Part 150: Records of Approval

Lambert-St. Louis International Airport, St. Louis, Missouri

Approved on 1/10/97

INTRODUCTION

In 1994, the city of St. Louis Airport Authority (STLAA) initiated an update to its original Airport Noise Compatibility Planning Study for Lambert-St. Louis International (Lambert) Airport (STL)in compliance with Federal Aviation Regulations (FAR) Part 150. The Noise Compatibility Program Update (NCP) and its associated Noise Exposure Maps (NEM) were developed concurrently and submitted to the Federal Aviation Administration (FAA) for review and approval. The NEMs were found to be in compliance with applicable requirements of FAR Part 150, effective July 15, 1996. The FAA began the formal review period for the NCP on that date.

A variety of noise abatement and noise mitigation measures have been proposed by STLAA for inclusion in Lambert's NCP update. The Noise Compatibility Program includes four types of strategy recommendations. The Operational Strategy Recommendations include those actions that the airport operator proposes to reduce the extent of aircraft noise exposure through changes in aircraft operational procedures. The Remedial Strategy Recommendations include those actions that would minimize the impact of aircraft noise in affected communities and neighborhoods by completing ongoing land acquisition programs, implementing a sound insulation and sales (transaction) assistance program, conducting a test program, and other measures directly applicable to specific neighborhoods. The Land Use Management Strategy Recommendations include implementation of policy measures, regulatory measures, and using advanced land acquisition where necessary. The Program Management Recommendations include a continuing effort to monitor compliance with the Noise Compatibility Program and to identify new or unanticipated problems and changing conditions, through the use of an aircraft monitoring system, community coordination, and, when appropriate, a noise compatibility program update. These program measures were developed by STLAA on the basis of input and evaluations by the project consultant, the Lambert Airport users, the FAA, the affected communities, and the public-at-large.

There is a proposal to construct an additional runway and related other development at the airport. If approved, construction would not be complete until about 2002 which is beyond the time frame of this NCP update. It is the intent of the STLAA to prepare an update to their Noise Compatibility Program to reflect proposed changes in the airport configuration once such changes are approved and construction actually begins.

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

The recommendations below summarize as closely as possible the airport operator's recommendations in the NCP and are cross-referenced to the program. The statements

contained within the summarized recommendations and before the indicated FAA approval, disapproval, or other determination do not represent the opinions or decisions of the FAA.

PROGRAM ELEMENTS

Operational Strategy Recommendations (Vol II,Chapter 5, Pages 5-1 -- 5-11, NCP)

5.1.1.**Revise Tower Order.** The informal noise abatement program, as referenced in Appendix 9 of local FAA ATCT Order, should be revised. Previously approved measures that should be continued should be clarified in the Tower Order to adequately describe these procedures, and additional enhanced measures should be added to the Tower Order immediately upon approval of the Part 150 Study Update.

I. Continue Noise Control Procedures Previously Approved:

Between the hours of 6 a.m. and 11 p.m., runway 6/24 is to be used primarily for commuter and general aviation operations and as a reliever runway for air carrier and Missouri Air National Guard (MANG) operations as needed to prevent air traffic delays.

> **APPROVED**. Note: air carrier and MANG aircraft may be assigned to runway 6/24 at the air traffic supervisors' discretion to minimize either arrival or departure delays. Nothing in this measure precludes local control (ATC) from retaining a missed approach aircraft in the Airport Traffic Area and assigning the aircraft to runway 6/24 in order to expedite the movement of air traffic.

Between the hours of 11 p.m. and 6 a.m., runway 6/24 will not be used for air carrier or military jet operations unless wind, weather, runway/taxiway closures, runway conditions, or navigational aid outages dictate otherwise.

APPROVED.

Nighttime (between 11 p.m. and 6 a. m.) full-power aircraft engine test runups are prohibited without prior approval from the airport Operations/Communications Center. When approved, runups are to be conducted on the mid-field runup pad adjacent to taxiway B. Aircraft are to be aligned on a heading of 135 degrees, or into the current wind direction. Runups are to be limited to a duration of two minutes at maximum power.

APPROVED. Note: This runup restriction has been in effect since 1987.

Continue to encourage air carriers to use quiet push-back procedures between 6 a.m. and 11 p.m. and to discourage powerbacks between 11 p.m. and 6 a. m. from terminal gate positions

APPROVED.

II. Implement Additional/Enhanced Noise Control Procedures:

Establish nighttime (11 pm to 6 am) corridors. Departures on Runways 12L, 12R and 30L should be assigned runway heading and those on Runway 30L should be assigned a heading that aligns with 305 degree heading with turns at 4,000' MSL or 3 nautical miles.

> **APPROVED**. This procedure may not be strictly adhered to at all times. Weather or conflicting traffic may require variations in the procedure for safety reasons. Pilot technique may also be a factor in explaining variations which may be observed in the procedure from time to time.

Maximize west flow. Current use is about 60% west bound and 40% eastbound. By maximizing west flow, departures which are typically louder than arrivals will be concentrated over areas of lower population density

APPROVED . This procedure may not be strictly adhered to at all times. Weather or conflicting traffic may require variations in the procedure for safety reasons. Pilot technique may also be a factor in explaining variations which may be observed in the procedure from time to time.

Implement Distant Noise Abatement Departure Procedure for Commercial Jet Aircraft as outlined in FAA Advisory Circular 91-53A Note: This procedure is already in use by TWA and SWA, the dominant air carriers at the airport.

APPROVED

Commercial jet aircraft to intercept final approach no closer than 4 nautical miles. Use of this procedure would enhance consistency along the arrival flight tracks and minimize short turn ins.

APPROVED . This procedure may not be strictly adhered to at all times. Weather or conflicting traffic may require variations in the procedure for safety reasons. Pilot technique may also be a factor in explaining variations which may be observed in the procedure from time to time.

Install additional navigational equipment. Installation of a precision approach for 30L and 12L LDA is recommended. The current LDA procedure requires the use of a step-down arrival (which is perceived by residents as noisier than a smooth descent) and has minima which do not allow the use of these procedures during many periods of adverse weather. Installation of the precision approach aids for 30L and 12L would provide arriving aircraft with electronic glide slope guidance and minimize the need for power adjustments on final approach.

APPROVED. Installation of the ground equipment for these procedures will require an additional environmental finding in accordance with the National Environmental Policy Act (NEPA).

III. Implement Two-Phased Daytime Departure Corridors

Phase I: Maintain current headings that align with corridors of 100, 120, 305, and 335 degrees, with turns at 2,500' MSL or 5 nautical miles, (whichever is sooner). This is a continuing measure from the 1987 NCP. In addition, use the VOR/DME which is programmed for installation in late 1996 or early 1997 to enhance the definition of noise abatement departure corridors to the extent possible.

APPROVED.

Phase II: Upon environmental approval, implement headings that align with corridors of 105, 120, 170, 285, 305, and 345 degrees, after reaching the middle marker with turns at 4,000' MSL or 3 nautical miles (Alternative C). During preparation of the NCP, community groups both to the east and west of the airport expressed an interest in having departing aircraft maintain their initial departure track for a greater distance prior to turning on course. This concept was discussed with representatives of the ATCT, and it was determined that in order to accomplish this goal without reducing the safety and efficiency of the airport, a third departure heading would be necessary. Three alternatives were studied, with alternative C as described above selected by the airport as its preferred alternative. Implementation of Alternative C will reduce housing units within the DNL 65 dB and greater contour from 7,158 to 6,606. Population exposed to noise exposure levels of greater than DNL 65 dB would be reduced from 15,204 under the current (baseline) condition to 14,505 under alternative C.

NO ACTION REQUIRED AT THIS TIME: This measure relates to flight procedures which are not required to be approved or disapproved within 180 days under Section 104(b) of the Aviation Safety and Noise Abatement Act of 1979, as amended, 49 USC 47504(b). An FAA determination on this measure is anticipated within 30 days.

5.1.2.**Airline notification.** The Airport will provide air carriers with scheduled service at STL information concerning the existing practices for full power maintenance runups and terminal pushbacks. The Airport will also encourage the use of the distant noise abatement departure procedure.

APPROVED. This measure is within the authority of the Airport Authority.

Remedial Strategy Recommendations (Vol II. Chapter 5, Pages 5-12 -- 5-13, NCP)

5.2.1Complete Land Acquisition Program. STLAA will continue the ongoing acquisition program with the additional areas outlined in Chapter 3 page 3-29 and Table 3.5-1 Priority will be given to the critical areas that are no longer viable and cannot provide service to residents.

Specific recommendations are as follows:

- Complete ongoing programs in Kinloch, East Kinloch, Southeast and Southwest Berkley, Ramona Hills, Bridgeton, Bridgeton Terrace, McNulty Manor, and Robertson.
- Acquire four mobile home parks that fall within the DNL 65 dB or greater contour (Airline, PEK,, Luxury Living, and Colonial Manor). Note: the mobile home parks are being acquired at lower noise exposure levels than other residential units because they cannot be effectively sound proofed.
- Acquire apartment complexes that fall within the previous acquisition areas (Kinloch public housing, Tiffany Towne, Cricklewood duplexes, and Bridgeton Terrace apartments).
- Acquire vacant properties zoned for residential use within the DNL 70 dB noise contour or within the ongoing acquisition areas..
- Acquire the 88 properties in Ferguson pursuant to the Ferguson/Cool Valley court settlement and airport implementation plan.

The acquisition plan, when completed, will eliminate non-compatible land uses from the DNL 70 and greater contour.

APPROVED. Note: Acquisition of vacant land is approved for noise purposes when it is necessary to prevent new, noncompatible development. In this case, that non-compatible development is highly likely because the land is near an urban area and is zoned for residential development. As a result of the zoning, local land use controls will not prevent residential development.

5.2.2Implement a Sound Insulation and Sales (Transaction) Assistance Program. A sound insulation and sales transaction assistance program would be implemented within the boundaries of the area delineated in Exhibit 3.5-2. The boundaries of the mitigation areas would change with the implementation of Alternative C. Upon environmental approval of Alternative C, the area delineated in Exhibit 3.5-3 would be used for the mitigation boundaries. If environmental approval is not received, the boundaries of the area delineated in Exhibit 3.5-2 would continue to be used.

APPROVED. Note: the sound insulation program will be required to meet the provisions of FAA Order 5100.38.A, paragraph 712, if Federal funding is to be used.

5.2.3.Develop Sound Insulation and Sales (Transaction) Assistance Procedures Manuals and Conduct a Test Program. Prior to initiating either the sound insulation or sales (transaction) assistance program, a test program will be undertaken by the Airport. Representative housing types will be selected from each community to participate in the test program. The test will determine the scope of the improvements needed to sound insulate a home to meet the 45 dB interior noise level requirements. The test program for the Sales (Transaction) Assistance

program will identify procedures and program administration techniques that are necessary to ensure that property values in the neighborhoods are not adversely impacted by the program.

APPROVED. Note: the sound insulation program will be required to meet the provisions of FAA Order 5100.38.A, paragraph 712, if Federal funding is to be used.

5.2.4. Implement a Limited Easement program. The airport proposes to purchase avigation easements from a limited number of residents located within the 1999 DNL 65 contour whose homes already meet the standards for noise level reduction (NLR), (a reduction of noise levels of DNL 25 dB from outside to inside) and which are not within the acquisition areas identified above.

APPROVED.

Land Use Management Strategy Recommendations (Vol II.Chapter 5, Pages 5-13 - 5-14, NCP)

5.3.1Implement Policy Measures including Comprehensive Planning and Discretionary Review. The Airport will encourage nearby communities to use these measures to ensure that incompatible uses do not continue to be developed within the areas exposed to significant levels of aircraft noise. The planning, development, and zoning departments of incorporated areas will be notified of development activities of the Airport and the changes in the noise contours so that their planning efforts will take aircraft noise impacts into consideration.

APPROVED. This preventative land use planning measure is within the authority of the local land use planning jurisdictions.

5.3.2Implement Regulatory Measures such as compatible use zoning/rezoning; environmental, height and hazard, and noise overlay zoning, and building codes. The Airport will encourage the various jurisdictions surrounding the airport to explore these measures as to their appropriateness for controlling incompatible land use development in noise-impacted areas.

APPROVED IN PART. The compatible use zoning, noise overlay, and building code provisions of this measure are approved. The height and hazard provision is **disapproved** for purposes of Part 150 because it is not related to noise compatibility. This disapproval for Part 150 purposes does not indicate FAA's position on this issue under the provisions of Part 77.

5.3.3.Use Advanced Land Acquisition, Where Necessary. Advanced land acquisition is where an airport acquires land to preclude future incompatible development. This measure is to be implemented by the Airport when there is no other course of action to ensure that incompatible residential uses do not continue to develop within the DNL 65 dB or greater contour.

APPROVED. Acquisition of vacant land is approved for noise purposes when it is necessary to prevent new, noncompatible development. In this case, that non-compatible development is highly likely because the land is near an urban area and is zoned for residential development. As a result of the zoning, local land use controls will not prevent residential development.

Program Management Measures (Vol II Chapter 5, Pages 5-14 -- 5-16, NCP)

5.4.1Aircraft Monitoring System. Automated systems that gather, maintain, summarize and report monitoring results are currently available, and the Airport wishes to upgrade its monitoring program to incorporate these enhancements in monitoring and report production. An integrated monitoring system which combines noise measurements and flight track surveying is recommended to assist the Airport and FAA ATCT personnel in the continued implementation of the operational strategies.

APPROVED. **NOTE: For reasons 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. The FAA notes that the STL NCP does not include such thresholds.**

5.4.2Community Coordination. Lambert Airport responds to aircraft noise complaints, supervises the aircraft noise monitoring system, and coordinates with surrounding communities. The airport intends to maintain or enhance community coordination via the following programs:

- The Airport will continue to address community aircraft noise concerns as identified by individuals or communities regarding operational mitigation measures and remedial land use measures, provide technical assistance to local jurisdictions for land use management measures that relate to aircraft noise, and provide community outreach through periodic news releases/newsletters.
- Neighborhood committees provide a forum for the Airport and the neighboring communities to exchange information and ideas on noise abatement. The Airport Neighborhood Committee will be established at Lambert to provide such a forum. The committee will work directly with the Airport and provide community input to the office on matters pertaining to on-Airport and off-Airport environmental mitigation programs and planning.

APPROVED.

5.4.3Noise Compatibility Program Update. Airport management will review and update the NCP and consider refinements and revisions when necessary. A complete plan update may be necessary in approximately five years to respond to changing conditions at the Airport, in the local area, and for the aviation industry.

APPROVED.