



SANTA BARBARA AIRPORT

Aircraft Noise

Airport Commission Meeting
September 15, 2021



Flight Activity – August 2021

- Commercial Aircraft Operations – 697 (22/day average)
 - **Runway 25 – 371 (53%)** – (12/day average)
 - Runway 7 – 326 (47%) – (10/day average)
 - CY2019 saw approximately 30 commercial aircraft operations per day
- Voluntary Noise Abatement Approach (VNAA) Adherence
 - 244 (66%) of 371 flights adhered with the VNAA
 - 27 (7%) flights operated in marginal VFR conditions where VNAA may not have been possible
 - 100 flights (average 3/day) did not fly VNAA and warranted follow-up
 - Average altitude at shoreline – 1,407 Feet (829 feet for flights adhering to VNAA)
 - Highest Altitude at shoreline – 3,606 Feet (1,531 feet for flights adhering to VNAA)
 - Those that did not adhere to the VNAA likely could not have due to safety



Aircraft Noise Complaints – Substantial Increase

- There is a significant increase in the number of noise-related complaints being received by the Airport:

August 2019	August 2020	August 2021
1003	272	3228

- Of 3,228 complaints, 718 (22%) are attributed to 127 aircraft that did not adhere to the VNAA – 2,510 complaints (78%) did adhere to the VNAA.
- Complaints are the result of the following factors:
 - Aircraft operations recovering to 2019 levels after an unprecedented fall-off in 2020
 - Community organizing around the issue
 - Community members encouraged to send in repeated complaints – on average 8-10/household
 - Three residents account for nearly 30% of the total complaints received (521/256/209)
 - The top complaints originate from homes in the vicinity of the More Mesa Open Space where we are encouraging aircraft to direct their path of flight.



Current Noise Complaint Trends – August 2021

- Approximately 50% of the complaints we received are related to commercial and corporate aircraft arriving into the Airport from the east on Runway 25
- Approximately 50% of the complaints we receive are related to general aviation aircraft that are in the air traffic flight pattern for general aviation aircraft
- Approximately 73% of flights from the east utilize the VNAA or FAA Instrument approach
- In August, approximately 100 aircraft (3 per/day) did not utilize the VNAA or an approved FAA Instrument Approach



Current Handling of Noise Complaints

- Noise complaints received through:
 - PublicVue
 - Voicemails through noise hotline and office/front desk
 - Email (Administration/City Council)
- All noise complaints are investigated
 - Did they fly the VNAA? Could they have flown the VNAA?
 - Review: airspeed, altitude, weather conditions, air traffic control communications, etc.



Comparison of Actual Sound Levels

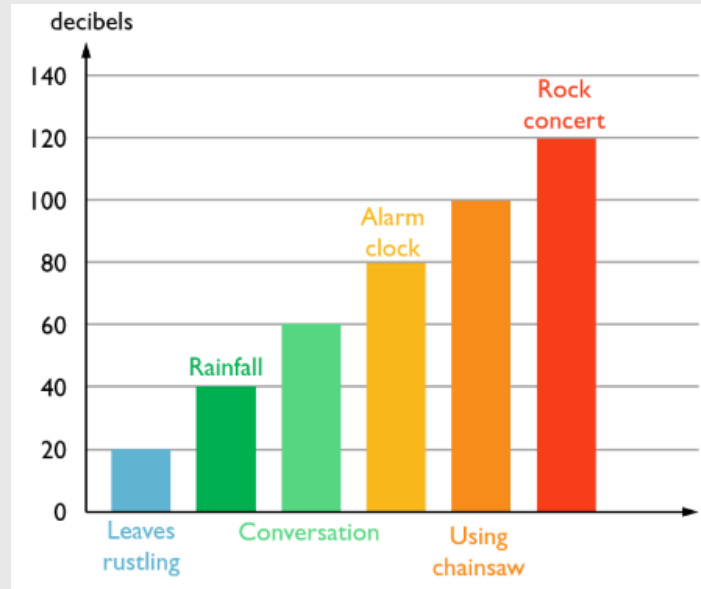
- Boeing 737-800 – Largest Aircraft Regularly Serving SBA
 - *Takeoff: 73 Decibels*
 - *Approach: 85 Decibels*
- Airbus 319
 - *Takeoff: 73 Decibels*
 - *Approach: 83 Decibels*
- Canadair RJ 700
 - *Takeoff: 69 Decibels*
 - *Approach: 83 Decibels*
- Gulfstream V
 - *Takeoff: 68 Decibels*
 - *Approach: 82 Decibels*

*Source FAA – Estimated Sound Level – Differing Engine Types/Flap Configuration May Affect Noise Produced



