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Memorandum

US Department of Transportation Federal Aviation Administration

Subject: <u>ACTION</u>: Recommendation for Approval of the Nashua Municipal Airport - Boire Field, Nashua, New Hampshire Noise

Compatibility Program

Date: August 9, 1990

From: Manager, Airports Division, ANE-600 Reply to Attn. of:

To: Assistant Administrator for Airports, ARP-1

On May 24,1990, a notice was published in the **Federal Register** announcing our determination of compliance for the noise exposure maps for Nashua Municipal Airport - Boire Field, Nashua, New Hampshire, 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 Nashua's proposed noise compatibility program, under the provisions of Section I04(a) of the Act. The program must be approved or disapproved by 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 Part 150.

The documentation submitted by the Nashua Airport Authority 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 Nashua'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**.

Vincent A. Scarano

Attachment

Concur X

Nonconcur Assistant Administrator for Policy, Planning, and

International Aviation, API-1

10/18/90

Concur X

Nonconcur Chief Counsel, AGC-1

10/30/90

Approved X

Disapproved Assistant Administrator for Airports, ARP-1

10/30/90

Record of Approval

Nashua Municipal Airport - Boire Field Nashua, NH

Noise Compatibility Program

I. Introduction

The Nashua Airport Authority, Nashua, New Hampshire 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 3, 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 Planning Advisory Committee, which represented the Nashua Airport Authority, City of Nashua, other affected municipalities, New Hampshire Department of Transportation (Aeronautics Division), Midwest Air Traffic Control, regional planning agency, fixed-based operators, airport users, and community residents. A series of five Planning Advisory Committee meetings were held, with the consultant presenting material and findings. Four 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 the **Noise Compatibility Plan**, Chapters 4 and 5. Chapter 4 evaluates potential noise abatement measures and Chapter 5 provides details of recommended measures. Table 5D on Page 5-19 summarizes the program.

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 am before the indicated FAA approval, disapproval, or other determination do not represent the opinions or decisions of the FAA.

The approvals which follow include actions that the Nashua Airport Authority 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 Plan

1. Continue Present Runway Use Program. (Pages 4-4, 4-13, 5-2, and D-2.)

Under an informal preferential runway use program, Runway 32 is used approximately 74 percent of the time. Departures overfly less noise-sensitive wetlands to the northwest of the airport. High density residential areas to the east of the airport are :impacted less.

Approved. Continuation of this practice provides a benefit in less contour area exposure to residential areas within the 55 DNL contour.

2. **Designation of Runway 32 as the VFR Calmwind Runway**. (Pages 4-4, 4-14, 5-3, and D-2.)

In practice, Runway 32 is utilized as the calmwind runway. By wind data, it could be used approximately 84 percent of the time, as opposed to approximately 74 percent of the time.

Approved. In conjunction with the first measure above, this element produces a slight reduction in the 55 DNL contour over residential areas to the east of the airport.

3. **Departure Turns from Runway 14**. (Pages 4-14 and 5-3.)

Under VFR conditions, traffic would turn to 190 degrees and follow the turnpike south until leaving 2,000 feet above mean sea level (MSL) or until the West Hollis/Kingsley Turnpike interchange before turning on course. Under IFR conditions, traffic would climb on runway heading to 1,000 feet MSL before turning on course.

Approved. The 55 DNL contour to the southeast would be reduced and traffic would be routed over a noise compatible corridor.

4. Continue Practice of Runway 32 Departures Flying Runway Heading. (Pages 5-4 and D-2.)

Runway 32 departures presently fly runway heading until leaving 1,000 feet MSL.

Approved. This practice responds to noise complaints from two residential areas. Single-event overflights of these areas are fewer than without the practice.

5. **Construct Noise Berm**. (Pages 4-12, 4-16, 5-4, and 2-9 of Volume 1.)

A 1,000 foot long, 6-10 foot-high, earthen noise berm would be constructed on airport property along Pine Hill Road.

Disapproved for lack of Sufficient Information. This measure is designed to produce a 3-9 dBA level reduction from aircraft ground noise. Since the CV-580 is no longer a significant contributor to ground noise in the Lear Drive area and a separate mitigation measure (no. 6) addresses

ground runups from other aircraft additional monitoring on Lear Drive and sound level reduction analysis are needed to justify the berm. It should be noted that the landscaping improvements associated with the berm would probably not be eligible for federal funding.

6. Restrict Runups to Runway 14 Holding Apron. (Pages 5-6 and 2-9 of Volume 1.)

Maintenance runups would be conducted on the Runway 14 holding apron, with aircraft oriented to 140 or 320 degrees. Maintenance runups between 10:00 p.m. and 7:00 a.m., would be prohibited.

Approved. This measure addresses noise complaints by reducing ground-generated noise, primarily along Pine Hill road.

7. Endorse Runway Construction Recommended in the Airport Master Plan. (Page 4-15, Exhibit 4-E, and Pages 5-6 and 5-7).

The airport master plan proposes construction of a new 3,200-foot general aviation runway on the basis of capacity enhancement and airport operations. The NCP indicates the use of this new runway would provide secondary noise benefits by keeping the pattern to the north, reducing overflights of the Broad Acres area. The NCP does not recommend that the runway be constructed for noise abatement purposes.

Approved. As an endorsement of an airfield development project in recognition of some slight future accompanying noise mitigation benefits. The runway construction itself is disapproved for purposes of Part 150 because its purpose and justification reside in its capacity enhancement role.

- B. Land Use Management Plan
- 8. Retain Existing Commercial and Industrial Zoning Within the 55 DNL Contour. (Page 5-9.)

The City of Nashua and Town of Hollis should retain existing compatible use zoning in the airport environs and resist efforts to introduce additional residential development into noise-impacted areas.

Approved. This measure would continue to provide for a large area of compatible land use to the northwest of the airport.

9. Adopt the Part 150 Noise Compatibility Planning Study as a Comprehensive Plan Element or Planning Guideline. (Pages 4-35 and 5-10.)

The City of Nashua and Town of Hollis should adopt the recommendations of the Part 150 Study as part of their land use comprehensive planning or as a general land use planning guideline.

Approved. This measure would help ensure compatible land use in the airport environs.

10. Adopt Guidelines for Discretionary Review of Development Projects. (Pages 4-37, 5-10, and D-4.)

Nashua and Hollis should establish informal guidelines for Planning boards, zoning boards of appeal, planning staffs, and local governing bodies. The guidelines would address the impact of airport noise on community development proposals and applications for rezoning variances and conditional uses. The guidelines would apply within the 55 DNL contour, based on the 1998 Noise Compatibility Plan.

Approved. This measure would help ensure that aircraft noise considerations are integrated into land use decision-making.

11. Seek Donation of Noise and Aviation Easements Within the Runway 14 Approach Area. (Page 5-11.)

Although the potential noise impacts in the approach area are not sever enough to justify purchasing easements, voluntary donation should be explored. this is particularly applicable to large tracts of land where a developer has the flexibility to divert development away from the approach area.

Approved. Easements would help assure the continuation of compatible land use.

12. Seek Acquisition of Development Rights Within the Runway 14 Approach Area. (Page 5-11 and Exhibit 5C.)

The City proposes to seek to acquire development rights to undeveloped land outside of the airport boundary and within the runway 14 approach area. The city would also seek to secure the development rights to part of the approach area through voluntary donation.

Approved. Acquisition of development rights for the vacant land off the approach end of Runway 14 and within the 55 Ldn is subject to a showing at the time of the airport

operator's proposed action that such purchase is necessary to prevent a noncompatible use of the property.

C. Administrative Program

13. **Program Monitoring**. (Page 5-16.)

Airport management would periodically check on implementation and compliance with the noise compatibility program. Additional staffing would be considered, as well as a nighttime presence at the airport to monitor compliance.

Approved. This measure would assist in implementing the program.

14. **Noise Complaint Response**. (Pages 5-17 and D-5.)

A standard system of recording, analyzing, and responding to noise complaints would be implemented. A noise complaint form is included.

Approved. This measure would improve community relations and provide a systematic way of collecting noise complaint information.

15. Plan Review and Evaluation. (Page 5-17.)

Noise exposure maps would be updated with significant changes in existing or forecasted conditions. A plan update is anticipated between 5 and 10 years.

Approved. Noise exposure maps would be kept up-to-date.