



Memorandum

US Department of Transportation
Federal Aviation Administration

Subject: FAR Part 150 Noise Compatibility Program, Hartford-Brainard Airport, Hartford, Connecticut Date: May 14, 1990

From: Director, Office of Airport Planning and Programming, APP-1 Reply to Attn. of:

To: Assistant Administrator for Airports, ARP-1

Attached for your action is the Noise Compatibility Program (NCP) for the Hartford-Brainard Airport (HFD) under Part 150. The New England Region, in conjunction with the Federal Aviation Administration (FAA) headquarters, has evaluated the program and recommends action as set forth in the attached Record of Approval.

On November 30, 1989, the FAA determined that the noise exposure maps for HFD were in compliance with applicable requirements of FAR Part 150. The last date for FAA action on the program per section 104(b) of the Aviation Safety and Noise Abatement Act of 1979 is May 14, 1990. If the program is not acted upon by the FAA by that date, it becomes automatically approved except for flight procedures.

A total of nineteen measures is included in the State of Connecticut Department of Transportation's recommended program. Six are listed as Airport Operations Measures, and thirteen are listed as Administrative Measures. The FAA is recommending approval of all of the measures except for Measure No 2., Nighttime Use Restriction, which is being disapproved pending additional information. Each measure is described in the attached Record of Approval with the necessary justification of FAA's action.

The NCP 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. It also attempts to minimize the single event noise impact on those residents closest to the airport.

The Assistant Administrator for Policy and International Aviation and the Chief Counsel have concurred with the April 16, 1990, recommendations of the Airports Division, New England Regional Office, as described in the Record of Approval.

If you agree with the recommended actions, you should indicate your approval by your signature in the appropriate space on the last page of the ANE-600 letter. I recommend your approval.

Signed by:

Paul L. Galis

Attachment



Memorandum

US Department of Transportation
Federal Aviation Administration

Subject: ACTION: Recommendation for
Approval of the Hartford-Brainard Airport,
Hartford, Connecticut Noise Compatibility
Program

Date: April 16, 1990

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

To: Assistant Administrator for Airports,
ARP-1

On November 30, 1989, a notice was published in the Federal Register announcing our determination of compliance for the noise exposure maps for Hartford-Brainard Airport, Hartford, Connecticut, 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 Hartford-Brainard's proposed noise compatibility program, under the provisions of Section 104(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 May 14, 1990.

We have reviewed and 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 State of Connecticut was reviewed by the Airports, Air Traffic, Airway Facilities, and Flight Standards Divisions, and by the Assistant Chief Counsel. The public comment period closed January 14, 1990. No substantive comments have been received.

Each proposed action in Hartford-Brainard'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.

Signed by: John C. Silva for
Vincent A. Scarano

Attachment

Concur X /s/
Nonconcur Assistant Administrator for Policy and International Aviation, API-
1 5/11/90

Concur X	/s/		
Nonconcur	Chief Counsel, AGC-1	5/14/90	
Approve X	/s/		
Disapprove	Assistant Administrator for Airports, ARP-1	5/14/90	

Record of Approval

Hartford-Brainard Airport Hartford, Connecticut

Noise Compatibility Program

I. Introduction

The State of Connecticut 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 October 25, 1989 and June 16, 1989, respectively. The NEM was approved on November 15, 1989. The determination was announced in the **Federal Register** on November 30, 1989.

The Part 150 Study was closely monitored by an Airport Noise Advisory Committee which represented the State of Connecticut (including airport administration), the regional planning agency, fixed-base operators, airport users, local governments, and community residents. A series of Advisory Committee meetings were held, with the consultant presenting material and findings. Public information meetings were held on August 17, 1988, March 1, 1989, and June 28, 1989. 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**, Chapters 2, 3, 4, and 6. Chapter 2 describes the NCP, Chapter 3 describes implementation, Chapter 4 covers program benefits, and Chapter 6 provides evaluation details. Table 3.1, on Pages 45 and 46, summarizes the program.

The approvals which follow include actions that the State 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. Airport Operations Measures.

1. Flight Tracks (Sections 2.1, Table 3.1, 4.1.1, & 6.2.1).

IFR departures from Runway 02 would be given an initial departure clearance to climb 800 feet, then turn left to a heading of 360 degrees. VFR departures would be directed to turn left 20 degrees. IFR departures from Runway 20 would be given an initial departure clearance to turn left to a heading of 175 degrees or less. VFR departure clearance would be directed to turn left at least 25 degrees as soon as practical. IFR arrivals to Runway 02 would be assigned the LDA or VOR approach and continue inbound so as to avoid residential areas of Wethersfield. VFR arrivals to Runway 02 would follow a new charted visual flight procedure utilizing airspace over the Connecticut River.

Approved. This will result in a significant decrease of people impacted by noise.

2. Nighttime Use Restriction (Sections 2.2, Table 3.1, 4.1.2, & 6.3.1).

The Connecticut Department of Transportation (CONNDOT) would prohibit aircraft operations between 10:00 P.M. and 7:00 A.M., where takeoff noise exceeds 77.6 dBA, or approach noise exceeds 84.0 dBA, based on noise data published in Advisory Circular 36-3E. The rule would prohibit night operations by some of the loudest, older technology aircraft that occasionally use Hartford-Brainard, including Westwind 1123's, Lear 23s, 24s, and 25s, Hawker-Siddeley HS125-400s, and Falcon 10s. Single-event noise levels from these aircraft reach approximately 102 dBA at the closest homes in Wethersfield and East Hartford. The rule would continue to permit regular nighttime use of the airport by aircraft operating as check couriers.

Disapproved pending additional information. The information available does not provide sufficient data regarding the potential impact on interstate commerce. The Part 150 documentation merely indicates the type of aircraft and the numerical percentage of nighttime IFR operations that would be affected. There is no discussion identifying the affected users, whether they are regular users of the airport or itinerants, or of the impact on these users of being precluded from operating at the airport between 10:00 P.M. and 7:00 A.M. The FAA also notes that there is no residential property currently existing or forecast within the 65 Ldn contour, that the proposed nighttime restriction would result in a 1 db decrease in overall noise exposure to the residential population at levels below 65 Ldn, and that a number of land use measures were rejected from further consideration by the airport operator because of the relatively low levels of noise exposure in noise sensitive areas. Given the modest nature of the noise problem and of the noise benefit of this measure, the impact on commerce would indeed have to be minimal in order not to be an undue burden.

3. Preferential Runway Use (Sections 2.3, Table 3.1, 4.1.3, & 6.2.2).

This program would minimize the use of Runway 02 for arrivals and Runway 20 for departures.

Approved. Increased landings on Runway 20 and departures on Runway 02 would reduce residentially exposed populations between 55 and 65 DNL (Table 6.2, page 73).

4. Departure Procedures (Sections 2.4, Table 3.1, 4.1.4, & 6.2.5).

Pilots would be encouraged to fly manufacturer's or NBAA published noise abatement departure procedures.

Approved. Noise exposure can be reduced for communities less than 10,000 feet from brake release.

5. Helicopter Flight Corridors (Sections 2.5, Table 3.1, 4.1.5, & 6.2.3).

Formal flight corridors would be adopted for helicopters flying under VFR conditions (Figure 6.3).

Approved. Although DNL contours from helicopter operations are not significant, this measure would address annoyance from single-event overflights. The corridors would overfly as few residential areas as possible.

6. Nighttime Maintenance Runup Restriction (Sections 2.6, Table 3.1, 4.1.6, & 6.3.3).

This voluntary, informal restriction would eliminate maintenance runups between 10:00 P.M. and 7:00 A.M.

Approved. While this measure would be ineffective in dealing with current noise levels, it would be effective in preventing a future problem.

B. ADMINISTRATIVE MEASURES

7. Part-time Noise Abatement Officer (Sections 2.7, Table 3.1, & 6.4.5).

This individual would handle complaints, collect and compile noise measurement data, and act as a liaison to communities impacted by aircraft noise.

Approved. This measure would increase significantly the responsiveness of the State, as operator of the airport, in dealing with noise complaints.

8. Noise Complaint and Receipt and Response Procedures (Sections 2.8, Table 3.1, & 6.4.2).

While Hartford-Brainard has a noise reporting and follow-up procedure, the effectiveness of the procedure could be increased if measure 7 were implemented.

Approved. A Noise Abatement Officer would take over these responsibilities from the Airport Manager.

9. Noise Monitoring System (Sections 2.9, Table 3.1, & 6.4.3).

Two portable monitors would be purchased.

Approved. The system would provide a data base for aircraft-related noise events, correlate noise complaints with events, and detect changes in noise exposure which might warrant updating noise exposure maps.

10. **Automated Aircraft Recording System** (Sections 2.10, Table 3.1, & 6.4.2).

A voice-activated recorder would monitor frequencies when the air traffic control tower is closed at night.

Approved. This measure would enable the collection of noise data and facilitate compliance with the above operational noise abatement procedures.

11. **Public Information Program/Review and Implementation** (Sections 2.11, Table 3.1, & 6.4.4).

A long-term, comprehensive noise abatement committee would be established.

Approved. The committee would monitor progress of the NCP and bring about a public information program to inform on noise abatement issues.

12. **Program Publicity: Letters To Airmen** (Section 2.12 & Table 3.1).

NCP measures would be publicized through a tower-issued Letter to Airmen (Figure 2.4).

Approved. This is an effective way of generating compliance.

13. **Program Publicity: Airside Signs** (Sections 2.13, Table 3.1, & 6.4.1).

Operational noise abatement measures for Runways 02 and 20 departures and helipad operations would be publicized with airport signage.

Approved. Brief noise abatement messages would aid compliance with noise abatement operational measures. The signs will have to conform to FAA standards.

14. **Program Publicity: Automatic Terminal Information Service (ATIS) Advisories** (Sections 2.14, Table 3.1, & 6.4.6).

ATIS would be utilized to briefly advise of noise abatement procedures.

Approved. This implementation measure was largely the result of the interest of the Advisory Committee and the responsiveness of the Air Traffic Operations Service in establishing national policy covering the use of ATIS. The measure is generally believed to be most effective in advising of noise abatement procedures in a timely manner.

15. Program Publicity: Tower Advisories (Sections 2.15, Table 3.1 & 6.4.6).

This measure would have Bradley Departure Control and Hartford-Brainard Tower issue and advise, respectively, of the above operational noise abatement measures, as the performance of other duties permits.

Approved. Controller-pilot communications are an effective means of assuring compliance with noise abatement procedures which are currently being implemented by the HFD ATCT.

16. Program Publicity: Informational Brochures (Sections 2.16, Table 3.1, & 6.4.7).

An informational brochure would publicize all existing and proposed noise abatement procedures.

Approved. This measure would also act as an effective means of compliance.

17. Quantitative Evaluation of Cumulative Changes in Noise Exposure (Section 2.17 & Table 3.1)

Potential changes in noise exposure would be computed and reported annually using a CONNOOT microcomputer.

Approved. NCP effectiveness can be tracked and, if a threshold is exceeded, noise exposure map (NEM) contours updated.

18. Assessment of NEM and NCP with Changes in Airport Layout or Operation (Section 2.17 & Table 3.1)

Changes in airport layout or operation, as well as changes in air traffic control procedures, would be reported to a continuing Noise Abatement Committee. This information would be evaluated to determine the need for a revised NEM or NCP.

Approved. This measure would facilitate compliance with NEM update provisions of Part 150.

CONNDOT would revise noise contours every five years and review the contours with the Noise Abatement Committee and FAA to obtain their recommendations concerning NEM/NCP revision.

Approved. This measure would also facilitate compliance with the NEM update provisions of Part 150.