SANTA BARBARA AIRPORT

Noise Working Group

3rd Meeting

October 30th, 2024

Noise Working Group Meeting #3

3rd Meeting

Oct. 30th, 2024

- **FAA Part 150 Noise Study Overview**
  - Purpose and Key Components
  - Compliance and Methodology
  - Benefits, Limitations and Considerations
  - Funding Sources
- **Santa Barbara Airport Noise Monitors**
  - 3 Monitors Locations
  - Explanation of measurements recorded by Noise Monitors
  - Examples of Single Event Metrics: SEL, Lmax
  - Examples of Cumulative Average Metrics: Leq, DNL, CNEL
- **Tahoe Truckee Special Procedures**
- **Last Chance! Sign-up for a Tower Tour**
- **Review Santa Barbara letter to Goleta for next meeting topics**

FAA Part 150 Noise Study Overview

- **Purpose of Part 150**
  - The Part 150 Noise Compatibility Program is a federally supported initiative aimed at evaluating and managing aircraft noise around our airport. This study would help improve compatibility between airport operations and surrounding land uses by developing a transparent plan that involves community input. At Santa Barbara Municipal Airport, our goal with this study is to balance airport growth with the quality of life in nearby neighborhoods, providing a long-term strategy for reducing noise impacts and fostering positive relationships with our community.

- **Key Components, Part 1**
  - **Noise Exposure Maps (NEMs) – Often Called Noise Contours**
    - **Description**: NEMs provide a visual representation of noise exposure around the airport, identifying the current and future areas impacted by aircraft noise.
    - **Metric Used**: These maps are developed using the Day-Night Average Sound Level (DNL) metric, which measures cumulative noise levels over a 24-hour period, with a 10-decibel penalty applied to nighttime noise events (10 p.m. - 7 a.m.). This reflects the increased sensitivity to noise during night hours.
    - **Purpose**: NEMs are a critical tool for informing the community and stakeholders about areas most affected by aircraft noise, helping to shape land use decisions and guide mitigation efforts.

FAA Part 150 Noise Study Key Components

- **Key Components, Part 2**
  - **Noise Compatibility Programs (NCPs)**
    - **Description**: The NCP component outlines specific actions and strategies that the airport can undertake to reduce noise impacts and enhance compatibility with surrounding land uses.
    - **Recommended Measures**:
      - **Operational Changes**: Adjustments in flight paths, altitudes, and timing of operations to reduce the noise impact on residential areas.
      - **Land Use Strategies**: Encouraging appropriate land use planning around the airport to minimize noise-sensitive developments in high-noise zones.
      - **Sound Insulation Initiatives**: Providing financial assistance for soundproofing eligible homes, schools, and other sensitive facilities within noise-affected areas.

FAA Part 150 Noise Study Compliance

- **Compliance and Methodology**
  - **Adherence to FAA Guidelines (14 CFR Part 150)**
    - All noise analyses conducted under a Part 150 Study must strictly comply with the regulations set forth in 14 CFR Part 150. These guidelines ensure that the methodologies used are consistent with federal standards, making the study's recommendations eligible for FAA acceptance and funding.
  - **Use of Advanced Modeling Tools**
    - Noise exposure is analyzed using the Aviation Environmental Design Tool (AEDT), an FAA-approved software that provides an accurate assessment of aircraft noise exposure over different periods. The tool integrates various operational and environmental factors to model the noise environment effectively.
  - **Stakeholder Collaboration and Public Meetings**
    - The Part 150 process places a strong emphasis on collaboration between the airport, community members, regulatory bodies, airlines, and local authorities. Multiple public meetings are held throughout the study process to share findings, gather input, and discuss potential noise mitigation options.
    - Transparency is key, with all findings and proposals being shared openly to ensure that community concerns are properly addressed and incorporated into the final recommendations.

FAA Part 150 Study Benefits

Benefits of Conducting a Part 150 Study

- **Data-Driven Noise Management**
  - The Part 150 Study uses advanced modeling tools like the Aviation Environmental Design Tool (AEDT) to identify and assess noise impacts. Comprehensive data collection and analysis ensure decisions are transparent and credible.
- **Community and Stakeholder Engagement**
  - The study involves public outreach through community meetings, workshops, and surveys, allowing residents, businesses, and stakeholders to voice concerns. This input is crucial in developing recommendations that reflect community needs.
- **Access to Federal Funding**
  - Completing a Part 150 Study improves eligibility for FAA funding through the Airport Improvement Program (AIP). This funding supports noise mitigation measures, reducing the financial burden on the city and community.
- **Community-Centric Approach**
  - The study provides a structured, federally-recognized framework for addressing noise concerns. It helps balance airport growth with the quality of life in nearby neighborhoods.
- **Supports Long-Term Planning**
  - By identifying high noise areas, the study creates a roadmap to align future land use with noise compatibility goals, promoting sustainable coexistence between airport operations and community development.

