



U.S. Department of Transportation
Federal Aviation Administration

Memorandum

Subject: ACTION: Recommendation for Approval of the Westfield-Barnes Airport, Westfield, Massachusetts Noise Compatibility Program

Date: October 1, 1990

Reply to
Attn. of:

From: Manager, Airports Division, ANE-600

To: Assistant Administrator for Airports, ARP-1

On May 4, 1990, a notice was published in the Federal Register announcing our determination of compliance for the noise exposure maps for Westfield-Barnes Airport, Westfield, 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 Westfield's proposed noise compatibility program, under provisions of Section 104 (a) of the Act. The program must be approved or disapproved by the Federal Aviation Administration (FAA) within 180 days or it shall be considered approved as provided for in Section 104 (b) of the Act. The last date for such approval or disapproval is October 31, 1990.

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 Regulations (FAR) Part 150.

The documentation submitted by the City of Westfield was reviewed by the Airports, Air Traffic, Airway Facilities, and Flight Standards divisions, and by the Assistant Chief Counsel.

The Federal Register public comment period closed July 3, 1990. No comments were received.

Each proposed action in Westfield'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 Volume 2: Noise Compatibility Program.

/S/

Vincent A. Scarano

Attachment

Concur
Nonconcur

/S/

Assistant Administrator for Policy Planning, and International Aviation, API-1

Date:
10/22/90

Concur
Nonconcur

/S/

Chief Counsel, AGC-1

Date:
10/26/90

Approved
Disapproved

/S/

Assistant Administrator for Airports

Date:
10/26/1990

Record of Approval

Westfield-Barnes Airport
Westfield, Massachusetts

Noise Compatibility Program

I. Introduction

The City of Westfield, Massachusetts 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 April 25, 1990. The NEM was determined to be in compliance on May 4, 1990. The determination was announced in the Federal Register on May 24, 1990.

The part 150 Study was closely monitored by a Technical Advisory Committee, which represented the City of Westfield, regional planning agency, state aeronautics agency, Air National Guard, other airport users, and community residents. A series of Technical

Advisory Committee meetings were held, with the consultant presenting material and findings. Two 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 resultant program is described in detail in Volume 2: Noise Compatibility Program, Sections 3, 4, and 5. Section 3 analyzes promising noise abatement alternatives, Section 4 evaluates land use alternatives, and Section 5 provides implementation details.

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 that the City of Westfield 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.

II. Program Elements

A. Noise Abatement Elements

1. Preferential Runway System (Sections 3.2.1 and 5.3.1 A.)

A formal preferential runway system would favor Runway 02 for arrivals and departures during calm winds or crosswinds of 10 knots or less.

Approved. This measure would result in more aircraft departures to the north over less intensely developed residential land. Approximately 59 homes to the south of the airport would be removed from the 65 DNL contour. FAA's approval for noise abatement purposes does not extend to the installation of a full ILS on Runway 02, which is mentioned as a way of increasing the utility of the runway for arrivals (ILS approaches are currently conducted to Runway 20), nor to the construction of a parallel taxiway on the east side of Runway 02-20. While these facilities would act as an incentive to increase the use of Runway 02 for arrivals and departures, the benefit in noise abatement can be achieved without them. Most of the benefit would be operations.

2. Modification of Aircraft Departure Tracks (Sections 3.2.2 and 5.3.1 B.)

This measure would specify turns after departure until reaching specified altitudes for VFR aircraft departing any of the four runways and for helicopters.

Approved. An additional nine residences above those mitigated with the preferential runway system would be removed from the 65 DNL contour. Existing departure procedures would not be altered significantly.

3. Full Nighttime Bidirectional Runway Use (Section 3.2.3 and 5.3.1 C.)

This measure proposes to maximize arrivals from the north between 10:00 p.m. and 7:00 a.m. Aircraft would arrive on Runway 20 and depart on Runway 02. The procedure would be utilized during calm winds and in the absence of traffic conflicts.

Approved in part; disapproved in part. That portion of the measure that would occur during hours when the air traffic control tower is open is approved. That portion of the measure that would occur when the tower is closed is disapproved. In the absence of positive air traffic control, the establishment of a formal procedure involving opposite-direction operations cannot assure flight safety. The proposal does not cover how the airport would ensure that traffic conflicts would not exist. Since the primary nighttime user is based on the airport, and effective alternative, outside the confines of Part 150 recommendation to FAA, would be an informal request for bidirectional runway use to the operator, whose pilots can determine whether the operation can be safely conducted, given the circumstances present at the time. The benefit in noise reduction would be similar.

4. Addition of IFR Departures to Modified Tracks (Sections 3.2.4 and 5.3.1 D.)

VFR tracks described in measure 2 above were modified to provide for IFR departure requirements.

Approved. Four additional residences are removed from the 65 DNL contour. No significant operational impact is anticipated.

5. Construction of a Noise Barrier South of the Threshold to Runway 02. (Section 5.3.1 E.)

This measure would reduce single-event noise levels from aircraft departure runway, initial departure roll and final rollout, the latter from Runway 20. A 28 foot high and 1,400 foot long barrier would reduce single-event noise by 5 to 10 dBA.

Disapproved pending submission of additional information.

Detailed analysis needs to be conducted following implementation of measure 1 above. Additional evaluation is needed in the areas of computer analysis to determine height and length, ambient noise levels from the nearby Massachusetts Turnpike, obstruction clearance requirements, and potential electromagnetic interference from a potential Runway 02 MLS approach.

6. Nighttime Noise-Based Surcharge and Restriction of Nighttime Training Activity. (Sections 5.3.1 F and 5.4.2 F.)

This measure proposed two airport use restrictions. The first would prohibit aircraft with noise levels (FAA Advisory Circular 36-3) greater than 80 dBA for takeoff and 85 dBA for landing, between the hours of 10:00 p.m. and 7:00 a.m. A varying noise-based

surcharge would be assessed aircraft which meet and do not meet these levels. The second measure would prohibit training activity between 10:00 p.m. and 7:00 a.m.

Disapproved for lack of sufficient information with which to make an informed analysis under Part 150. The Noise Compatibility Program does not quantify the benefits in reduction in noise versus the cost in terms of potential impact on interstate commerce and unjust discrimination affecting certain users of the airport. The NCP needs to thoroughly explain why the proposed noise levels are appropriate to Barnes and how the noise surcharges were derived. To some extent, the airport has already achieved informal agreements involving voluntary user restrictions on training activity and nighttime use.

B. Ongoing Implementation, Monitoring, Review, and Evaluation Elements

7. Regular Monitoring of Runway Use and Flight Tracks (Section 5.3.2 A).

A time-coded, voice-activated tape recorder would be used to determine aircraft identification, type of operation, and runway user information, for operations conducted when the tower is closed. The equipment would be used to monitor runway use and flight tracks flown.

Approved. The measure would facilitate implementation of measures 1 through 4 above.

8. Periodic Evaluation of Noise Exposure. (Section 5.3.2 B.)

The noise exposure map would be updated when average day-night sound level differs from that forecast. In the absence of this difference, the study would be updated five years after program approval.

Approved. The study would be updated in accordance with Part 150.

9. Noise Abatement Committee. (Section 5.3.2 C.)

The City of Westfield would initiate approximately quarterly continuing meetings of a Noise Abatement Committee. NCP progress would be discussed at the meetings.

Approved. Continuation of a Noise Abatement Committee will assist in implementation and evaluation of the NCP.

C. Land Use Elements

10. Soundproofing/Climate-Control Program. (Sections 6.1.1, 4.2.1, and 4.3.)

Implementation of noise abatement elements would leave approximately three residences within an incompatible 65 DNL contour. A voluntary soundproofing program is proposed as a remedial measure, following a detailed post-NCP-implementation, noise measurement site survey to validate the need for soundproofing.

Approved. This approval assumes that a noise measurement site survey validates the need for soundproofing.

11. Easement Acquisition (Remedial). (Section 6.1.2.)

The Airport Commission would attempt to obtain aviation easements from three residences within the 65 DNL contour and future commercial or industrial development located within incompatible noise contours (Section 6.2).

Approved. A voluntary easement acquisition program, in conjunction with other remedial land use measures, such as soundproofing, would assist in maintaining compatible land use.

12. Airport Zoning Overlay District. (Section 6.2.1 and Appendix D).

An Airport Compatibility Overlay Zone is proposed as part of a Northside Rezoning Ordinance. Noise contours from the Noise Compatibility Planning study would be applied to land use boundaries (Appendix D). Future residential development would be prohibited within the 65 DNL contour area. Easements would be required for new incompatible development other than residential within the 65-75 DNL, and new development in conceptualized 65, 70, and 75 contour areas would be required to attain noise level reduction factors in accordance with Appendix A of Part 150. Noise disclosure notices would be required for new residential development within a conceptualized 60 DNL contour and for any residential and other real estate transactions in conceptualized 65, 70, and 75 DNL contour areas.

Approved. The provisions of this measure deal comprehensively with existing and future land use compatibility.

13. Environmental Review. (Section 6.2.2.)

Environmental review by local land use boards would be required for new development within the 65, 70, and 75 DNL contour areas. Development plans and mitigation, including soundproofing and siting orientation considerations, would be required prior to development approval.

Approved. This measure would integrate aircraft noise abatement considerations into the local land use approval process.

14. Easement Acquisition (Preventive). (Section 6.2.3.)

The Airport Commission would obtain easements for all new development proposed within the conceptualized 65, 70, and 75 DNL contour areas. The easements would include the right to cause noise and the right to restrict use of the surface to uses compatible with Part 150.

Approved. Like the remedial easement acquisition measure proposed above, this measure would assist in maintaining compatible land uses by preventing incompatible development.

15. Real Estate Disclosure. (Section 6.2.4.)

A disclosure notice would make buyers or lessors aware of aircraft noise considerations. A Zoning Board of Appeals special permit would be required for real estate transactions within the conceptualized 65, 70, and 75 DNL contour areas (Appendices D and E).

Approved. Real estate disclosure is an effective means of notice of aircraft noise.

16. Voluntary Undeveloped Land Acquisitions. (Section 6.2.5.)

This measure would be instituted by the Airport Commission to eliminate long-term incompatibility of residential uses subject to 65 DNL. Undeveloped land zoned for non-compatible use would be voluntarily acquired in fee simple. The provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act would apply.

Approved. The Airport Commission would be provided control over otherwise potentially incompatible land use. FAA's decision to fund such purchases would require that the land be the subject of imminent incompatible development.