SAN DIEGO INTERNATIONAL AIRPORT

San Diego International Airport ✈ Airport Noise Mitigation Office Frequently Asked Questions (FAQ's)

The following are frequently asked questions, grouped in three (3) major categories: General Questions, Operational Questions, and Legal & Legislative Questions. A glossary of terms (indicated in **Boldface** in the text) is located at the end of the third section.

GENERAL QUESTIONS

1. How can I reach Airport Noise Mitigation?

Airport Noise Mitigation staff is available Monday through Friday from 8:00 a.m. to 5:00 p.m. at (619) 400-2781. Faxes can be sent to (619) 400-2787. The Noise Complaint Hotline (bi-lingual) is available 24-hours a day at (619) 400-2799.

2. When was the Airport Noise Mitigation Department formed? What is its purpose, and how is it staffed?

In 1974, as jet aircraft operations began to take the place of propeller-driven commercial air service operations, the Port of San Diego installed a noise monitoring system, operated by the Engineering Department, to meet requirements of Federal and California environmental law. In the early 1980s, the system was transferred to a newly formed Airport Noise Information Department. Now called Airport Noise Mitigation, the team has grown to four full-time staff members committed to reducing the aircraft noise impact on the community through an ongoing mitigation program, information and education outreach; and by monitoring and enforcing compliance with local, state and federal regulations.

3. What is the home sound insulation program (**Q**uieter **H**ome **P**rogram) I recently saw mentioned on television?

Residential sound insulation is the noise mitigation portion of **SDIA**'s noise compatibility program. For general information eligibility requirements, and frequently asked questions please call (619) 400-2660, or access the Internet web site at **www.quieterhomeprogram.org**.

4. How does the Airport monitor aircraft noise?

There are currently 24 remote monitoring sites (**RMS**s) surrounding SDIA in communities ranging from Golden Hills to Ocean Beach and north to Mission Beach. These sites, which are acoustic microphones mounted on tall poles, measure noise and transmit the data, twenty-four hours a day, to a computerized noise monitoring and flight tracking system (**ANOMS-GIS**), located at the Airport. The data is evaluated and compiled to meet state requirements, and periodic reports are submitted to the County of San Diego and the State of California, Division of Aeronautics. The system also helps staff monitor noise levels and aircraft flight tracks. Additionally, stored information is used to confirm departure curfew violations and to respond to aircraft noise complaints from community members. Finally, downloaded information from the 24 remote monitor sites is used to generate a "noise contour" map that defines the area of noise-impacted communities.

5. What is a Noise Monitoring System?

SDIA uses an Airport Noise and Operations Monitoring System - Geographic Information System (ANOMS-GIS), a highly flexible and fully integrated computerized aircraft noise and flight tracking system. ANOMS-GIS allows staff to manage SDIA's noise compatibility program to meet community and state requirements, and is one of the most sophisticated aircraft noise monitoring systems in the world. Visitors from as far away as Australia, Denmark, France, and Spain have visited to acquaint themselves with the system and its capabilities. Demonstrations of ANOMS-GIS are offered, by appointment, to interested parties. To schedule a demonstration, call (619) 400-2781.

6. What noise metric is used to describe the aircraft noise we hear?

The **decibel (dB)** measures the scale of human hearing. Because the range of human hearing is large, decibels are computed logarithmically. In hearing individual aircraft, a decrease of 3 dB is usually discernable by most people, while a decrease of 10 dB is significant. Aircraft noise in the vicinity of SDIA is made up of many events, including aircraft takeoffs, landings, overflights, and ground noise (the noise generated by aircraft on taxiways and gate areas). The overall airport noise environment is described and defined by the Community Noise Equivalent Level (**CNEL**) metric. The CNEL is a 24-hour average of all aircraft noise events recorded at SDIA. Title 21 of the California Noise Standards and Federal Aviation Regulation (**FAR**) **Part 150** requires the use of the CNEL metric for measuring aircraft noise impacts in California as the standard for measuring outdoor noise environments. CNEL is produced through the use of the FAA computer model called the Integrated Noise Model (**INM**). The INM produces a set of noise contours, which are computer-generated drawings of the areas exposed to various levels of airport noise described by the CNEL metric. Per **CA PUC**, Title 21, Airport Noise Standards, Airport Noise Mitigation uses the **INM** to generate four quarterly reports identifying the 65 CNEL contour (state and federally defined noise impact area). In addition, a calendar year multi-contour (60 – 80 CNEL) is produced.

