

# Part 150: Records of Approval

## Lincoln Airport, Lincoln, Nebraska

Approved on 6/7/04

### INTRODUCTION

The Lincoln Airport, Lincoln, Nebraska, Noise Compatibility Program (NCP) recommends a total of seventeen measures to improve the compatibility between aircraft operations and noise sensitive land uses in the area, including five elements to abate aircraft noise, eight to guide land development or improve current land uses, and four elements to manage the program. The airport sponsor, based on a 10-year planning period, developed the NCP.

The approvals listed herein include approvals of actions that the airport recommends be taken by the Federal Aviation Administration (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 decisions to implement the actions. Later decisions concerning possible implementation may be subject to applicable environmental or other procedures or requirements. Approval does not constitute a commitment by the FAA to financially assist in implementing the program, nor is it a determination that all measures covered by the program are eligible for grant-in-aid funding from the FAA. Eligibility for federal funding of measures that are determined in this Record of Approval to meet the approval criteria of 150.33 will be determined at the time the FAA receives an application for funding, using the criteria in the most current version of FAA Order 5100.38, Airport Improvement Program Handbook.

The program elements below summarize as closely as possible the airport operator's recommendations in the noise compatibility program and are cross-referenced to the program. The statements contained within the summarized program measures and before the indicated FAA approval, disapproval, or other determination do not represent the opinions or decisions of the FAA.

### 1 - NOISE ABATEMENT ELEMENT

#### **1. Continuation of Airport's existing run-up noise abatement procedures. (Pages 4-8 through 4-10, Exhibit 4B, pages 4-31 through 4-32, Exhibits 4F through 4H, page 6-3, and Exhibit 6A)**

**Description:** This measure recommends that the Airport Authority continue its run-up policy at the airport. The airport's current run-up policy, enacted in March 2002, requests that aircraft maintenance activity between the hours of 7:00 p.m. to 7:00 a.m. occur on the west side of the airport on the run-up pad located on Taxiway E between Runway 17R-35L and the west apron. Run-ups conducted from 7:00 a.m. to 7:00 p.m. are allowed on the east apron. Both of these locations are depicted on Exhibit 6A. This measure includes the placement of signs adjacent to the ramp indicating the time that aircraft are allowed to run-up at the east location, and indicating the maximum weight of aircraft allowed to use the ramp. Maintenance operators would be requested to keep detailed logs to help investigate complaints about run-ups and determine the success of the current policy.

**FAA Action: Approved, in part; disapproved in part for purposes of part 150.** The addition of a second run-up area, Site A, during daytime hours appears to be related to reducing the potential for run-up incursions and has not been documented to provide additional noise benefit. This portion of the recommendation does not meet part 150 approval criteria and is disapproved for that purpose. The FAA strongly encourages that this measure be pursued outside of the part 150 process to improve airport safety and efficiency. The portion of the measure relating to posting of signage and recording maintenance operations is approved. This would provide a means to determine the success of the current policy.

**2. Continuation of existing military aircraft training procedures and publication of these procedures within the Department of Defense's flight information publication AP/1, *Arca Planning – North and South America* as well as the IFR Supplement. (Pages 4-24 through 4-26, pages 6-3 through 6-5)**

**Description:** This measure recommends that the Airport Authority continue informal aircraft training procedures established August 16, 1996, in an agreement between the airport, FAA tower, and Offutt Air Force Base. The agreed-to procedures are used for local military aircraft as well as aircraft from Offutt Air Force Base (AFB). The Nebraska Air National Guard also has made efforts to develop a noise abatement procedure, outlined in their operations notes. The military utilizes AP/1 and the IFR supplement for publishing approach and departure procedures at various airports. It would be beneficial if the procedures were published within these guides, to allow transient pilots to lessen the impact on surrounding neighborhoods. Touch and go activity at Lincoln Airport is a source of noise complaint.

**FAA Action:** Approved as a voluntary measure only.

**3. Encourage the use of Advisory Circular 91-53A, *Noise Abatement Departure Procedures for Large Jets*. (Pages 4-11 and 4-12, Exhibit 4C, page 6-5, Appendix D)**

**Description:** This measure recommends that the Airport Authority actively encourage large jet operators to use the procedures outlined with Advisory Circular (AC) 91-53A, consistent with its existing policy. This AC provides for two standard thrust cutback procedures. One focuses on noise abatement near the airport (the close-in procedure), while the other abates noise further away from the airport (the distant procedure). The intent of the AC is to provide guidelines for aircraft operators to establish safe and effective procedures that are used at all airports across the country. A complete description of AC 91-53A is included in Appendix D. The Airport Authority should reflect this policy on pilot guides, signs, pilot mailings and the airport's website.

**FAA Action: Disapproved pending submission of additional information to make an informed analysis.** The NCP appears to recommend the Distant departure procedure (Exhibit 4C). This is one of three available to aircraft operators under AC 91-53A. However, the NCP fails to indicate specific noise benefits of this measure at Lincoln Airport, compared to other procedures that are, or may be, used at the airport.

**4. Encourage use of NBAA Noise Abatement Procedures. (Pages 4-11 and 4-12, Exhibit 4D, page 6-5, Appendix D)**

**Description:** This measure recommends that the Airport Authority actively encourage business jet operators to use the National Business Aviation Association (NBAA) Approach and Landing Procedures, or equivalent quiet-flying procedures developed by aircraft manufacturers. A complete description is found in Appendix D.

**FAA Action: Disapproved pending submission of additional information to make an informed analysis.** The NCP appears to recommend the Standard departure procedure.

However, the NCP fails to indicate specific noise benefits of this measure at Lincoln Airport, compared to other procedures that are, or may be, used at the airport.

**5. Promote use of AOPA Noise Awareness Steps by light single and twin-engine aircraft. (Page 6-6 and Appendix D)**

**Description:** This measure recommends that the Airport Authority actively encourage the use of Aircraft Owners and Pilots Association (AOPA) Noise Awareness Steps by light single and twin-engine aircraft. The AOPA encourages quiet and neighborly flying by distributing generalized noise abatement procedures for use by propeller aircraft. These “Noise Awareness Steps” have recommendations on how to fly the aircraft, as well as where to fly. These steps are listed in Appendix D.

**FAA Action: Approved as a voluntary measure only.** These procedures appear to apply to all aircraft at all times and are general “good-neighbor” guidance to pilots of these aircraft types.

## **2 – LAND USE MANGEMENT ELEMENT**

**1. Change the boundaries of the Airport Environs Noise District to encompass developing areas which receive military training overflight activity. (Pages 5-6 and 6-6 through 6-7, Exhibits 5B and 6C)**

**Description:** This measure recommends that the Airport Authority give consideration to expanding the existing boundaries of the Airport Environs Noise District to the west to capture the areas impacted by touch-and-go activity west of the airport. The current boundaries extend approximately four miles off the primary Runway 17R-35L. When this boundary was developed, the western-most areas contained within the boundary were primarily undeveloped and outside the city limits. As the city has grown, areas west of the existing boundary have begun to experience development pressures. Future land use plans depict residential development in the areas bordering the existing noise district. Flight track data indicates these areas experience a great deal of touch and go activity, primarily as a result of local and transient military training. The recommended boundaries are depicted on Exhibit 6C. Revision would require an amendment to the City of Lincoln's zoning ordinance.

**FAA Action: Approved.** This measure would improve the airport's ability to minimize impacts of touch and go operations on surrounding land uses. The federal government has no authority to control land uses; the local government has the authority to implement this measure.

**2. Update the General Plan to reflect the Airport Environs Noise District boundary. (Pages 5-8, 5-11 through 5-13 and page 6-7)**

**Description:** The City of Lincoln and Lancaster County comprehensive plan references the city's Airport Environs Noise District and Airport Zoning Regulations. This measure recommends that these jurisdictions include an exhibit depicting the boundaries of the various districts into the plan. Many individuals utilize comprehensive or general plans when considering purchasing property. Incorporating an exhibit depicting the areas impacted by airport operations into the General Plan would allow for further fair disclosure of the impact of the airport on its environs.

**FAA Action: Approved.** The federal government has no authority to control land use; the local government has the authority to implement this measure.

**3. Update the General Plan to reflect the 2002 noise contours prepared as part of this F.A.R. Part 150 Study. (Pages 5-3 through 5-9, page 6-7)**

**Description:** This measure recommends that the City of Lincoln and Lancaster County consider incorporating an exhibit within the Comprehensive Plan depicting the boundaries of the noise contours prepared as part of this F.A.R. Part 150 Study. The 2002 60, 65, 70, and 75 DNL noise contours are suggested for adoption because they represent the “worst case” scenario. This could be accomplished by amending the 2025 Lincoln and Lancaster County Comprehensive Plan.

**FAA Action: Approved.** The federal government has no authority to control land use; the local government has the authority to implement this measure.

**4. Modify the existing Airport Environs Noise District regulations to reflect the 2002 noise contours and incorporate the 60 DNL noise contour into the regulations. (Pages 5-3 through 5-9, pages 6-8 and 6-9, Table 6A, Appendix E)**

**Description:** Based on the military training activity at the airport and the size and shape of the new noise contours for Lincoln Airport, consideration should be given to modifying regulations within the Airport Environs Noise District. These changes primarily relate to the district boundary and the uses allowed within the various noise contours. Due to the similarity in shape of the previously prepared 65 DNL contour in the 1980 ANCLUC study and the 2002 60 DNL contour, it is recommended that the 60 DNL noise contour be incorporated into the Airport Environs Noise District. Changes in the fleet mix and a decrease in the noise levels make it reasonable to now utilize the 60 DNL noise contour. The proposed boundaries are depicted on Exhibit 6C. Exhibit 6D depicts the recommended boundaries of the various zones and Table 6A outlines a potential noise compatibility matrix that could be included within the modified Airport Environs Noise District. The recommended change to the regulations would ensure that noise-sensitive dwellings are sound insulated to minimize the impact of aircraft operations on residents. Avigation easements would be required prior to development to help ensure property owners are aware of the airport's impact. Additionally, the incorporation of some form of fair disclosure should be required. It is also recommended that the land uses allowed within the 2002 65 DNL noise contour be modified to not allow noise-sensitive development, such as residences, schools, churches and libraries within this contour. Additional supporting information is contained in Appendix E.

**FAA Action: Approved.** Prohibiting noise-sensitive development within the DNL 65 dB noise contour is consistent with Federal land use compatibility guidelines. The federal government has no authority to control land use; the local government has the authority to implement this measure.

**5. Incorporate into the Airport Environs Noise District regulations airport land use compatibility guidelines for review of development projects within the noise district. (Pages 5-8 and 5-9, pages 6-12 and 6-13, Table 6A)**

**Description:** This measure would apply throughout the Airport Environs Noise District. It recommends adoption of special project review criteria, specifically addressing airport land use compatibility needs. This will provide guidance to land use decision-makers as they review project proposals, and would utilize Table 6A to determine sensitivity of land uses, advise airport management of proposed development within the 2002 60 DNL noise contour, recommend locating noise-sensitive facilities outside of the 60 DNL and away from primary aircraft traffic patterns if possible, and other program elements (pages 6-12 and 6-13).

**FAA Action: Approved.** Recommended land use limitations are consistent with Federal land use compatibility guidelines. The federal government has no authority to control land use; the local government has the authority to implement this measure.

**6. Maintain compatibly zoned areas within the 2002 60 DNL noise contour when possible. (Pages 5-10 and 6-13)**

**Description:** The majority of the area within the 2002 60 DNL noise contour is currently zoned for compatible land uses. When possible, the areas should be maintained compatibly.

**FAA Action: Approved.** The federal government has no authority to control land use; the local government has the authority to implement this measure.

**7. Lobby state legislature to modify fair disclosure regulation to incorporate clauses regarding the impacts of aircraft operation on property. (Pages 5-19 through 5-21, pages 6-13 and 6-14, Appendix D)**

**Description:** This measure recommends that the Airport Authority lobby the state legislature to clarify or revise the *Nebraska Real Estate Commission Seller Property Condition Disclosure Statement* to enhance the fair disclosure of aircraft noise impacts.

**FAA Action: Approved.** The federal government has no authority to control land use; the local government has the authority to implement this measure.

**8. Utilize fair disclosure covenants and signage in new developments within the Airport Environs Noise District to notify prospective landowners of the presence of aircraft operations. (Pages 5-19 through 5-21, page 6-14)**

**Description:** This measure recommends that a fair disclosure covenant be required prior to the approval of a subdivision plat. This would have an effect on a large number of potential property owners. Use of signage within development areas would benefit prospective buyers about the impact of the airport in areas within the Airport Environs Noise District. New developers would be required to post the noise contours within the sales office to help ensure property owners are aware of the noise produced by the airport prior to purchasing property in the District. The current subdivision regulations and plat approval process would need to be amended.

**FAA Action: Approved.** The federal government has no authority to control land use; the local government has the authority to implement this measure.

### **3 – PROGRAM MANGEMENT ELEMENT**

**1. Establish a Geographic Information System (GIS) for receiving, analyzing, and responding to noise complaints; publishing the prepared noise contours; and community outreach. (Page 6-15)**

**Description:** This measure recommends that the Airport Authority update the current noise complaint monitoring system. The Airport Authority would develop a computerized GIS system to map the noise complaints to better identify geographic patterns and trends that emerge which may deserve special attention. The system could also be utilized to track and publish aviation easements in the Airport vicinity. If the geographic pattern of complains indicate that consistent problems exist, the airport management would investigate and seek corrective action if possible.

The GIS system could also be utilized to publish the airport's noise contours on its Web Site; thereby, allowing for an additional level of fair disclosure for those who choose to locate within the areas impacted by airport operations.

**FAA Action: Approved.** For reasons of aviation safety, this approval does not extend to use of the monitoring equipment for enforcement purposes by in situ measurement of any present noise thresholds.

**2. Prepare military and civilian pilot guides to make transient pilots aware of the noise abatement procedures that have been established for military training activities. (Page 6-16)**

**Description:** This measure recommends that the Airport Authority prepare pilot guides describing civilian and military noise abatement information for wide distribution to pilots utilizing the Lincoln Airport. The guide should include an aerial photo showing the airport and the surrounding area, pointing out noise sensitive land uses, and preferred noise abatement procedures.

**FAA Action: Approved.** This measure is associated with Noise Abatement Measure 2 contained in this record of approval. Final language for inclusion in publications must be coordinated with FAA before publication.

**3. Review Noise Compatibility Program implementation. (Page 6-16)**

**Description:** This measure recommends that airport management monitor compliance with the Noise Abatement Element. This will involve checking periodically with airport users and the local Tower Manger regarding compliance with the informal military and civilian procedures. Additionally, the run-up policy and noise complaint information should be reviewed periodically to evaluate the success of the program. It may be necessary to arrange for periodic noise monitoring, modeling, or flight track analysis to study issues that may arise in the future. The Airport Authority will also maintain communications with the Lincoln and Lancaster County Planning Department to follow progress in implementing relevant land use measures contained in the NCP. When needed, consultants will be used to assist in preparing and adopting revisions to the city's zoning ordinance to ensure compatible development within the Environs.

**FAA Action: Approved.** This measure is associated with, and will monitor success of, other measures contained in the NCP and approved in this record of approval.

**4. Update Noise Exposure Maps and Noise Compatibility Program. (Page 6-17)**

**Description:** This measure recommends that the airport management review the NCP and consider revisions and refinements as necessary. A complete plan update will be needed periodically to respond to changing conditions in the local area and in the aviation industry. This can be anticipated every five to ten years, or sooner if major changes occur.

**FAA Action: Approved.**