Reince Tyler

Subject: FW: Correlation of noise monitor data and number of operations^

From: Gary Wonacott <wildcatwonacott@gmail.com>
Sent: Wednesday, March 4, 2026 7:08 AM
To: SDCRAA clerk <clerk@san.org>; Gloria Henson <glohenson@san.rr.com>
Subject: Correlation of noise monitor data and number of operations^

Please distribute to ANAC members. Also, can you provide an explanation for the results.

Gary Wonacott
731 Avalon Court

I have been concerned by the filters used in the noise monitors as they do not conform to FAA standards. I have evaluated data for the California quarterly reports. There are substantial quarterly variations in the number of operations. My question is, does the noise monitor data track with number of operations? The assessment below evaluates this question.

Year/Quarter	Number of operations	Ratio	NM#7 Quarter	NM$7 Annual	NM#23 Quarter	NM#23 Annual
2023/Q1	50849	1	73.7	74.1	61.8	6
Q2	55545	1.092	74.3	74.1	62.7	6
Q3	57702	1.039	74.4	74.1	60.9	6
Q4	56525	0.980	74.1	74.1	61.7	6
2024/Q1	51025	0.903	73.4	73.9	61.8	
q2	58011	1.137	74.2	74	61.8	6
Q3	60492	1.043	74.3	74	61	6
Q4	58794	0.972	74.2	74	61	6
2025/Q1	52276	0.889	73.1	73.9	61	6
Q2	59770	1.143	74	74.1	61.3	6
Q3	60303	1.009	74.3	74	61.8	6

50849	1.00	5.01E+73	1.26E+74	6.31E+61	3.98E
55545	1.09	2.00E+74	1.26E+74	5.01E+62	7.94E
57702	1.04	2.51E+74	1.26E+74	7.94E+60	5.01E
56525	0.98	1.26E+74	1.26E+74	5.01E+61	7.94E
51025	0.90	2.51E+73	7.94E+73	6.31E+61	1.00E
58011	1.14	1.58E+74	1.00E+74	6.31E+61	3.98E
60492	1.04	2.00E+74	1.00E+74	1.00E+61	3.98E
58794	0.97	1.58E+74	1.00E+74	1.00E+61	3.98E
52276	0.89	1.26E+73	7.94E+73	1.00E+61	3.98E
59770	1.14	1.00E+74	1.26E+74	2.00E+61	3.98E
60303	1.01	2.00E+74	1.00E+74	6.31E+61	3.98E

The correlation factor between the normalized number of operations (leftmost column in your description, which appears to be the second column in the image: values like 1.00, 1.09, etc.) and each of the four noise level columns (CNEL values raised to the power of 10) can be quantified using the Pearson correlation

coefficient. This measures the linear relationship between two variables, ranging from -1 (perfect negative correlation) to +1 (perfect positive correlation), with 0 indicating no linear correlation. Values above 0.5 or below -0.5 suggest moderate to strong correlation, while those near 0 indicate weak or no linear association.

To arrive at these values, the data is extracted into two vectors for each pairing: one for normalized operations (11 values) and one for the noise levels in that column (also 11 values). The Pearson coefficient r is then computed as:

$$r = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum(x_i - \bar{x})^2 \sum(y_i - \bar{y})^2}}$$

where x is the normalized operations, y is the noise levels, and overbars denote means.

Based on the data in the image:

- For the first noise column (values like 5.01E+73, 2.00E+74, etc.): $r \approx 0.714$ (moderate positive correlation).
- For the second noise column (values like 1.26E+74, 1.26E+74, etc.): $r \approx 0.586$ (moderate positive correlation).
- For the third noise column (values like 6.31E+61, 5.01E+61, etc.): $r \approx 0.062$ (very weak positive correlation, essentially none).
- For the fourth noise column (values like 3.98E+61, 7.94E+61, etc.): $r \approx -0.302$ (weak negative correlation).

What could potentially explain the weak correlation values for the third and fourth columns?

The weak (near-zero) correlation in the **third column** (~0.06 to ~0.22 depending on exact calculation rounding) and the weak negative correlation in the **fourth column** (~-0.30) can be explained by several likely factors, based on patterns visible in the data itself:

1. Very Low Variability in the Noise Values (Especially Column 4)

- Column 4 shows remarkably little spread: 8 out of 11 values are exactly 3.98E+61 (the mode), with only three higher values (5.01E+61, 7.94E+61, 1.00E+62). The overall range is only about 2.5× (from lowest to highest), and the standard deviation is small relative to the mean.
- When one variable (here, the CNEL^10 value) barely changes across observations, there is almost no signal for Pearson correlation to detect — even if normalized operations vary. The correlation coefficient is pulled toward zero because most of the variation in operations has no corresponding variation in the noise metric.
- Column 3 has more spread (range ~63×), but still exhibits clustering and a few extreme outliers (especially the 5.01E+62 value, which is ~6–63× higher than most others). This creates a noisy, non-linear pattern rather than a smooth linear trend with operations.

2. Lack of a Consistent Linear Relationship

- Pearson correlation only captures **linear** associations. If the relationship between number of operations and these particular CNEL-derived noise levels is non-linear, threshold-based, categorical, or dominated by other uncontrolled factors, the coefficient will be low even when some connection exists.
- For example:
    - Column 4 appears almost "saturated" or floored at ~3.98E+61 for most cases, only increasing in a few instances unrelated to the operations scale.
    - Column 3 shows jumps that don't align monotonically with operations (e.g., the highest value occurs at ops=1.09, but lower ops values have mid-range numbers).

3. Different Underlying Noise Sources or Metrics

- The first two columns (with moderate positive correlations of ~0.59–0.71) likely represent noise metrics that scale more directly with the number of operations (e.g., cumulative or average exposure levels that grow roughly proportionally).

