to ANAC members.

Please distribute to ANAC members prior to next ANAC meeting.

18 July 2022

Mr. Phillip Crimmins
Associate Environmental Planner
Department of Transportation
Division of Aeronautics-M.S. #40
1120 N. Street
P.O. Box 94274-0001
Sacramento, CA 94274-0001

Dear Mr. Crimmins:

When we spoke a while back, you commented that the SDIA noise abatement office personnel were just trying to do their job (paraphrased). And presumably their job is finding the right balance between protection of the residents and school children who live in airport noise impacted areas, and ensuring that the County of San Diego has sufficient airport capacity to support the traveling public as well as the San Diego County economy.

During the COVID pandemic, there was an unprecedented decrease in air travel internationally, including at SDIA. And while there were fairly severe impacts on specific types of businesses in San Diego, primarily the tourism industry, San Diego is still here. As you are aware, most businesses replaced air travel with ZOOM, much to the benefit of the environment around us and the health of the residents living in noise impacted areas around SDIA.

In the meantime, the body of work by medical scientists has grown substantially in recent years that now shows a cause and effect relationship between noise disruption and different medical maladies. This all raises a question in my mind and the minds of the residents near me who are subjected to continuous noise disruption from 6:30 am to 11:30 pm.

I believe right now we view maximizing tourism and supporting tourism travel as the goal, as the independent variable, while all else, including airport noise, would be consequences, or dependent variables. What if we begin giving health and tourism dollars equal consideration, perhaps providing non-discriminating incentives for airlines to take actions that might benefit health of the residents in the noise impacted communities both in and out of the 65 dB CNEL.

In the 1970-1990's the State worked closely with SDIA and the City to establish noise driven limits on numbers of operations and implemented temporary departure rules. For example, there are Port of San Diego documents that show a 70-30 split of departures with 70 percent on a vector turn right to 295 degrees as well as a requirement to put all post 10 pm departures on the 295 vector departure (FAA Operational Noise Abatement Departure). These emergency changes were implemented

without a NEPA, or any kind of environmental assessment, presumably because they were temporary. The 70-30 split was reversed in the early 1990's; however, the post 10 pm FAA Operational Noise Abatement Departure was not and continues today, without a NEPA. Efforts in the recently completed FAA Part 150 Study to move all of these aircraft to the FAA satellite navigation SID, PADRZ, was thwarted by the residents of Mission Beach.

But, frankly, I would like to get back to my reason for sending you this letter. In my opinion, the SDIA noise abatement office is not complying with the most recent noise variance in 3 areas:

- 1) Lack of use of noise monitors to establish the 65 dB CNEL contour,
- 2) Not showing all of the contours required at the end of the year, and
- 3) Not taking advantage of all of the noise mitigation options at their disposal.

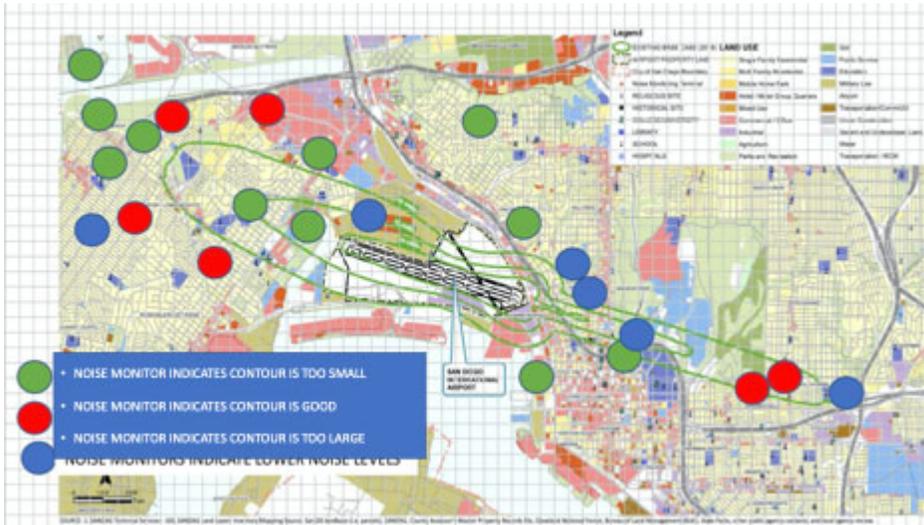
I have captured several sections from the variance that are shown below along with my explanation for non-compliance. I believe that the State of California had very good reasons for including the requests in the variance.