7. What is a noise curfew violation, and how is it dealt with?

The Airport Use Regulations (**AUR**s) for SDIA were adopted by the Board of Port Commissioners in 1989, and include Time of Day Restrictions (curfew). Adopted as San Diego County Regional Airport Authority (**SDCRAA**) Code 9.40, in 2003, it states that Stage 2 aircraft can depart from 7 a.m. to 10 p.m. (Stage 2 aircraft have been phased out at SDIA as of January 1, 1999 for all regularly scheduled commercial, cargo, and commuter operators using aircraft weighing more than 75,000 pounds). Stage 3 aircraft can depart between 6:30 a.m. and 11:30 p.m. Lifeguard, emergency or flights of military necessity are permitted to operate as needed, and landings are permitted 24 hours a day at SDIA. Engine run-ups above idle are permitted between 6:30 a.m. and 11:30 p.m. only. When a violation of the curfew occurs, the Curfew Violation Review Panel (CVRP), comprised of Airport Authority staff from several departments, meets to evaluate if the aircraft operator should be fined for the violation. The **CVRP** meetings are held the first Wednesday of the every other month starting in January, and are open to the public. The fine schedule for aircraft found in violation of the AURs is: $2,000 for the first violation by a particular operator in a calendar quarter; $6,000 for the second violation in that calendar quarter; and, $10,000 for the third violation in that calendar six month compliance period. Collected fines are compiled in the Airport Authority general budget to help offset the costs of maintaining the State-mandated Airport Noise Mitigation Office.

8. What is the difference between Stage 2 and Stage 3 aircraft?

The Federal Aviation Administration (**FAA**) provides noise classifications on various types of aircraft under the standards established in Federal Aviation Regulations (FAR) Part 36. Aircraft may be certificated as Stage 1, Stage 2, or Stage 3 based on its noise level, weight, number of engines and in some cases, the number of passengers. **Stage 1** aircraft, the oldest and noisiest aircraft (*e.g.,* B707) are no longer permitted to operate in the United States. **Stage 2** aircraft include aircraft models such as the B737-200, B727, and DC-9 aircraft. Stage 2 aircraft have been phased out of the United States' commercial air carrier fleet as of January 1, 2000. **Stage 3** aircraft are the newer, generally quieter aircraft (*e.g.,* B737-300, B757, B767, A320 and MD 80/90 aircraft, *etc.*).

Stage 3 aircraft may also include aircraft that were Stage 2 when manufactured, but have since been fitted with "hush kits" or have been re-engined and re-certified to meet the Stage 3 noise standards. Although aircraft meeting Stage 3 standards are noticeably quieter than many of the older aircraft, the regulations make no determination that such aircraft are acceptably quiet for operation at any given airport.
To implement the Airport Noise and Capacity Act (**ANCA**), the FAA amended FAR Part 91 and issued a new FAR Part 161. FAR Part 91 addresses the phase-out of large Stage 2 aircraft and the phase-in of Stage 3 aircraft. Part 161 establishes a stringent review and approval process governing the implementation of local airport use or access restrictions by airport proprietors.

9. What are the California Airport Noise Standards, and what is a Variance?

The **California Airport Noise Standards** (Standards) state that the basis for the acceptable level of aircraft noise for persons living in the vicinity of airports is a Community Noise Equivalent Level (CNEL) of 65 decibels. In addition, the Standards state that no proprietor of a “noise problem" airport shall operate an airport with a noise impact area of 65 decibels CNEL unless the operator has applied for and received a Variance from the California Airport Noise Standards. The Aeronautics Division of the California State Department of Transportation (CALTRANS), enforces the California Airport Noise Regulations. SDIA is one of ten California airports subject to the “noise problem airport” requirements. These regulations establish 65 dB CNEL as a noise impact boundary within which there shall be no incompatible land uses. This requirement is based, in part, upon the determination in the CALTRANS regulations that 65 dB CNEL is the level of noise which should be acceptable to “... a reasonable person residing in the vicinity of an airport." Airports are responsible for achieving compliance with these regulations. Airports not in compliance must operate under variance procedures established within the regulations. SDIA has received eight such variances to operate since the late 1970s. As of January 2007, there are approximately 10,000 dwelling units and 23,000 persons residing in the SDIA noise impacted area.

10. Why do aircraft sound louder at night?

During nighttime hours, ambient (background) noise levels are generally low; therefore, noise events may be judged louder because the low ambient noise levels are used as a base for comparison. In addition, more noise events may be audible at low ambient noise levels. In comparison, during the daytime hours, ambient noise levels are likely to be higher because normal activity masks some noise events.