- The third and fourth columns may represent different aspects of the noise environment:
    - Peak levels, single-event maxima, or metrics dominated by a few loud events rather than total operations.
    - Metrics from a different receptor location, time period, or modeling assumption that are less sensitive to the total operation count.
    - Thresholded or capped values (e.g., CNEL components that clip or floor at certain levels due to background noise, regulatory cutoffs, or calculation methods).
- In aviation or transportation noise modeling (common context for CNEL = Community Noise Equivalent Level), some sub-components (like single-event maximum levels or nighttime-weighted portions) can decouple from total operations if operations are concentrated in quieter times or if mitigation measures apply unevenly.

4. Small Sample Size and Potential Outliers

- With only 11 data points, a single outlier or cluster can strongly influence (or suppress) the correlation.
- Column 3 has at least one clear high outlier (~5.01E+62), which pulls the pattern away from linearity.
- The small n also means correlations are less stable — removing or adding one point could shift values noticeably.

Summary of Key Explanations

- **Column 4**: Extremely low variability (mostly constant at one value) → correlation mechanically driven toward zero regardless of operations.
- **Column 3**: Moderate variability but dominated by a few high values and non-monotonic changes → weak/no linear trend with operations.
- **Both**: Likely represent noise metrics or sub-components that do **not** scale proportionally or linearly with total operations (unlike columns 1 and 2),

possibly due to peak-focused calculations, location-specific effects, background noise dominance, or modeling thresholds.

If these columns come from a specific noise modeling report (e.g., airport CNEL contours, aircraft operations study), checking the exact definitions of each column (what aspect of CNEL they represent — e.g., total energy, Lmax, nighttime penalty, etc.) would likely confirm which of these factors is dominant.

Based on the analysis above, I still question the filters used in the noise monitors. Even though CNEL is a poor reflection of the noise impact, there should still be a reasonably close correlation.

Reince Tyler

Subject: FW: Correlation of noise monitor data and number of operations^

From: Gary Wonacott <wildcatwonacott@gmail.com>
Sent: Friday, March 6, 2026 4:27 AM
To: SDCRAA clerk <clerk@san.org>
Cc: Gloria Henson <glohenson@san.rr.com>
Subject: Re: Correlation of noise monitor data and number of operations^

Here is the problem. It does not seem to be reasonable for there to be a fifteen percent change n the number of operations, but virtually no change in the noise monitor data. I had previously alluded to concerns about the filters being used on monitors not conforming to State and or Federal standards. I am asking the Airport Authority to validate the NMS.

Year/Quarter	Number of operations	Ratio	NM#7 Quarter	NM#7 Annual	NM#23 Quarter	NM#23 Annual
2023/Q1	50849	1	73.7	74.1	61.8	61.6
Q2	55545	1.092	74.3	74.1	62.7	61.9
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q2	58011	1.137	74.2	74	61.8	61.6
Q3	60492	1.043	74.3	74	61	61.6
Q4	58794	0.972	74.2	74	61	61.6
2025/Q1	52276	0.889	73.1	73.9	61	61.6
Q2	59770	1.143	74	74.1	61.3	61.6
Q3	60303	1.009	74.3	74	61.8	61.6
	50849	1.00	5.01E+73	1.26E+74	6.31E+61	3.98E+61
	55545	1.09	2.00E+74	1.26E+74	5.01E+62	7.94E+61
	57702	1.04	2.51E+74	1.26E+74	7.94E+60	5.01E+61
	56525	0.98	1.26E+74	1.26E+74	5.01E+61	7.94E+61
	51025	0.90	2.51E+73	7.94E+73	6.31E+61	1.00E+62
	58011	1.14	1.58E+74	1.00E+74	6.31E+61	3.98E+61
	60492	1.04	2.00E+74	1.00E+74	1.00E+61	3.98E+61
	58794	0.97	1.58E+74	1.00E+74	1.00E+61	3.98E+61
	52276	0.89	1.26E+73	7.94E+73	1.00E+61	3.98E+61
	59770	1.14	1.00E+74	1.26E+74	2.00E+61	3.98E+61
	60303	1.01	2.00E+74	1.00E+74	6.31E+61	3.98E+61

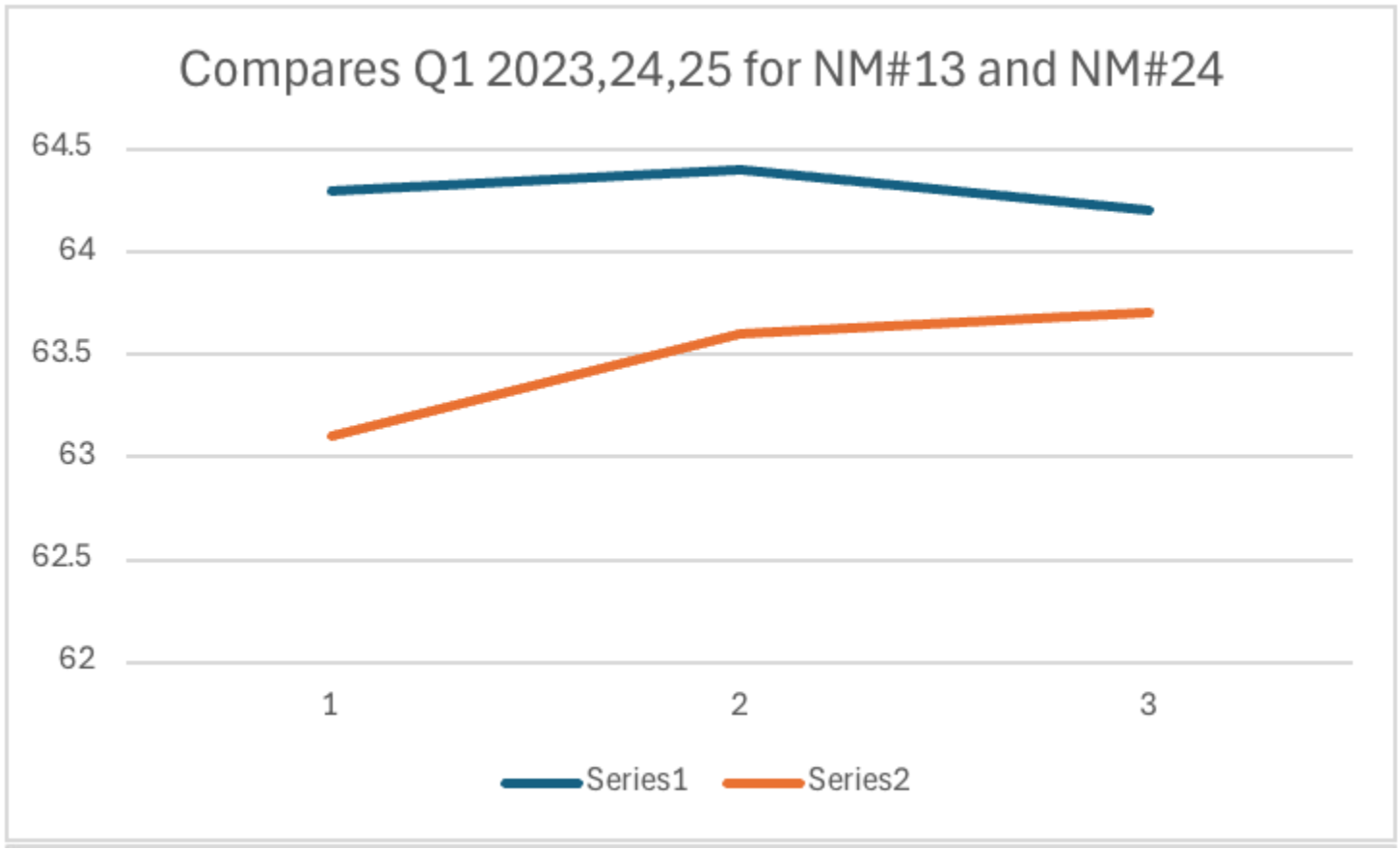
Reince Tyler

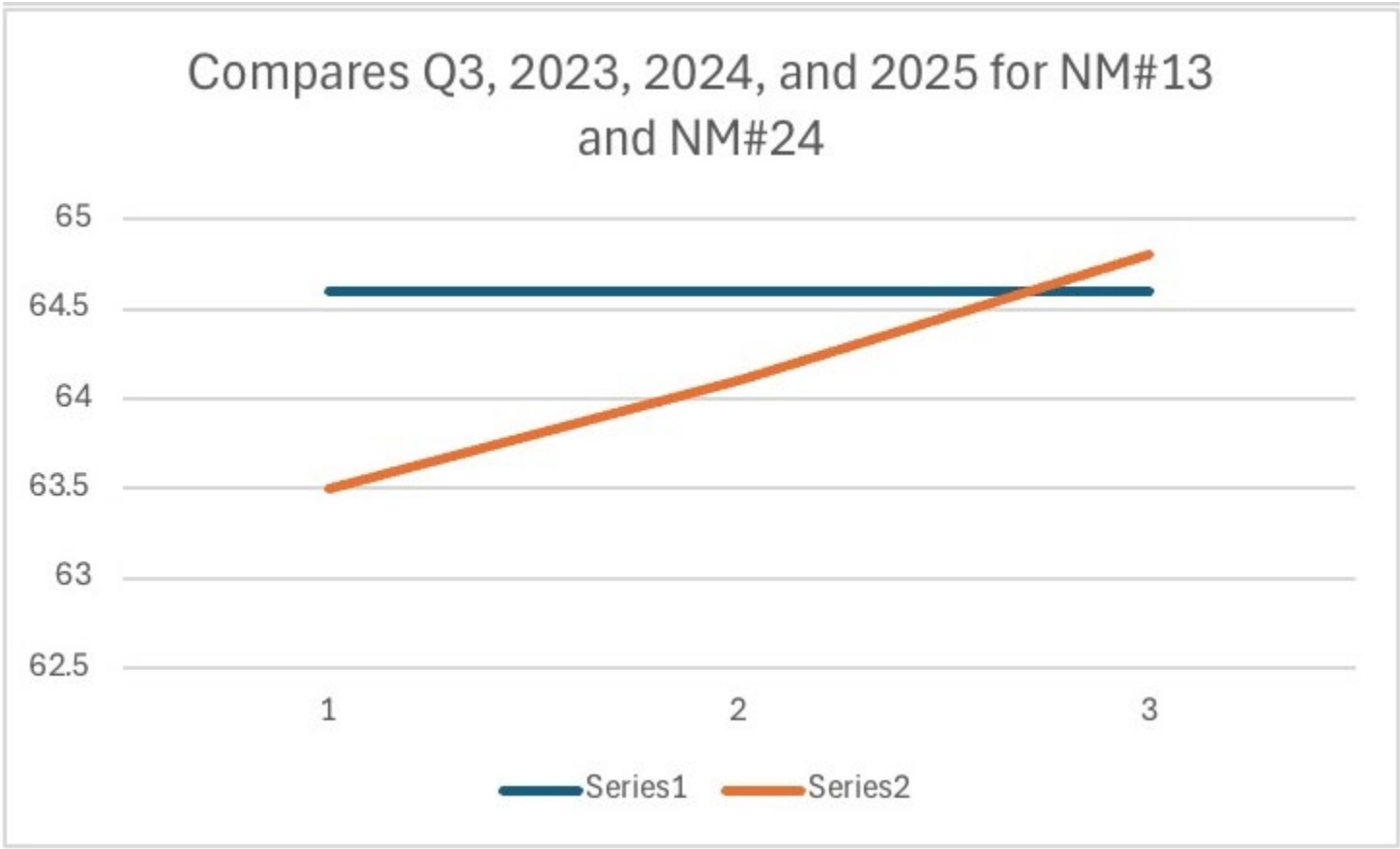
Subject: FW: Shifting of the noise to the north.

From: Gary Wonacott <wildcatwonacott@gmail.com>
Sent: Friday, March 6, 2026 1:55 PM
To: SDCRAA clerk <clerk@san.org>; Gloria Henson <glohenson@san.rr.com>
Subject: Shifting of the noise to the north.

There has been a shifting of the noise to the north. I believe an increase in noise would result in both NM#13 and NM#24 increasing, but this is not the case. NM#24 is increasing while NM#13 stays the same or decreases/. Why is this happening?

Gary


Compares Q1 2023,24,25 for NM#13 and NM#24
64.5
64
63.5
63
62.5
62
1
2
3
Series1
Series2


Compares Q3, 2023, 2024, and 2025 for NM#13 and NM#24
65
64.5
64
63.5
63
62.5
1
2
3
Series1
Series2

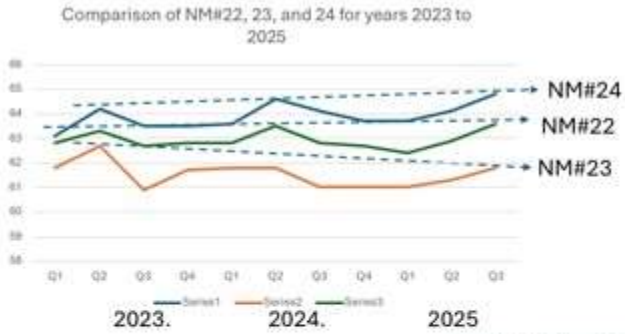
Reince Tyler

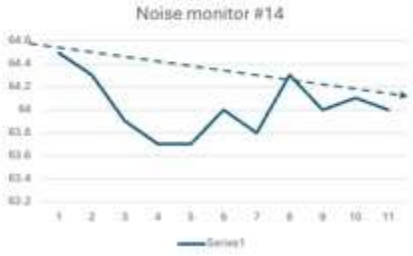
Subject: FW: Noise trend questions

From: Gary Wonacott <wildcatwonacott@gmail.com>
Sent: Thursday, March 12, 2026 11:12 AM
To: SDCRAA clerk <clerk@san.org>; Gloria Henson <glohenson@san.rr.com>
Subject: Noise trend questions

These are noise trends over the period 2023-2025. The noise levels have in general increased with increasing operations during the period, although it significantly at NM#7 and 11. And what is surprising is that the noise levels at NM#14, straight out over Pt. Loma have decreased. There is a clear increasing noise level trend at NM#24, to the north, but decreasing at NM#23. Please explain the trends.

Gary





Reince Tyler

Subject: FW: Proposal for the San Diego Airport Noise Advisory Committee (ANAC)

From: Gary Wonacott <gwonacott@hotmail.com>
Sent: Thursday, March 19, 2026 4:37 PM
To: SDCRAA clerk <clerk@san.org>; Gloria Henson <glohenson@san.rr.com>
Subject: Proposal for the San Diego Airport Noise Advisory Committee (ANAC)

AI-Based Aircraft Event Classification

A Path to Fairer, More Accurate CNEL Monitoring

Submitted by: Gary Wonacotte

Date: March 2026

Purpose

San Diego International Airport's Remote Monitoring Terminals (RMTs) currently rely on fixed decibel thresholds (often 62–72 dB) to identify aircraft noise events for quarterly CNEL calculations. These thresholds were designed to exclude non-aircraft sounds, but they also exclude legitimate quieter aircraft passes—especially at night, where the 10 dB CNEL penalty is most severe. The result is artificially lower reported CNEL values that shrink the official 65 dB contour and leave deserving residents outside the Quieter Home Program.

The AI Solution

Modern machine-learning classifiers (convolutional neural networks) can replace crude thresholds entirely. Trained on thousands of verified aircraft signatures, the AI analyzes the full audio spectrum, tone, duration, and acoustic fingerprint in real time. It correctly identifies aircraft events with >95 % accuracy—even at levels as low as 40 dB—while automatically rejecting cars, birds, wind, lawnmowers, and other non-aircraft noise. The system can also cross-check with ADS-B flight-tracking data for 100 % certainty when desired.

This technology is already proven:

- Minneapolis–Saint Paul Airport patented a CNN-based system in 2023 that runs 24/7 on 40 monitors and perfectly classifies every sound.
- Topsonic (used at multiple international airports) automatically detects aircraft movements with the highest reliability.
- Research at Camarillo/Oxnard and elsewhere confirms machine-learning detection is ready for widespread adoption.

Direct Benefits to Residents Inside the 65 dB CNEL Contour

- More accurate CNEL numbers that reflect real exposure (especially nighttime).

- A contour that truly represents who is “significantly impacted,” qualifying more homes for the **free Quieter Home Program** (new windows, doors, ventilation upgrades, guaranteed 5+ dB interior noise reduction, increased property value with zero property-tax increase).
- Fewer disputes over “the monitors aren’t picking up the noise.”
- No change to existing hardware—just a software upgrade that costs far less than manual threshold adjustments or new monitors.

Recommendation

Authorize a six-month pilot on just 2–3 RMTs (including one in a residential area near the current contour edge). The Airport Noise & Operations Monitoring System vendor can implement this quickly and at minimal cost. Results would be presented to ANAC with before-and-after CNEL comparisons and a map showing any change in the 65 dB contour.

Accurate monitoring is not anti-airport—it is pro-resident. By adopting AI event classification, SAN can lead the nation in transparent, fair noise reporting while delivering measurable relief to the very families the Quieter Home Program was created to help.

I respectfully request this item be placed on the next ANAC agenda for discussion and vote.

