

REQUEST FOR VARIANCE¹
TO NOISE REGULATIONS FOR CALIFORNIA AIRPORTS

1. **Airport Name:** San Diego International Airport (SAN)

2. **Person making Request:** Kimberly J. Becker, President / CEO **Date:** June 30, 2022

3. **Specific Variance Requested (Administrative Code Section Number and Description of Request):**
The San Diego County Regional Airport Authority ("Airport Authority"), as the State and Federally certified operator of SAN, submits an application and request to the California Department of Transportation, Division of Aeronautics ("the Department") for a variance (the "Variance" or the "Variance request") from certain provisions of the California Noise Standards (21 Cal Code Regs. §§5501, *et. seq.*) with respect to the continued operation of SAN. This request for a Variance is based upon the information contained in this request.

4. **Statement Explaining why the Airport Proprietor believes a Variance is necessary:**
A Variance is necessary for continued operations at SAN. Per the California Noise Standards, Section 5012, SAN has a Noise Impact Area greater than zero.

5. **Date airport was officially designated by County Board of Supervisors to have a Noise Problem:**
July 25, 1972

6. **Total Annual Flight Operations:**
Calendar Year 2021: 162,828²

7. **Total Annual Air Carrier Operations:**
Calendar Year 2021: 136,430²

8. **Noisiest Class of Aircraft using Airport:**

Boeing 737-800

9. **Size of Noise Impact Area as defined by the Noise Standards for California Airports (measured in square statute miles):**
For the Calendar Year 2021, the Noise Impact Area was 0.175 square miles

¹ The San Diego County Regional Airport Authority has reformatted the Department of Transportation, Division of Aeronautics' Form DOA 618 (11-21-89) and submitted this Request for Variance in this format.

² FAA Air Traffic Activity System (ATADS) - <https://aspm.faa.gov/opsnet/sys/Airport.asp>

10. Statement describing how the Noise Impact Boundary was located:

The Noise Impact Boundary was located using output from approved noise monitoring equipment and noise contours developed for the calendar year 2021. The Noise Impact Boundary was ascertained using the FAA's Aviation Environmental Design Tool (AEDT) with calendar year 2021 aircraft operations from data reported by the SAN noise monitoring system to facilitate locating the maximum extent (closure points) of the Noise Impact Boundary.

11. Approximate number of homes (single-family dwelling units) enclosed by the 70 dB CNEL Contour line:

There are approximately two hundred and four (204) single family dwelling units and three hundred and forty three (343) multi family dwelling units, located within the 70 dB CNEL contour line, as defined by the Airport Authority's 2021 annual noise contours. Four hundred and fourteen (414) of these dwelling units have been sound insulated.

12. Actions Taken by the Airport Proprietor to reduce the Noise Impact Area:

The actions taken by the Airport Authority include:

- a. Continued enforcement of the Airport Use Regulations (AURs) which restrict all aircraft departures and above-idle aircraft engine run-ups between 2330 and 0630 daily.
- b. The Airport Authority has continued to aggressively implement the enhanced residential sound insulation program, Quieter Home Program (QHP), consistent with the requirements of the previous Variances. From March 31, 2015, to April 30, 2022, one thousand, six hundred and fourteen (1,614) dwelling units were completed in the Program. As of April 30, 2022, there are five hundred and eleven (511) dwelling units beginning construction or in pre-construction and three hundred and seventy-seven (377) dwelling units in the design phase. The Airport Authority received the largest single sound insulation grant from the FAA in 2021, in the amount of \$26 million, allowing for an accelerated pace of the QHP.
- c. The Airport Authority started the implementation of an enhanced non-residential program by initiating design for two places of worship/preschool facilities. These two properties are currently in design with anticipated construction between 2022 and 2024.
- d. In 2017, the Airport Authority started a "Fly Quiet Program", a voluntary program where-in the Airport Authority reports on various operational elements to show which aircraft operators flew in the "quietest" manner. Currently, there are three elements: Fleet Quality (the noise contribution of each operator's fleet mix), Noise Exceedances (the number of times an operator's aircraft exceeds a specific level at three noise monitor locations), and Curfew Compliance (the number of times an operator violates the curfew). Aircraft operator's efforts to improve their score can result in a reduction to the Noise Impact Area. An annual Fly Quiet Report is generated and awards are presented to operators in multiple categories.

