



U.S. Department
of Transportation

**Federal Aviation
Administration**

Memorandum

Subject: **ACTION:** Approval of Noise Compatibility
Program for Akron-Canton Regional Airport,
North Canton, Ohio

Date: SEP 7 1989

From: Assistant Manager, Airports Division,
Great Lakes Region, AGL-601

Reply to
Attn. of

Snyder:X7538

To: Associate Administrator for Airport
System Development, ARP-1
ATTN: APP-600

On April 24, 1989, the FAA determined that the Noise Exposure Maps (NEM's) for Akron-Canton Regional Airport in North Canton, Ohio, are in compliance with applicable requirements of Section 103 (c) of the Aviation Safety and Noise Abatement Act of 1979 ("The Act"). On July 21, 1989, FAA determined that the Noise Compatibility Program conforms to the requirements of FAR Part 150 and is acceptable for detailed review. Therefore, July 21, 1989 marked the start of the formal 180-day review period for Akron-Canton Regional Airport's proposed Noise Compatibility Program (NCP) under Section 104(a) of the Act. According to the Act, the NCP must be approved or disapproved by FAA within 180 days or it shall be deemed approved. The last date for such approval or disapproval is January 17, 1989.

The proposed NCP has been reviewed and evaluated by the Detroit Airports District Office; Flight Standards, Airway Facilities, Air Traffic, and Airports Divisions; the Regional Planning Specialist; and Assistant Chief Counsel. Their comments were consolidated with those of APP-600 and AEE-100 and sent to the airport sponsor. The sponsor addressed these comments, and produced errata sheets for Part I and Part II of the Akron-Canton Regional Airport Part 150 Study submittal. The sponsor's response also contained certification of public participation in the Part 150 process and documentation of the sponsor's certification for both the NEM and NCP. Copies of all of these are being submitted with this memorandum to APP-600 to be consolidated with previous submittals of the NEM and NCP, and the NEM checklist.

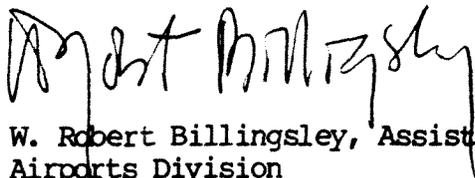
We have concluded that the NCP is consistent with the intent of the Act and that it meets the standards set forth in FAR Part 150 for such programs. The standard Part 150 noise compatibility program checklist was reviewed to ensure that all required items were included in the proposed program. That checklist is attached.

As part of the formal 180-day review, each proposed action in the NCP has undergone further review and evaluation on the basis of effectiveness and potential conflict with Federal policy and prerogatives. These include safe and efficient use of the nation's airspace, undue burden on interstate commerce, unjust discrimination, and interference with a Federal regulatory

compliance schedule (i.e., FAR Part 91, Subpart E).

On July 21, 1989, in accepting the NCP for formal review, FAA indicated informally to the airport sponsor that a portion of Land Use Management Measure 9 in the NCP lacked sufficient justification for recommending purchase of three homes and approximately six acres of undeveloped land north of the airport on the south side of Greensburg Road. These properties, for the most part, lie outside the Ldn 65 contour generated by the Integrated Noise Model. In a letter dated August 8, 1989, the airport sponsor, through its consultant, submitted an Addendum dated August 8, 1989, entitled, "Taxiway and Helicopter Ramp Noise Analysis-Impact on Greensburg Road Homes". This document provided further analysis of the noise impact on these homes, to be used by FAA in evaluation of the measure. This analysis was reviewed by Tom Connor, AEE-120, and was found to have some minor deficiencies. An errata sheet addressing these deficiencies was submitted by the sponsor's consultant in a letter dated August 24, 1989. The sponsor, in a letter dated September 6, 1989, submitted additional documentation for Land Use Management Measure 9, and urged further consideration at the Washington level. We feel further consideration is merited, but we have no current guidance that would allow us to recommend approval.

Our recommendation on each of the proposed actions is described in the attached Record of Approval. Each measure is described in detail in the Akron-Canton Regional Airport NCP.



W. Robert Billingsley, Assistant Manager
Airports Division
FAA Great Lakes Region

Attachments

Addendum: Taxiway and Helicopter Ramp Noise Analysis-Impact on
Greensburg Road Homes, August 8, 1989 (Revised August 24, 1989)
Letter from Sponsor dated September 6, 1989, requesting reconsideration
of recommendation on Land Use Management Measure 9
NCP and NEM, Including Sponsor's Response to FAA Comments
NEM Acceptance Letter
Federal Register Notice, Copy of Original Submittal
Record of Approval
NCP and NEM Checklists

RECORD OF APPROVAL
AKRON-CANTON REGIONAL AIRPORT
NOISE COMPATIBILITY PROGRAM

Concur	<u>✓</u>	<u>Joan W. Bauerlein</u>	<u>9/21/89</u>
Non concur	_____	Associate Administrator for Policy and International Aviation, API-1	(date)

Concur	<u>✓</u>	<u>Gregory S. Walker</u>	<u>Sept. 21, 1989</u>
Non concur	_____	Chief Counsel, AGC-1	(date)

Approve	<u>✓</u>	<u>Lionel S. Taylor</u>	<u>9/21/89</u>
Disapprove	_____	Associate Administrator for Airport System Development, ARP-1	(date)

RECORD OF APPROVAL
AKRON-CANTON REGIONAL AIRPORT
NOISE COMPATIBILITY PROGRAM

The Noise Compatibility Program (NCP) for Akron-Canton Regional Airport, North Canton, Ohio, describes the current and future non-compatible land uses based upon the parameters as established in FAR Part 150, Airport Noise Compatibility Planning. The Akron-Canton Regional Airport Authority recommended seventeen (17) measures in their NCP to remedy existing noise problems and prevent future non-compatible land uses. These measures are grouped into three categories: Noise Abatement Measures (4 measures), Land Use Management Measures (10 measures) and Continuing Program Measures (3 measures).

Each measure is identified below by plan category, and includes a summary of the airport operator's recommendations and a cross reference to page numbers in the NCP where each measure can be found. Summaries of these measures are found in Table 6A, Noise Abatement Recommendations and Table 6C, Land Use Management Alternative Evaluation Matrix. Also, Table 6G, contains information on who is responsible for implementation, an implementation schedule, and associated implementation costs for each measure. These pages and recommendations are supplemented by an Addendum dated August 8, 1989, entitled, "Taxiway and Helicopter Ramp Noise Analysis-Impact on Greensburg Road Homes" (Revised August 24, 1989). This document provided additional justification for recommendations made in Land Use Management Measure 9.

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

The recommendations in the Record of Approval summarize as closely as possible the airport operator's recommendations in the Noise Compatibility Program, and are cross-referenced. The statements contained within the summarized recommendations and before the indicated FAA approval, disapproval, or other determination do not represent the opinions or decisions of the FAA.

NOISE ABATEMENT MEASURES.

1. **Establish Runway 23 Departure Procedures (NCP pages 5-4, 5-5, Exhibit 5A (following page 5-6), 6-2 (including errata dated July 21, 1989), 6-3, 6-5, 6-21, 6-23, 6-24, 6-29, and Appendix D, page D-2). The Airport Authority recommends maintaining a recently implemented departure procedure for Runway 23 which**

calls for all jet aircraft to hold runway heading on Runway 23 departures until 4 nautical miles from the ASR Antenna. The straight out departure procedure is intended to apply only to jet aircraft. For purposes of promoting safety and the efficient use of local airspace, it is important to allow the separation of high performance aircraft from slower aircraft. By restricting the straight-out procedure to jets, slower turboprop and piston-engine aircraft can be turned to the right or left to keep them separated from the flow of jet aircraft. FAA's Akron-Canton Air Traffic Control Tower would continue to implement this procedure subject to the authority of the pilot in command to request an amended departure clearance pursuant to FAR 91.75. The Airport Authority plans to notify all carriers utilizing the airport of the procedure. Also, the Authority plans to reinforce the procedure through a written letter of agreement between the airport management and the FAA Air Traffic Control Tower and by having the procedure included in the Air Traffic Control Tower Orders.

Approved.