FAA Part 150 Noise Study Limitations

Limitations and Considerations of a Part 150 Study

- **Long Timeline for Completion**
  - The Part 150 Study can take 1-2 years to complete, during which immediate noise issues may not be resolved. This may be challenging for community members seeking quick relief from aircraft noise.
- **No Guarantee of Implementation**
  - Recommendations made in the Noise Compatibility Program (NCP) are subject to further evaluation, approval, and funding availability. Some proposed solutions may require collaboration from airlines, the FAA, or other stakeholders, which can limit the speed and scope of implementation.
- **Limited Control Over Flight Paths**
  - Santa Barbara does not have the authority to dictate flight paths or altitudes, as these are controlled by the FAA. The Part 150 Study can make recommendations, but actual operational changes depend on FAA approval, which may lead to stakeholder frustration if expectations are not managed.
- **Cost Considerations**
  - Although federal funding is available, the study still requires a local funding match (20-25%). This means that the city must allocate resources, which could be challenging when balancing other community priorities.
- **Complexity and Technical Challenges**
  - Noise modeling and analysis are complex and require a high level of technical expertise. Communicating technical findings in a way that is clear and understandable to all stakeholders may pose challenges, especially in maintaining transparency.

FAA Part 150 Noise Study, Funding Sources

Funding Sources:

- **FAA Airport Improvement Program (AIP) Grants**
  - Overview: The FAA provides AIP grants to airports for noise planning and mitigation.
  - Funding Coverage: Typically covers up to 80-90% of eligible costs for a Part 150 Study.
  - Benefit: Supports Santa Barbara's efforts to align noise mitigation with federal guidelines while reducing the financial burden on local funds.
- **Passenger Facility Charges (PFCs)**
  - Fees collected from passengers boarding at Santa Barbara.
  - Can be applied toward noise studies and implementation of noise mitigation measures identified by the Part 150 Study.
  - Benefit: Direct funding source that can be used to support airport noise initiatives.
- **Local Matching Funds – City of Santa Barbara**
  - Requirement: AIP grants require a 10% local match for funding.
  - Contribution: The City of Santa Barbara can contribute to this match to demonstrate local commitment to addressing community noise concerns.
- **State Funding Opportunities**
  - Availability: Limited state funding may be available through specific grant programs.
  - Potential Use: Can complement federal and local funding to ensure comprehensive community-focused noise mitigation efforts.

Santa Barbara Airport Noise Monitors

Noise Monitor Locations

- Santa Barbara Airport currently has three noise monitors located outside of the airport in surrounding residential areas. These monitors record several different measurements ranging from single events to cumulative averages and then uploads them into our database nightly. The noise monitors are calibrated and maintained by PASSUR Aerospace Inc. to ensure equipment is working properly and measurements are accurate.
  - **1 Monitor West of the Airport**
    - Located at the end of Georgetown Rd, just west of Girsch Park, approximately 1.5 miles west of the approach end for Runway 7.
  - **2 Monitors East of the Airport**
    - One noise monitor located at the end of Ward Dr, just outside the southeast corner of Rancho Goleta Lakeside, approximately 0.8 miles east-southeast of the approach end of Runway 25.
    - One noise monitor located near the intersection of San Vincente Dr. and Gwyne Ave, approximately 1.5 miles east of the approach end of Runway 25.

Noise Monitor Locations

What measurements are taken?

Single Event Metrics

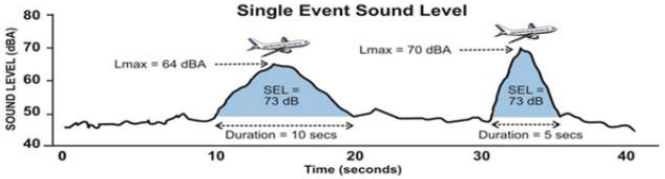
- SEL (Sound Exposure Level): Represents the cumulative noise energy of a single noise event, compressed into a standard reference time.
- Lmax (Maximum Sound Level): Measures the peak level during a noise event.
- Lmax Time (Time of Maximum Sound Level): Indicates in seconds the exact moment when the Lmax occurs into an event.

Cumulative (Average) Metrics

- Leq: Equivalent Continuous Sound Level
- Leq Aircraft: The average sound level from aircraft noise over a specific period.
- Leq Community: The average sound level from community (non-aircraft) noise over a specific period.
- Leq Total: The combined average sound level from both aircraft and community noise over a specific period.

