#### SBA Noise Advisory Program Frequently Asked Questions (FAQ) 2019

#### 1) What are the rules regarding how low an aircraft can fly over a residential area?

Aircraft altitude is established by Federal law. Title 14, Coder of Federal Regulations Section 91.119 which governs flight states: "Except when necessary for takeoff of landing, no person may operate an aircraft below the following altitude: Over any congested area of a city, town or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft."

It is important to be aware of two aspects of this regulation. First, most aircraft operating in the vicinity of the Santa Barbara Airport (SBA) are in the process of landing or taking off, thus this regulation does not apply. Second, helicopters are specifically exempted from this Federal regulation.

#### 2) Who is responsible for aircraft navigation?

Federal law gives the Pilot in Command (PIC) final authority and responsibility over how their aircraft is operated and flown. The PIC is responsible for flight safety.

Air Traffic Control (ATC) has authority over aircraft in flight. ATC formulates and enforces rules and regulations under which aircraft are operated. ATC ensures aircraft remain a safe distance from one another.

SBA has no control over how or where aircraft are flown. SBA assures the physical facilities of the Airport are safe for aircraft use. SBA manages the SBA Voluntary Noise Advisory Program.

#### 3) How does SBA measure aircraft noise? What is a noise contour? Do the noise monitors work?

Significant aircraft noise is defined in the state of California as Community Noise Equivalent Level (CNEL) 65 decibels (dB). CNEL is a measures of cumulative noise exposure over a 24-hour period, with adjustments to reflect the added intrusiveness of noise during certain times of the day. There are no residential structures within the 65 CNEL at Santa Barbara Airport.

The Airport currently utilizes a noise contour software solution to monitor and observe aircraft noise impacts in the surrounding communities, and to gauge the boundary of the 65 CNEL impact area around the Airport. Noise contour technology metrics are used to reflect a person's cumulative exposure to sound over a 24hr period, expressed as the noise level for the average day of the year on the basis of annual aircraft operations. Noise contour technology evaluates aircraft noise impacts in the vicinity of airports. It is algorithm based, and uses noise-power-distance (NPD) data to estimate noise accounting for specific operation mode, thrust setting, and source-receiver geometry, acoustic directivity, and other environmental factors. Noise contours can be generated for an area, or for a noise level at pre-selected locations. Noise contours at SBA have been tested, and confirmed accurate and reliable.

In addition to noise contour technology, 3 noise monitors that used microphone technology to record aircraft noise were installed in 1992 at key locations around SBA. These outdated monitors reached end of life, and are scheduled to be repaired and upgraded to include newer technology. Their data has been audited against noise contour data, to ensure accuracy of noise contour technology.

#### 4) How many complaints does the airport receive? What are those complaints?

The Airport is currently receiving over 1400 noise complaints per month. The majority of noise complaints received identify aircraft who have flown one of the voluntary noise abatement procedures into SBA. Many noise complaints are received from locations directly under the established flightpath of the voluntary noise abatement approach for Runway 25.

For flights landing at SBA that are determined to have not flown a voluntary noise abatement approach, excluding flight tracks flown for safety or spacing requirements, education is provided to the aircraft operator for future use.

#### 5) What is the consequence of improper aircraft flight paths flown?

Aircraft operators who do not fly a voluntary noise abatement approach into SBA are contacted and provided education on the SBA voluntary noise abatement procedures, and requested to fly them in the future whenever safety allows.

6) What happens if an aircraft fly's too low?

The Airport documents and researches all noise complaints received, and will notify the FAA if a flight is found to violate FAA minimum altitude requirements. Generally, these types of serious safety infractions do not occur at SBA.

