Santa Barbara Airport

Aircraft Noise Report

May 2021









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Dear Community Partners:

I am pleased to present to you the Santa Barbra Airport (SBA) our first edition of the Airport Noise Report. This report is designed with our community in mind. With a focus on being a good neighbor, we present this report with the objective of educating the community on issues related to aircraft noise; and to provide an overview of efforts undertaken to monitor and minimize the impact of aircraft noise on our community.

SBA is pleased to have worked closely with our airline partners and other users of the airport to be responsive to concerns raised by the community.

Despite the challenges encountered throughout this past year responding to a worldwide pandemic that resulted in a net reduction of activity at the airport, over-all each flight operated safely into the airport – *our highest priority*.

This report, nor steps taken by the airport, are in any way intended to eliminate aircraft noise. However, the objective is to demonstrate our understanding of the issue and to present factual information related to noise impact.

The Airport as a department of the City of Santa Barbara is an advocate for the community and is focused on ensuring residences are minimally impacted and that all federal requirements in respect to flight operations are adhered to fully. Santa Barbara and Goleta do not currently have any residential properties that are impacted by aircraft noise levels that exceed noise standards established by the Federal Aviation Administration (FAA).

I sincerely hope that this report will demonstrate the level of work and commitment your airport team has to responding to the community and monitoring aircraft noise.

Questions concerning aircraft noise, or this report, can be sent to mgarcia@santabarbaraca.gov.

Sincerely,

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Henry L. Thompson, A.A.E., IAP Airport Director



Airport Noise Education

Definitions

- Airport: Santa Barbara Airport (SBA) is owned and operated by the City of Santa Barbara
- ATC: Air Traffic Control
- Charted Visual Approach: Approach in which an aircraft operating in VFR (visual flight rules) conditions and having an ATC (air traffic control) authorization may proceed to the airport of intended landing via visual landmarks and altitudes depicted on a published visual approach chart.
- CNEL: Community Equivalent Sound Level (CNEL) is a long-duration cumulative noise exposure level. This California standard is more sensitive (less tolerant) of aircraft noise levels than any other state in the US. 65 CNEL is the FAA designated California threshold for maximum allowable cumulative noise exposure.
- DNL: The day-night average sound level (DNL) noise metric is used to reflect a person's cumulative exposure to sound over a 24-hour period, expressed as the noise level for the average day of the year based on annual aircraft operations. The DNL noise metric provides a mechanism to describe the effects of environmental noise in a simple and uniform way. DNL is the standard noise metric used for all FAA studies of aviation noise exposure in airport communities.
- EnvironmentalVue: L3Harris Symphony[®] EnvironmentalVue[®] is a secure web-based application that gives airports real-time unrestricted access to all flight-track information provided by multi-alteration and Automatic Dependent Surveillance-Broadcast (ADS-B) surveillance technologies.
- FAA: Federal Aviation Administration
- FBO: Fixed Base Operator (FBO) is an airport business that handles private aviation (noncommercial), aircraft passengers and services.
- Noise Contours: A noise contour is a line on a map that represents equal levels of noise exposure. SBA uses EnvironmentalVue to calculate monthly or annual noise contours. The number of annual flights, aircraft types and flight tracks are critical inputs to the contour model. Noise levels can be computed at individual locations of interest, but to show how noise can vary over extended areas, noise metric results like DNL are often drawn on maps in terms of lines connecting points of the same decibel (dBA). Similar to topographical maps showing the elevation of terrain in an area, these noises "contours" are useful for comparing aircraft noise exposure throughout an airport community. The shape of noise contours depends on many factors, but are influenced by things like whether more arriving or departing aircraft are flying over an area.
- PIC: Pilot in command of an aircraft
- PublicVue: PublicVue is the public web-based portal to the Airport's noise data software program, EnvironmentalVue.
- RNAV Visual Approach: An RNAV Visual Approach is comprised of a flight path requiring a flight management system (FMS) and use of ground based, space based or onboard navigation aids,



followed by a visual track to landing. The RNAV Visual Approach purpose is to increase aircraft arrival rates by combining predictable flight paths with the benefits of a visual approach. These approaches are designed to reduce the number of unstabilized approaches by being more predictable to the pilot, thus improving energy management. The general concept is based on maintaining a lateral flight path flown via RNAV waypoints, followed by a visual final approach to landing.