Cumulative Metrics with Time Penalties

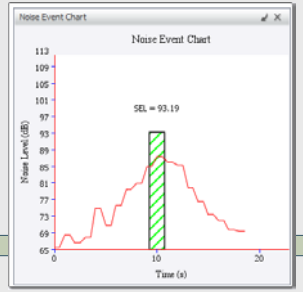
- DNL (Day-Night Average Sound Level): Averages 24-hour noise levels with
  - 10 dB penalty for nighttime noise (10 p.m. to 7 a.m.)
- CNEL (Community Noise Equivalent Level): Averages 24-hour noise levels with
  - 5 dB penalty for evening noise (7 p.m. to 10 p.m.)
  - 10 dB penalty for nighttime noise (10 p.m. to 7 a.m.)

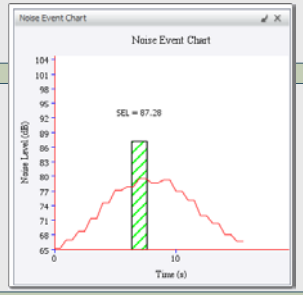


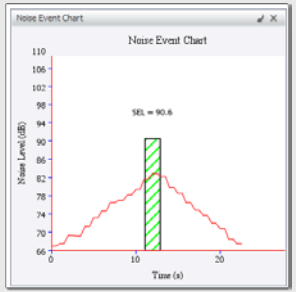
Single Event Metric Samples

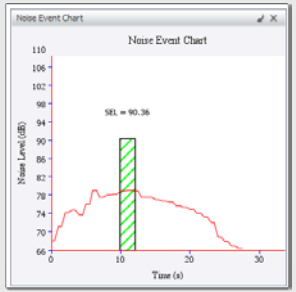
Top 30 Lmax – 9/6/2024

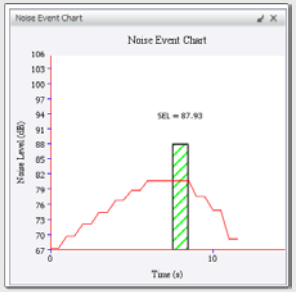
Arrival / Departure	Noise Monitoring Site	Start Time	Lmax	Lmax Time	SEL	Duration	Aircraft Type
A	West (#2)	9/6/2024 17:15	87.3	10	93.19	19s	B738
A	West (#2)	9/6/2024 17:05	87.3	11	91.69	18s	B737
A	West (#2)	9/6/2024 20:43	85	9	91.12	15s	B738
A	West (#2)	9/6/2024 11:13	83.5	8	90.12	16s	A319
D	Far East (#1)	9/6/2024 5:21	82.9	12	90.6	23s	B738
A	West (#2)	9/6/2024 21:02	82.9	7	89.59	14s	B737
A	West (#2)	9/6/2024 19:30	82.9	5	89.07	13s	A320
A	West (#2)	9/6/2024 23:33	82.2	7	88.86	15s	B738
A	West (#2)	9/6/2024 0:08	82	5	88.41	12s	A320
A	West (#2)	9/6/2024 10:34	80.8	8	87.53	13s	E75L
A	West (#2)	9/6/2024 20:54	80.7	8	87.93	12s	A220
A	West (#2)	9/6/2024 16:12	80.6	9	88.9	21s	CRJ7
A	West (#2)	9/6/2024 12:50	80.6	7	87.34	12s	A220
D	Far East (#1)	9/6/2024 18:44	80.2	7	86.14	13s	B738
A	West (#2)	9/6/2024 11:11	80.1	6	86.43	12s	E175
A	Far East (#1)	9/6/2024 23:44	80.1	7	86.02	12s	E175
A	Far East (#1)	9/6/2024 12:08	79.6	7	85.75	11s	A320
D	West (#2)	9/6/2024 6:31	79.5	10	88.02	21s	A319
D	West (#2)	9/6/2024 6:26	79.5	7	87.28	16s	C525
D	West (#2)	9/6/2024 13:39	79.5	5	84.09	9s	E55P
D	Far East (#1)	9/6/2024 18:47	79.4	8	85.86	15s	B737
D	Near East (#3)	9/6/2024 5:20	79.1	11	90.36	28s	B738
A	West (#2)	9/6/2024 12:22	79	14	89.03	28s	B737
D	West (#2)	9/6/2024 7:07	79	13	88.61	24s	B737
D	West (#2)	9/6/2024 6:39	79	10	87.45	18s	B738
A	West (#2)	9/6/2024 18:13	79	6	84.64	10s	CL35
A	West (#2)	9/6/2024 14:15	78.9	7	85.51	11s	B350
D	West (#2)	9/6/2024 19:54	78.9	6	85.25	10s	FA7X
D	West (#2)	9/6/2024 9:48	78.8	10	88.41	24s	E175
A	West (#2)	9/6/2024 10:13	78.7	7	84.57	13s	CL30