13. Incremental schedule of Noise Impact Area reductions for the time period prior to compliance:

As discussed in question #12, a variety of methods have been used to reduce the Noise Impact Area. Between March 31, 2015, and December 31, 2021, the Noise Impact Area decreased from 0.486 square miles to 0.175 square miles. Note: This reduction is attributed to the impacts of reduced operations resulting from the COVID-19 Pandemic and the additional units receiving sound insulation treatments.

Implementation of QHP is dependent upon continued availability of Federal grant funding, which cannot be guaranteed for a period sufficient to complete the QHP. Assuming continued available Federal grant and local matching funding availability in constant dollars, QHP could be expected to complete approximately 300 dwelling units a year.

Over the time period of the 12th Variance, airlines operating at SAN have continued making changes to the fleet mix of aircraft operating at SAN, some of which have shown to reduce the Noise Impact Area. However, the Airport Authority has no control over when and what type of aircraft operate at SAN, so can make no guarantee that this fleet mix change process will continue into the future nor whether it will have a significant effect on the reduction of the Noise Impact Area.

14. Future Date by which the Airport Proprietor expects to achieve compliance with the regulations:

See the information provided in response to Question #13. As of April 30, 2022, there are approximately nine hundred and thirty-six (936) dwelling units remaining in the Noise Impact Area. Currently, the Airport Authority is completing sound insulation to approximately 350 dwelling units per year. If this pace is continued, and if all other conditions are met, including but not limited to continued funding from the FAA, and assuming the Noise Impact Area is not reduced by any other manner, using the calculations of the current Noise Impact Area, it will take the Airport Authority an additional roughly three years to complete the Program. However, this does not address future requirements to insulate places of worship and hospitals within the Noise Impact Boundary. Furthermore, the Airport Authority's sound insulation boundary identified through the FAA's Part 150 study process is forecasted to be larger in the future as aircraft operations increase. Therefore, the future date by which the Airport Authority could achieve compliance with the Regulations would be approximately 2034.

15. Statement regarding economic and technologic feasibility of complying with the regulations:

See the responses to Questions 13, 14, & 17. As the Department has previously found, it is presently economically and technologically infeasible for the Airport Authority to achieve compliance with the regulations for SAN at any specific, defined time in the foreseeable future. Sound insulation is the only feasible strategy for achieving a zero-Noise Impact Area around SAN. Currently, the average cost per eligible unit (single and multi-family units) for sound insulation is approximately thirty-six thousand, five hundred dollars (\$36,500).

16. Noise impact should Variance be granted:

The noise impact at SAN is described in the Quarterly Noise Reports filed with the Department pursuant to the Noise Standards. This noise impact will not be negatively affected by granting a Variance. Even with a Variance, the Noise Impact Area will continue to be incrementally reduced through the Airport Authority's QHP, as described in the responses to Questions #13 and #14.

17. Value to the Public of services for which the Variance is sought:

As the Department has consistently found in prior Variance determinations, continued operation of SAN as the region's only significant commercial service airport during the period of the requested Variance is essential to the interests of, among others, commercial aviation operators, general aviation operators, the San Diego County business community, shippers and other local users of commercial air cargo services, local public entities, the air traveling public, other users of the airport, and the residents of San Diego County and neighboring counties. No other existing airport in the County is available to provide the services currently provided at SAN. SAN is a significant contributor to the region's economic base, providing thousands of jobs and approximately twelve billion dollars (\$12,000,000,000) annually in total economic benefit³.

³ San Diego International Airport Economic Impact Study, June 2018

<https://www.san.org/Portals/0/Documents/Finance/Economic%20Impact%20Study/2017-01-06-economic-impact-study.pdf>

ATTACHMENT A

For the convenience of the Department, and as additional information in support of its request for a variance, the Authority has listed below each of the applicable terms and conditions of the Current Variance, followed by a discussion of the manner in which the San Diego County Regional Airport Authority (Airport Authority) has complied with each term and condition.

Condition Number One: The variance shall be granted for a period of three years beginning on the effective date of this order.

Compliance with Condition Number One: The Airport Authority is submitting its request for a renewal of the variance in a time and manner required by and consistent with the Current Variance.

Condition Number Two: The Airport Authority shall continue to file the required Quarterly Reports and shall include in those reports the additional information contemplated by the 2001 Noise Information Enhancement Program (NIEP).