11. Will aircraft continue to become quieter?

The current production of civilian aircraft is markedly quieter than the older technology aircraft. Dramatic reductions in engine noise have occurred since the early 1980's. However, this dramatic reduction in noise with each new generation of engine is not projected to continue. Small evolutionary changes may be occurring, but the technological noise reduction achieved through higher engine bypass ratios has a limit, and that limit is being approached. It is important that based on current knowledge and without some new technological breakthrough, the kind of dramatic noise reduction achieved in the last 15 years will not be repeated in the near future. This information does not imply that reductions achieved will not be maintained, only that the continued improvements may be less dramatic. A new Boeing 777 has approximately one-tenth the noise “signature” on departure as a Boeing 727-200, yet it carries more than twice the number of passengers. Because aircraft have operating lives of 20 or more years, it takes decades for airline fleets to catch up to the latest and quietest technology. Absent any compelling incentive or regulatory requirements to retire older aircraft, airlines naturally expect to extend the usefulness of their capital investments for as long as possible.

12. What type of operating restrictions may the Airport Authority imposed?

Airport operating restrictions are generally regulatory restrictions which, for noise control or other environmental reasons: (1) limit the type of aircraft which may use the airport; (2) limit the time of day which certain aircraft can use the airport; or (3) limit the number of aircraft which can use the airport during a defined time period.

Historically, this has been a complex legal area where the federal government (principally the Federal Aviation Administration) and the local airport proprietor have had shared regulatory authority. State and local governments that are not airport proprietors, however, have generally been held by the courts not to have any regulatory authority over airport or aircraft operations for noise control purposes because of the preemptive effect of the "pervasive" scheme of federal regulation over such matters.

Although airport proprietors historically had some discretion to control and regulate the use of its airport for noise control and other limited purposes, that discretion has always been subject to substantial federal oversight and influence by a variety of legal means, including the airport proprietor's obligations to the FAA under standard "**grant assurances**" given to the federal government under federal legislation dating back to 1946. In 1990, the Congress significantly limited the scope of the local airport proprietor's regulatory discretion for noise control purposes by adopting the Airport Noise and Capacity Act of 1990 (ANCA). FAA has subsequently adopted regulations implementing ANCA under Part 161 of the Federal Aviation Regulations (FAR) (14 CFR Section 161.1). The practical effect of ANCA and implementing legislation (Part 161) is to make traditional aircraft operation regulations by local airport proprietors infeasible without the concurrence of the air carriers or other operators affected by the restriction.

13. What are Part 150 and Part 161 studies?

In those cases where aircraft noise, noise abatement and land use compatibility are issues of special concern, a study may be conducted following the guidelines set forth in FAR **Part 150**. Planning guidelines for conducting Part 150 studies are described in FAA Advisory Circular 150/5020-1, *Noise Control and Compatibility Planning for Airports,* dated August 1983. A Part 150 Study may also be conducted as part of an Airport Master Plan. The study develops an inventory and five year forecast of aircraft noise, capacity issues and land use considerations. If potential conflicts are determined to exist, alternative noise abatement strategies may be developed and evaluated. If noise abatement strategies that may result in airport restrictions are pursued, the Part 150 Study must also meet the requirements of FAR **Part 161**, which requires that potential restrictions to airport or aircraft operations undergo an extensive economic impact study and receive FAA review and approval.

14. Can the Airport Authority negotiate aircraft operator agreements with the operators at the airport?

The first part of the Part 161 regulations address any potential noise or access restriction on Stage 3 aircraft which results from an agreement between an airport proprietor and aircraft operators. The regulations set forth the procedures which must be followed before an airport proprietor and aircraft operators can agree upon a noise or access restriction, including: (1) notice requirements to inform interested parties and those likely to be affected by the outcome of an agreement; (2) provisions to protect and limit the rights of aircraft operators not currently using the airport; (3) requirements for implementing an agreement; (4) procedures for terminating an agreement; (5) provisions to ensure that relevant information is available for public review; and (6) limitations on FAA review of such agreements. Although the FAA has constantly stated that it encourages airport proprietors and aircraft operators to voluntarily agree on noise and access restrictions, the procedures for entering into an agreement are cumbersome. Particularly at large air carrier airports, it may be difficult to achieve unanimity, not only from existing affected operators, but also from potential new entrant operators. Since implemented in 1990, there has never been a Part 161 Study accepted by the FAA.

15. Where can regularly published noise reports be obtained?

Regularly published (monthly, quarterly and annual) noise reports may be downloaded from the Noise Reports section of this website or through the Authority Clerk's Office. Please call (619) 400-2400 for details.

OPERATIONAL QUESTIONS

1. What are the air traffic control procedures at San Diego International Airport (SDIA)?

SDIA has only one runway, requiring aircraft to depart to the west, or the east, depending on the surface wind direction. Prevailing westerly winds dictate that aircraft depart using Runway 27 (over the ocean) approximately 95% of the time. East departures (over Balboa Park) occur less than 5% of the time (usually during periods of Santa Ana type winds or inclement weather). Air carrier aircraft departing SDIA to the west are normally assigned (by FAA air traffic personnel) a magnetic compass heading of either 275 degrees or 290 degrees (northwest) depending on the destination airport. For example, for Runway 27 departures aircraft landing at Los Angeles, San Francisco, and airports west and northwest of San Diego, aircraft are usually assigned an initial departure heading of 290 degrees (a "right turn" of approximately 15 degrees after takeoff). Aircraft destined for Phoenix, Denver, Dallas and airports east of San Diego receive an initial heading of 275 degrees (a "straight out" departure). The number of aircraft using each route varies depending on airline schedules and FAA air traffic controllers' discretions, but historically has often been close to a 50/50 split. There are no ground based navigational aids usable for providing departing aircraft precision guidance over the ground. Because departing aircraft can only fly a magnetic heading and not a specific, electronically defined route, winds cause some variation in the path of the aircraft over the ground.

2. What are "Head-to-Head" air traffic operations?

Head-to-Head operations are an air traffic control procedure used at SDIA when weather and/or aircraft weight play a factor in the arrival and departing phase of flight. Normal operations at SDIA consist of arrivals from the east, and departures to the west. During Head-to-Head operations, aircraft arrive from the west, and depart to the west on a reciprocal heading. Once airborne, departing aircraft are vectored south (over south Pt. Loma) to clear the airspace for arrivals into SDIA. These operations occur rarely and, for safety reasons, significantly reduce the operational capacity of the airport when they occur.

3. What are the numbers of missed approaches that are forced to fly over Point Loma each day, or week?

The number of **missed approach**es executed by air carriers at San Diego International Airport (SDIA) varies. Official records of missed approaches, formerly kept at the SDIA Federal Aviation Administration-Air Traffic Control Tower (FAA-**ATCT**) are no longer available due to staffing shortages. Using ANOMS-GIS, Airport Noise Mitigation staff has the capability of viewing non-Standard Instrument Departure (**SID**) radar flight tracks out of SDIA, but does not have the capability of determining the precise heading of the aircraft nor the circumstances that warranted the use of a non-SID. Only the FAA has the knowledge and control of aircraft headings, and actual headings flown. Some examples of when air carriers may execute a missed approach are listed below. Please note that this list is not inclusive.

- A departing aircraft is exiting the airspace/runway slower than an arriving aircraft is entering the airspace/runway. In an effort to ensure safe separation of each aircraft, a missed approach is executed.
- A change in weather conditions has reduced minimums to the point that the pilot must terminate the descent and executes a missed approach.
- A pilot is approaching the field at a speed or altitude that would not permit the aircraft to touch down at a reasonable distance past the displaced threshold (landing line) and still have enough runway remaining for braking and/or reverse thrust.
- Operations have been halted because foreign object debris (FOD) has been spotted on the runway and must be removed prior to resuming operations.
- Slow flow of departures and/or arrivals.

4. What is the difference between a fly-over and a missed approach?

A fly over is a generic term used to indicate what happens when an aircraft transits the navigable airspace above homes, neighborhoods or other ground-based structures. A fly-over may occur as a result of a missed approach, or as a result of normal operations. Every departure and arrival at SDIA results in a fly-over of multiple homes and neighborhoods.

5. What is the number of deviations from the flight path heading that are granted to pilots after takeoff per day or week. (off the 275 or 290-degree heading)?

Only the FAA has the capability of determining what precise headings aircraft use when departing SDIA. However Airport staff can use the available computerized system to determine if departing aircraft utilized a published standard instrument departure (SID). The ANOMS-GIS software is capable of overlaying the SID corridor that aircraft normally fly when departing SAN. When aircraft fail to transit this corridor, a printout of the radar flight track showing this deviation is sent to the FAA **TRACON** for review. The SID corridor is represented on Page 25 of the California State Auditors report of San Diego International Airport, dated October 31, 2000. This document is available online at www.bsa.ca.gov/bsa, Report Number 2000-126.