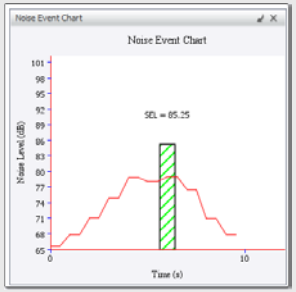








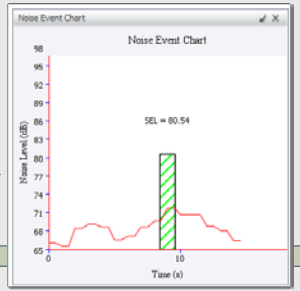


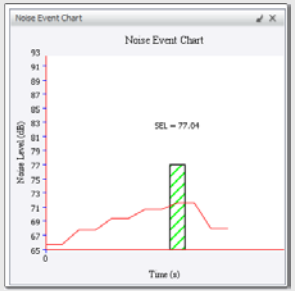


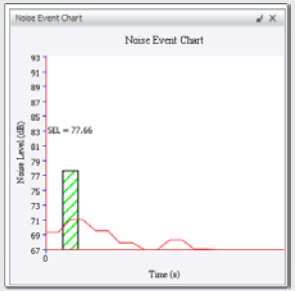
Single Event Metric Samples

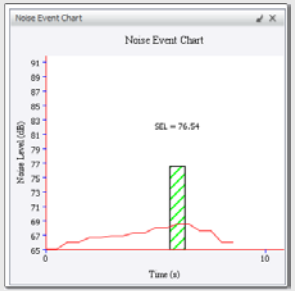
Lowest 30 Lmax – 9/6/2024

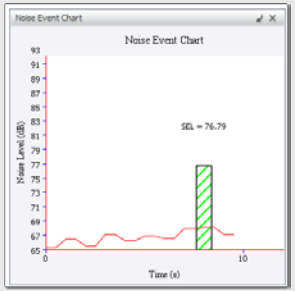
Arrival / Departure	Noise Monitoring Site	Start Time	Lmax	Lmax Time	SEL	Duration	Aircraft Type
A	Far East (#1)	9/6/2024 9:33	71.9	7	79.41	9s	E175
D	Near East (#3)	9/6/2024 14:09	71.8	9	80.54	15s	C680
D	Near East (#3)	9/6/2024 14:33	71.7	6	79.92	12s	E55P
A	West (#2)	9/6/2024 13:05	71.7	4	78.65	7s	BE9L
D	Far East (#1)	9/6/2024 16:43	71.6	7	79.72	11s	B38M
A	Far East (#1)	9/6/2024 21:21	71.6	4	77.04	6s	DHC2
D	Far East (#1)	9/6/2024 9:28	71.4	3	77.57	6s	BE9L
D	West (#2)	9/6/2024 9:37	71.3	5	79.33	9s	C56X
A	Far East (#1)	9/6/2024 15:04	71.3	4	78.25	8s	S22T
D	Near East (#3)	9/6/2024 18:55	71.2	4	78.07	8s	H25B
D	West (#2)	9/6/2024 14:58	71.1	1	77.66	8s	GA6C
D	West (#2)	9/6/2024 9:39	70.9	6	80.41	12s	E55P
D	Near East (#3)	9/6/2024 14:20	70.9	1	79.33	10s	C150
A	West (#2)	9/6/2024 9:18	70.9	2	76.82	6s	BE9L
D	Far East (#1)	9/6/2024 14:33	70.6	2	76.88	7s	E55P
D	Near East (#3)	9/6/2024 12:56	70.4	3	78.89	9s	CL30
A	Far East (#1)	9/6/2024 9:39	70.1	10	79.37	12s	B38M
D	West (#2)	9/6/2024 6:13	70.1	3	77.83	8s	BE9L
D	Far East (#1)	9/6/2024 18:02	70	2	78.89	10s	B38M
D	Far East (#1)	9/6/2024 17:58	69.8	2	76.1	7s	GLF6
D	Near East (#3)	9/6/2024 14:44	69.5	4	74.77	5s	C750
A	Far East (#1)	9/6/2024 12:33	69.1	5	77.16	8s	A320
D	Near East (#3)	9/6/2024 17:57	69	3	76.95	9s	GLF6
D	Near East (#3)	9/6/2024 13:27	68.9	3	76.65	7s	C56X
A	Far East (#1)	9/6/2024 23:14	68.5	6	76.54	9s	BCS3
D	Far East (#1)	9/6/2024 14:09	68.3	0	75.09	6s	C680
A	Near East (#3)	9/6/2024 9:44	68.1	8	76.79	10s	PC12
D	Far East (#1)	9/6/2024 16:17	68	4	73.9	5s	S22T
A	West (#2)	9/6/2024 15:31	67.6	1	76.45	9s	F900
D	West (#2)	9/6/2024 9:33	66.3	1	73.75	6s	C172

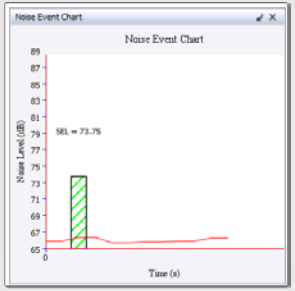












Single Event Metric Samples

Noise Events between 00:00 and 08:00, compared to the loudest Top 30 Lmax

Arrival / Departure	Noise Monitoring Site	Start Time	Lmax	Lmax Time	SEL	Duration	Aircraft Type
A	West (#2)	9/6/2024 0:08	82	5	88.41	12s	A320
D	Near East (#3)	9/6/2024 5:20	79.1	11	90.36	28s	B738
D	Far East (#1)	9/6/2024 5:21	82.9	12	90.6	23s	B738
A	West (#2)	9/6/2024 5:58	77.6	4	81.52	6s	PC12
D	West (#2)	9/6/2024 6:00	78.4	11	86.77	21s	E175
D	West (#2)	9/6/2024 6:13	70.1	3	77.83	8s	BE9L
D	West (#2)	9/6/2024 6:17	72.5	8	82	14s	BCS3
D	West (#2)	9/6/2024 6:26	79.5	7	87.28	16s	C525
D	West (#2)	9/6/2024 6:31	79.5	10	88.02	21s	A319
D	West (#2)	9/6/2024 6:39	79	10	87.45	18s	B738
D	West (#2)	9/6/2024 7:07	79	13	88.61	24s	B737
A	Near East (#3)	9/6/2024 7:41	78	7	88.71	20s	SR20
D	West (#2)	9/6/2024 7:42	72.9	5	81.65	12s	E55P
D	West (#2)	9/6/2024 7:50	75	7	84.46	17s	BCS3
D	West (#2)	9/6/2024 7:56	74.4	6	82.75	15s	M20P

Arrival / Departure	Noise Monitoring Site	Start Time	Lmax	Lmax Time	SEL	Duration	Aircraft Type
A	West (#2)	9/6/2024 17:15	87.3	10	93.19	19s	B738
A	West (#2)	9/6/2024 17:05	87.3	11	91.69	18s	B737
A	West (#2)	9/6/2024 20:43	85	9	91.12	15s	B738
A	West (#2)	9/6/2024 11:13	83.5	8	90.12	16s	A319
D	Far East (#1)	9/6/2024 5:21	82.9	12	90.6	23s	B738
A	West (#2)	9/6/2024 21:02	82.9	7	89.59	14s	B737
A	West (#2)	9/6/2024 19:30	82.9	5	89.07	13s	A320
A	West (#2)	9/6/2024 23:33	82.2	7	88.86	15s	B738
A	West (#2)	9/6/2024 0:08	82	5	88.41	12s	A320
A	West (#2)	9/6/2024 10:34	80.8	8	87.53	13s	E75L
A	West (#2)	9/6/2024 20:54	80.7	8	87.93	12s	A220
A	West (#2)	9/6/2024 16:12	80.6	9	88.9	21s	CRJ7
A	West (#2)	9/6/2024 12:50	80.6	7	87.34	12s	A220
D	Far East (#1)	9/6/2024 18:44	80.2	7	86.14	13s	B738
A	West (#2)	9/6/2024 11:11	80.1	6	86.43	12s	E175
A	Far East (#1)	9/6/2024 23:44	80.1	7	86.02	12s	E175
A	Far East (#1)	9/6/2024 12:08	79.6	7	85.75	11s	A320
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D	West (#2)	9/6/2024 6:26	79.5	7	87.28	16s	C525
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D	West (#2)	9/6/2024 7:07	79	13	88.61	24s	B737
D	West (#2)	9/6/2024 6:39	79	10	87.45	18s	B738
A	West (#2)	9/6/2024 18:13	79	6	84.64	10s	CL35
A	West (#2)	9/6/2024 14:15	78.9	7	85.51	11s	B350
D	West (#2)	9/6/2024 19:54	78.9	6	85.25	10s	FA7X
D	West (#2)	9/6/2024 9:48	78.8	10	88.41	24s	E175
A	West (#2)	9/6/2024 10:13	78.7	7	84.57	13s	CL30

Cumulative (Average) Metrics

Hourly Leq Aircraft, Leq Community, Leq Total – 9/6/2024

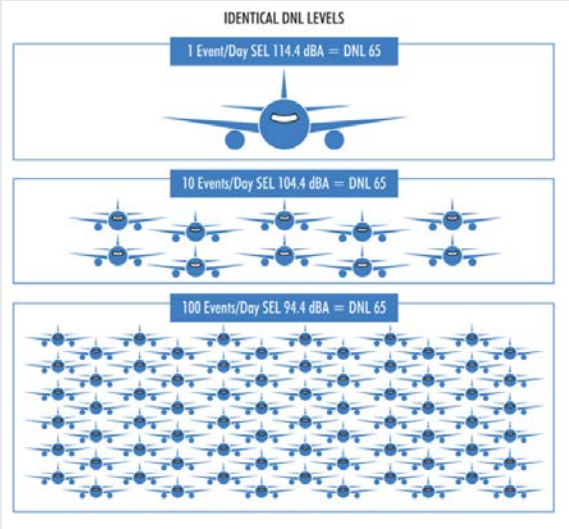
Noise Monitor #1 (Far East) – Gwyne Ave			
End Time	LEQ Aircraft	LEQ Community	LEQ Total
2024-09-06 01:00:00	0	47.5	47.5
2024-09-06 02:00:00	0	48.28	48.28
2024-09-06 03:00:00	0	46.83	46.83
2024-09-06 04:00:00	0	45.47	45.47
2024-09-06 05:00:00	0	46.27	46.27
2024-09-06 06:00:00	55.03	48.19	55.85
2024-09-06 07:00:00	0	51.74	51.74
2024-09-06 08:00:00	0	52.52	52.52
2024-09-06 09:00:00	45.61	52.27	53.12
2024-09-06 10:00:00	51.08	51.92	54.53
2024-09-06 11:00:00	50.66	49.01	52.92
2024-09-06 12:00:00	52.28	49.9	54.26
2024-09-06 13:00:00	54.91	51.47	56.53
2024-09-06 14:00:00	50.84	48.78	52.94
2024-09-06 15:00:00	49.79	51.08	53.49
2024-09-06 16:00:00	54.59	51.01	56.17
2024-09-06 17:00:00	50.53	51.26	53.92
2024-09-06 18:00:00	43.85	51.37	52.08
2024-09-06 19:00:00	55.3	54.57	57.96
2024-09-06 20:00:00	43.4	52.93	53.39
2024-09-06 21:00:00	0	49.19	49.19
2024-09-06 22:00:00	48.12	50.39	52.41
2024-09-06 23:00:00	0	49.06	49.06
2024-09-07 00:00:00	50.92	49.13	53.13

Noise Monitor #2 (West) Georgetown Rd			
End Time	LEQ Aircraft	LEQ Community	LEQ Total
2024-09-06 01:00:00	52.84	48.26	54.14
2024-09-06 02:00:00	0	46.4	46.4
2024-09-06 03:00:00	0	46.72	46.72
2024-09-06 04:00:00	0	44.9	44.9
2024-09-06 05:00:00	0	48.17	48.17
2024-09-06 06:00:00	45.96	50.66	51.93
2024-09-06 07:00:00	58.28	53.11	59.43
2024-09-06 08:00:00	55.71	53.72	57.84
2024-09-06 09:00:00	52.04	52.67	55.38
2024-09-06 10:00:00	54.75	51.76	56.52
2024-09-06 11:00:00	54.2	48.17	55.17
2024-09-06 12:00:00	57.57	48.46	58.07
2024-09-06 13:00:00	57.67	47.63	58.08
2024-09-06 14:00:00	53.56	47.66	54.55
2024-09-06 15:00:00	54.86	50.24	56.15
2024-09-06 16:00:00	47.8	49.66	51.84
2024-09-06 17:00:00	57.18	49.56	57.87
2024-09-06 18:00:00	60.21	50.05	60.61
2024-09-06 19:00:00	52.31	49.96	54.3
2024-09-06 20:00:00	56.19	51.53	57.47
2024-09-06 21:00:00	57.26	50.62	58.11
2024-09-06 22:00:00	54.03	49.66	55.38
2024-09-06 23:00:00	0	49.91	49.91
2024-09-07 00:00:00	53.3	48.29	54.49

Noise Monitor #3 (Near East) Ward Dr			
End Time	LEQ Aircraft	LEQ Community	LEQ Total
2024-09-06 01:00:00	0	48.03	48.03
2024-09-06 02:00:00	0	44.14	44.14
2024-09-06 03:00:00	0	43.29	43.29
2024-09-06 04:00:00	0	43.64	43.64
2024-09-06 05:00:00	0	44.72	44.72
2024-09-06 06:00:00	54.92	50.54	56.27
2024-09-06 07:00:00	45.09	51.76	52.61
2024-09-06 08:00:00	53.15	53.31	56.24
2024-09-06 09:00:00	40.6	52.89	53.14
2024-09-06 10:00:00	48.47	52.17	53.71
2024-09-06 11:00:00	51.55	50.68	54.15
2024-09-06 12:00:00	0	51.06	51.06
2024-09-06 13:00:00	51.09	53.64	55.56
2024-09-06 14:00:00	53.57	48.73	54.8
2024-09-06 15:00:00	55.3	52.94	57.29
2024-09-06 16:00:00	0	51.11	51.11
2024-09-06 17:00:00	39.83	51.14	51.45
2024-09-06 18:00:00	49.8	51.87	53.97
2024-09-06 19:00:00	53.65	52.79	56.25
2024-09-06 20:00:00	51.88	51.74	54.82
2024-09-06 21:00:00	44.11	49.93	50.94
2024-09-06 22:00:00	42.02	49.51	50.22
2024-09-06 23:00:00	42.02	48.39	49.29
2024-09-07 00:00:00	42.97	48.08	49.25

Cumulative (Average) Metrics Cont'd

- **DNL (Day-Night Average Sound Level)** is a metric commonly used in aviation noise studies to represent the average noise level over a 24-hour period, with an additional penalty for nighttime noise.
  - **24-hour Average with Penalties**: DNL averages all sound events over a full day to provide a single noise level, with a Nighttime Penalty
  - **Nighttime Penalty**:
    - Noise events occurring between 10 p.m. and 7 a.m. are given a 10-decibel penalty
  - **DNL** is a standard metric in the U.S. for assessing noise exposure around airports and is often used in studies (such as Part 150 noise compatibility studies) to determine eligibility for noise mitigation measures. It's valuable for understanding long-term noise impact on communities rather than focusing on individual events.



- **CNEL (Community Noise Equivalent Level)** is a noise metric similar to DNL (Day-Night Average Sound Level) but includes an additional penalty for evening noise.
  - **24-hour Average with Penalties**: Like DNL, CNEL represents the average noise level over a 24-hour period but applies penalties to certain times to account for increased sensitivity to noise.
  - **Evening and Nighttime Penalties**:
    - Noise events occurring between 7 p.m. and 10 p.m. (Evening) receive a 5-decibel penalty.
    - Noise events occurring between 10 p.m. and 7 a.m. (Night) receive a 10-decibel penalty.
  - **CNEL** is often used in California and some other regions as it provides a more detailed assessment of noise impact by incorporating the evening period, recognizing that noise during these hours can also be disruptive. It is commonly used for assessing noise around airports, transportation hubs, and urban areas to guide noise compatibility and mitigation efforts.

Noise Monitor Site	Date	LEQ Community	LEQ Aircraft	LEQ Total	LDN Community	LDN Aircraft	LDN Total	CNEL C	CNEL A	CNEL Total
NMT01 (Far East)	9/6/2024	50.55	49.76	53.18	55.44	54.13	57.85	55.81	54.28	58.12
NMT02 (West)	9/6/2024	50.01	54.59	55.89	55.85	58.45	60.35	56.1	59.07	60.84
NMT03 (Near East)	9/6/2024	50.7	49.29	53.06	55.7	52.63	57.44	55.51	53.86	57.77

Follow-up on Tahoe Truckee Special Procedures

FLIGHT TECH ENGINEERING

Instrument Flight Procedure (IFP)
Ownership Master Services Agreement
Truckee Tahoe Airport (KTRK)

Review of letter from Santa Barbara to Goleta

Below is copied from the 1st and 2nd page of the letter sent by Santa Barbara Mayor, Randy Rowse, to Goleta City Council
RE: Santa Barbra Airport – Aircraft Noise Action Plan
Dated Sept. 12th, 2023

1. Strategies Addressed Through an Airport Noise Compatibility Planning Study (14 CFR Part 150): (Strategies 1, 7, 9, 10, 13)

Several of the recommendations reference specific flight paths and affected communities. Due to changes in the current aircraft fleet mix utilizing the airport and development of additional housing near the University of California Santa Barbara (UCSB) campus and other areas, we recognize the need to update recommended procedures in and around SBA through an update to the previous 2004 FAA Part 150 noise study. The process of updating the noise study demonstrates a commitment to understanding and mitigating the concerns of affected communities. This effort will foster better communication and engagement between SBA, residents, and stakeholders, lending the Airport to make well informed decisions factoring in public comment and concerns through a comprehensive process encouraging input from all stakeholders.

The Santa Barbara City Council wholeheartedly supports this effort and directs staff to begin coordination with the Federal Aviation Administration (FAA) to secure funding and plan for a comprehensive update of the Part 150 noise study. We believe that this updated study will provide valuable insights into the current noise landscape and help SBA formulate more effective strategies within the proposed Aircraft Noise Action Plan.