SDIA has a comprehensive Noise Monitoring System (NMS) that contrary to what is required in the variance, is not being used to establish the contour, or even adjust the contours based on analytically generated software such as AEDT. I further believe that the NMS indicates that there are areas where the AEDT model and the input data is understating the size of the 65 dB CNEL.

12 | SDIA's noise impact boundary is developed by the Airport Authority by using their noise
13 | monitoring equipment and collection process. From data obtained from the Airport
14 | Authority's noise monitoring equipment, annual CNEL contour maps are generated. These maps are
15 | provided by the Airport Authority for reporting purposes and are a matter of public record.

In the picture below, I have color coded the noise monitors indicating which ones indicate that the AEDT model is understating the contour size. The picture below is from the SDIA Title 21 Q4 2018 report. The green dots are where the noise monitors indicate that the contour is too small. I made this assessment using the following approach:

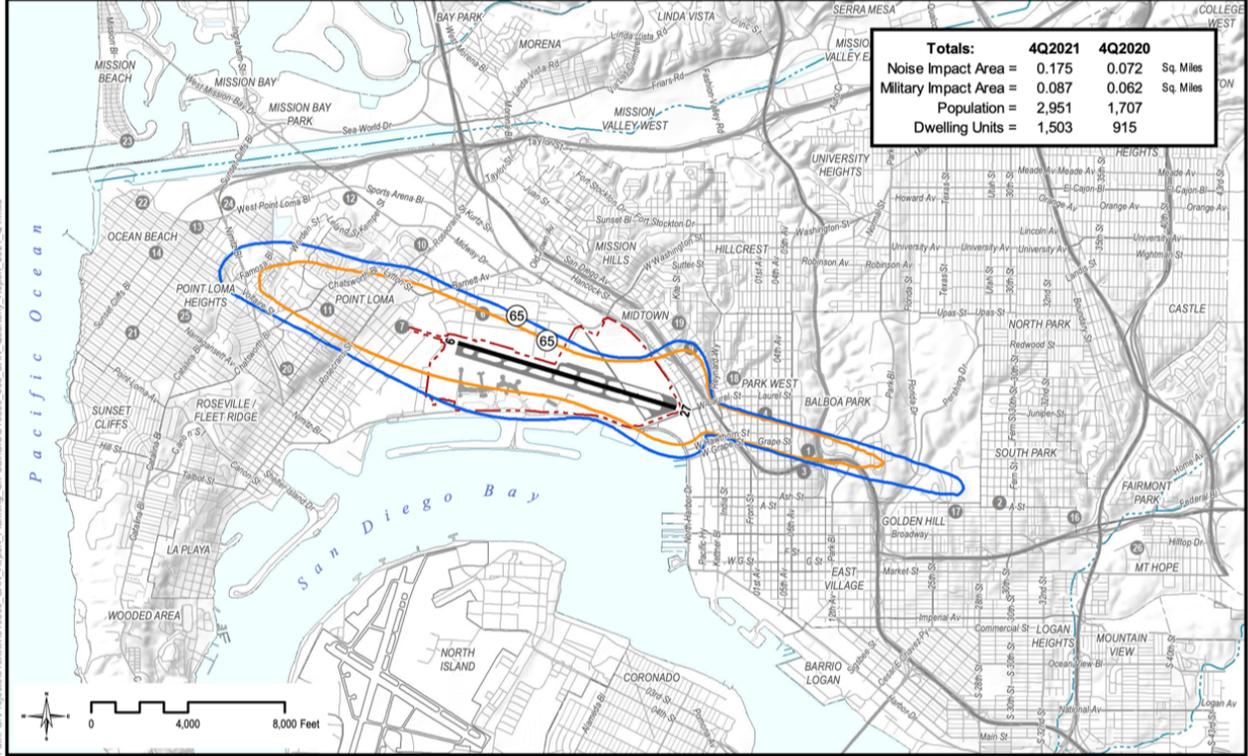
- 1) I calculated the CNEL noise level for each of the NMS noise monitors using the AEDT generated contour.
- 2) I compared the annual noise monitor CNEL value with the analytically generated value for the noise monitor location.
- 3) I then calculated the effective 65 CNEL area in square miles for each of the NM locations, and finally
- 4) I averaged the areas for all of the NMS locations to come up with an integrated average 65 dB CNEL area.



There clearly are trends that can be seen from the analysis. The contour is seen to be too small for the area that veers off to the right towards Mission Beach. It is crucial to be able to visualize this in the Title 21 report to the State. To accomplish this, I propose that the Airport Authority be required to add CNEL values at TBD grid points. I also believe that these grid CNEL values should be included in a table so that they might be used for making the contour assessment. I also believe that the Airport Authority should from this time forward be required to adjust the AEDT contours using the NMS as is stated in the variance.

Unless the State is getting information not included in the quarterly Title 21 reports, I don't see that the Airport Authority is complying with the provision below, providing multiple contours. I believe it is important for all of these to be provided. I know that the residents outside of the 65 could have benefitted over the years to see how the 60 was changing, for example. And, I also believe that those in the 70 dB CNEL might have gained greater insight into their noise disruptions and potentially a contour that is too small compared to the NMS. The grid values will help here.

11 | 3. The Airport Authority's annual report (for each calendar year) shall plot the annual
 12 | CNEL contours for the 60, 65, 70, 75, and 80 dB CNEL noise contour levels (as developed and
 13 | reported by the Airport Authority) and shall quantify the areas of incompatible land use.



Path: G:\Projects\310000310560_SAN_Airport_Planning_On-Call\GIS\10560_003_SAN_Airport_Quarterly_Report_2021_Q4.mxd



- 2021 4th Quarter 65 dB CNEL Contour
- 2020 4th Quarter 65 dB CNEL Contour
- Airport Property
- Runway
- RMT Site Location
- Roads
- ~ River / Stream

Comparison of the 2020 and 2021 Fourth Quarter 65 dB Community Noise Equivalent Level (CNEL) Contours



This is an area that is completely underutilized by the Airport Authority. There has been virtually no effort to try incentives. In fact the Airport Authority has used the FAA as a whipping horse to stop any discussions regarding incentives. But, if they are applied in a non-discriminatory manner that does not interfere with interstate commerce, then they should be considered. Seems like the State should require a report from the Airport Authority as part of Title 21 that addresses this issue specifically.

24 The Airport Authority has several options (although they are not unlimited) to reduce or
25 eliminate the size of the noise impact area, including those listed in Section 5037. For instance, it
26 may encourage the use of less noisy aircraft or departure flight paths and procedures to minimize
27 noise in residential areas. It may also convert incompatible land uses to compatible ones through
28 rezoning, acquisition of aviation easements for airport noise, application of acoustical insulation, or

GRANT OF VARIANCE

1 acquisition of property. (Section 5014.) The burden of proof shall be upon the applicant for the
2 variance. (Section 5056.)

Gary Wonacott

Mission Beach

From: User <gwonacott@hotmail.com>

Sent: Thursday, September 1, 2022 10:58 AM

To: SDCRAA clerk <clerk@san.org>

Cc: Scott Morrison <scott@morrisonattorney.com>; Robert Otilie <ro@ottilielaw.com>; cathy ives <cathy.ives@gmail.com>; Klaus Mendenhall <kluasm@aol.com>; Larry Webb <lwebb2828@gmail.com>; Larry Clark <lclark7@san.rr.com>; Dave Schwab <reporter@sdnews.com>; Dennis Lynch <dcl7777@aol.com>; bob semonsen <gerdsem@twc.com>; Scott Gressard <sgressard07@gmail.com>; Laurence Fedak <laurence.fedak@gmail.com>

Subject: Mission Beach ANAC Representative

Please distribute to the ANAC committee members before the next meeting. Also, please send a copy to Ms. Amy Gonzales, SDCRAA General Counsel.

Ms. Watkins has been the ANAC representative for Mission Beach for about 12 years. Ms. Watkins resides at the address shown on the Webtrak picture. This location is about 3,665 ft or 0.69 miles from the nominal PADRZ flight track and 9,200 feet or 1.74 miles to the ZZ0003 nominal flight track. The residents who live under PADRZ in SMB have pleaded for years for Ms. Watkins to step aside so someone far more impacted by airport noise could represent us. Now, Ms. Watkins term is up and she has selected her replacement, Ms. Gloria Henson, one of her good friends who lives in roughly the same location.

We believe that this action is unfair and irresponsible. We believe that the Airport Authority should step in and allow the entire Mission Beach Precise Planning Board to ask for candidates from Mission Beach, allowing each candidate to present their case to the MBPPB for their decision as is in the best interest of our community.

Gary Wonacott
Mission Beach