• SoCal Metroplex: The Southern California Metroplex (SoCal Metroplex) project is a FAA initiative designed to make Southern California airspace more efficient with improved access to some of its airports by optimizing aircraft arrival and departure procedures.

SBA Noise Advisory Program Three Main Goals:

- 1. Provide region with facilities to access the National Air Transportation System
- 2. Achieve airport operations that are compatible with surrounding communities
- 3. Maintain a continuing dialogue between the Airport, Airport users, and the surrounding community through the Noise Advisory Program

Santa Barbara Airport (SBA) Noise Advisory Program Goals

SBA continues to make progress in efforts to provide guidance and education to both aircraft operators, and to constituents/community members regarding how they can support the SBA Noise Advisory Program. While abiding by noise abatement procedures is voluntary, the Airport finds most aircraft operators willingly incorporate these procedures upon their education of them.

1. Provide region with facilities to access the National Air Transportation System

The primary purpose of the Airport is to provide safe and secure facilities for the landing and takeoff of aircraft, including commercial, corporate, general aviation, helicopter, and occasional military aircraft. SBA is certified for air carrier (commercial airline) service by the FAA, under FAR Part 139. Maintaining air carrier certification requires strict compliance with FAA safety regulations, as well as with TSA security regulations.

2. Achieve airport operations that are compatible with surrounding communities

FAA Part 150, Airport Noise Compatibility Planning, is the primary Federal regulation guiding and controlling planning for aviation noise compatibility on and around airports. The Part 150 process is a balanced approach for mitigating the noise impacts of airports upon their neighbors/community, while protecting or increasing both airport access and capacity, as well as maintaining the efficiency of the national aviation system. The Airport completed a Part 150 Noise Compatibility Study in 2004, in partnership with the FAA, to address and mitigate



community noise concerns. The Part 150 Study provided guidance and procedures to mitigate aircraft noise within the framework of the Noise Compatibility Program, now called the SBA Noise Advisory Program. The Noise Advisory Program monitors use and maintains support of SBA voluntary noise abatement approaches, and various methodologies to ensure education of these procedures to aircraft operators, and to constituents/community members reporting potential incompatible flight paths flown.

3. Maintain a continuing dialogue between the Airport, Airport users, and the surrounding community through the Noise Advisory Program

Noise concerns and complaints submitted to the Airport are important and helpful. They are the most direct approach to identify areas of aircraft noise impact. This community feedback, in coordination with PublicVue, SBA's online noise complaint system, is the most valuable component of our Noise Advisory Program. Positive identification of an aircraft flight track, correlated to a community outside of a noise abatement approach, provides the methodology for the Airport to educate aircraft operators who may have not flown a noise abatement approach into the Airport.

This direct community feedback provides the Airport with information regarding where aircraft may not be flying along voluntary noise abatement procedure routes. When unsafe or incompatible flight activity is discovered, steps are taken to address those issues with the aircraft operator, Airport users, Airport tenants, and/or the FAA where warranted. These steps include:

- Aircraft operator formal letter of advisement
 - Request they follow the voluntary noise abatement approach whenever safety allows
- Coordination with aircraft operators to incorporate voluntary noise abatement procedures in their proprietary flight systems, including:
 - All Airlines operating at SBA
 - o Net Jets
 - Private corporate operators
- Coordination with Airport tenants, including:
 - Updated noise abatement approach visual guidance maps
 - Providing updated Noise Advisory Program measures/data
 - Fixed Base Operator (FBO) support in aircraft identification during same day urgent noise concerns or military, helicopter identification

PublicVue & EnvironmentalVue Education

PublicVue is the public web-based portal to the Airport's noise data software program, EnvironmentalVue. EnvironmentalVue is the program that provides the Airport the ability to identify registration information of most aircraft that fly into SBA (Military aircraft and most helicopters



excluded), access SBA arrival and departure aircraft flight tracks, correlate a flight track to an aircraft noise complaint at a specific location, run reports of aircraft noise activity, run noise contour reports, run noise monitor reports, and more. Community members in the greater Goleta/Santa Barbara area may create an account in PublicVue, enter noise concerns and complaints, and receive follow-up regarding complaints submitted in their account.

Features of PublicVue include:

- Public may follow, capture, and review aircraft operations in their vicinity
- Real time (with 10min security delay) and historical replay flight tracking options
- Public access to data accuracy, transparency, and consistency
- Directly input noise complaints
- Flight paths are displayed and highlight the route of flight in the vicinity of specific location
- Usable on smart phones, tablets, and computers

PublicVue account creation instructions:

- 1. Visit Santa Barbara Airport's website at: <u>www.flysba.com</u>
- 2. Move curser to the 'About' field on the upper right
- 3. Inside the gray 'About' box, under 'Contact Us', select 'Aircraft Noise Advisory Program'
- 4. Select the hyperlink to 'PublicVue' (located directly under the photo of an aircraft)
- 5. Click on 'Complaint' near the upper left
- 6. This opens up to a Login page. First time users must establish a user name and password, so click on 'Click here to register'
- 7. This takes you to a page to register for the first time. Fill out the required lines and select 'Submit Registration'
- 8. If you are already registered, sign in using your Username and password
- 9. This takes you to a page called 'Complaint'
- 10. Select 'Submit New'
- 11. This takes you to a page called 'Complaint Entry'. Fill this out and click 'Submit Complaint'
- 12. By submitting a complaint, the software, in coordination with the SBA Noise Program support team, will identify the flight path correlated to your registered location at the date/time of the occurrence, for the purpose of reporting this potential deviation from a voluntary noise abatement procedure.



13. Upon completed flight path correlation, where applicable, SBA Noise Program support team staff will update the complaint with the results of their findings. These findings are available by PublicVue users by logging into their account to review their complaint(s) status.

SBA Response to Noise Complaints

Santa Barbara Airport (SBA) is currently established to receive aircraft noise complaints via PublicVue, and via the SBA Noise Hotline. PublicVue provides the forum for constituents who submit an aircraft noise concern or complaint to receive the outcome of their complaint within their account. The Noise Hotline is an automated hotline, where constituents may leave a message with their concern or complaint. The hotline requires Airport staff time to enter and process each complaint, and does not provide call back or response. Constituents who wish to receive the outcome of their complaint are encouraged to utilize PublicVue for all aircraft noise complaints submitted.

Investigation

Aircraft noise complaints are investigated and researched in the order received. Each complaint is investigated to determine what aircraft flight track may have caused the noise event, and determine whether or not that aircraft was flying established SBA voluntary noise abatement procedures. If the aircraft identified in the complaint was flying SBA voluntary noise abatement procedures, no action is taken towards the aircraft operator.

Follow-Up on Non-Conformance

If the aircraft identified in the complaint was not flying SBA voluntary noise abatement procedures, SBA researches the nature of the aircraft approach, and seeks to determine if the cause of the approach non-conformance was for safety. When there is no safety cause for non-conformance with SBA voluntary noise abatement procedures, SBA submits a letter to the aircraft operator stating the date and time of the flight, and requests future support of SBA voluntary noise abatement procedures whenever safety allows. SBA noise correlating software, EnvironmentalVue, does not provide flight identification information for helicopters or military aircraft.

Often times, aircraft do not fly SBA voluntary noise abatement procedures due to safety concerns. These safety concerns include (but are not limited to): weather, air traffic, emergencies, cabin readiness, wildlife activity, flight safety, natural disasters, and operational limitations of high performance aircraft.

SBA coordinates in advance with each new airline offering service at SBA, to ensure their flight crews are educated on SBA noise abatement procedures, and are aware of our request to fly them whenever safety allows. SBA regularly reaches out to both airline and corporate aircraft partners to seek improved conformance when there is a trend of non-conformance with SBA voluntary noise abatement procedures.



Flight Tracking

Santa Barbara Airport (SBA) utilizes EnvironmentalVue software to track aircraft flight paths and correlate them to their corresponding noise complaint. EnvironmentalVue provides the exact path of travel of all aircraft that arrive and depart out of SBA, with the exception of helicopter and military aircraft, which no identification information is provided for. By correlating an aircraft flight track to the date, time, and location of a noise complaint, Airport staff can identify which aircraft caused the noise event in most cases. PublicVue offers similar information to community members, and aircraft activity can be observed or tracked real-time (with a 10min security delay). Flight track data provides the location, altitude, and often the airspeed of aircraft on approach or departure to/from SBA.

SBA Noise Program History

The Federal Aviation Administration (FAA) implemented the Airport Noise and Capacity Act (ANCA) in 1990. ANCA limited the ability of airport sponsors to propose and implement new restrictions and/or fines on aircraft_operating into or out of their airport after 1990. Access restrictions have the potential to violate the federal obligation to make the airport available for public use on reasonable terms and without unjust discrimination as required by Grant Assurance 22, Economic Non-discrimination.

FAA Part 150, Airport Noise Compatibility Planning, is the primary Federal regulation guiding and controlling planning for aviation noise compatibility on and around airports. Part 150 establishes procedures, standards, and methodologies to be used by airport operators for the preparation of Airport Noise Exposure Maps (NEMs) and Airport Noise Compatibility Programs (NCPs). The Part 150 process is a balanced approach for mitigating the noise impacts of airports upon their neighbors/community, while protecting or increasing both airport access and capacity, as well as maintaining the efficiency of the national aviation system. The procedures contained in a Part 150 are voluntary and airport operators are not required to participate; however, SBA chooses to participate.

The Airport completed a Part 150 Noise Compatibility Study in 2004, in partnership with the FAA, to address and mitigate community noise concerns. The study provided Airport Noise Exposure Maps (NEMs) and a Noise Compatibility Program (NCP). The NEMs provided sufficient information so that constituents unfamiliar with the technical aspects of aircraft noise can understand the findings included therein. Technology has advanced since the early 2000s, and the Airport now maintains the ability to run noise contour reports to identify noise impacts that may be higher than the California standard threshold of 65 CNEL. The state of California has established 65 CNEL as the threshold above which aircraft noise is considered incompatible with residential areas. Community Equivalent Sound Level (CNEL) is a long-duration cumulative noise exposure level. This California standard is more sensitive (less tolerant) of aircraft noise levels than any other state in the US. There continue to be no residential dwelling units (residential homes) within the 65 CNEL noise impact area of the Airport.



SBA Airport Diagram and Information



Airlines Currently Operating at SBA:

- Alaska Airlines
- American Airlines
- United Airlines
- Southwest Airlines- New Service Launched April 2021

The Airport began outreach and coordination with Southwest Airlines well prior to their service launch regarding the existing voluntary noise abatement procedures for high performance aircraft.

Due to COVID-19 pandemic impacts, service from Contour Airlines and Delta Airlines has temporarily ended. The Airport remains hopeful these airlines return to service at SBA during anticipated pandemic recovery operations.

Airport Operator Tenants:

Fixed Base Operators (FBOs)

- Atlantic Aviation
- Signature Flight Support



Flight School(s)

• Above All Aviation

SBA Common Aircraft Fleet Mix

Below are a list of aircraft that can be commonly seen at SBA. Each aircraft links to an example photo on the *Airliners* website, <u>www.airliners.net</u>.