#### 7) The complaint line is going unanswered. Why are phone calls are not returned?

The noise complaint hotline is for reporting noise concerns. Noise complaints received on the noise hotline are documented, entered into the Airport noise database, researched, correlated to a corresponding flight track, and evaluated for aircraft use of voluntary noise abatement procedures. This lengthy process can take time to complete, especially during periods of high call volumes. The status of an individual's noise complaint(s) submitted in PublicVue can be found in the SBA PublicVue portal, located here: <u>https://secure.symphonycdm.com/publicvue/?sys=SBA</u>

#### 8) Where can I access monthly noise complaint reports?

Noise advisory program reports are run monthly, the information is provided to Airport Commission and is available online on the SBA Noise Advisory Program website at: <u>https://www.santabarbaraca.gov/gov/depts/flysba/about/insidesba/noiseabatement.a</u> <u>sp</u>. Aircraft operating at SBA adhere to the FAA required noise standards, and are encouraged to fly the voluntary noise abatement procedures whenever safety allows.

#### 9) Who is responsible for the SBA Noise Advisory Program?

The Airport Certification & Operations Division is responsible for the SBA Noise Advisory Program. All noise complaints received are documented and researched. The status of an individual's noise complaint(s) submitted in PublicVue can be reviewed by creating an account in the SBA PublicVue portal, located here: https://secure.symphonycdm.com/publicvue/?sys=SBA.

#### 10) What is Airport Commission's responsibility related to the Noise Advisory Program?

All aircraft in flight fall under the jurisdiction of the Federal Aviation Administration (FAA). The Airport Commission is responsible for matters pertaining to management and operation of the Airport facilities of the City. Members of the public have the opportunity to address Airport Commission during the Public Comment period at Airport Commission meetings. The Noise Abatement Subcommittee meets as needed when requested by the Airport Director.

#### 11) Can airports limit or ban private jets or any specific aircraft?

As required by the FAA under the Airport Noise and Capacity Act (ANCA) of 1990, aircraft 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 Nondiscrimination. FAA regulations prohibit the restriction of aircraft or air carrier operations at airports who receive federal funding.

FAA regulations include aircraft noise restrictions which phased out the loudest aircraft types. Title 14 Part 36 ensures the latest available safe and airworthy noise reduction technology is incorporated into aircraft design, and enables the noise reductions offered by those technologies to be reflected in reductions of noise experienced by communities.

Aircraft noise is regulated through standards. These standards are set internationally and are applied when an aircraft is acquiring its airworthiness certification. The standard requires that the aircraft meet or fall below designated noise levels. For civil jet aircraft, there are four stages identified, with Stage 1 being the loudest and Stage 4 being the quietest. For helicopters, two different stages exist, Stage 1 and Stage 2. As with civil jet aircraft, Stage 2 is quieter than Stage 1.

The FAA has undertaken a phase out of older, noisier civil aircraft, resulting in some stages of aircraft no longer being in the fleet. Currently within the contiguous US, civil jet aircraft over 75,000 pounds maximum take-off weight must meet quieter Stage 3 and Stage 4 standards to fly. In addition, aircraft at or under 75,000 pounds maximum take-off weight must meet Stage 2, 3, or 4 standards to operate within the U.S. In addition, as of December 31, 2015, all civil jet aircraft, regardless of weight must meet Stage 3 or Stage 4 standard to fly within the contiguous U.S. Both Stage 1 and Stage 2 helicopters are allowed to fly within the U.S.

# 12) <u>There is construction activity at the terminal and a new jet bridge coming. Does this mean more planes and more noise?</u>

The Airport is under construction in support of constructing Passenger Boarding Bridge 3, which was designed in the terminal building design in the early 2000s, but not installed when the terminal was built. This boarding bridge utilizes existing terminal ramp space to support existing air carrier flights into SBA.

13) <u>Community perception is that most pilots are not following the voluntary flight paths. How are pilots educated about the Voluntary Noise Abatement Procedures?</u>

The Airport documents and researches all noise complaints received. For flights landing at SBA that are determined to have not flown a voluntary noise abatement approach, excluding flight tracks flown for safety or spacing requirements, education is provided to the aircraft operator for future use. This education is provided via email or mail directly to the aircraft owner or operator. Education is provided to the following types of aircraft operations: private, commercial (air carrier), corporate, military, and flight training operations.

The majority of noise complaints received at SBA identify aircraft who have indeed flown one of the voluntary noise abatement procedures into SBA. Aircraft who have flown a voluntary noise abatement procedure into SBA are not provided additional Noise Advisory Program information.

14) <u>Air traffic controllers should direct pilots to proper approach path. How does ATC communicate</u> <u>Noise Abatement Procedures?</u>

Noise Abatement Procedure information is routinely available for pilots from Air Traffic Control (ATC) on the Automatic Terminal Information Service (ATIS) recording, which pilots are required to review prior to arrival at SBA.

SBA Noise abatement procedure reminders are available for pilots in the airfield near runways, and in FAA published airport chart supplements that pilots may review prior to operating at SBA.

All aircraft operators landing at SBA who have not flown a voluntary noise abatement procedure on arrival are provided education on the noise abatement procedures, and requested to fly these procedures during future flights whenever safety allows.

#### 15) Are there health/environmental impacts of aircraft not following voluntary flight paths?

Noise, air quality, climate, and energy are the most significant potential environmental constraints to increasing aviation capacity, efficiency, and flexibility. The FAA has established several programs and activities aimed at addressing these constraints. For aircraft noise, that involves limiting the number of people exposed to significant noise levels. Significant noise is defined in California as 65 CNEL. The number of people exposed to significant noise levels was reduced in the United States by approximately 90 percent between 1975 and 2000. This is due primarily to the legislatively mandated transition of airplane fleets to newer generation aircraft that produce less noise. Most of the gains from quieter aircraft were achieved by 2000. There have been incremental improvements since that time. Absent further advances in noise reduction technologies and fleet evolution, the remaining problem must be addressed primarily through operational procedures and airport-specific noise compatibility programs. The SBA Noise Compatibility Program established the voluntary noise abatement approach procedures in use at SBA today.

# 16) <u>The City of Los Angeles is suing the FAA about flight paths/neighborhood impacts.</u> Is that an <u>option for the City of Santa Barbara?</u>

The City of Los Angles filed suit against the FAA for implementation of the "North Downwind" approach procedures into LAX. These new approach procedures were included in the Southern California Metroplex project, which created satellite-based routes at airports throughout the region.

The So Cal 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 Metroplex project, the FAA completed a redesign of airspace, introduced new Performance Based Navigation (PBN) procedures, and utilization of Time Based Flow Management (TBFM).

SBA did not have any new final approach procedures implemented in the Metroplex project, as such, The City of Santa Barbara, who owns and operates SBA, does not have grounds to take similar action against the FAA. Aircraft flying into the Airport continue to utilize the voluntary noise abatement approach procedures whenever safety allows.

- 17) What percentage of pilots follow the voluntary flight path? Of those off the voluntary path, what percentage of those are over Hope Ranch, South of Hollister, other?
  - 1/1/2019-7/31/2019 SBA has had a total of 59,568 operations
  - SBA received 3242 aircraft noise complaints from 1/1/2019-7/31/2019
  - SBA has issued education to 492 aircraft operators whose aircraft did not fly the voluntary noise abatement approach from 1/1/2019-7/31/2019
  - 99.2% of flights at SBA followed voluntary noise abatement procedures from 1/1/2019-7/31/2019
  - Of the 492 letters issued from 1/1/2019-7/31/2019, these are the community breakdowns from the complaint origination:
    - Alta Mesa: 3 (.6%)
    - *Hitchcock: 2 (.4%)*
    - Hope Ranch: 187 (38%)
    - Lake Los Carneros: 18 (3.7%)
    - Mesa Shores: 38 (7.7%)
    - More Mesa: 154 (31.3%)
    - South of Hollister: 90 (18.3%)

#### 18) What reasons might a pilot have for deviating from the recommended, voluntary flight path?

The following flight safety conditions may preclude an aircraft from following SBA voluntary noise abatement procedures:

- Weather conditions (wind, clouds, lightening, etc.)
- Air Traffic Control instructions
- Safety and spacing needs
- Aircraft emergencies (in their aircraft or another aircraft)
- Lack of knowledge of voluntary noise abatement procedures

19) If a community member calls in and makes several noise complaints at once, when SBA shows their noise complaints statistics, is this reflected as one complaint or a complaint for each plane they called in to report?

Each complaint provided with the specific date, time, and location of a flight event/complaint is entered as a separate complaint.

### 20) <u>Is it possible to add noise abatement clauses into hangar contracts/private planes or contracts</u> with new airlines?

A clause or lease agreement that requires aircraft to fly any specific approach jeopardizes flight safety. Aircraft operators are encouraged to follow SBA's voluntary noise abatement procedures whenever flight safety allows. The Airport ensures Fixed Base Operators (FBOs) are providing information to private pilots on the use of Voluntary Noise Abatement Approaches into the Airport. This is done through briefings, and through posted Noise Abatement Approach information within the FBO facility.

Noise Advisory Program information, including voluntary noise abatement approach information specific to the aircraft to be operated at SBA, is provided to the Chief Pilot or Fleet Manager of each airline prior to their new service starting at SBA.

## 21) <u>Is there a way to positively reinforce good behavior by operators using the voluntary noise</u> <u>abatement flight path?</u>

The 2019 success rate of aircraft following the voluntary noise abatement procedures is 99.2%, nearly 100%. Many of the flights that did not follow voluntary noise abatement procedures did so for flight safety reasons. Incentivizing pilots, airlines, or ATC to compromise flight safety is not in the best interests of the community, the flight crews and passengers, or the airlines.

#### 22) Is it possible to install a waypoint or NOTAM over the ocean near More Mesa?

The Airport has initiated requests with both SBA ATC and FAA Western Service Center to pursue a published visual, RNP, or RNAV GPS approach to include the voluntary visual approach to Runway 25. We have also spoken with the team from Alaska Airlines and received their support in requesting the FAA consider using the waypoints/fixes included in Alaska's proprietary RNP approach to Runway 25.

Determination of which option is most feasible for FAA evaluation is in process, with a new public RNP approach based on the Alaska RNP approach, or a new public RNAV GPS approach being the most likely options.

Any of these published approaches, if approved by the FAA, would identify waypoints for pilots to navigate the aircraft along the preferred voluntary noise abatement approach to Runway 25.

#### 23) Is the FAA aware of Santa Barbara and Goleta community noise concerns?

Yes, the FAA is aware of the current SBA Noise Advisory Program procedures, actions, and data. FAA Western-Pacific Airports Division Office, Local Santa Barbara Air Traffic Control (ATC) and the FAA Western Service Center have all been provided recent updates on SBA Noise Advisory Program community concerns and complaints.

The FAA Western Service Center conducted their own assessment of flight activity into SBA. Their finding revealed the following:

- No increase in the in the number of turbine aircraft not complying with Voluntary Noise Advisory Program (VNAP).
- Reasons for the increase in noise complaints to the Airport could not be ascertained with any degree of certainty.
- Three aircraft types (CRJ9, CRJ2 and the E75L) account for the vast majority of non-compliant VNAP events.
- Possible causal factors for overflights in noise sensitive communities include: ATC vectoring, air traffic safety and spacing, weather avoidance, bird avoidance

Additionally, The Airport has initiated requests with both SBA ATC and FAA Western Service Center to pursue a published visual, RNP, or RNAV GPS approach to include the voluntary visual approach to Runway 25. We have also spoken with the team from Alaska Airlines and received their support in requesting the FAA consider using the waypoints/fixes included in Alaska's proprietary RNP approach to Runway 25.

Determination of which option is most feasible for FAA evaluation and potential acceptance is in process, with a new public RNP approach based on the Alaska RNP approach, or a new public RNAV GPS approach being the most likely options.