



U.S. Department
of Transportation

**Federal Aviation
Administration**

Memorandum

Subject: ACTION: FAR Part 150 Noise Compatibility Program
for Port Columbus International Airport,
Columbus, Ohio

Date: **SEP 21 1987**

From: Associate Administrator for Airports, ARP-1

Reply to
Attn. of:

To: Administrator

Attached for your action is the Noise Compatibility Program (NCP) for the Port Columbus International Airport under FAR Part 150. The Great Lakes Region, in conjunction with the Federal Aviation Administration (FAA) headquarters, **has** evaluated the program and recommends action as set forth below.

On July 27, 1987, the FAA determined that the noise exposure maps for the Port Columbus International Airport are in compliance with the requirements of Section 103(a) of the Aviation Safety and Noise Abatement Act of 1979 (Act) and Title 14 Code of Federal Regulations Part 150. Concurrent with this action, the FAA made notification in the Federal Register of the formal 180-day review period for Columbus' proposed Noise Compatibility Program (NCP) under the provisions of section 104(a) of the Act and FAR Part 150. The 180-day formal review period needs to be completed on or before January 23, 1988. 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 Port Columbus International Airport Noise Compatibility Program (NCP) describes the current and future noncompatible land uses. The Noise Compatibility Program recommends **nineteen(19)** measures to remedy existing noise problems and prevent future noncompatibilities. These measures are grouped into three categories: Operational Elements (7), Land Use Control Elements (4), and Program Management Elements (8). Each measure is identified in the attached Record of Approval by category with page reference given for location in the NCP.

Eighteen measures are recommended for approval. One measure, **A.3**, does not require an action at this time because it relates to specific flight procedures which require additional information and analysis.

The Associate Administrator for Policy and International Aviation, the Chief Counsel, and I have concurred with the recommendations of the Great Lakes Region.

If you agree with the recommended actions, you should sign the "approve" line on the attached Great Lakes **Region's** letter. I recommend your approval.



Robert L. Donahue

Attachments



U.S. Department
of Transportation
**Federal Aviation
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Memorandum

Subject: ACTION: FAR Part 150 Noise Compatibility Program, Record of Decision; Port Columbus International Airport, Columbus, Ohio Date: SEP 11 1987

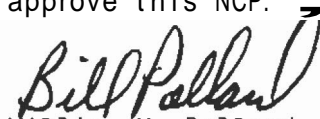
From: Director, AGL-1 Reply to Attn of Lamberts: 384-7387

To Administrator

The city of Columbus, Public Utilities and Aviation Department, owner and operator of Port Columbus International Airport, has submitted noise exposure maps (NEM's) and a proposed noise compatibility program (NCP) to this office. The NEM's were previously accepted by FAA effective July 27, 1987. The proposed NCP must be approved or disapproved on or before January 23, 1988. A Federal Register notice announcing the submission of the NCP for FAA approval was published July 27, 1987. The maps and proposed program have been coordinated with airport users, community officials, land use planning agencies, and the public. Documentation of this coordination is found in the appendices of the study report.

Earlier review of the proposed NCP by this office and APP-600 found the program to be compliant with the standards set forth in FAR Part 150, paragraph 150.23. This submittal requests formal FAA review and approval of the NCP for Port Columbus International Airport. The airport is situated in the eastern part of the city of Columbus, which is currently designated as a medium hub. It has 184 based aircraft and had approximately 230,000 operations in 1986. This Part 150 study was funded under AIP Grant 84-2-3-39-0025-03-85 with a Federal project share of \$267,188, which includes a master plan update.

This office believes the NCP complies with published standards for FAR Part 150 submittals. We have coordinated this report with Regional Counsel, the regional Planning Staff, and affected operational divisions. We are pleased to forward this candidate NCP for your consideration. We recommend you approve this NCP.


William H. Pollard

Attachment

Date:

Subject: FAR Part 150 Noise Compatibility Program, Record of Decision;
Port Columbus International Airport, Columbus, Ohio

Associate Administrator for Airports, ARP-1

Concur/Non-concur: Robert L. [Signature] Date: 9/16/87

Associate Administrator for Policy and International Aviation, API-1

Concur/Non-concur: [Signature] Date: 9/18/87

Chief Counsel, AGC-1

Concur/Non-concur: ^{by:} Emily M. [Signature] Date: 9/21/87

Administrator, AOA-1

Approved/Disapproved: [Signature] Date: 9-25-87

RECORD OF APPROVAL
PORT OF COLUMBUS INTERNATIONAL AIRPORT
NOISE COMPATIBILITY PROGRAM

INTRODUCTION

The Port of Columbus International Airport Noise Compatibility Program is presented in three categories all aimed at reducing incompatible land uses in the vicinity of the airport. The categories are: Operational Elements, Land Use Elements, and program Management Elements. The Program Elements are discussed in the following text with appropriate Program document chapter references.