Airline

- <u>CRJ-900</u>
- <u>E-135</u>
- <u>E-175</u>
- <u>B737</u>
- <u>A319/A320</u>

Corporate

- <u>Citation X</u>
- Gulfstream G550
- <u>Lear 60</u>
- Beech King Air 350

General Aviation

- <u>Cessna 172</u>
- Beech Bonanza
- <u>Cirrus SR-20</u>

SBA Noise Abatement Procedures

SBA has two (2) Voluntary Noise Abatement Approach procedures into the airport, and we spend considerable time educating the flying community on the use of these preferred flight paths. These procedures were designated in coordination with the FAA in the 2004 SBA Part 150 Study. SBA noise abatement procedures are voluntary, as required by the FAA. It is important to note that these flight paths can only be used when it is safe to conduct, as determined by the pilot in command (PIC) of each inbound aircraft.

A pilot may choose to not accept the voluntary approach due to a number of factors that deem the voluntary approach unsafe. These include: weather conditions, high aircraft altitude, aircraft speed, position when cleared by air traffic to turn inbound, pilot training or proficiency on the approach, cabin readiness, emergencies of inbound aircraft, or air traffic separation needed. In general, all pilots are



attempting an efficient and safe landing and will not deviate from the established approach unless directed otherwise by ATC, or unless they have a compelling reason to do so. Approach to landing is a critical phase of flight in which pilot judgement is essential and safety of the aircraft in flight is the highest priority.

High performance aircraft approach for Runway 25

This voluntary noise abatement approach requests that high performance aircraft approach the Airport over the ocean, and make a modified base-to-final turn at approximately 2.5 mi. east of the Airport. Aircraft are asked to overfly the More Mesa open space while turning from the 'base leg' to 'final approach leg' of their descent to SBA Runway 25. It is important to note that industry standard for a safe approach to landing is a 3-5 mile straight-in approach according to the FAA, which in the Santa Barbara/Goleta area would involve overflight over Hope Ranch and other communities. Situations will occur where this straight-in approach to landing may be selected by either ATC or the PIC to support a safe approach to landing on Runway 25.





VFR Aircraft Approach for Runways 15R & 15L

This voluntary noise abatement approach requests that VFR aircraft (typically general aviation, smaller aircraft) overfly Highway 101 while inbound/outbound to/from SBA. After overflying HWY 101, VFR aircraft are vectored (directed) by Air Traffic Control (ATC) for final base-leg and final-approach leg of their flight.





SBA Typical Daily Flight Track Map

The image below reflects a snapshot of a typical day's arrivals (red) and departures (blue) at SBA. These colored flights paths show the variation of aircraft flight tracks as they approach/depart SBA. It is important to note that aircraft flying a visual approach are flying as directed by ATC, or via the safest route determined by the pilot from the cockpit. Visual approach and departure is not precision flying, and will have more variance on flight path than a precision approach, where pilots fly via published instrument approaches and precision guidance from land based instrumentation ATC.



Education not Enforcement

As explicitly outlined in the Airport Noise and Capacity Act of 1990 (ANCA), the FAA prohibits airports from imposing limitations or violations, including curfews, on any aircraft, aircraft operator, or airline. Santa Barbara Airport (SBA) is open 24/7 for commercial and general aviation use, as required by the FAA.

SoCal Metroplex

The Southern California Metroplex (SoCal Metroplex) project created satellite-based, or ATC directed, routes at airports throughout the region. The SoCal Metroplex project was designed to make Southern California airspace more efficient with improved access to some of its airports by optimizing aircraft arrival and departure procedures. In the project the FAA completed a redesign of airspace, introduced new Performance Based Navigation (PBN) procedures, and utilization of Time Based Flow Management (TBFM). <u>SBA did not have any new final approach procedures implemented in the Metroplex project.</u> Aircraft flying into the Airport continue to utilize the voluntary noise abatement approach procedures whenever safety allows. More information about the SoCal Metroplex project can be found at: <u>https://www.faa.gov/air_traffic/community_involvement/socal/</u>



SBA Noise Statistics

Legend:

A: Arrival D: Departure

Runway Utilization – Sample Day August 7, 2020

	Flight Operation	Airport	Total Operations
7	А	SBA	23
7	D	SBA	26
25	А	SBA	30
25	D	SBA	13
15L	А	SBA	18
15L	D	SBA	37
15R	D	SBA	2
UNK	А	SBA	2
UNK	D	SBA	8

Daily Average Aircraft Operations by Hour – August 2020

Time of Day	Number Of Operations
0000 - 0200	1
0200 - 0400	0
0400 - 0600	1
0600 - 0800	7
0800 - 1000	16
1000 - 1200	19
1200 - 1400	25
1400 - 1600	36
1600 - 1800	29
1800 - 2000	18
2000 - 2200	6
2200 - 2400	1



Noise Complaint Statistics

Monthly Total Noise Complaints – all CY2020

- January 506
- February 470
- <u>March 303</u>
- <u>April 106</u>
- May 176
- <u>June 167</u>
- <u>July 393</u>
- <u>August 272</u>
- September 281
- <u>October 341</u>
- November 270
- December 201

Yearly Total Noise Complaints - CY2015-2020

- <u>2015 1164</u>
- <u>2016 543</u>
- <u>2017</u> 735
- <u>2018 1161</u>
- <u>2019 8042</u>
- <u>2020 3486</u>

Total Aircraft Operations – CY2015-2020

- <u>2015 107,593</u>
- <u>2016 100,171</u>
- <u>2017 93,229</u>
- <u>2018 100,667</u>
- <u>2019</u> 106,702
- <u>2020</u> 90,939

Total Airport Passenger Enplanements – CY2015-2020

- <u>2015</u> <u>315,465</u>
- <u>2016 315,597</u>
- 2017 355,939
- <u>2018 395,542</u>
- <u>2019 502,767</u>
- <u>2020</u> <u>192,322</u>



SBA Noise Work Plan

To track, monitor, and continue SBA Noise Advisory Program activity and success, the Airport created a Noise Work Plan. This plan identifies all the recent actions, progress, support, and outreach the Airport has conducted to continue the success of our Noise Advisory Program. The plan also provides information on future and past actions, activity, and aircraft partner support that the Airport continues to pursue to expand the Noise Advisory Program's positive impact on the community and in support of safe air travel to SBA by our aircraft operators. A complete listing of this Work Plan and completed projects can be found on Pg. 19 of this report.

SBA Website Updates

SBA developed a revised website in that launched in early 2020. Included in this revision was an upgrade to the Noise Advisory Program website, which provided new aircraft noise resource information, as well as a direct link to the FAA's Noise Complaint website. Over the course of 2020, SBA leadership staff have been working with regional the FAA Regional Administrator's Office staff on establishing a team based approach to coordinated noise program support, and implementing a "Partnering Airports for Noise Complaints and Inquiries" program in our region. The FAA has added our Airport partnership to their regional Noise Complaint website, this regional Noise Complaint website is available on the SBA Noise Advisory Program website, and is located at the website listed below:

https://www.faa.gov/about/office_org/headquarters_offices/arc/western_pacific/noise_complaint/

The intent of this partnership is to aid community members when there are concerns regarding noise and defining which entity will first handle public outreach. For the greater Santa Barbara/Goleta community, this was defined as part of the program's development and consists of the following:

Santa Barbara Airport will first handle all outreach needs within 5 miles to the west and north & 15 miles to the east of the airport. The FAA will handle all outreach needs outside of this predefined zone. While these are the agreed upon parameters, Airport staff remains committed to listening to community member concerns outside of this zone.

Charted Visual Approach Request to FAA

The Airport began pursuit of a FAA charted visual approach for the Runway 25 High Performance Aircraft Approach in September of 2019. After multiple investigatory meetings with both SBA ATC and FAA regional officials, FAA Flight Standards ultimately denied the Airport's request in October of 2020.

After thorough review, FAA Flight Standards advised that a Charted Visual Flight Procedure (CVFP) is not feasible at SBA for Runway 25. Specifically, the denial states CVFPs must originate at or near, and be designed around, prominent visually identifiable landmarks. It is not feasible to do this at SBA, as the CVFP would need to begin over the water where no visually identifiable landmarks exist. FAA Flight Standards does not recommend proceeding with the development of a CVFP at this location. Since this decision, SBA has continued the discussion with local and regional FAA regarding pursuit of a charted RNAV visual approach since the general visual approach request was denied.



Noise Abatement Procedures Visual/Map Updates

The Voluntary Noise Abatement Procedures for high performance aircraft visual guidance map was updated in January 2020, and published on SBA's Noise Program website.

The Noise Advisory Program team met with SBA ATC staff in summer of 2020 to review the Voluntary Noise Abatement Procedures for VFR aircraft. The visual guidance map was revised to include ATC's feedback, and is available on the website.

COVID-19 Impact on SBA Noise Program

The current COVID-19 pandemic has had a significant impact on aircraft operations at SBA, most dramatically to air carrier service (airlines). While the Airport has begun to see an increase in air carrier passenger traffic and available commercial flights, total air carrier daily flights are still dramatically reduced from pre-pandemic operations. Business and general aviation flight activity has been quicker to recover; however, they remain at lower frequency than pre-pandemic operations.

Although we have experienced a reduction in monthly noise complaint activity since March, noise complaints continue to occur, although total monthly complaints are significantly lower than the record number of complaints received in 2019.

Noise Monitors Program

In early 2020, Santa Barbara City Council approved the upgrade and reactivation of SBA noise monitoring terminals (NMTs). The NMT upgrade and reactivation of all three noise monitors was completed in July 2020. This activity included the replacement and upgrade of the processors (computers) that were at the end of their useful life, physical noise microphones, and upgrade/addition of small cell solar panels at each location. Hardware failures had rendered the previous noise monitors inoperative. Airport staff began monitoring digital noise contours utilizing FAA approved software in early 2019 when the previous monitors useful life ended. The three NMTs were brought back online to provide a second source for measuring weighted community average noise levels throughout the course of a day. Since installation, they have validated the digital contouring utilized by the Airport. The general locations of the noise monitors are noted in the map below by the yellow markers.





Work Plan Completed Tasks: 2018-2020

- ✓ Continued research of each noise complaint received from the community
- ✓ Continued outreach to aircraft operators for any potential deviations from the voluntary program
- ✓ FAA Analysis Report of SBA operations and noise complaints
- ✓ SBA Noise Advisory Program Presentation
- ✓ Quick facts flyer
- ✓ Amend noise hotline message to include bypass shortcut
- ✓ Installation of PublicVue
- ✓ Installation of noise contouring software
- ✓ Revision of aircraft operator response methods
- ✓ Review noise abatement approaches with ATC
- ✓ Identify airline fleet changes and provide advance notice of voluntary noise abatement approach procedures
- ✓ Alaska Airlines implementation of proprietary RNAV approach to RWY 25
- Met with SBA ATC to begin planning of FAA request for visual noise abatement approach procedures for RWY 25
- ✓ Launched SBA PublicVue portal
- ✓ Hosted PublicVue community workshop
- ✓ Revisions to current SBA Noise Advisory Program website
- ✓ Refined noise abatement approach visual aid published to SBA website

- Alaska Airlines visit reviewing participation in Noise Advisory Program and Alaska Proprietary Noise approach to RWY 25
- ✓ Revised SBA Noise Advisory Program website
- ✓ Met with corporate aircraft operator NetJets and gained greater support of our Program
- ✓ Upgrade and reactivation of 3 existing SBA noise monitors
- ✓ Publish SBA Noise Advisory Program 'frequently asked questions' on website
- ✓ Formal request submitted to FAA seeking published visual noise abatement approach procedures for RWY 25
 - Under review and initial application
 Sept. 2019 with FAA Western
 Services Center
 - Met with FAA (April 2020) and ATC upon formal request to FAA for published visual noise abatement approach to RWY 25
 - FAA Flight Standards denied the request in Oct. 2020, advising that a Charted Visual Flight Procedure (CVFP) is not feasible at our facility for Runway 25
- ✓ Met with Southwest Airlines to review and discuss their support of SBA visual noise abatement approach procedures for RWY 25
- ✓ Revised VFR aircraft voluntary noise abatement procedures visual/map

Work Plan Current Tasks: 2020-2021

- Revise signage/information in SBA flight schools and FBOs using revised visual aids
- Pursue digital link for SBA noise abatement procedures in online pilot Chart Supplements
- o Chief Pilot/Fleet Manager aircraft operator discussions for non-participation in voluntary program
- Planning and coordination with Southwest Airlines to facilitate their support of the Runway 25
 Voluntary Noise Abatement Procedure
- Pursuing FAA on feasibility of a RNAV Runway Approach designed to offer a stabilized approach into the Airport.

Community Noise Workshops and Meetings

- 2019 Noise Workshop
- 2020 Meeting: Hope Ranch Home Owners Association held on July 31, 2020



SBA Noise Resources

SBA Quick Facts (Exhibit 1)



The Exhibit 1 document can also be found on SBA's website: <u>https://www.flysba.santabarbaraca.gov/home/showpublisheddocument?id=1205</u>

SBA Noise Advisory Program FAQ (Exhibit 2)

The Exhibit 2 document can be found on SBA's website: https://www.flysba.santabarbaraca.gov/home/showpublisheddocument?id=1167



Noise Contours

A noise contour is a line on a map that represents equal levels of noise exposure. SBA uses EnvironmentalVue to calculate monthly or annual noise contours. The number of annual flights, aircraft types and flight tracks are critical inputs to the contour model. Noise levels can be computed at individual locations of interest, but to show how noise can vary over extended areas, noise metric results like DNL are often drawn on maps in terms of lines connecting points of the same decibel (dBA). Similar to topographical maps showing the elevation of terrain in an area, the noise "contours" are useful for comparing aircraft noise exposure throughout an airport community. The shape of noise contours depends on many factors, but are influenced by things like whether more arriving or departing aircraft are flying over an area.

The contour lines identified in the following pages are measured in Community Equivalent Sound Level (CNEL). CNEL is a long-duration cumulative noise exposure level. This California standard is more sensitive (less tolerant) of aircraft noise levels than any other state in the US. 65 CNEL is the FAA designated California threshold for maximum allowable cumulative noise exposure. In all the noise contours for SBA, the 65 CNEL contour is located on Airport property. There are no residential dwelling units located within the vicinity of SBA that are within the 65 CNEL at SBA. Aircraft noise level is experienced at a lower CNEL as one moves farther away from the Airport. The following noise contours depict the areas where cumulative noise is experienced from 45-85 CNEL.

Noise contours do not reflect single event noise, but rather the average over a 24hr period. Aircraft technology continues to improve with newer aircraft being outfitted with much quieter engines than those of the past. SBA benefits from its partner airlines using newer aircraft fleets.

Noise Contour Legend:

Red:	80-85 CNEL
Orange:	70-75 CNEL
Yellow:	60-65 CNEL
Green:	45-55 CNEL



July 1, 2017 Wide:



July 1, 2017 Close:





July 1, 2018 Wide:



July 1, 2018 Close:





July 1, 2019 Wide:



July 1, 2019 Close:





July 1, 2020 Wide:



July 1, 2020 Close:

