U.S. Department of Transportation
Federal Aviation Administration

Memorandum

Subject: ACTION: FAR Part 150 Noise Compatibility Program for Sikorsky Memorial Airport, Bridgeport, CT

Date: December 26, 1990

Reply to
Attn. of:

From: Director, Office of Airport Planning and Programming, APP-1

To: Assistant Administrator for Airports, ARP-1

Attached for your action is the Noise Compatibility Program (NCP) for Sikorsky Memorial Airport (BDR) under FAR Part 150. The New England Region, in conjunction with FAA headquarters, has evaluated the program and recommends action as set forth below.

On July 25, 1990, the FAA determined that the Noise Exposure Maps (NEMs) for BDR are in compliance with the requirements of section 103(a) of the Aviation Safety and Noise Abatement Act of 1979 (ASNA) and Title 14, CFR Part 150. At the same time, the FAA made notification in the Federal Register of the formal 180-day review period for BDR's proposed program under the provisions of section 104(a) of ASNA and FAR Part 150. The 180-day formal review period ends December 26, 1990. If the program is not acted on by the FAA by that date, it will be automatically approved by law, with the exception of flight procedures.

The BDR program describes the current and future noncompatible land uses within the 65 DNL. The NCP proposes measures to remedy existing identified incompatibilities and to prevent future noncompatible land uses. Changes in flight procedures and runway use will remove all incompatible development from the 65 DNL.

The Assistant Administrator for Policy, Planning and International Aviation and the Chief Counsel have concurred with the recommendations of the New England Region. If you agree with the recommended FAA determinations, you should sign the "approve" line on the attached signature page. I recommend your approval.

/S/
Paul L. Galis

Attachments

U.S. Department of Transportation
Federal Aviation Administration

Memorandum

Subject: ACTION: Recommendation for Approval of the Sikorsky Memorial Airport, Bridgeport, Connecticut Noise Compatibility Program

Date:

Reply to
Attn. of:

From: Manager, Airports Division, ANE-600

To: Assistant Administrator for Airports, ARP-1

On July 25, 1990, a notice was published in the Federal Register announcing our determination of compliance for the noise exposure maps for Bridgeport-Sikorsky Memorial Airport, 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 Bridgeport'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 December 26, 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 Bridgeport 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 August 28,1990. No comments were received.

Each proposed action in Bridgeport'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 X
Nonconcur _

/S/
Assistant Administrator for Policy, Planning, and National Aviation, API-1

Date: 12/90

Concur X
Nonconcur _

/S/
Chief Counsel, AGC-1

Date:

Approved X
Disapproved _

/S/
Assistant Administrator for Airports, ARP-l

Date: 12/26/90

RECORD OF APPROVAL

SIKORSKY MEMORIAL AIRPORT
BRIDGEPORT, CONNECTICUT

NOISE COMPATIBILITY PROGRAM

I. INTRODUCTION

The City of Bridgeport, 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 December 21, 1988 and November 15, 1989, respectively. The NEM was determined to be in compliance on June 29, 1990. The determination was announced in the Federal Register July 25, 1990.

The Part 150 Study was closely monitored by a Technical Advisory Committee which represented the City of Bridgeport, Town of Stratford, regional planning agency, 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 Volume2: Noise Compatibility Program, Sections 2, 3, 4, 6, and 7. Sections 2 and 6 analyze promising noise abatement alternatives, Section 3 covers implementation, Section 4 discusses benefits, and Section 7 evaluates land use alternatives. 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 Bridgeport 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 2.1, 4.1.1, and 6.1.) Use of Runway 11-29 would be maximized by reducing the crosswind component dictating its use from 15 knots to 10 knots.

Approved. Estimated population within the 65 DNL contour would be reduced from 170 to 0 (Table 4.1).

2. Noise Abatement Pattern Procedures. (sections 2.2, 4.1.2, and 6.2) Pattern operations have resulted in a significant number of complaints from isolated residential areas in Lordship and the Laurel Beach section of Milford. Procedures would be revised to avoid overflights of these areas.

Approved. Full implementation of the preferential runway system will reduce the population within the DNL 65 to zero. This pattern procedure would reduce the numbers of overflights over these communities without adversely affecting aviation.

3. Noise Abatement Helicopter Patterns.
(Sections 2.3, 4.1.2, and 6.3.) When fixed-wing traffic is on Runway 6-24, helicopter patterns would be over airport property on the northern side of the approach end of Runway 11. When 11-29 is the active runway, the helicopter pattern would be on the north side of the approach end of Runway 6, over airport property and wetlands.

Approved. Tighter helicopter patterns would reduce exposure of residential populations within the 75 SEL contour significantly (Figure 6.10.) The one major helicopter operator has concurred with the procedure.

4. Noise Abatement Departure Procedures.
(Sections 2.4, 4.1.4, and 6.4.) National Business Aircraft Association reduced-power takeoff procedures for turbojet corporate aircraft would be utilized.

Approved. This procedure would benefit a close-in residential community off the end of Runway 6.

5. Formalize Existing Nighttime Maintenance Runup Restriction.
(Sections 2.5, 4.1.5, and 6.5) Prior to implementing the existing informal runup maintenance procedure, neighbors regularly complained of being awakened by nighttime runups. Implementation of the informal restriction eliminated the problem. Formalization will prevent a reoccurrence of the noise problem. The airport manager would be able to waive the restriction on a prior-notice basis. There would be a fine ranging from $50 to $350 for violation.

Disapproved. The NCP indicates that the runup issue is moot because the commuter operator has moved its maintenance activity from the imposition of fines, is not justified since informal implementation has been effective. However, FAA approves continues use of the voluntary nighttime maintenance runup procedure.

6. Nighttime Use Restriction. (Section 2.6, 4.1.6, and 6.6.) Nighttime departures (10:00 p.m. to 7:00 a.m.) would be prohibited by aircraft whose departure noise level measurement, as listed in Appendix 1 of FAA Advisory Circular 36-3E, exceeded 82.0 dBA. The rule is designed to prohibit individual operations that would generate a significant (1.5 DNL) increase in noise contour exposure. A $250 fine would be assessed after a first-time warning.

Application of the 82.0 dBA criterion would prohibit the DNL contour on individual days from being five decibels or more above the average annual day-night contour. Based on an analysis of 1988 operations data (Section 6.6), those aircraft types that would be restricted are listed in Tables 6.5 & 6.6.

Disapproved pending submission of additional information to make an in:formed analysis. The NCP does not provide information on the numbers of people impacted or numbers expected to be relieved by imposing the restriction. The document attempts to support the restriction by calculating a short-term DNL, which is a misuse of this methodology (yearly day-night average sound level). Impacts for a single day are calculated, concluding that the DNL would increase 5 to 6 decibels (NCP page 50). The conclusion reached is misleading because the operations identified only occur once every one to three months, thus overstating the impact of the operations.

7. Support FAA Proposal to Install Runway 6 Approach Light System. (Sections 2.7, 4.1.7, and 6.7). FAA has proposed, for safety and operational purposes, the installation of a Medium-Intensity Approach Light System with Runway Alignment Indicator Lights (MALSR) , to serve Runway 6. The airport, including a majority of the Advisory Committee, supports the light system for noise abatement purposes. The study does not recommend that the system be installed for noise abatement purposes.

Approved. This approval extends only to an acknowledgement that the airport and Advisory Committee support, from a noise abatement perspective, FAA's installation of

the MALSR. The system would prevent the occurrence of some missed approaches during instrument weather conditions. A missed approach is a noisier aircraft operation than a landing. Since the benefit in overall noise reduction would be small, FAA cannot support its installation solely for purposes of noise abatement.

8. Connector Taxiway Between Taxiway A and the Approach End of Runway 24. (Sections 2.8, 4.1.8, and 6.8.) Figure 2.3 depicts the location of the proposed connector taxiway. Aircraft back taxi on Runway 24 prior to departure. During busy traffic periods, this causes an extension of the traffic pattern over the residential area of Laurel Beach. SD-360 aircraft SEL noise contour analysis indicates that a close-in turn would reduce or eliminate approximately 2,900 people from exposure to an SEL 80 noise contour.

Disapproved for the Purposes of Part 150. While there would be some noise benefit related to the taxiway, the primary benefits are operational and safety related. The taxiway connector is proposed on the Airport Layout Plan (ALP). Noise abatement should be considered in the timing of ALP implementation. The project would most likely not be eligible for noise abatement funds. This disapproval is limited to Part 150 and should in no way be construed as a determination on the potential benefits of this measure outside of the Part 150 planning process.

A. Land Use Elements

9. Two-Tier Airport Compatibility Zoning Ordinance (recommended for consideration by the Town of Strafford) (Sections 2.9 and 7.2, and Appendix J.) An Airport Impact land use district (related primarily to obstruction clearance requirements) and an Airport Development (AD) District (following approximately the forecasted 1993 65 DNL contour) would be established by the Town of Stratford, in which the airport is located. Development permitted within the AD District would be compatible with the 65 DNL contour.

Approved. Undeveloped, off-airport land would be protected from incompatible residential development.

C. Implementation, Monitoring, and Review Elements

10. Noise Complaint Receipt and Response Procedures. (Sections 2.10 and 4.3.) Procedures include a dedicated telephone number for noise complaints, a telephone answering machine for use during other than administrative hours, publicizing the noise complaint line, developing a standard noise complaint form and file, instructing staff on receiving and responding to complaints, follow-up action on complaints, and reporting to the Noise Abatement Committee.

Approved. While a specific contribution to noise reduction cannot be quantified, the measure is important to the success of the Noise Compatibility Program (NCP).

11. Install Tape Recording System to Monitor Operations When Tower C1osed. (Sections 2.11 and 4.3.) Airport management would obtain and install equipment to record nighttime tower radio transmission, for assistance in investigating noise complaints.

Approved. This measure is, likewise, essential to implementation of the NCP.

12. Continuation of Noise Abatement Committee to Review Implementation. (Sections 2.12 am 4.3). A reconvened Noise Abatement Committee would meet on a regular basis.The group would have a major role in ongoing review and monitoring of NEM am NCP implementation.

Approved. This administrative measure provides a framework for successful NCP implementation.

13. Quantitative Evaluation of Changes in Cumulative Noise Exposure. (Sections 2.13 and 4.3). An "EXP" methodology would compare changes in noise exposure to an index. It would form the basis of tracking noise exposure over time and provide a quantitative basis for determining if revision of the NEM is appropriate.

Approved. Evaluation of the cumulative changes in noise exposure to provide a quantitative basis for determining when a revision of the NEM is required is highly desirable and is approved. The FAA approved Area Equivalent Method (AEM) may b sued by airport operators as an indicator as to whether there has been a significant change in the noise environment warranting a revision to the NEM per Section 150.21 of Part 150. The "EXP" methodology has not been submitted to nor approved, endorsed, or verified for accuracy by the FAA, and is, hence, a nonstandard procedure.

14. Assessment of NEM and NCP with Changes in Airport Layout, Operation. (Sections 2.14 and 4.3) Changes in airport layout which could change noise exposure would be reported to the Noise Abatement Committee and form the basis of possible need to update the NEM.

Approved. This measure would also assist in complying with the NEM update provisions of Part 150.

15. Assessment of NEM and NCP at Minimum Intervals of Time. (Sections 2.15 and 4.3.) In the absence of significant changes evident in measures 13 and 14 above, the NEM contours would be revised every five years.

Approved. As with the above two measures, this would form the basis of compliance with Part 150.

16. Program publicity: Letter to Airmen. (Sections 2.16 and 4.3, and Figure 2.6.) The Letter to Airmen would be the primary informational tool for implementing noise abatement procedures at the airport.

Approved. The measure would help ensure effective NCP implementation.

17. Program publicity: On-Airfield Signs. (Sections 2.17 and 4.3, and Figure 2.7.) Signs would be placed on the airport, addressed to pilots, providing noise abatement information.

Approved. This measure would also help ensure effective implementation of several NCP measures.

18. Program Publicity: ATIS Message. (Sections 2.18 and 4.3.) FAA is requested to consider a short noise abatement message on the ATIS.

Approved. A short message, reminding pilots of noise abatement information, complies with Air Traffic control procedures.