The approvals listed herein include approvals of actions that the airport recommends be taken by the Federal Aviation Administration. 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.

A. OPERATIONAL ELEMENTS

1. Maintain and Publicize an Element of the Local Air Traffic Control Tower(ATCT) Order 7110.33B Requiring all turbojet and Turboprop Aircraft Departing to the East to be Instructed to Maintain Runway Heading (10°) until Reaching 3,000 feet Above Mean Sea Level. (V-7, VII-3, 7)

Approved. Departures to the east have been found to have less impact and less annoyance if they are performed along runway heading until reaching a specific altitude. All users will be instructed to institute and comply with this procedure.

2. Maintain and Publicize an Element of the Local ATCT Order Encouraging the Use of a Standard Noise Abatement Departure for Turbojet Aircraft. (V-5, VII-3, 7)

Approved. Both the FAA and Air Transport Association have published recommended noise abatement departure profiles. These are applied on a national scale and are acceptable to the airport users. Air carriers, business jet operators, and other turbojet users will be instructed to incorporate these procedures on all departures. Compliance will be monitored and consultations with users will continue to better implement this element.

3. Maintain and Re-Evaluate as Needed, an Element of the Local ATCT Order Implementing a Formal Runway Use Program Requiring Larger Aircraft to Use Runway 10R/28L, While Restricting Nighttime Use of the Shorter Runway 10L/28R. (VII-3)

No Action required at this time as this item relates to flight procedures and definition of aircraft that apply thereto, which require additional information and analysis.

4. Execute Departure Turns to the West. (V-6, VII-2, 7)

Approved. All turbojet and turboprop aircraft departing to the west will execute departure turns to fly over industrially-zoned or open space areas whenever possible considering weather, individual aircraft performance characteristics, and airspace constraints. Prior to implementation, FAA Air Traffic Control Staff will perform a test program and consult aircraft operators to judge the safety and efficiency of this element. Flexibility in adherence to this element is necessary given the current fleet mix at Port Columbus, but substantial compliance will achieve significant reduction in noise impacts.

5. Confine Engine Maintenance Run-ups to a Designated Area to be Constructed on the South Side of the Airport, and Modify the Airport Operations Manual to include Details of these Procedures. (VII-5, 7)

Approved. Restricting maintenance run-ups to a designated area will reduce the impact of ground level run-up noise on airport neighbors. Blast fences and other acoustic barriers will be considered in facilities planning.

6. Review Fleet Mix of Existing and Potential Airport Tenants to Assure Compliance with Federal Noise Regulations (FAR Part 36, Stage II). (VII-5, 7)

Approved. The city will regularly monitor the airport tenants' fleet mix to assure compliance with FAR Part 36. Potential new tenants will also be required to show evidence of a noise-compliant fleet prior to occupancy. The monitoring process will be coordinated by the Noise Abatement office, which will be established under this program.

7. Maintain, Publicize, and Distribute Information on the Following Elements in the Existing Local ATCT Order: Rotational Runway Use; Arrival Altitudes; Runway Headings; and Helicopter Routes. VII-5, 7)

Approved. Local Tower Order 7110.330 requires: rotation of runway configurations when wind and weather conditions permit to provide equitable noise relief for surrounding communities; except during an emergency, all arriving Category III and turboprop aircraft to be kept above 4,000 feet (IFR) or 3,500 feet (VFR) until intercepting the glide slope or until within 10 flying miles of the landing threshold; departing Category III and turboprop aircraft not be vectored until reaching 3,000 feet MSL or higher; and helicopter traffic utilizing Runways 28R/10L for transition landings be required to adjust their traffic pattern to remain within the airport boundaries, south and west of Interstate Highway 270. (These helicopter operations will not be approved between the hours of 2200-0800 local time.)

All these procedures provide some level of noise impact reduction.

B. LAND USE ELEMENTS

1. Acquire Residential Property Within the 75 Ldn Contour in the Community of Wonderland (City of Columbus) and Selected Parcels in Mifflin Township. (VI-6, VII-9)

Approved. Residential use in the 75 Ldn is clearly not compatible with airport operations. The acquisition of the Wonderland community is estimated to cost \$3,201,600 (1985 dollars) and the selected parcels in Mifflin Township are estimated to cost \$200,000. Implementation will acquire all existing residential units within the 75 Ldn. 95 households are involved totaling 283 people. Once acquired, the city of Columbus will move to establish proper land use controls on the acquired property.