6. Can flight track/path alterations be made?

Flight track procedures are dictated by the Federal Aviation Administration (FAA), taking into account considerations of operational, safety and air traffic control procedures. The airport operator has no authority to regulate flight tracks. Therefore, although an airport may advocate for certain noise abatement flight tracks to reduce noise, the request must be investigated for its impact on the National Airspace System Plan (**NASP**). A decision can be made to approve the alteration, disapprove the request, or return it to the airport operator for further modification or study. The FAA has published **Advisory Circular** (AC) 91-53-A regarding noise abatement departure procedures (**NADP**). AC 91-53-A sets minimum requirements for departure procedures and limits the number of NADP's that an airline may use. These procedures are implemented at the discretion of individual airlines after approval of the FAA.

7. Why are some aircraft lower than others are when they arrive and depart SDIA?

Aircraft altitude is generally determined by distance from the landing or takeoff runway. The closer the aircraft is to the runway, the lower the altitude. SDIA arrivals normally descend at a fixed angle of approximately three and one half (3.5) degrees as they approach for landing. The angle of ascent on departures is a function of aircraft type, weight, air temperature, and wind speed.

8. How does an airline determine the appropriate noise abatement departure procedure/profile to use at the airport?

Each air carrier operating at San Diego International Airport has discretion to designate a standard noise abatement departure profile (NADP) for each aircraft type they operate in a manner consistent with the procedures specified in Federal Aviation Administration (FAA) Advisory Circular 91-53. The appropriate NADP depends upon many factors including, but not limited to, aircraft type, weight and passenger load. The usefulness of an NADP at any particular airport also depends on where noise affected communities are located relative to the runway and normal flight tracks. At some airports, some NADP's would actually be counterproductive and would increase rather than decrease residential noise exposure.

9. What is a preferential runway system and does SDIA have one?

A preferential runway (**PR**) system is a local traffic control procedure that identifies a specific runway for use when specific conditions are present. It is generally defined by a set of operational rules and parameters affecting or limiting runway selection options under defined weather and/or operational circumstances, and these programs are generally implemented by agreements between the Federal Aviation Administration, airport operators, and airport users. Preferential runway procedures are

always specific to a particular airport, and they are typically developed to support noise abatement or noise control objectives, or for purposes of airport or air traffic control efficiency.
SDIA does not have a PR because there is only one runway surface and a westerly prevailing wind 95% of the time or greater. Another type of preferential runway system is called a nighttime preferential runway system (**NPR**). A NPR is most commonly used to minimize the effect of aircraft noise on residential communities during nighttime and early morning hours. SDIA's prevailing westerly wind and an Instrument Landing System (ILS) to only one of the runways (Runway 09) make an NPR infeasible.

10. What is the number of missed approaches or other flights per day or week that are given 250-degree headings?

Airport Noise Mitigation is not able to precisely determine the number of 250-degree (non-SID) headings assigned by ATC. As specified in the California State Auditors report (p.11), the FAA "...has the sole authority to manage the air traffic control system and the navigable airspace in the United States and establish flight operational procedures." Other flights that may be given a non-SID heading include smaller, slower general aviation type aircraft. These aircraft are primarily single and multi-engine propeller driven craft that are not able to accelerate as fast as jet aircraft. These types of operations constitute such a small portion of total activity that they are not considered a significant source of noise. In the summer of 1998, the FAA installed new radar maps with a series of "noise dots" that define the departing flight path turn points for the instrument departure procedures. A map illustrating these noise dots can be seen on Page 25 of the audit report mentioned in response to question #5.

11. What are SDIA's Airport Use Regulations?

The Airport Use Regulations (AURs), including the Time of Day (curfew) restrictions (Regulations) were adopted by the Port District's Board of Port Commissioners in March 1989, and subsequently adopted by the Airport Authority in January 2003. The Regulations established restrictions on operations at SDIA by certain types of aircraft, and prohibit departures by any aircraft during certain times of day, except for Lifeguard, mercy or flights of military necessity. Stage 3 aircraft may depart SDIA between 6:30 a.m. and 11:30 p.m. Stage 2 aircraft may only depart between 7:00 a.m. and 10:00 p.m. Arrivals for all aircraft types are permitted twenty-four hours a day. The primary operators at SDIA during the early morning hours are cargo carriers like FedEx, UPS, and Airborne Express, whose business model revolves around early morning delivery. The Airport Noise and Capacity Act (ANCA) passed by Congress in 1990 severely restricted the airport proprietor's ability to impose new restrictions on operations. Pre-existing regulations (*i.e.,* before November 1990) were unilaterally "grandfathered" and are not subject to ANCA unless they are suspended or changed to increase further the "grandfathered" restrictions.

