



Memorandum

US Department of Transportation
Federal Aviation Administration

Subject: ACTION: Recommendation for
Approval of the Norwood (Massachusetts)
Memorial Airport Noise Compatibility
Program

Date: February 4, 1994

From: Manager, Airports Division, ANE-600

Reply to
Attn. of:

To: Assistant Administrator for Airports,
ARP-1

On September 20, 1993, a notice was published in the **Federal Register** announcing our determination of compliance for the noise exposure maps for Norwood Memorial Airport, Norwood, Massachusetts, under Section 103 (a) of the Aviation Safety and Noise Abatement Act of 1979. Coincident with that determination, we began the formal 180-day review period for Norwood's proposed noise compatibility program, under provisions of Section 104 (b) of the Act. The last date for such approval or disapproval is March 2, 1994.

We have evaluated the proposed noise compatibility program and have concluded that it is consistent with the intent of the Act and that it meets the standards of Federal Aviation Regulation (FAR) Part 150.

The documentation submitted by Norwood Airport Commission was reviewed by the Airports, Air Traffic, Airway Facilities, and Flight Standards divisions and by the Assistant Chief Counsel.

The **Federal Register** comment period closed October 22, 1993. No comments were received.

Each proposed action in Norwood's noise compatibility program was also reviewed and evaluated on the basis of effectiveness and potential conflict with federal policies and prerogatives. These include safe and efficient use of the nation's airspace and undue burden on interstate commerce.

Our approval or disapproval recommendations on each proposed action are described in the attached Record of Approval. Each proposed action is described in detail in the "Noise Compatibility Program" section of the study.

Vincent A. Scarano
Attachment

Concur	X		
Nonconcur		Assistant Administrator for Policy, Planning, and International Aviation, API-1	2/25/94
Concur			
Nonconcur		Chief Counsel, AGC-1	3/2/94
Approved	X		
Disapproved		Assistant Administrator for Airports, ARP-1	3/2/94

Record of Approval

Norwood Memorial Airport Norwood, Massachusetts

Noise Compatibility Program

1.0 Introduction

The Norwood (Massachusetts) Memorial Airport Commission sponsored an Airport Noise Compatibility Planning study under a Federal Aviation Administration (FAA) grant, in compliance with Federal Aviation Regulations (FAR), Part 150. The Noise Compatibility Program (NCP) and its associated Noise Exposure Maps (NEM) were developed concurrently and submitted to FAA for review and approval on July 13, 1993. The NEM was determined to be in compliance on September 3, 1993. The determination was announced in the **Federal Register** on September 20, 1993.

The Part 150 Study was closely monitored by an advisory committee which represented the Town of Norwood and other area towns, airport users, and community residents. A series of advisory committee meetings was held, with the airport's consultant presenting material and findings. Three public information meetings were held. The consultant addressed comments at all of these meetings, and subsequent written comments as well.

The study focused on defining an optimum set of noise and land use mitigation measures to improve compatibility between airport operations and community land use, presently and in the future.

The measures studied during development of the program are described in detail in the "Noise Compatibility Program" section of the study, Chapters 3,4,5, and 6. Chapter 3 analyzes alternative operational measures. Chapter 4 analyzes promising land use control measures. Chapter 5 describes administrative measures and Chapter 6 presents in table form the airport operator's final program measures and includes a proposed implementation plan. 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 recommendations and before the indicated FAA approval, disapproval, or other determinations do not represent the opinions or decisions of the FAA.

The approvals which follow include actions which the Norwood Airport Commission recommends be taken by 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 of these actions may be subject to applicable environmental or other procedures or requirements.

2.0 PROGRAM ELEMENTS. The program elements are presented in this ROA in the same order as they are presented in the Implementation Plan, Chapter 6, beginning on page 6-2.

2.1 Noise Abatement Elements

2.1.1 Flight Track Changes: VFR, 1FR and Helicopter (sections 3.1.1, 3.3.1, Appendix D, and June 1993 Appendix J). VFR fixed-wing departures would fly recommended headings rather than utilizing landmarks which are specified in the existing procedures. This would achieve better compliance with the desired flight tracks along highways and open space. The recommended procedures for Runways 17, 28 and 35 would be, respectively, maintain runway heading until reaching the divided highway (1-95); maintain runway heading until reaching the end of the runway, then turn to a heading of 230 degrees until reaching 1,000 feet mean sea level (MSL); and maintain runway heading until the end of the runway, then turn to a heading of 360 degrees until reaching 1,000 MSL. IFR departures from Runway 35 would fly runway heading until leaving 700 feet MSL, then turn left to a heading of 330 degrees. Recommended helicopter procedures would overfly highway, industrial, and open space land uses.

Approved as a voluntary measure, when air traffic and weather conditions permit. In combination with measure 2.1.3., below, implementation of these procedural changes to existing procedures would remove approximately 21 residences (average occupancy rate of 2.6 persons) from within the existing 55 day-night average sound level (DNL) contour, a level of significance adopted as a measure of residential incompatibility by the local community.

2.1.2 Preferential Runway Program (sections 3.1.2, 3.4, Appendix D, and June 1993, Appendix J). The present runway priority system would be revised, with the order of priority as follows: First and second: arrive 28, depart 17 or arrive 17, depart 17. Third: arrive 35, depart 10. Fourth: arrive 35, depart 35. Fifth: arrive 10, depart 10. Sixth: arrive 28, depart 28.

Approved as a voluntary measure, when air traffic and weather conditions permit. This measure, in combination with measure 2.1.3., below, would remove approximately 54 residences (average occupancy rate of 2.6 persons) from within the 55 DNL contour.

2.1.3 Low-noise Flight Procedures (sections 3.1.7, 3.6., and Appendix H). The

NBAA standard departure procedure and VFR and IFR arrival procedures would be followed by operators of multi-engine aircraft, whenever possible. Regular users of the airport would file the procedure they would normally use with the airport manager.

Approved in Part The use of NBAA or manufacturer's noise abatement procedures are **approved**. The use of other procedures not specifically approved by the FAA as safe are **disapproved** in this ROA (see specifically measure D, appendix H). Implementation of the approved portions of this measure would reduce sound exposure levels to close-in residences. This benefit is reflected in the 55 DNL contour reduction of the above two measures.

2.1.4 Calm wind Runway Assignment After Tower Closure (section 3.4). Consistent with the above preferential runway priorities, the calm-wind arrival runway would be Runway 17 during hours when the air traffic control tower is closed.

Approved as a voluntary measure. This measure would reduce sound exposure levels to residential land use. The benefit from preferential runway use described above reflects this nighttime arrival preference.

2.1.5 Restriction of Touch-and-Go Operating Times (section 3.3.2). This measure would extend the existing nighttime prohibition of touch-and-go operations from summertime to year-round.

Disapproved for lack of sufficient information from which to make an informed analysis. There are no data or analyses to support the costs to airport users or benefits in noise reduction to the community. This proposal would have the effect of a mandatory restriction on nighttime training activity.

Should the airport operator intend to pursue this proposal after further analysis, the measure would need to also satisfy the appropriate requirements of 14 CFR Part 161, Notice and Approval of Airport Noise and Access Restrictions.

2.1.6 Amendment of Existing Noise Limit Restriction (section 3.5., Appendix G). The existing noise rule would be amended to include sideline noise limits and a new lower noise limit would be established for nighttime operations.

Disapproved for lack of sufficient information from which to make an informed analysis. The NCP states that amending the airport's existing noise rule to include a sideline limit would affect very few aircraft operations. This presumably has little or no effect on reducing residential incompatibility within the 55 DNL contour. In the NCP, benefits are expressed in terms of lowering maximum noise levels produced by each aircraft event, by about 10 dB. There is no quantification of reduction in the numbers of residences or population impacted. Based on information provided in the study that a new lower noise limit for nighttime operations would restrict no based aircraft and no known itinerant aircraft, this provision of the restriction is not reasonably consistent with achieving the goal of reducing incompatible land use.

Should the airport operator intend to pursue this proposal after further analysis, the proposal would need to also satisfy the appropriate requirements of 14 CFR Part 161.

2.1.7 Aircraft Maintenance Run-up Area and Noise Barrier (section 3.71.). This measure would relocate maintenance run-ups to a remote site on the airport that would eventually be surrounded by a noise barrier.

Approved in part. Given the layout of the airport with the preponderance of residences to the west, the measure has the potential to reduce ground noise exposure. That part of the measure which would relocate run-ups to a remote site is **approved**. Any noise barrier is **disapproved for lack of sufficient information from which to make an informed analysis** because the study presents no data supporting that such a barrier would be warranted.

2.2 Administrative Elements

2.2.1 Establishment of Landing Fees (section 5.8). Landing fees would be established for the airport, with aircraft identity data and receipts potentially used to administer and fund the noise abatement program.

Disapproved for Purposes of Part 150 because potential landing fees, as described in the airport operator's noise compatibility program, would primarily serve purposes other than noise mitigation. Part 150 is not the appropriate program in which to address such fees. This disapproval for purposes of Part 150 does not affect the airport operator's ability to establish a fee and rental structure consistent with its Federal grant obligations "...for the facilities and services being provided the airport users which will make the airport as self-sustaining as possible.... " This disapproval also does not affect the airport operator's legitimate authority to use landing fees for administrative and funding purposes, including those related to measures approved in its noise compatibility program, consistent with its Federal grant obligations and with local requirements.

2.2.2. Monitor total noise change and maintain database of aircraft (Noise Index Calculation Procedure) (section 5.4) . The airport would prepare and update an airport noise index to monitor the change of quarterly average day-night weighted sound exposure (DNSE) resulting from departure operations.

Approved. The FAA has no objection to local use of this nonstandard screening procedure. The DNSE methodology has not been submitted to, approved by, or otherwise endorsed by the FAA.

2.2.3. Airport noise signing (section 5.5). The airport would use signs readable to pilots to inform or remind them of the Norwood Noise Abatement Program.

Approved. The content and location of airfield signs are subject to specific approval by appropriate FAA officials outside of the Part 150 process and are not approved in advance by this action.

2.2.4. Noise brochure (section 5.7). The airport would prepare a noise brochure for itinerant pilots.

Approved.

2.2.5. Complaint response program (section 5.3). The airport manager would continue to handle complaints. The record of complaints would be computerized to determine trends and evaluate program effectiveness.

Approved.

2.2.6. Local pilot education (section 5.6., 5.6.1.). Pilots and the local public would be provided noise abatement information.

Approved.

2.2.7. National pilot education (section 5.6. 5.6.2). It is recommended that the FAA undertake an analysis of its pilot certification and education programs with respect to noise abatement at general aviation airports and develop a program to insert noise awareness throughout its training actions and documents.

Disapproved for purposes of Part 150. This measure is inconsistent with Part 150, which provides only for local, airport-specific program measures. The FAA is, however, separately pursuing development of pilot educational materials that include information to pilots regarding noise abatement.

2.2.8. Permanent noise advisory committee (section 5.1). It is recommended that the Commission formally continue a noise advisory committee to continue the process that has functioned throughout the Part 150 study.

Approved.

2.2.9. Annual report on noise (section 5.2). Preparation, review, and dissemination of an annual report on noise abatement is recommended. The report would be prepared by the airport manager for ultimate distribution to the public, airport users, and interested organizations.

Approved.

2.2.10. Maintain noise exposure map (Chapter 6, Table 6-1, page 6-3). Update the noise exposure map every 5 years to stay abreast with change and update future forecasts.

Approved.

2.2.11. Enforcement of airport noise regulation (section 5.9 and Appendix H). The airport manager will advise itinerant aircraft operators whether its aircraft violates the airport's noise levels and will issue a warning that a repetition will result in a violation being filed with the appropriate authority and subject the operator to a fine in accordance with the following schedule: \$100 for second violation, \$200 for third violation, and \$300 for the fourth and subsequent violations.

Disapproved for lack of sufficient information from which to make an informed analysis. The FAA notes that the airport operator has submitted only its fine structure for FAA action under Part 150. The FAA cannot approve the measure because the documentation does not contain an analysis of these fines which would satisfy approval standards prescribed in Part 150.

The FAA's lack of action on other aspects of the revisions to the noise abatement regulation which were not submitted to the FAA for action under Part 150 does not confer approval under that Part.

2.3 Land Use Elements

2.3.1 Within the Town of Norwood's Comprehensive Plan and Zoning, Consider Recording with the Registry of Deeds the Area of Noise Impacts (section 4.7). Every deed within the noise impact area would potentially be noticed regarding its location within a particular noise contour.

Approved. Almost all developable land within the 55 DNL contour has been developed. This measure could provide notice of aircraft noise to affected or potential homeowners.

2.3.2 Within the Town of Norwood's Comprehensive Plan and Zoning, Consider Creating an Airport Noise Overlay Zoning District and Allow Noise-sensitive Uses Only by Special Permit (section 4.7).

Approved. Land uses within the district would be subject to administrative review.