1) Reinstate the Runways 7 and 25 voluntary flight procedure for visual and instrument flights over the Ellwood-Devereux Open Space and More Mesa area. The community desire is to include all operations within these corridors to the maximum extent possible.
2) Prepare charted visual approach procedures to align aircraft on flight paths that mitigate noise exposure over residential communities. These procedures can also improve communications between pilots and the Federal Aviation Administration (FAA) air traffic control tower (ATCT) to further encourage flight path compliance.
3) Incentivize airline compliance with noise abatement flight paths.
4) Encourage all four airlines serving the Airport to use a "proprietary" instrument approach procedure currently used by three of the four airlines.
5) Address noise issues and noise abatement compliance at the time the Airport negotiates with new airlines and new routes by existing airlines.
6) Address business jet operations and chartered aircraft separately from commercial airlines through outreach to Fixed Base Operators (FBO) supporting these owners and operators. Create noise mitigation procedures specifically for charter aircraft and business and private jets by aligning with National Business Aircraft Association (NBAA) Noise Abatement Program. Apply these procedures to east and west noise abatement corridors used for airline and general aviation operations.
7) Analyze and report on departure procedure use, which departure and arrival procedures are "quietest" and whether those are being used most often (if not, why). Explore solutions for reducing noise impacts especially during early morning and late evening hours.
8) Explore new outreach efforts to pilots to get them information on preferred approach and departure procedures and noise-mitigating measures.
9) Explore the potential benefits and costs of a voluntary aircraft noise curfew, understanding the trade-off that airlines and passengers would likely lose some flight connections.
10) Analyze and report on the fleet mix at the Airport, the number of older, louder aircraft still landing and departing, and hours of operation. Develop strategies to discourage older, louder aircraft use, especially during early morning and late evening hours.
11) Gather and report data on aircraft particulate emissions.
12) Advise on an amendment to Santa Barbara Airport Commission Charter to give the City of Goleta a permanent seat and voice in Airport decisions directly impacting the City. Include informal consideration of City of Goleta nominations for Commission representatives from the City of Goleta or County of Santa Barbara.
13) Develop "fly quiet" flight procedures for takeoff and arrival for all operations to mitigate noise impacts to residential areas around the Airport.

Review of letter from Santa Barbara to Goleta

Below is copied from the 2nd page of the letter sent by
Santa Barbara Mayor, Randy Rowse, to Goleta City Council
RE: Santa Barbra Airport – Aircraft Noise Action Plan
Dated Sept. 12th, 2023

2. Strategies Addressed Through an Airport Noise Working Group: (Strategies 2, 3, 4, 5, 6, 8,)

The Part 150 Noise Study Process is not likely to start for at least 2 years due to the planning, funding, and coordination. Once started the process itself is also very time-consuming requiring time needed to gather data, conduct public outreach, and allow for FAA review.

While SBA awaits the completion of the updated FAA Part 150 noise study, Council recognizes that there is still important work that can be done to address the issue of aircraft noise in the interim. To assist staff in overseeing this effort, we endorse the establishment of a Noise Working Group. Bringing together key stakeholders including: airlines; corporate aircraft operator; flight training institutions; air traffic control representatives; neighborhood advocates; City of Goleta; County; and SBA, this collaborative platform will allow us to develop practical and effective noise mitigation strategies.

The Airport Noise Working Group could proactively address several of the recommendations that would not require as much public input, such as: encouraging all airlines serving our market to develop or use existing "proprietary" instrument approaches; addressing noise issues with new airlines or new routes with incumbent carriers; coordinating with the FAA to develop charted visual approaches; conducting outreach efforts; researching existing local conditions and other industry efforts that could be adopted locally; and evaluating other options to incentivize compliance with recommended noise abatement procedures.

1) Reinstate the Runways 7 and 25 voluntary flight procedure for visual and instrument flights over the Ellwood-Devereux Open Space and More Mesa area. The community desire is to include all operations within these corridors to the maximum extent possible.
2) Prepare charted visual approach procedures to align aircraft on flight paths that mitigate noise exposure over residential communities. These procedures can also improve communications between pilots and the Federal Aviation Administration (FAA) air traffic control tower (ATCT) to further encourage flight path compliance.
3) Incentivize airline compliance with noise abatement flight paths.
4) Encourage all four airlines serving the Airport to use a "proprietary" instrument approach procedure currently used by three of the four airlines.
5) Address noise issues and noise abatement compliance at the time the Airport negotiates with new airlines and new routes by existing airlines.
6) Address business jet operations and chartered aircraft separately from commercial airlines through outreach to Fixed Base Operators (FBO) supporting these owners and operators. Create noise mitigation procedures specifically for charter aircraft and business and private jets by aligning with National Business Aircraft Association (NBAA) Noise Abatement Program. Apply these procedures to east and west noise abatement corridors used for airline and general aviation operations.
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13) Develop "fly quiet" flight procedures for takeoff and arrival for all operations to mitigate noise impacts to residential areas around the Airport.

Tower Tours

- Last chance to sign up for a tour!

SANTA BARBARA AIRPORT

Up Next…

Noise Working Group Meeting #4:

Thursday, December 5th, 2024 - 5:30pm to 7:00pm

Thank you for your engagement and partnership in our community.