12. What is an aircraft operation and how many does SDIA experience annually?

An operation consists of either a takeoff or landing. For example, an aircraft arriving at SDIA and then departing some time later is counted as two operations. SDIA had approximately 227,000 operations in 2007, or an average of 310 daily departures and 310 daily arrivals.

13. Why does the number of operations at SDIA vary from hour to hour during any given day?

Airlines operating at SDIA primarily determine schedules based on the Airport Use Regulations, Time of Day Restrictions and passenger service demands. Most airlines rely on computer models to assist in the scheduling of aircraft, being sensitive to such issues as specific airport rules and regulations, aircraft size (seat availability versus seat demand) and aircrew schedules and rest requirements. Different airlines operate in different modes, which also play a part in the amount of operations throughout the day at airports, system wide. For example, some airlines rely on "Point-to-Point" service between busy city pairs, whereas other airlines operate a "Hub and Spoke" type of operation, funneling passengers form smaller airports to a larger (hub) for redistribution to smaller airports. A recent trend at SDIA shows that, although operations have decreased annually the last five years, passenger enplanements have increased approximately three and a half percent annually for the same time

period. This equates to airlines either using larger planes less frequently, or the same size planes are experiencing increased load factors.

14. What can the Airport Authority (Authority) do to keep noisier aircraft from flying over particular neighborhoods surrounding SDIA?

By law, the Federal Aviation Administration has the sole authority to manage the air traffic control (**ATC**) system and the navigable airspace in the United States; therefore, the Authority cannot restrict access to "noisier" aircraft or dictate departure routes. The FAA, not the Authority, has sole and exclusive regulatory authority over the operation of aircraft in flight, on the runway and taxiway surfaces at the Airport. At SDIA and all commercial airports, from the time an aircraft departs the terminal and enters the taxiway and runway system, and throughout its flight to and arrival at the gate of the destination airport, the aircraft moves only by instruction and permission of the FAA, and pursuant to the direction of FAA (not airport) personnel.

15. What limitations exist to the Airport Authority's ability to control operations at SDIA?

This is a complex subject. However, in very general terms, SDIA and commercial aviation operate according to the following criteria: (a) the pilot has the final decision on runway use and reaches decisions based primarily safety-of-flight considerations; (b) the U.S. weather service reports conditions that determine runway selection; (c) the Federal Aviation Administration air traffic control system controls runway use and flight patterns assigned; and (d) airlines operating at the Airport determine schedules subject to the Airport Authority's Use Regulations and passenger service requirements.

LEGAL AND LEGISLATIVE QUESTIONS

1. What is the Airport Noise and Capacity Act of 1990 (ANCA) and how does it impact regulatory controls at SDIA?

In recent years, airport proprietors increasingly have recognized the importance of improving the noise environment in the vicinity of their facilities. Effectively recognizing that it has become impossible to expand the capacity of the national aviation system without reducing the adverse noise impacts of airports on their neighbors, Congress, in November 1990, enacted the Airport Noise and Capacity Act of 1990 (ANCA). ANCA established two broad directives to FAA: (1) institute a program to phase out the use of any Stage 2 aircraft over 75,000 pounds in domestic commercial service in the United States (excluding Alaska and Hawaii intrastate operations) by December 31, 1999; and (2) establish a standard method to review and evaluate post-1990 aircraft noise, airport use, or airport access restrictions requested or imposed by airport proprietors.

Federal Aviation Regulations (FAR) Part 91 was amended to address step 1 above. It generally states that all Stage 2 aircraft weighing over 75,000 pounds are prohibited from operating in the scheduled commercial air service domestic fleet effective December 31, 1999. There are a few exceptions, but for the most part, only Stage 3 aircraft (or aircraft modified to meet Stage 3 noise requirements) now remain in the domestic commercial service fleet.

FAR Part 161, addressing step 2, places new requirements and procedures on airport proprietors considering the adoption of new restrictions or prohibitions on the operation of Stage 2 or Stage 3 aircraft. This enabling legislation requires airport operators to conduct studies to detail the economic costs and benefits of proposed restrictions; then publish proposed restrictions, provide notice to potentially affected airlines and conduct any necessary environmental analysis, prior to enacting restrictions on the operations of Stage 2 or Stage 3 aircraft. Proposed restrictions on the operation of Stage 3 aircraft adopted after 1990 also require tacit approval of the FAA under defined statutory criteria before they may legally be implemented. Such a study is referred to as a "Part 161 Study" because its requirements are described in Part 161 of the Federal Aviation Regulations (FAR).

In order to place capacity or access restrictions on Stage 3 aircraft, ANCA requires that the Secretary of Transportation find in favor of the airport on each of six statutorily defined criteria from Part 161: (1) the proposed restriction is reasonable, nonarbitrary, and nondiscriminatory; (2) the proposed restriction would not create an undue burden on interstate or foreign commerce: (3) the proposed restriction would maintain safe and efficient use of navigable airspace; (4) the proposed restriction would not conflict with an existing federal statute or regulation; (5) the airport has provided adequate opportunity for public comment; and (6) the proposed restriction does not create an undue burden on the national aviation system. To date, no airport in the country has successfully implemented access restrictions on Stage 3 aircraft through FAR Part 161.

Voluntary agreements may be negotiated with aircraft operators to provide noise relief in a way that avoids undue economic burden (Part 161, Subpart B). In contrast to mandatory restrictions, such arrangements are not subject to Part 161 analysis unless they later are converted into mandatory requirements.

Through ANCA, Congress expressly seeks to balance local desires for airport noise abatement with the needs of the national air transportation industry. To that end, the Noise Act sets forth criteria and standards intended to ensure that an airport cannot upset this balance by imposing a local restriction whose negative effect on the national air transportation system outweighs any local benefits the restriction is designed to produce.

2. What is the history of noise litigation regarding aircraft operations at the airport?

The first effort to use civil litigation to challenge jet aircraft operations at San Diego International Airport (SDIA) resulted in a California Supreme Court decision reported as *Loma Portal Civic Club, et al. v. American Airlines, et al.* (1964) 61 Cal.2d 582. In that action, a group of residents living in the Loma Portal area of San Diego (west of the principal runway at SDIA), sought an injunction prohibiting or limiting commercial jet aircraft operations at SDIA. At the time the action was initiated, the City of San Diego was the owner and operator of SDIA, but the airport was transferred to the Unified Port District while the matter was on appeal. (The District came into existence in 1963 through legislative action). However, only the airlines were named as defendants; neither the City nor the District was a party to the action. The Supreme Court held, as a matter of state policy that an injunction was not an available remedy under such circumstances and affirmed the decision of the trial court to grant a summary judgment in favor of the defendant airlines. However, in doing so, the Supreme Court expressly noted that its holding would not preclude damage claims made under a constitutional "taking" theory, citing *Griggs v. Allegheny County* (1963) 369 U.S. 84, 86.

A new round of litigation was initiated in 1973 with the filing of a multi-count noise damage complaint alleging that it was filed on behalf of a "class" of persons living in the Loma Portal area. *Lewis, et al. v. San Diego Unified Port District,* SDSC No. 341065. The Superior Court granted a motion by the District to dismiss the "class," finding that the action was not suitable for class action treatment. The Loma Portal community responded to that ruling by filing two new actions, *Britt, et al. v. San Diego Unified Port District,* SDSC No. 367963, and *Banks, et al. v. San Diego Unified Port District,* SDSC no. 379755. The *Britt* and *Banks* cases, together with the remnants of the *Lewis* case, were then consolidated under a single action and subsequently referred to generally as the "Britt cases." These actions contained claims by 936 individuals and one church (St. Charles Borromeo Roman Catholic Church and Academy) and involved over 250 property parcels. "Inverse condemnation" and various tort theories (nuisance, negligence, etc.) were alleged claiming both property damage (in the form of diminished fair market value) and personal injury.

The *Britt* actions were tried over a six month period in 1979-80 and resulted in a judgment for the District based upon the determination that the statute of limitations had expired on the plaintiff's' claims. There was no appeal. During this same time period, the San Diego Unified School District filed an action against the District alleging that noise from aircraft operations at the Airport had caused damage to the value and educational uses of various elementary and secondary schools west and east of the Airport operated by the District. After the trial court decision in favor of the District in the *Britt* cases, the District and the School District settled that action. The District made a payment of $100,000 to the School District and, in return, the School District granted the Port District an avigation easement for noise over all of the named schools and dismissed the action.

Finally, in the 1980s, a series of "homeowner" damage actions were filed, and they were eventually consolidated in the United States District Court for the Southern District of California under the caption *Schultz, et al., etc. v. San Diego Unified Port District,* USDC SDCal.Civ.No. 279743. Although they alleged damages on theories similar to those used in the *Britt* actions in the 1970s, the *Schultz* actions were not prosecuted vigorously, and they were dismissed by the Court.

3. Who controls the aircraft in flight and on the runway and taxiways at SDIA?

The Federal Aviation Administration has sole and exclusive regulatory authority over the operation of aircraft in flight and on the runway and taxiway surfaces at the Airport (Title 49, United States Code, Section 40101). At San Diego International Airport, and at all commercial airports, from the time an aircraft pushes back from the gate and enters the taxiway and runway system, and throughout its flight or its arrival at the gate of the destination airport, the aircraft moves only by permission of the FAA, pursuant to the direction of FAA (not airport) personnel.

Glossary of Terms

The following is an alphabetic list with definitions of terms used in the FAQs with which you may not be familiar. Please call SDIA Airport Noise Mitigation at (619) 400-2781 if you need further explanation or definition of other terms used.

AC - Advisory Circular: Information letters issued by FAA to inform the public in a systematic way of non-regulatory material.

ANCA - Airport Noise and Capacity Act: This 1990 Federal Law established a "national policy on aviation noise". Its main feature is to require that by the year 2000 all jet aircraft used in commercial service at civilian airports be Stage-3 aircraft (aircraft that incorporate the latest technology for suppressing jet-engine noise).

ANOMS-GIS – **A**irport **N**oise and **O**perations **M**onitoring **S**ystem – **G**eographic **I**nformation **S**ystem: SDIA's computerized noise monitoring and flight tracking system.

ATC - Air Traffic Control: that segment of the Federal Aviation Administration (FAA) responsible for controlling aircraft movement on the ground and in the air.

ATCT – Air Traffic Control Tower: FAA facility established at most larger airports to provide for a safe, orderly and expeditious flow of aircraft.

AURs – Airport Use Regulations: SDIA's noise regulations.

CA PUC – California Public Utilities Commission: A California agency that oversees and regulates, among other things, all public use airports under the California State Department of Transportation, Aeronautics Division.

California Airport Noise Standards: CA State regulations (CA PUC, Title 21, Subchapter 6) governing the operation of aircraft and aircraft engines for all airports operating under a valid permit issued by the California Department of Transportation.

CNEL – Community Noise Equivalency Level: The noise metric used to measure aircraft noise impact in California

CVRP – Curfew Violation Review Panel: SDIA's review panel for suspected violations of the Time of Day (Curfew) noise restrictions

dB – Decibel: the noise metric that most closely measures the scale of human hearing

FAA – Federal Aviation Administration: The Federal agency responsible for regulating all air traffic flow and safety of the U.S. airspace.

FAA TRACON – Terminal Radar Approach Control: An FAA facility that provides advisory Service to aircraft during the departure and approach phases of flight.

FAR – Federal Aviation Regulations: Implementing legislation for federal laws pertaining to aviation activities. FAR Part 91/150/161 are sections of the Federal Aviation Regulations.

Grant Assurance: Specific obligations and certification required of airports to meet requirements of Federal grants for airport planning and development projects.

"Head-to-Head" Operations: A local air traffic control procedure used at SDIA during inclement weather conditions, which require arrival and departure operations in the same direction.

INM – Integrated Noise Model: FAA's standard tool for determining the predicted noise impact in the vicinity of airports. The Model uses flight track information, aircraft fleet mix, standard and user defined aircraft profiles to produce noise exposure contours.

Missed Approach: A climbing maneuver accomplished by a pilot of an airplane when a landing cannot be accomplished safely.

NASP – National Airspace System Plan: A management description of the FAA system framework that will allow for future growth in aircraft operations in a safe and expeditious manner.

QHP – Quieter Home Program: SDIA's Residential Sound Attenuation Program (RSAP).

PR/NPR – Preferred Runway/Night Preferred Runway: A local air traffic control procedure recommending use of a certain runway for arrivals and/or departures when specific conditions exist (i.e., for noise abatement purposes).

RMS – Remote Monitoring Site: At SDIA, the 24 sites in the community where permanent microphones

are placed to measure aircraft noise and define the areas most adversely affected by aircraft operations.

SDCRAA – San Diego County Regional Airport Authority: the policy body for SDIA since January 1, 2003. Prior to this date, the San Diego Unified Port District provided policy guidance for the airport.

SDIA: San Diego International Airport (Lindbergh Field)

Stage 1/2/3: Certification of aircraft according to their specific noise levels – Stage 3 is the latest technology, thus the quietest aircraft in the fleet.

SID – Standard Instrument Departures: Published Air Traffic Control procedures an aircraft must adhere to immediately after takeoff. Because of surrounding terrain or noise abatement restrictions, these procedures detail any turns or speed and altitude restrictions pilots must comply with unless amended or superseded by ATC.