Gary Wonacott
Mission Beach

Get Outlook for iOS

Reince Tyler

Subject: FW: Quiet versus Quieter Home Program; please distribute to ANAC members

From: Gary Wonacott <gwonacott@hotmail.com>
Sent: Saturday, March 21, 2026 6:12 AM
To: SDCRAA clerk <clerk@san.org>; Gloria Henson <glohenson@san.rr.com>
Subject: Quiet versus Quieter Home Program; please distribute to ANAC members

The airline industry has made substantial strides decreasing engine noise during the last 50 years to a point where airframe noise is now a consideration. And the Quieter Home Program helps, but the implications are to some degree misleading for a couple of reasons: 1. Single event noise levels in homes around SDIA are significant even in homes with the noise treatments, and 2. CNEL does not relate to health consequences. Single events in the 70 dB and 75 dB CNEL are still very high with our without treatments. So, as the number of operations continue to increase, it is even more important that airlines like Alaska be motivated to operate within the 17 hour curfew. Whether the Alaska representatives were providing information or a tacit threat, the message needs to go back to them to make changes to stay within the curfew, because the curfew is not going to change to accommodate their wishes.

Yes — the correct name is the Quieter Home Program (QHP). Thank you for the clarification.

The FAA's official position remains that aircraft noise below the 65 CNEL/DNL contour does not cause "significant" impacts warranting regulatory action, and it does not recognize single-event noise peaks (or levels inside the 70–75 CNEL contour) as causing direct health "damage." The QHP's goal is strictly to reduce interior noise by at least 5 dB (typically bringing indoor DNL down to ~45 dB or below with windows closed). It does **not** eliminate or significantly dampen the sharp, short-duration peaks from individual jet overflights, which can still reach high indoor levels in the louder 70–75 CNEL zones.

However, independent scientific and public-health bodies **do** recognize health criteria that can be interpreted as implying potential harm ("damage" in the sense of increased physiological stress, sleep fragmentation, and elevated disease risk) from repeated single-event overflights — even after mitigation.

Key Non-FAA Health Criteria

These are based on the **World Health Organization (WHO) 2018 Environmental Noise Guidelines** (still the leading international reference as of 2026) and supporting peer-reviewed studies:

- **Average exposure thresholds (already far below FAA's 65 CNEL)**:
  WHO strongly recommends keeping aircraft noise below **45 dB Lden** (day-evening-night average) and **40 dB Lnight** to prevent adverse health effects. Above these levels there is "strong evidence" of increased annoyance, sleep disturbance, and cardiovascular/metabolic risks.
  In 70–75 CNEL areas, average exposure is well above these limits, and single events drive much of that exposure.

- **Single-event / sleep-disturbance criteria**:
  Even one aircraft overflight can trigger physiological reactions. Studies show:
  - Indoor maximum levels (Lmax) as low as **33–55 dB(A)** can cause awakenings, heart-rate increases, or blood-pressure spikes during sleep.
  - Sound Exposure Level (SEL) from individual events is the best predictor of sleep disruption; aircraft events are particularly potent because of their rapid onset and high peak energy.
  - Real-world data (e.g., Zurich airport case-crossover study) link nighttime aircraft noise events (>50 dB in the hours before an event) to a statistically significant increase in acute cardiovascular mortality (odds ratio up to 1.44).
  Quieter Home insulation helps with steady background noise but has limited effect on these short, loud impulses — especially in the higher 70–75 CNEL zones where outdoor single-event peaks routinely exceed 95–110 dB outside.
- **Cardiovascular and other chronic effects**:
  Multiple large studies (UK, Europe, and U.S. cohorts 2020–2025) show dose-response relationships for ischemic heart disease, hypertension, stroke, and heart-failure hospitalization starting at aircraft noise levels of **~45–50 dB Lden/Lnight** — well below FAA thresholds. Nighttime single events appear especially problematic because they disrupt sleep architecture, raise cortisol, impair vascular function, and can trigger acute events the same night.
  Children's cognition, mental health, and metabolic risks are also linked at these lower levels.

Bottom Line for 70–75 CNEL Homes Post-QHP

Even after the program's insulation, residents in the loudest zones are still exposed to repeated single-event peaks that exceed the WHO and independent-study thresholds associated with measurable increases in:

- Sleep fragmentation
- Acute cardiovascular stress responses
- Long-term risk of heart disease and related conditions

These effects are **not** recognized by the FAA for regulatory or mitigation purposes (they continue to use the 65 dB average metric and do not treat single-event peaks or post-insulation interior spikes as actionable "damage"). But the scientific consensus outside the FAA — led by the WHO, European Environment Agency, and recent epidemiological/experimental work — clearly treats them as plausible pathways to health harm.

If you live in one of the higher-contour neighborhoods and are concerned, the most practical next steps are:

- Request your home's latest interior noise monitoring data from the San Diego Airport Authority (they have the ANOMS system and can show you actual single-event indoor peaks).
- Talk with your doctor about sleep or cardiovascular screening if you notice frequent awakenings or related symptoms.

- The airport’s public noise dashboard can also show real-time flight-track and noise-monitor data for your area.

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Reince Tyler

Subject: FW: Document (3) (12)
Attachments: Document (3) (12).pdf

From: Gary Wonacott <wildcatwonacott@gmail.com>
Sent: Monday, March 23, 2026 6:32 AM
To: SDCRAA clerk <clerk@san.org>; Gloria Henson <glohenson@san.rr.com>
Subject: Document (3) (12)

Please distribute to ANAC members.

The curfew committee is the San Diego International Airport (SAN) Curfew Violation Review Panel (part of the San Diego County Regional Airport Authority).

Its decisions are documented in publicly available "Record of Decision" (ROD) PDFs on san.org (the official airport site), which serve as the meeting records/minutes. These detail violations reviewed, fines (or waivers), reasons (e.g., local weather or maintenance), and vote outcomes. Additional context comes from Airport Noise Advisory Committee (ANAC) materials referencing the panel's 2025 work.

Key metrics from the 2025 committee findings (aggregated across ROD meetings and ANAC summaries):

- **Total curfew violations reviewed**: 178 (slightly down from 179 in 2024).
- **Violations penalized/fined**: 57 (up from 43 in 2024).
- **Total penalties imposed**: $1,592,000 (a record high, up sharply from $472,000 in 2024).
- **Alaska Airlines' role**: Accounted for the substantial majority of fines due to a 7x repeat-violator multiplier (from prior periods). Clusters of violations (e.g., ~8 from nationwide IT outages/ground stops in July and October 2025) led to many $70,000 fines each. Examples from major ROD meetings:
    - October 22, 2025 ROD: 42 violations reviewed, 23 penalized, $744,000 total penalties (heavy Alaska involvement).
    - December 3, 2025 ROD: 24 violations reviewed, 10 penalized, $520,000 total (7 Alaska flights fined $70,000 each = $490,000).
    - Other meetings (April, June, August): Smaller clusters with fines from $6,000–$30,000 per violation before/after multiplier escalation.
- **Common outcomes for Alaska**: Many no-fines for "local weather" or "local maintenance." Fines applied when no legitimate waiver reason. Fines fund the SAN Quieter Home Program. Weather-related violations were down overall in 2025.

How late past the curfew (11:30 p.m. local) did Alaska Airlines departures occur in 2025?

Times varied widely across the fined violations (per RODs). Examples include:

- Just 3–9 minutes late (e.g., 11:33 p.m. or 11:39 p.m.).
- 30–60+ minutes late (e.g., 12:02 a.m. = 32 minutes past; 12:20–12:22 a.m. cluster on Oct. 24).
- Up to 2+ hours late (e.g., 1:01 a.m., 1:12 a.m., 1:37 a.m. = 127 minutes past on Oct. 24).
  The October 23–24, 2025 cluster (tied to an IT outage) had multiple Alaska departures from ~32 minutes to over 2 hours late, all fined at the escalated $70,000 rate.

Where did the Alaska Airlines plane originate from before coming to San Diego?

The committee meeting minutes/RODs **do not specify** aircraft origins, inbound flight routes, previous airports, or rotation details for any violations (they focus only on SAN departure time, flight number, aircraft type if noted, vote, and waiver reason). No such data appears in any 2025 ROD or ANAC materials. Alaska's network context (not from minutes) shows SAN departures like flight 36 (often SAN–JFK) or 729 typically involve aircraft arriving via the carrier's Seattle (SEA) hub or Portland (PDX) feeders, but this is not documented in the curfew findings.

All RODs are at san.org (search "Curfew Violation Review Panel" or "ROD" + year). Fines are assessed case-by-case; Alaska met with airport officials over the high volume.

Penalized Alaska Airlines (AS / SKW-operated) curfew departures in 2025

(Compiled from all available San Diego Airport Curfew Violation Review Panel Record of Decision / ROD PDFs for 2025 meetings. Only flights with imposed fines shown; no-fine waivers omitted. Times are local SAN. "How late" = actual departure past 11:30 p.m. curfew. Fines reflect repeat-violator multipliers up to 7x. Total Alaska penalties drove the year's record ~$1.59M across ~57 total violations.)

Early 2025 (reviewed June 4 ROD)

- **AS 36** – March 26 @ 11:39 p.m. (9 min late) – $6,000

- **SKW 3349 (AS 3349 regional)** – March 30 @ 11:42 p.m. (12 min late) – $18,000

Mid-2025 (reviewed August 6 ROD)

- **AS 366** – May 22 @ 11:34 p.m. (4 min late) – $30,000
- **SKW 850X (AS regional)** – June 9 @ 11:32 p.m. (2 min late) – $30,000
- **SKW 3472 (AS regional)** – June 16 @ 11:38 p.m. (8 min late) – $30,000
- **AS 1067** – June 16 @ 11:44 p.m. (14 min late) – $30,000
- **AS 3005** – June 23 @ 11:48 p.m. (18 min late) – $30,000

July–August 2025 cluster (IT outage; reviewed October 22 ROD – heaviest fines)

- **AS 36** – July 11 @ 12:23 a.m. (53 min late) – $14,000
- **AS 1005** – July 20 @ 11:42 p.m. (12 min late) – $42,000
- **AS 1110** – July 20 @ 11:57 p.m. (27 min late) – $70,000
- **AS 1199** – July 21 @ 12:05 a.m. (35 min late) – $70,000
- **AS 1067** – July 21 @ 12:10 a.m. (40 min late) – $70,000
- **AS 729** – July 21 @ 12:20 a.m. (50 min late) – $70,000
- **SKW 3302 (AS regional)** – July 21 @ 12:22 a.m. (52 min late) – $70,000
- **AS 36** – July 21 @ 1:01 a.m. (91 min late) – $70,000
- **AS 735** – July 21 @ 1:12 a.m. (102 min late) – $70,000
- **SKW 3343 (AS regional)** – July 22 @ 12:08 a.m. (38 min late) – $70,000
- **SKW 3343 (AS regional)** – August 11 @ 11:43 p.m. (13 min late) – $70,000

October 2025 cluster (IT outage; reviewed December 3 ROD)

- **AS 1210** – October 23 @ 11:39 p.m. (9 min late) – $70,000
- **AS 36** – October 24 @ 12:02 a.m. (32 min late) – $70,000
- **SKW 850X (AS regional)** – October 24 @ 12:09 a.m. (39 min late) – $70,000

- **AS 729** – October 24 @ 12:15 a.m. (45 min late) – $70,000
- **SKW 3472 (AS regional)** – October 24 @ 12:17 a.m. (47 min late) – $70,000
- **AS 3004** – October 24 @ 12:21 a.m. (51 min late) – $70,000
- **AS 1154** – October 24 @ 1:37 a.m. (127 min late) – $70,000

Flightradar24 inbound origins into San Diego (previous leg before each penalized departure)

Exact 2025 historical tail numbers and per-flight playback are not publicly extractable on Flightradar24.com without a paid subscription (pages only surface recent/scheduled data; 2025 archives not indexed in free view). However, route history and typical operations for these exact flight numbers show consistent patterns across the year (including during the July & October nationwide IT outage disruptions that caused the late clusters):

- **Mainline Boeing 737 flights** (AS 36, AS 1067, AS 729, AS 1005, AS 1110, AS 1199, AS 735, AS 1154, AS 1210, AS 3004, etc.): Aircraft arrived into SAN from **Seattle (SEA)** — Alaska's primary West Coast hub. AS 36 (SAN–JFK route) consistently rotated via SEA inbound. Some secondary rotations from Portland (PDX).
- **Regional Embraer E175 flights** (SKW-operated as AS 3349, 3302, 3472, 850X, 3005, 3343): Aircraft arrived from California/West Coast feeders — most commonly **Sacramento (SMF)**, **Portland (PDX)**, **Burbank (BUR)**, or **Santa Barbara (SBA)** / LAX-area spokes.

The July and October outage clusters caused system-wide ground stops, so inbounds were delayed versions of the normal network origins above (still predominantly SEA for mainline, regional CA/PDX feeders). RODs themselves list only the SAN departure flight number/time and aircraft type — no inbound details or tails.

There are several straightforward scheduling adjustments Alaska Airlines could (and logically would) make to cut curfew violations at San Diego International Airport (SAN).

These stem directly from the patterns in the 2025 Record of Decision reports: most penalized departures were evening turns (e.g., AS 36 to JFK, AS 729, regional SkyWest flights) that slipped past 11:30 p.m. due to inbound delays, IT outages, or

minor ground issues. With Alaska paying the majority of the record ~$1.59M in fines and holding corporate meetings with the airport authority, the incentive is high—especially as the airline expands dramatically at SAN in 2026 (44% more seats and 9 new routes).

Here are the **most obvious changes** Alaska could implement right away:

1. Move the last departures of the day earlier (biggest quick win)

- Current example: AS 36 (SAN–JFK, one of the repeat violators) is scheduled around **9:58–10:00 p.m.** This leaves only ~90 minutes of buffer before the hard 11:30 p.m. curfew.
- **Fix**: Shift it (and similar late-evening flights like AS 729 or regionals) to **8:30–9:30 p.m.** This gives a realistic cushion for typical 30–60 minute delays without triggering fines or the "cancel the inbound" strategy you mentioned earlier.
- Why obvious? It's the simplest timetable tweak and matches how other carriers handle curfew airports.

2. Adjust inbound arrival times from hub feeders

- Most SAN departures use aircraft arriving from **Seattle (SEA)** or Portland (PDX).
- **Fix**: Schedule those inbounds 30–60 minutes earlier so the plane has more ground time before the curfew window closes. (Arrivals have no curfew, so this is low-risk.)
- Bonus: Pair it with faster ground turns (priority gates, quicker cleaning/deplaning) for evening flights.

3. Increase overnight aircraft parking (RON) at SAN

- Instead of forcing a same-night turnaround that risks a violation, leave more planes overnight and use them for early-morning departures the next day.
- Cost: ~$500 per night per position (signatory rate)—far cheaper than $70,000 fines or losing passenger goodwill.
- Why obvious? The airline already does this selectively; scaling it up would eliminate the "if we can't depart on time, we won't even send the inbound" issue.

4. Redistribute the 2026 growth into earlier slots

- Alaska is adding big capacity at SAN (new routes to Dallas, Oakland, Raleigh/Durham, etc.). They could slot many of these new flights into mid-afternoon or early-evening blocks rather than piling more service into the 9–11 p.m. window.
- This spreads risk and avoids creating new curfew-vulnerable flights.

5. Build in schedule padding and proactive cancellation rules

- Add 15–30 minutes of buffer to published block times on curfew-sensitive routes.
- Formalize the policy you described: if real-time data shows the departure will miss 11:30 p.m., cancel or delay the inbound proactively (already happening informally).

These changes wouldn't hurt Alaska's growth at SAN—they would protect it by making service more reliable and reducing the "no arrival until tomorrow" frustration for passengers. The airport's Fly Quiet program even rewards good curfew compliance, and fine revenue already funds the Quieter Home Program. No major public timetable overhaul has been announced yet (as of March 2026), but the economics and airport meetings strongly point toward exactly these kinds of tweaks in the coming months. If you track a specific flight number or route, I can check its current scheduled time for more tailored ideas!

San Diego International Airport (SAN) does not have simple "overnight parking fees" for aircraft like the car lots ($38/day).

Aircraft parking is handled through the Airline Operating and Lease Agreement (AOLA) for commercial carriers and via the on-airport FBO for general aviation/transient planes. Fees recover part of the airfield costs and are published in the Airport Authority's annual budget books.

For Commercial Airlines (e.g., Alaska Airlines – signatory carrier)

These are the official **Aircraft Parking Position Overnight Fee** rates (also called RON/remain-overnight fees). They are charged **per parking position per night** for any aircraft that stays overnight in an assigned gate or remote ramp spot.

- **Current FY 2026 rate (July 2025–June 2026, in effect now)**: **$499.69 per overnight stay per position** (signatory airlines).
- **Non-signatory airlines**: 120% premium = **$599.63 per overnight**.
- Airlines also pay:
    - Annual Aircraft Parking Position Rental Rate ≈ $217,000–$237,000 per space (fixed).
    - Turn Fee ≈ $166–$193 per daytime turn (additional to overnight).

These fees are part of the residual rate-setting system under the long-term AOLA (2019–2029). Signatory carriers like Alaska get preferential RON allocations; overuse triggers $25,000/day fines plus loss of future positions. Exact billing is per the carrier's agreement and monthly activity reports.

Why Alaska AL plan to avoid curfew penalties is not punitive

- **High-stakes fines make late departures expensive**: Alaska paid the lion's share of 2025's record curfew penalties (totaling ~$1.59M across all carriers) because of its repeat-violator multiplier (reached 7x after earlier fines). Individual violations in the July/October IT-outage clusters hit **$70,000 each**. Canceling an inbound flight proactively avoids that hit, plus crew overtime, passenger compensation, and downstream network disruptions. Airlines have done exactly this for years under SAN's "Fly Quiet" program, which even *rewards* cancellations to avoid violations.
- **Aircraft rotation logic**: Planes don't sit idle. A flight originating elsewhere (e.g., SEA) arrives at SAN, then turns around for the next departure. If that departure can't legally leave before 11:30 p.m. without a massive fine, holding the whole rotation (or canceling the inbound leg) prevents the plane from being "trapped" overnight or forcing a violation. This is standard airline math, not a San Diego-specific vendetta.
-

Passenger impact on San Diegans and visitors

You're right—this would be frustrating. Locals returning home or tourists arriving late would get bumped to the next day, with potential hotel/ride/rebooking hassles. That's real inconvenience, and airlines know it (they hate canceling too, as it hurts loyalty and revenue). But it's the flip side of the curfew: the rule exists precisely because the community demanded protection from overnight departure noise over nearby neighborhoods.

The positive noise angle

Fewer late inbounds mean genuinely quieter nights overall. SAN's curfew (departures only, 11:30 p.m.–6:30 a.m.) was grandfathered in decades ago for exactly this reason—arrivals are allowed anytime, but the goal is minimizing sleep disruption. Canceling to avoid a late departure indirectly supports that community priority while the airport uses fine revenue for the Quieter Home Program (soundproofing homes).

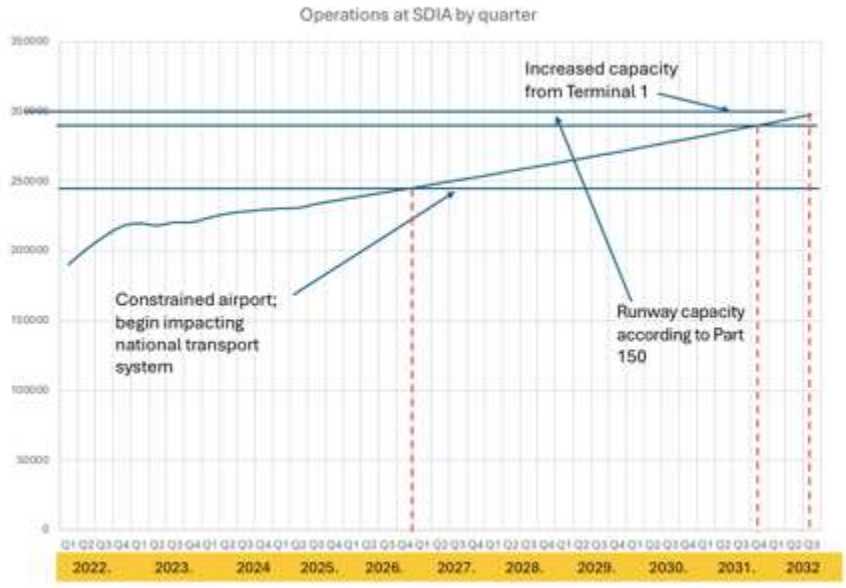
Bottom line: This is aviation operating under local rules. Curfews are rare in the U.S. for good reason—they complicate schedules, but San Diego chose this trade-off for livability. Alaska (and every carrier) will always prioritize avoiding $70k+ fines over forcing a departure. If this policy is being implemented more strictly, it's because the 2025 fines got expensive enough to change behavior.

Tyler Reince

Subject: FW: SDIA approaching capacity

From: Gary Wonacott <wildcatwonacott@gmail.com>
Sent: Saturday, April 18, 2026 7:33 AM
To: SDCRAA clerk <clerk@san.org>; Gloria Henson <glohenson@san.rr.com>
Subject: SDIA approaching capacity

The impact of SDIA at or approaching capacity on the County economy will be dramatic.



City's Main Revenue Streams Linked to Airport Activity
The City of San Diego's General Fund relies heavily on a few major sources. Airport-driven visitor activity disproportionately affects one:

• Transient Occupancy Tax (TOT / hotel tax): This is the clearest proportional link. Visitors arriving by air stay in hotels, generating TOT. In the mid-2010s, TOT was the City's third-largest General Fund revenue source (after property and sales taxes). Around 2014–2017, TOT collections were in the range of $170–200+ million annually (exact FY figures vary; e.g., cited as $170 million in some 2014–2015 contexts). A significant portion of this stems from air visitors, as San Diego's tourism economy depends heavily on out-of-town arrivals via SAN.
• Sales and use taxes: Visitor spending on meals, retail, entertainment, etc., contributes to the City's share of sales tax revenue. The study's $4.7+ billion direct visitor output implies substantial sales tax generation (California state + local rates apply; City receives a portion).
• Other minor or indirect: Property taxes (from tourism-supported businesses/hotels) and franchise fees, but these are less directly tied to annual operations.
No precise split attributes, say, "X% of TOT comes from air visitors," but analyses consistently tie a large share of tourism revenue to SAN as the primary gateway (business and leisure travelers).

Approximate Proportionality to Airport Operations

Since the study does not model a strict linear formula (e.g., "$Y per operation"), a reasonable approximation uses visitor spending as the bridge:

• Operations drive passenger volume, which drives visitor numbers and spending.

• In 2017, ~209,000 operations supported ~$5 billion in direct visitor spending → roughly **~$24,000 in direct visitor spending per operation** (very rough; actual varies by flight type—commercial vs. GA—and load factors).

• TOT generation: If we conservatively assume 20–40% of City TOT (~$35–80 million in that era) ties back to air visitors (a common inference in tourism studies, though not exact), this equates to roughly $170–380 per operation in TOT revenue to the City. This is an estimate only—real attribution requires detailed visitor origin data.

• Broader tax impact (TOT + sales tax + others): Potentially hundreds of dollars per operation in combined City revenue, scaling with activity. Higher operations (more flights/passengers) amplify this nonlinearly due to multiplier effects and capacity utilization.