Compliance with Condition Number Two¹: Consistent with the Current Variance, the Airport Authority has provided Quarterly Noise Reports to the Department, the San Diego County Clerk, and the Airport Noise Advisory Committee (ANAC). Included in the Quarterly Noise Reports are:

- (1) Aircraft noise measurement criteria;
- (2) Quarterly and annual Community Noise equivalent Level (CNEL) data for each of the twenty-three (23) Remote Monitoring Terminals (RMTs) as currently reported by the Authority;
- (3) Overall San Diego International Airport (SAN) aircraft operations as reported by the FAA Air Traffic Activity Data System (ATADS);
- (4) A separate quarterly operations summary for aircraft arrivals and departures, which identifies the loudest twenty-five percent (25%) of the operations by aircraft type, operator, decibel, point of origination, flight number and time of day during a three (3) day survey period each quarter;

¹ The NIEP requires the Airport Authority to provide the following additional information in its Quarterly Noise Reports: (a) the noisiest 25% of the noise events captured by the monitoring system during a three (3) day survey period each quarter; (b) the name of the operator, the flight number, and the operation time of day for each of the listed operations; and (c) the current status of RSIP.

- (5) The operations activity by airline, including aircraft type by quantity, for each quarter. Note, cumulative six-month reporting is no longer generated as numbers are done quarterly and can be added to obtain a six-month period.
- (6) A separate quarterly and year-to-date synopsis of community noise and overflight complaint statistics are provided via the Airport Authority's monthly tableau statistics that are posted online².
- (7) A description of enforcement activity undertaken by the Airport Authority for violations of the Airport Use Regulations (AUR), including identification of specific offenders and administrative penalties assessed also posted online².
- (8) The status of the Residential Sound Insulation Program (RSIP) (i.e., Quieter Home Program or QHP), including the steps the Airport Authority has taken to implement the RSIP for eligible residences within the FAA-accepted projected 2014 65 dB CNEL noise contour, including the number of homes that have been sound insulated pursuant to the RSIP.

Additionally, quarterly reports contain a link to our website showing the list of current members of ANAC and minutes from quarterly meetings held during that period³.

Condition Number Three: The Airport Authority's annual report (for each calendar year) shall plot the annual CNEL contours for the 60, 65, 70, 75 and 80 dB CNEL noise contour levels (as currently developed and reported by the Authority) and shall quantify the areas of incompatible land use.

Compliance with Condition Number Three: Consistent with the current Variance, the Airport Authority has provided annual contour maps to the Department, the San Diego County Clerk and ANAC. The annual contour maps plot the annual 65 dB CNEL contours and quantify the area of incompatible land use. Since the FAA only funds mitigation and abatement programs within the 65 dB contour, all other contours were removed for clarity in reporting. Additionally, the most current annual noise contour map is posted in electronic format on the Authority's website, so that it can be conveniently accessed and downloaded by the public.

Condition Number Four: The Airport Authority shall continue to maintain an Airport Noise Management Office at SAN, which shall, among other things, receive and respond to aircraft noise complaints and gather information on an aircraft noise and operations monitoring system. The Airport Authority shall include a status report on this matter with its quarterly reports to the Department. Originals or copies of all public records generated

² <https://public.tableau.com/app/profile/noise.disclosure/viz/SANQHPCDashboard/SANQHP>

³ <https://www.san.org/Aircraft-Noise/Initiatives#645294-meeting-schedule>

in connection with the operations of the Airport Noise Management Office shall, at minimum: (i) be maintained at the Airport Management Office for not less than two (2) years; and (ii) be available for public inspection and designation for copying during normal business hours.

Compliance with Condition Number Four: Consistent with the current Variance, the Airport Authority continues to maintain an aircraft noise office, which, among other things, receives and responds to aircraft noise complaints and gathers information on aircraft operations and noise levels at SAN by use of the aircraft noise monitoring system. The aircraft noise offices are located in the community within the Noise Impact Boundary. This allows members of the public to easily meet with staff to receive valuable noise information. The aircraft noise office is staffed by three full-time employees and one administrative assistant, who are responsible for, among other things, ensuring compliance with the AUR and the current Variance. The aircraft noise staff also administers the Noise Compatibility Program, conducts continuous noise data management using a state-of-the-art computerized flight tracking and noise monitoring system as described in our monitoring plan approved by the Department, and ensures continuing implementation of the NIEP.