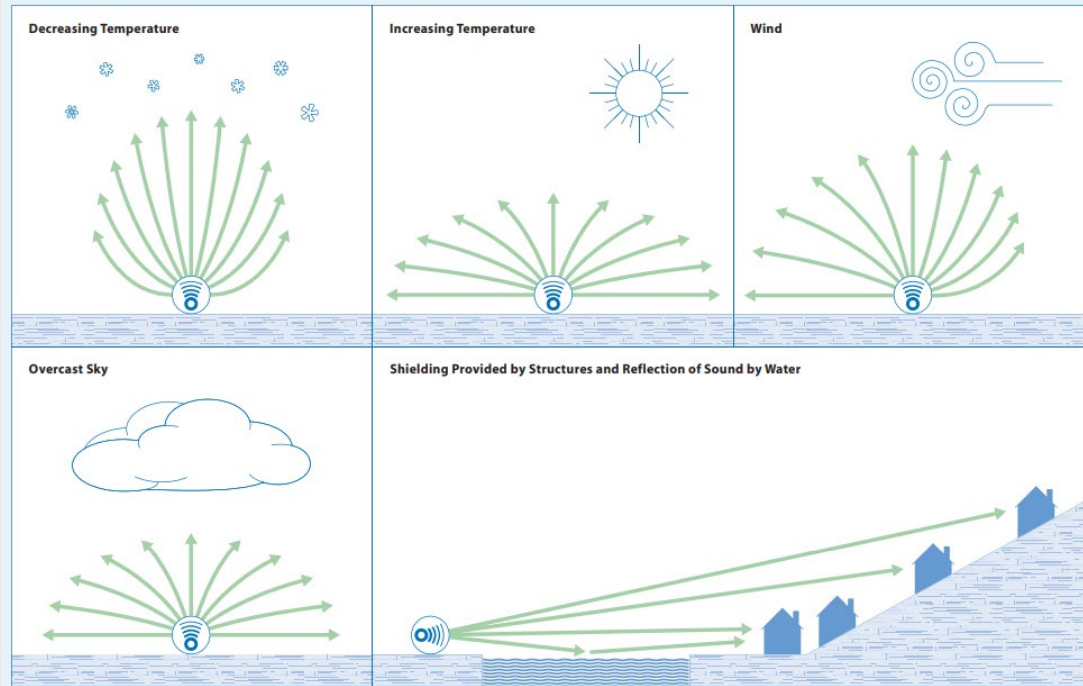
Comparison of Actual Sound Levels

- How can this be compared to other noise in our environment





Effects of Weather on Sound





The SBA Noise Problem

- Increased complaints driven by the *perception* of more activity and aircraft not flying the “**Voluntary Noise Abatement Approach**”
 - *Perception of a significant increase in commercial activity at the Airport*
- Perception that aircraft have a **required** flight path into the Airport
- Increased concerns in the following neighborhoods:
 - *Hope Ranch*
 - *Mesa*
 - *South of Hollister*
 - *Mesa Shores*
 - *Goleta*



Noise vs. Flight Path

- SBA conducted a Part 150 Study in which it was confirmed that there are no residential properties within the vicinity of the airport that are impacted by nuisance noise above the federal standard (65CNEL).
- We will undertake a new formal Part 150 Study in the next year to assess if there are any negative affects due to changes in the operation.
- Many of the complaints today are related to flight activity near homes as aircraft are arriving or in the air traffic pattern for the Airport.



Airport Approach to Addressing Noise

- Being **responsive** to complaints
- Researching and **understanding** the nature of noise complaints
- Being **proactive** in addressing the concern
- Managing **expectations** of the community
- Engage in **educating** the community on noise issues and regulations
- Providing **accurate and factual** information
- Actively **vetting** unviable or illegal solutions such as the following:

(X) – Relocate Airport	(X) – Reduce flight operations	(X) - Prevent airlines from serving SBA
(X) – Implement Curfew	(X) - Fine airlines	(X) - Prevent flights from overflying neighborhoods
(X) - Mandate the Voluntary Noise Abatement Approach	(X) - Require flights arrive on a specific route	(X) - Require aircraft fly at a higher altitude



SBA Noise Solutions

- Analyzing accurate complaint data to better understand the issues
- Educating the community & operators
- Monitor continued adherence to VNAA when feasible
- Working to develop a Charted RNAV Visual Approach



Noise Work Plan

- Noise Complaint Investigations
- User Engagement
- Charted RNAV Approach
- Noise Page Update – www.flysba.com
- Monthly Noise Impact Reports
 - Flight path analysis
 - VNAA Adherence
- Part 150 Noise Compatibility Study – Update
 - Noise Exposure Maps (NEM) – identify the levels of airport noise in areas around the Airport.
 - Noise Compatibility Program (NCP) – identify measures designed to reduce noise and incompatible land uses within the noise exposure area



THANK YOU!

Any questions?