2. Acquire Easements for Undeveloped Property within the 75Ldn Contour in Mifflin Township and the City of Gahanna. (VI-4, 7, 9)

Approved. The purchase of easements for presently undeveloped parcels within the 75 Ldn will restrict the use of these properties to those uses compatible with that level of noise. Detailed costs for this element are unknown at present as this must be negotiated with property owners, but are generally much less than outright acquisition.

3. Soundproof Selected Residences and Schools Within the 65-75 Ldn Contours, as Indicated Feasible and Effective in a Detailed Pilot Study. (VI-4, 9)

Approved. Soundproofing existing buildings within non-compatible noise level contours in exchange for avigation easements can be both cost efficient and successful in achieving a reduction in noise impacts. Two levels of soundproofing have been identified. A Stage I program for sealing cracks (achieving a 5 dBA reduction) is proposed for approximately 2,700 residences within the 65-70 Ldn contour. A Stage II program involving window and door treatments (achieving a 10 dBA reduction) is proposed for approximately 450 residences within the 70-75 Ldn contour. Total costs are approximately \$8,276,000 (1985 dollars) over 10 years, and the soundproofing program will be phased as funds become available.

4. Pursue Compatible Land Use Zoning and Building Code Modifications in the Four Political Jurisdictions Within the 65 Ldn. (VII-10,11)

Approved. This program proposes that the city of Columbus, the city of Gahanna, Mifflin Township, and Jefferson Township undertake zoning and building code modifications to restrict non-compliant development in currently undeveloped areas. Specific actions include adding noise exposure limits to existing land use/zoning maps or comprehensive plans; adding a disclosure statement to the development review and approval process; review and revise, where necessary, the zoning for presently undeveloped land to restrict development to those uses compatible with the expected noise level; review and revise residential building code requirements to specify additional noise attenuation in all new construction consistent with the expected level of exposure; and review and revise existing allowable uses under current zoning to insure non-compatible conditional uses will not be approved.

C. PROGRAM MANAGEMENT ELEMENTS

1. Establish a Noise Abatement Office and Appoint a Noise Officer, (V-14)

Approved. The establishment of a single point of contact for implementation and oversight of this program is necessary. Further, a system of monitoring noise and noise complaints, tenant compliance with FAR Part 36, Program coordination and contract monitoring, and liaison among airport users is required for successful operation of this noise compatibility program. Costs are expected to be approximately \$1,120,000 over 10 years.

2. Establish a **Formal Noise Complaint/Response** Procedure. (V-14)

Approved. The establishment of a 24-hour telephone line for complaints will resolve the existing problem of a lack of communication and, hence, lack of problem resolution between the airport and the community regarding noise. Staff will follow an established procedure for identifying the problem and issuing a timely written response to the complainant.

3. **Publish Noise Abatement Procedures.** (VII-17)

Approved. Once this Part 150 program is approved, the city, through the airport administration, will review the operational elements of the plans and amend the airport operations manual to include those items with which each operator must comply. All users will receive a copy of the operational elements of the plan and amended airport procedures.

4. Establish and Maintain a Consultation Framework. (VII-14)

Approved. Once the Part 150 program is approved, the airport administration, Noise Officer, and city staff will arrange meetings with each group responsible for implementing the operational and land use elements of this plan to establish the framework necessary to effectuate implementation.

5. **Review Part 150 Program Effectiveness and Compliance.** (V-15)

Approved. By continuously reviewing and assessing the accomplishments of the program, the noise officer, the city and airport staff, the airport commission, and the public will have the opportunity to keep the program on track and identify the need for possible revision. The Noise Officer will prepare and submit monthly reports to the airport commission, and publish an annual report to be presented at an annual public meeting.

6. Establish and Maintain Noise Monitoring Program. (VII-16)

Approved. Noise monitoring assists in evaluating program compliance, and can provide a record of comparative noise levels over time. A computer-based central data system will be acquired and used to monitor noise compliants, tenant compliance, and to respond to complaints from the community.

7. Provide for Part 150 Program Update. (VII-16)

Approved. The city will undertake an update of this Part 150 study when the program review indicates significant operational changes or noise impacts will occur. The update will focus on the operational and land use changes which had occurred since the program's adoption, and will involve consultation with user groups, land planning agencies, and the public. New noise contours based on current fleet mix and flight track data will be developed and compared to prior exposure. Up-to-date land uses will be examined to identify any new non-compatible use within the noise exposure areas.

8. Public Education Program. (VII-18)

Approved. The city will **publish** and distribute newsletters to user groups, community officials, and the public. An annual public meeting will be conducted to brief interested parties on the status of the Part 150 program, and to solicit input for possible updates of the program.