Community noise and overflight complaints can be submitted to the aircraft noise office in three ways.

1. The Airport Authority's online flight tracking website, <https://www.san.org/Aircraft-Noise/Flight-Tracking>
2. An app that can be downloaded from the Airport Authority's website.
3. A telephone "hotline" available in English with information on how to receive the instructions in Spanish. Input from the phone line is monitored and transcribed daily during the workweek for information and further investigation, as necessary.

An Aircraft Noise Specialist promptly investigates complaints and responds personally to community members, who request feedback. Referrals are made to outside organizations, as required. Additionally, noise complaint data is published in the quarterly noise reports submitted to San Diego County and the Department.

Consistent with the current Variance, the Airport Authority has made an effort to place records electronically on our website so that members of the public can view up-to-date information without having to seek a public records request (PRR). Any information that is not available online can be requested through a PRR. An electronic version of the request

form can be found on the Authority's website (<http://www.san.org/Airport-Authority/About-the-Authority/Public-Records-Request>).

Condition Number Five: During the period of this variance, the Airport Authority shall continue to implement the RSIP, QHP, as agreed to in the previous 1997 and 2001 stipulations of the parties, and incorporated in the 2008 order by the Department, including its efforts to obtain full federal discretionary Airport Improvement Program (AIP) funding to match the annual Airport Authority contribution. The Airport Authority has no obligation under the RSIP, or under this variance, to commit or support other use of any federal AIP funds allocated to the Authority in its capacity as the proprietor of SAN as "entitlement" funds under the AIP program in any year during which QHP is in effect. In addition, the Airport Authority shall continue to retain its legislative discretion to review and revise elements (other than the funding level commitments, obligations of its stipulations, and the conditions of this variance decision) of the RSIP, including, but not limited to, revisions to the eligibility and funding priority provisions of the Quieter Home Program; and that after the term of this variance, retain the right to terminate the Quieter Home Program. However, any such decision to terminate the Quieter Home Program must be demonstrably reasonable and shall not be arbitrary and capricious.

Compliance with Condition Number Five:

1. Continued Implementation. The Airport Authority continues to vigorously implement the QHP. During the period from March 31, 2015, through April 30, 2022, the Airport Authority completed sound insulation of one thousand, six hundred and fourteen (1,614) dwelling units. As of April 30, 2022, there are five hundred and eleven (511) dwelling units beginning construction or in pre-construction and three hundred and seventy-seven (377) dwelling units in the design phase.

Consistent with the requirements of the NIEP, the Airport Authority is constantly reviewing program practices and materials used to sound insulate dwellings and making improvements, where necessary and feasible. Examples of this include the addition of "virtual appointments" in response to COVID-19 pandemic and at the discretion of the homeowner. All materials, including the required avigation easement, are developed in a manner that can best be explained in readily understandable, common-sense terms.

The Airport Authority is in the process of updating the Programmatic Agreement entered in July of 2011 between the Authority, FAA, State Historic Preservation

Office, City of San Diego-Historic Resources Board, and the Advisory Council of Historic Preservation. Using this Programmatic Agreement as a guideline, from March 31, 2015, through April 30, 2022, the Airport Authority identified and treated one hundred and seventy-one (171) historic dwelling units. As of April 30, 2022, there were seventy (70) dwelling units identified as potentially historic on the QHP wait list.

In 2021, the Airport Authority also initiated the Non-Residential Quieter Home Program, allowing application of properties that were within the noise impacted area and noise sensitive such as places of worship and schools. Currently, there is one property that contains a place of worship and preschool in construction and one additional place of worship and preschool in design.

2. QHP Funding: Between March 31, 2015, through April 30, 2022, the QHP received approximately \$71.2 million in FAA AIP funds for the QHP. Total expenditures (including Airport Authority Share) for QHP from March 31, 2015, through April 30, 2022 is approximately \$90.5 million.
3. Easement Requirements: All easements that have been executed by eligible property owners in favor of the Airport Authority under the RSIP have been consistent with the requirements of the RSIP, as follows:
 - a. The reference contour for purposes of calculating the easement CNEL value is the SAN projected CY2014 Noise Exposure Map ("NEM") recertified by the FAA on November 23, 2016 ; and
 - b. The easement CNEL value of any eligible property in the highest year Projected 2014 CNEL value (rounded up to the nearest whole decibel) affecting any portion of the property, plus 1.5 dB CNEL .

