

Part 150: Records of Approval

San Antonio International Airport, San Antonio, Texas

Approved on 9/30/02

Statements within the program measures below summarize as closely as possible the airport operator's recommendations contained in the Noise Compatibility Plan (NCP). The statements within the summaries, which precede the indicated Federal Aviation Administration (FAA) approval, disapproval, or other determination, do not represent the opinions or decisions of the FAA. The page numbers in parentheses cross-reference the submitted document/addenda.

The approvals listed herein include approvals of actions that the city of San Antonio recommends be taken by the FAA. The approvals indicate only that the actions would, if implemented, be consistent with the purposes of Part 150. These approvals do not constitute decisions to implement the actions. Later decisions concerning possible implementation of these actions may be subject to applicable environmental or other procedures or requirements.

Abatement Measure No. 1: Conduct live tests of noise abatement departure profiles.

[Pages II-2 – II-5]

Modifications to thrust and wing flap management procedures for departures can reduce the noise levels generated by individual jet aircraft departures. The potential exists for reductions in noise levels in noise-sensitive areas near the departure ends of runways if specific noise abatement departure procedures are followed. The City of San Antonio Aviation Department is working with airlines to determine what procedures work best to reduce single-event departure noise.

FAA Action: Disapproved.

Airlines have already developed procedures to comply with AC 91-53A. The purpose of the Advisory Circular is to eliminate airport-specific noise abatement departure procedures to ensure safe aircraft management. Airlines may be contacted to determine the procedures they have published for their aircraft, and these procedures may be incorporated into the noise model to determine benefits of specific procedures. At San Antonio International Airport, the distant procedure may be more appropriate, since compatible commercial development is closest to the airport. With the phase-out of Stage 2 aircraft over 75,000 pounds, the benefits from Stage 3 aircraft performing close-in noise abatement departure procedures is expected to be minimal.

Abatement Measure No. 2: Pursue additional voluntary noise abatement departure procedures to further reduce noise levels of aircraft operations.

[Pages II-5 – II-6.]

This recommendation calls for the city of San Antonio to develop voluntary measures that would need to be coordinated with the airlines and the FAA, along with corporate flight departments, fixed based operators (FBOs), and other aircraft owners and operators. These measures would

be assessed to ensure that implementation does not create additional airspace interactions, reduce capacity of the SAT or in any way compromise safety. They include: (1) Departure profiles which would increase the altitude to which an aircraft would climb at departure thrust before reducing power settings and adjusting flaps, and (2) Modifications to arrival tracks which would prevent aircraft from turning onto a short final approach over noise-sensitive areas close to the Airport.

FAA Action: Approved in part, as voluntary; disapproved in part.

The proposal to work with airlines, affected aircraft operators, and the FAA to determine the effectiveness of modified approach procedures to reduce noise impacts is approved as voluntary. The NCP discusses the possibility of reducing single-event noise levels through the adoption of voluntary approach procedures that would modify arrival tracks to prevent aircraft from turning onto a short final approach over noise-sensitive areas that do not usually receive overflights. Pilots would be encouraged to line up aircraft with the final approach heading as far out as practicable. If additional voluntary approach procedures are identified, any subsequent noise abatement measures should be recommended for inclusion in the overall NCP and submitted to the FAA for review.

Noise Abatement Departure Procedures not in accordance with AC 91-53A are disapproved. To ensure safe aircraft management, modifications to the procedures defined in AC 91-53A are not permitted.

Abatement Measure No. 3: Establish a preferential runway use program and enhance its effectiveness by extending existing runways, more specifically:

[Pages II-6 and II-11]

(a) Establish a preferential runway use program that minimizes departures on Runways 12L and 12R and arrivals on Runways 30L and 30R.

Because the highest number of noise-sensitive facilities are likely to be exposed to the highest levels of aircraft noise associated with departures on Runways 12L and 12R and arrivals on Runways 30L and 30R, the Technical Advisory Committee (TAC) decided that it would be worthwhile to determine whether an even greater percentage of departures could occur on runways other than Runways 12L and 12R and a greater percentage of arrivals could occur on runways other than Runways 30L and 30R.

(b) Extend Runway 3-21 to the northeast to enhance the effectiveness of the preferential runway use program.

The Master Plan Update recommended that Runway 3-21 be extended 1,500 feet to the northeast to a total length of 9,005 feet to improve airfield capacity. This extension would also remove the length preference of Runway 12R for air carrier departures, and make wind direction the primary determinant of runway use, thus enhancing the ability to use the runways more equally under a preferential runway use program.

(c) In addition, extend Runway 12R-30L to the northwest, allowing for the removal of the intersection of Runways 12R-30L and Runway 3-21.

Extending Runway 12R-30L approximately 400 feet to the northwest and decommissioning approximately 450 feet of the runway at its southeastern end—effectively shifting the runway to

the northwest—would remove the physical intersection of the two runways, allowing arrivals on Runway 12R and departures on Runway 3 to occur more independently.

FAA Action on 3(a). Disapproved.

The FAA Air Traffic Division has determined that the proposed recommendation will impact efficiency and airport capacity. Runway 12R is currently used approximately 50% of the time with all other runways accounting for the remainder. Therefore traffic is already dispersed. Moving operations to other runways will shift noise to other residential areas while inhibiting air traffic operations.

FAA Action on 3(b). Disapproved for purposes of Part 150.

The extension of Runway 3 has been proposed to provide additional capacity in a previously developed master plan. Because the primary purpose of the project is capacity and not for reduction of noise impacts, the FAA cannot approve the recommendation under Part 150. Information provided in the NCP indicates that this element increases the total number of people located in the 65 DNL contour. While the project may be needed for capacity purposes, it is a recommendation inconsistent with Part 150 and is not approvable for the purpose of noise abatement.

FAA Action on 3(c). Disapproved for purposes of Part 150.

Although the runway extension for runway 12R/30L was not identified in a master plan, this runway extension would increase capacity. As with Abatement Measure 3(b), the FAA cannot approve this project under Part 150. This disapproval under Part 150 relates to the primary purpose of the project. The city of San Antonio is discussing with FAA possible projects to be included in an Environmental Impact Study (EIS) scheduled to begin in Fall 2002. The environmental impacts associated with the runway extensions identified in Measures 3(b) and 3(c) would be analyzed during this EIS.

Abatement Measure No. 4: For departures from Runway 3, establish a departure corridor that places aircraft over compatible land uses east of Wetmore Road to the extent possible.

[Pages II-11 – II-22]

Establishment of this departure corridor would avoid or reduce overflight of areas northeast of the airport but west of Wetmore Road.

FAA Action: Disapproved.

The FAA Air Traffic Division has determined this recommendation would restrict the flexibility of air traffic to expedite departures by varying headings after departure for other than turbojet aircraft. Turbojets proceed via runway heading until reaching altitude of 3,000' before turning. Spacing between subsequent departures would have to be increased, resulting in delays during peak periods. In addition, for certain aircraft, an immediate turn after departure on Runway 3 would conflict with operations in the Randolph Air Force Base Class D Airspace.

Abatement Measure No. 5: For those times that Runway 21 must be used for departure, establish a departure corridor that places aircraft over the Highway 281 corridor to the extent possible.

[Page II-22]

Establishment of this departure corridor would avoid or reduce overflight of areas south of the airport but west of Wetmore Road.

FAA Action: Disapproved pending submittal of additional information.

FAA must determine whether this measure will adversely impact the safe, efficient or feasible use of the national airspace system. The city of San Antonio is discussing with FAA possible projects to be included in an EIS scheduled to begin in Fall 2002. The establishment of this corridor will be studied under that EIS.

Abatement Measure No. 6: Incorporate the findings and recommendations of the engine run-up study into the FAR Part 150 Noise Compatibility Program (NCP).

[Pages II-22 – II-23]

The documentation, found in Appendix F, is included in this NCP to provide information on final site selection and design of the facility. As documented in the summary report, all of the homes currently or anticipated to be exposed to significant noise levels from ground run-ups would no longer be exposed to significant noise levels if a GRE were constructed at the Airport.

FAA Action: Approved.

Approval of this measure is consistent with prior NCPs and FAA approvals. FAA has issued a grant for construction of the ground-run-up enclosure and construction has begun.

Abatement Measure No. 7: Install an aircraft noise and operations monitoring system to track the use of departure corridors and departure profiles.

[Pages II-23 - II-24]

The city of San Antonio requests that the measure be approved as a continuation of the previous Noise Compatibility Program. Aircraft noise and operations monitoring systems can be used to measure:

- Individual aircraft noise levels
- The aircraft type of specific operations
- Runway use
- Flight track definition and use
- Aircraft altitude and speed profiles
- Daily and annual day night level (DNL) levels at various locations around the airport

On August 9, 2001 the city of San Antonio accepted an FAA grant for design and implementation of such a system, and has issued a request for professional services for the work.

FAA Action: Approved.

This item replaces Program Element Number 8 in the May 23, 1997, Record of Approval. Noise Exposure Maps must be developed with the Integrated Noise Model, in accordance with the Part 150 regulations. For purposes of aviation safety, this approval does not extend to the use of monitoring equipment for enforcement purposes by in-situ measurement of any pre-set noise

thresholds. Interface with FAA equipment and operations must comply with FAA Order 1200.22C, NAS Data and Interface Equipment Used by Outside Interests.

Abatement Measure No 8: Enhance pilot awareness of noise-sensitive areas and noise abatement procedures by providing information for Jeppesen charts, airline pilot manuals, and fixed based operator information.

[Page II-25]

The objective of this measure is to maximize the benefits of the noise abatement measures. Most pilots operating at SAT in multi-engine or jet aircraft and many of those operating in single engine aircraft subscribe to a service which provides regular updates to a reference manual on instrument procedures in use at airports. The Jeppesen-Sanderson, Inc produces this publication. These types of inserts have been a very successful means of educating pilots on the details of noise abatement procedures at other locations.

FAA Determination: Approved.

Proposed language should be submitted to the FAA for review prior to publication. Location of, and language contained in, any airport signage must be pre-approved by FAA.

Abatement Measure No. 9: Investigate the use of noise barriers along Airport boundaries at runway ends to reduce the effects of takeoff roll noise.

[Page II-25]

Noise barriers may provide noise relief in areas near an airport that are exposed to significant noise from departure back blast and in some cases arrival thrust reversal procedures. The specific benefits that could be gained through the development of noise barriers have not been assessed in this NCP Update.

FAA Action: Disapproved pending submission of additional information to make an informed analysis.

The NCP does not provide sufficient information to justify additional study regarding the location of noise barriers. With the installation of the GRE (Measure 6), and the indication in the NEMs that the airport is surrounded by compatible land uses, there is not sufficient information to demonstrate that there are incompatible land uses close enough to the airport that could benefit from a noise barrier. Additional information is required in order to determine if the proposal meets the approval requirements of Part 150.

Abatement Measure No. 10: Encourage Congress to seek stricter aircraft noise standards, particularly regarding a phase-out schedule for aircraft originally manufactured as Stage 2 that have been modified or are operated to meet Stage 3 noise standards.

[Page II-26]

Although modified Stage 2 aircraft meet the Stage 3 noise standards, their noise levels are significantly higher than those generated by most aircraft originally manufactured to meet Stage 3 standards, and are still the loudest aircraft to operate at U.S. airports. A phase-out of modified Stage 2 aircraft could further reduce noise exposure in the Airport environs.

FAA Action: Disapproved.

The U.S. participates in the environmental committee of the International Civil Aviation Organization (ICAO) and has, with other participating countries, reviewed the question of modified Stage 2 phase out. On a national and international level, data show that the noise benefit of a modified Stage 2 phase out would be small and that the cost would be very high. As a result of this finding, FAA does not support encouraging the U.S. Congress to mandate a modified Stage 2 phase out. With U.S. air carriers grounding many older Stage 3 and modified Stage 2 aircraft in the last year for economic reasons, the case for Congressional action is even weaker.

Abatement Measure 11: Encourage the FAA to develop a phase-out schedule for FAR Part 36 Stage 2 aircraft weighing less than 75,000 pounds.

[Pages II-26 – II-27]

As air carrier fleets have become quieter, the noise environments around airports are controlled more and more by corporate and general aviation jet aircraft because these aircraft generate noise levels as high as those generated by many Stage 2 air carrier jet aircraft.

FAA Action: Disapproved.

This recommendation appears to be based on a faulty premise that Congress has given direction and authority to FAA to mandate such a phase out. In the text of the NCP (page II-26), a statement is made that the Airport Noise and Capacity Act of 1990 (ANCA) clearly specified that the FAA should develop a phase-out schedule for Stage 2 aircraft weighing less than 75,000 pounds. This statement is incorrect. There is no Federal legislation directing a phase out of Stage 2 aircraft under 75,000 pounds, and previous FAA review found that technological feasibility and economic costs posed problems that discouraged a Federally-mandated phase out of such aircraft. At the present time, FAA encourages and supports voluntary efforts by aircraft owners and the aviation industry to reduce noise of Stage 2 aircraft under 75,000 pounds.

Mitigation Measure No. 1: Develop an expanded residential acoustical treatment program based on the positive results from the current Residential Acoustical Treatment Pilot Program.

[Pages III-1 – III-4]

The City of San Antonio intends as a first priority to provide acoustical treatment primarily for those homes exposed to aircraft noise of DNL 70 and higher, based on the 2004 noise exposure map presented in Exhibit I-5 of the NCP. The boundaries of the area designated as the initial phase are shown on Exhibit III-1. After acoustical treatment has been provided in those areas, the Aviation Department may decide to continue the residential acoustical treatment program into areas exposed to DNL 65 and higher. Priority would be given to those areas which are most highly affected by aircraft noise.

FAA Action: Approved.

The NCP indicates (III-2) that an apartment complex has also been identified within the 2004 65 DNL contour. Upon confirmation that the apartment complex owner wishes to participate in the program, the approved measure will be extended to those units.

Mitigation Measure No. 2: Provide acoustical treatment for schools and religious facilities that have not yet received such treatment and could be exposed to aircraft noise of DNL 65 and higher.

[Pages III-4 – III-5]

The city of San Antonio would like to include additional noise-sensitive facilities that have not been treated to date but are located in areas exposed to aircraft noise of DNL 65 and higher based on the 2004 noise exposure map. Two schools, one religious facility, and one group care home have not been treated and could be eligible for acoustical treatment.

FAA Action: Approved.

Mitigation Measure No. 3: Study the mechanism for and impact of incorporating noise exposure acknowledgements into real estate transactions.

[Pages III-5 – III-6]

The city of San Antonio would like to study the potential mechanisms for incorporating noise exposure acknowledgements into real estate transactions and study the potential effects of such acknowledgements.

FAA Action: Approved for study.

Mitigation Measure No. 4: Study mechanisms to maintain compatible land uses in current and proposed flight corridors and to prevent development of additional incompatible noise-sensitive land uses in areas exposed to DNL 65 and higher.

[Pages III-6 – III-7]

This recommendation involves development of a comprehensive study of a various land use controls, an analysis of existing zoning and land uses in the Airport environs, and the identification of land use management measures, as well as short-range (5-10 years) and long range (20 year) recommendations for enhancing and maintaining compatible land use.

FAA Action: Approved for study.

Since the City of San Antonio owns the airport and is responsible for land use planning within the DNL 65 dB noise contour, it is obligated under Federal grant Assurance 21 to take appropriate action, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations.