APPENDIX E:  CURRENT FAA-APPROVED
NOISE COMPATIBILITY PROGRAM MEASURES
Subject: ACTION: FAR Part 150 Noise Compatibility Program for Portland International Jetport, Portland, Maine

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

To: Assistant Administrator for Airports, ARP-1

Date: SEP 21 1990

Reply to Att'n of:

Attached for your action is the Noise Compatibility Program (NCP) for Portland International Jetport (PWM) 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 March 27, 1990, the FAA determined that the Noise Exposure Maps (NEMs) for PWM 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 PWM's proposed program under the provisions of section 104(a) of ASNA and FAR Part 150. The 180-day formal review period ends September 23, 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 PWM 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. Chapter 2 of the NCP summarizes the airport operator's recommendations and quantifies the expected benefits derived from full implementation of the program. The table on page 2-11 indicates that the number of people impacted would be reduced by about 5,172 with full implementation.
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.

Jyme Sparks, Pickard

Paul L. Galis

Attachments
Subject: Recommendation for Approval of the Portland International Jetport, Portland, Maine Noise Compatibility Program

Date: JUL 27 1990

From: Manager, Airports Division, ANE-600

To: Assistant Administrator for Airports, ARP-1

On March 27, 1990, a notice was published in the Federal Register announcing our determination of compliance for the noise exposure maps for Portland International Jetport, Portland, Maine, 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 Portland'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 September 23, 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 City of Portland was reviewed by the Airports, Air Traffic, Airway Facilities, and Flight Standards Divisions, and by the Assistant Chief Counsel. The public comment period closed June 25, 1990. No substantive comments have been received.

Each proposed action in Portland International'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

Nonconcur

[Signature]

Sept. 21, 1980

Assistant Administrator for Policy and International Aviation, API-1

Concur

Nonconcur

[Signature]

Sept. 23, 1990

Chief Counsel, AGC-1

Approved

Disapproved

[Signature]

Sept. 21, 1990

Assistant Administrator for Airports, ARP-1
RECORD OF APPROVAL

PORTLAND INTERNATIONAL JETPORT
PORTLAND, MAINE

NOISE COMPATIBILITY PROGRAM

I. INTRODUCTION

The City of Portland, Maine, 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 27, 1988 and November 8, 1989, respectively. The NEM was determined to be in compliance on March 27, 1989. The determination was announced in the Federal Register on May 1, 1990.

The Part 150 Study was closely monitored by an Advisory Committee which represented the City of Portland (including airport administration), the City of South Portland, airport users, local governments, and community residents. A series of Advisory Committee meetings was held, with the consultant presenting material and findings. Public information meetings were held on May 21, 1987, September 14, 1987, January 19, 1988, and September 29, 1988. 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 2, 3, 4, and 5. Section 2 summarizes NCP, Section 3 analyzes operational measures, Section 4 analyzes land use measures, and Section 5 describes implementation and monitoring. Tables 2.1 and 2.2, on pages 2-2, 2-3, and 2-7, summarize 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 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 Portland recommend 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. Noise Barrier at the Approach End of Runway 18. (Sections 2.1.1, 3.1.1, and 5.1.)

A 15-foot or 20-foot barrier would be constructed, depending on future design considerations. Maximum Lear Jet departure noise levels are in the range of 80 to 90 dBA at three residences. Non-turbojet engine runups are also a problem.

Approved. A 12 to 16 dBA noise level reduction can be expected.

2. Hush House on the East End of the Airport Property. (Sections 2.1.2, 3.1.2, and 5.1.)

Airline maintenance runups are expected in the area of the Bar Harbor hangar.

Approved. A 13 to 14 dBA noise level reduction can be expected to 5-6 single and multi-family residential units to the east of the airport. Maintenance runups would be consolidated at a central location.

3. Preferential Use of Runway 29. (Sections 2.1.3, 3.2, and 5.1.)

Runway 29 would be the preferential runway for early morning departures and Runway 11 would be the preferential runway for late night arrivals.

Approved. Population within DNL 65 would be reduced by approximately 4,800 in more densely populated areas east of the airport.

4. Preferential Arrival Route. (Sections 2.1.4, 3.3, and 5.1.)

Most turbojet aircraft would be controlled to approach Runway 29 from the north, making greater use of airspace over Portland Harbor.

Approved. Approximately 200 less people would be exposed to 65 DNL. Also, between 1,100 and 1,200 less people would be impacted by SEL 90 or greater. Workload and air traffic flow would be more evenly distributed and use of the existing published Runway 29 Harbor Visual Approach would be facilitated.
5. Runway 11 Preferential Departure Routes. (Sections 2.1.5, 3.4, 5.1, 2.1.5, 3.5, 2.1.7, and 3.6.)

Three variations of the existing straight-out procedure are proposed: right turns as soon as feasible, left turns to a heading to overfly the Fose River, and straight-out departures to 3,000' or approximately six nautical miles (whichever comes first). The Automatic Terminal Information Service would be used to publicize the procedures.

Approved. Taken together, the three measures would satisfy a community objective of sharing noise. The first would reduce population exposed to 65-70 DNL, and greater than 70 DNL by 171 people and 36 people, respectively. The second could reduce the population exposed to 65 DNL by approximately 3,900 people. The third produces no quantifiable change in DNL contours, but would reduce noise complaints from aircraft which double back over residential areas at lower altitudes.

6. Use of FAA Advisory Circulars (AC) 91-53 Noise Abatement Departure Profiles. (Sections 2.1.9, 3.8, and 5.1.)

Airlines currently use a similar procedure while operating at Portland. The airport would request that airlines fly the AC 91-53 noise abatement departure profile (reduced power takeoffs for Runway 11 departures). Power would be increased over water.

Approved. SEL noise would be reduced significantly over close-in residential areas (Table 3.16.)

B. Monitoring and Review Elements

7. Monitor Proposals for New Scheduled Operations Between 11:30 P.M. 6:15 A.M. (Sections 2.1.8 and 3.7.3)

Any airline proposing to schedule operations between the hours of 11:30 P.M. and 6:15 A.M., is required to present the proposal to a continuing Noise Abatement Committee. Upon review, the committee submits a recommendation to the City Council to accept or reject the proposal.

The City has stated by Letter dated September 19, 1990, from the Airport Manager that, prior to implementing any mandatory use restriction, it recognizes its responsibility to thoroughly evaluate impact with regard to: 1) reasonableness consistent with reducing non-compatible land uses around the airport, 2) undue burden on interstate commerce or foreign commerce, and 3) unjust discrimination with regard to airport users. The City has also agreed to submit the evaluation and any proposed use
restriction as a revision to this Noise Compatibility Program (NCP) for approval in accordance with Part 150 of the Federal Aviation Regulations. In addition, the City states that it does not intend to take action implementing a mandatory use restriction until FAA review is complete.

Approved in part. This measure, already implemented, is approved insofar as it establishes an administrative procedure for review of proposed airline service by the Noise Abatement Committee. The continuation of an airline service monitoring process should promote a good relationship between the Noise Abatement Committee and airlines.

The measure is disapproved insofar as it may appear to grant the NAC authority, on behalf of the City, to delay access through extended negotiations or to force airlines to agree to meet unspecified noise standards. The measure is disapproved insofar as it may appear to grant the City blanket authority to approve or disapprove nighttime operations based on unspecified standards. FAA approval of monitoring and review by the NAC does not extend to actions on the part of the City Council to accept or deny proposed service based on recommendations of the NAC. Until such time as the City adopts a reasonable, nondiscriminatory use restriction or obtains FAA approval of a proposed use restriction in a revision to the NCP, the City should permit unrestricted access in accordance with the assurances set forth in its federal grant agreements.

A decision by the FAA to approve a proposed use restriction is not legally binding on the airport sponsor. While the City has agreed to submit proposals for approval under Part 150, FAA approval or disapproval under Part 150 does not regulate the City with respect to its airport access decisions. The FAA will evaluate the proposal submitted under Part 150 relative to safe and efficient use of the navigable airspace.
8. **Noise Abatement Committee Review of Implementation.** (Section 5.3 and 5.3.5.)

The Advisory Committee would form a Noise Abatement Committee (NAC) to review NCP compliance, including both operational and land use elements. The NAC would take an active role in coordinating with affected local governments to facilitate implementation of the NCP. This coordination would be particularly important for the remedial soundproofing program, the airport zoning overlay district, and real estate disclosure. The NAC may also consider future policies for noise control, including a noise based user fee.

Approved. This measure would create a forum for discussion of noise abatement issues. FAA's approval does not extend to future actions on the part of the NAC or City Council, particularly with respect to use restrictions or a noise based user fee.

9. **Quantitative Review of Changes in Noise Exposure.** (Section 5.3.2.)

Airport management would compute an EXP noise metric each year, as a means of determining whether the NCP should be reevaluated and new noise contours prepared.

Approved. NCP effectiveness can be tracked and, if appropriate, NEM contours updated.

10. **Recomputation of Contours with Changes in Airport Layout or Operation.** (Section 5.3.3.)

The NEM would be revised and NCP reevaluated if a major change in airfield layout or operation is proposed — one that would affect runway use or flight paths.

Approved. This measure provides a criterion for keeping the NEM and NCP current.
11. **Minimum Time Interval Between Preparation of New Noise Contours.**  
   *(Section 5.3.4.)*

   New noise contours would be prepared a minimum of every five years.

   **Approved.** This measure would also ensure up-to-date NEM and NCP.

C. **Land Use Elements**

12. **Land Acquisition and Relocation** *(Sections 2.2.1, 4.1.1, and 5.2.1.)*

   A mobile home park, consisting of 20 homes within the 70 DNL contour, would be the subject of acquisition and relocation.

   **Approved.** Land acquisition through voluntary fee-simple purchase and subsequent relocation of residents would provide effective remediation of an incompatible use.

13. **Soundproofing.** *(Sections 2.2.2, 4.1.2, and 5.2.2.)*

   A soundproofing program would be implemented for land uses that contain qualified compatible residential and noise sensitive land uses within the 65 DNL and 70 DNL contours, and qualified compatible non-residential land uses within the 75 DNL contour.

   **Approved.** One hundred-eighty seven residential and four non-residential land uses would potentially be affected, pending structural and acoustic surveys and evaluation of noise monitoring data.

14. **Easement Acquisition.** As part of sound attenuation assistance.  
   *(Sections 2.2.3, 4.1.3, and 5.2.3.)*

   In areas with noise levels greater than 65 DNL, avigation easements would be negotiated as part of sound attenuation assistance.

   **Approved.** In conjunction with soundproofing, this measure would ensure future compatibility between the airport and existing qualified compatible land uses.
15. **Airport Zoning Overlay District.** (Sections 2.2.4, 4.2.1, and 5.2.3.)

Noise sensitive land uses would be restricted and construction standards specified.

*Approved.* Compatible development would be encouraged and incompatible development prohibited.

16. **Easement Acquisition - As Part of Proposed New Development.** (Sections 2.2.5, 4.2.2, and 5.2.5.)

Through purchase or dedication, avigation easements for proposed new development would be obtained.

*Approved.* This measure would restrict land uses to those compatible with defined noise exposure, ensure the airport the right of overflight, the right to cause noise, and the right to prohibit potential obstructions to airspace.

17. **Real Estate Disclosure.** (Sections 2.2.6, 4.2.3, and 5.2.6)

Real estate disclosure policy would be included in revisions to zoning ordinances.

*Approved.* The identification of airport noise impacts on real estate would foster an awareness of airport and community relationships, and serve as notice of airport noise impact to potential buyers or lessors.

18. **Undeveloped Land Acquisition.** (Sections 2.2.7, 4.2.4, and 5.2.7)

This measure would be instituted by the airport to eliminate long-term compatibility problems associated with development in areas subject to 80 DNL noise contours. Voluntary fee-simple purchase would be involved.

*Approved.* Undeveloped land acquisition through fee-simple purchase would provide the City specific development or land use control over undeveloped land between the western airport boundary and the limits of the 80 DNL contour in the City of South Portland. Approval is subject to, a showing at the time of the airport operator's proposed action, that such purchase is necessary to prevent a non-compatible use of the property.