Condition Number Six: The Airport Authority shall continue to implement its 2001 Noise Information Enhancement program.

Compliance with Condition Number Six:

1. Airport Noise Advisory Committee ("ANAC"):
 - a. ANAC meeting locations were moved to a local hotel when attendance increased and then during the pandemic they were conducted virtually. This allows the public, and committee members, easier access to attend the meetings.

- b. The ANAC met on a bi-monthly basis, at a day and time determined by the ANAC at the first meeting of a new calendar year. Effective in calendar year 2022, with the agreement of ANAC members, meetings were changed back to quarterly meetings.
 - c. In 2018, Airport Authority staff updated the ANAC membership to include more community members. In addition to seven community members within the 65 dB contour, there were four community members added based on areas outside the 65 dB contour that have the highest level of households submitting noise complaints.
- 2. Airport Noise Monitoring System ("ANOMS"): The Authority continues to maintain and upgrade the noise monitoring system with newer software upgrades as they become available.
- 3. Web Site: The Airport Authority maintains a website dedicated to aircraft noise programs. This site provides information and documentation as well as provides aircraft noise staff the opportunity to add real-time updates for unusual aircraft operations that may cause noise concerns. Additionally, the Airport Authority recently launched a tableau dashboard on the website to update statistical information monthly so that members of the public could have easy access to data in real-time, rather than wait for an ANAC meeting.
<https://public.tableau.com/app/profile/noise.disclosure/viz/SANQHPDashboard/SANQHP>
- 4. Newsletter: As indicated above, the Airport Authority provides timely updates via the website. Recent upgrades to the website are more efficient and allow aircraft noise staff the opportunity to provide real-time data in a more efficient manner. Newsletters are no longer used as all information is provided on the website.
- 5. Quarterly Noise Report: In addition to the data required under Title 21, and unless the Department objects and otherwise instructs the Authority, the Authority provides the following additional information in its Quarterly Noise Reports ("QNR"):
 - a. QNR Tables 5 & 6 provide the name of the operator, the flight number and operation time of day for each of the listed operations;
 - b. These tables also report the noisiest twenty-five percent (25%) of noise events captured by the monitoring system during a three-day survey period each quarter;
 - c. The Authority has a section in the QNR that discusses the current status of the RSIP.
- 6. Residential Sound Insulation Program (RSIP): The Residential Sound Insulation Program, referred to as the Quieter Home Program ("QHP"), incorporates handouts,

fliers, surveys, a dedicated phone line, email address, and a comprehensive internet website to identify terms, requirements, and operations of the QHP. These materials have been prepared in a manner that the Airport Authority believes can best be explained in readily understood, common-sense terms. In addition, within the aircraft noise offices, the Airport Authority continues to maintain a showroom to demonstrate various treatment methods that homeowners may encounter in the Program. This showroom allows residents to view treatments first-hand so they understand exactly what retrofits will look like in their home.

7. Avigation Easement Review: Each year, the Airport Authority reviews the language in the avigation easement for ease of understanding for the QHP homeowners.
8. Quieter Home Program-Community Outreach Items. During the Current Variance period, the QHP continues to maintain information on the website (www.san.org/Airport-Projects/Quieter-Home-Program) for participating and prospective homeowners and an informational phone line (619) 400-2660. On the website, participants and prospective homeowners can fill out surveys identifying their personal experience with the QHP and are also able to apply for the QHP. The QHP has also established an email address (quieterhome@san.org) that is monitored daily.

Condition Number Seven: The Airport Authority shall submit its request for any further extension of the variance to the Department in accordance with the then regulations of the Department, but, in any case, no later than sixty (60) days prior to the expiration of the variance. A copy of the application shall be provided to each of the parties on the proof of service of this decision, and the previous stipulations.

Compliance with Condition Number Seven: A request for a further variance is submitted by the San Diego County Regional Airport Authority to the Department on June 30, 2022 (64) days prior to the expiration of the Current Variance. Copies of the variance application will be provided to the parties listed on the proof of service to the Current Variance along with the parties to the previous stipulation.