2. **Establish Itinerant Helicopter Departure Procedures (NCP pages 5-6, 6-3 (including errata dated July 21, 1989), 6-5, 6-21, 6-23, 6-24 (including errata dated July 21, 1989), and 6-29).** The Airport Authority recommends maintaining a departure procedure for itinerant helicopters implemented July 25, 1988. This procedure calls for itinerant helicopters to be cleared to 2,500 feet MSL immediately after takeoff when conflicts are not present. This procedure could impose some delays on helicopters when conflicting traffic is in the area. However, the procedure would reduce noise impacts by increasing the altitude of those departures that were formerly allowed to take off and fly lower. FAA's Akron-Canton Air Traffic Control Tower would continue to implement this procedure subject to the authority of the pilot in command to request an amended departure clearance pursuant to FAR 91.75.

Approved.

3. **Establish Minimum Approach Altitude For Helicopters On Runway 32 (NCP pages 5-7, 6-3 (including errata dated July 21, 1989 and August 8, 1989), 6-5, 6-21, 6-23, 6-24, 6-29, and Appendix D, page D-3).** The Airport Authority recommends establishing an approach procedure to Runway 32. The procedure would call for helicopters approaching Runway 32 to maintain an altitude of at least 2,500 feet MSL until reaching a distance of 5 nautical miles from the ASR antenna (4 nautical miles from the runway end). At that point, the helicopters could begin their descent at a rate of 300 feet per mile, maintaining that rate of descent until landing. Although this procedure will not result in any change in Ldn noise contours, it should reduce some of the potentially disturbing occasional

single event noise from helicopter arrivals over North Canton. This procedure would be implemented by FAA's Akron-Canton Air Traffic Control Tower, subject to the authority of the pilot in command to request an amended approach clearance pursuant to FAR 91.75. The Airport Authority plans to reinforce this procedure through a written letter of agreement between the airport management, the FAA Air Traffic Control Tower and the Army National Guard.

Approved.

4. **Establish Noise Abatement Turn For Eastbound Departures On Runway 19** (NCP pages 5-5, 5-6, Exhibit 5B (preceding page 5-7), 6-4 (including errata dated July 21, 1989), 6-5, 6-21, 6-23, 6-24, 6-29, and Appendix D, page D-4). The Airport Authority recommends establishing a noise abatement turn for eastbound departures by all aircraft on Runway 19. The procedure would call for eastbound aircraft departing on Runway 19 to be assigned a heading of 160 degrees at 2 nautical miles from the ASR antenna that heading would be maintained until reaching 4 nautical miles from the ASR antenna, at which point the aircraft would be assigned a destination heading. FAA's Akron-Canton Air Traffic Control Tower would implement this procedure subject to the authority of the pilot in command to request an amended approach clearance pursuant to FAR 91.75. The Authority plans to reinforce the procedure through a written letter of agreement between the airport management and the FAA Air Traffic Control Tower and by having the procedure included in the Air Traffic Control Tower Orders.

Approved.

LAND USE MANAGEMENT MEASURES

1. **Adopt Office/Research Or Planned Light Industrial Zoning In Jackson Township** (NCP pages 5-32, Exhibit 5K (following page 5-32), 5-34, 5-35, 6-9 through 6-11, Exhibit 6D (following page 6-12), 6-21, 6-23, 6-24, and 6-29). The Airport Authority will encourage Jackson Township to consider the adoption of new zoning provisions creating an "office/research" or "planned light industrial" zoning district. This zoning provision would then be recommended to be applied to property south of Portage Road and north of Stark Technical College/Kent State University.

Approved.

2. Adopt Industrial/Commercial Rezoning in Lake Township (NCP pages 5-32, Exhibit 5K following page 5-32, 5-33, 6-9, 6-11, Exhibit 6D following page 6-12, 6-21, 6-24, and 6-29). The Airport Authority will encourage Lake Township to consider rezoning a tract of land in Lake Township on the north side of Greensburg Road and near the extended centerline of Runway 5-23 to either Light or General Industrial. Abutting land to the south and west is currently zoned General Industrial or Light Industrial. Commercial zoning would be equally acceptable from a noise compatibility standpoint.

Approved.

3. Adopt Zoning Amendments For Planned Unit Development in Green Township (NCP pages 5-32, Exhibit 5K (following page 5-32), 5-34, 5-35, 6-9, 6-11, 6-12, Exhibit 6D (following page 6-12), 6-21, 6-23, 6-24, and 6-29). The Airport Authority will encourage Green Township to consider amending its zoning resolution to permit the Township Trustees to zone four areas in Green Township, indicated on Exhibit 6D, to PD-1, independently of the property owner, or consider establishing a new PD-2 District to apply to these properties.

Approved.

4. Adopt Noise Overlay Zoning (NCP pages 5-35, 5-36, 6-9, 6-12, Exhibit 6E (preceding page 6-13), 6-13, Table 6D (pages 6-14 through 6-18), 6-21, 6-23, 6-24, 6-29, and Appendix D, pages D-5 and D-6). The Airport Authority will encourage the adoption of noise overlay zoning by Green, Jackson, and Lake Townships. The noise overlay boundaries are shown in Exhibit 6E titled, "Recommended Noise Overlay Zone Boundaries," preceding page 6-13. The boundary generally follows the 60 Ldn contour, except for the area south of the airport, where it more closely follows the 65 Ldn. A proposed model noise overlay zoning ordinance is included in Appendix D, pages D-5 and D-6. Several important provisions of this model ordinance follow. First, the proposed ordinance recommends the standards found in Table 6D, pages 6-14 through 6-18, which among other things prohibit mobile homes, private schools, hospitals, nursing homes, amphitheaters, and resorts and group camps in the noise overlay zone. These standards exceed the Part 150 guidelines which would prohibit these uses effective inside the Ldn 75 contour. As there appears to be little demand for these kinds of uses in the near future, the Authority feels that this is a practical way of protecting the public welfare without creating hardships for existing property owners or unreasonably constraining the choice of future building locations by an of those uses. The public schools, however, are exempt from these proposed regulations by state law. The proposed ordinance also requires that avigation easements for noise and non-suit covenants be secured from all new residential development and new churches inside the noise overlay

zone. Finally, the proposed ordinance includes a requirement of notifying the airport management of any land use development proposals within the overlay zone which require discretionary review or approval by the Board of Zoning Appeals, the Zoning Commission, or the Township Board of Trustees to enable them an opportunity to review and comment on applications for variance, conditional use, rezoning, and subdivision plat approval. This special notification requirement is not intended to apply to simple applications for zoning certificates.

Approved.

5. **Adopt Subdivision Regulation Amendments (NCP pages 5-38, 5-39, 6-9, 6-17, 6-21, 6-23, 6-24, 6-29, and Appendix D, pages D-7 through D-9).** The Airport Authority will request Stark and Summit Counties to amend their subdivision regulations by adopting measures requiring the dedication of avigation easements for noise for any subdivisions within a noise overlay zone and a notice of potentially high aircraft noise levels should be recorded with the plat. It is also proposed that the ordinance require that the airport management be notified of any proposed subdivisions within the noise overlay zone to give them an opportunity to review and comment on the proposals.

Approved.

6. **Adopt/Endorse Part 150 Study As A Comprehensive Plan Element Or Planning Guideline (NCP pages 5-41, 6-9, 6-17, 6-21, 6-23, 6-25, and 6-29).** The Airport Authority will recommend to Stark County that it adopt the Part 150 Study, or the relevant parts to the study, as the airport compatibility element of its comprehensive plan. The Airport Authority will also recommend to Summit County and Green, Jackson and Lake Townships that they endorse or adopt the Part 150 Study as a planning guideline, of if they ever develop a comprehensive plan or land use plan, they would adopt this study as an element of that plan.

Approved.

7. **Development Of Parks South Of Runway 1-19 (NCP pages 6-9, Exhibit 6D (following page 6-12), 6-17, 6-18, 6-21, 6-23, 6-27, 6-28, and 6-29).** The Airport Authority plans to seek the cooperation of Jackson Township and Stark County in considering the use of land south of Runway 1-19 for parks. Two possible locations for these parks are shown on Exhibit 6D, Recommended Land Use Management Measures (following page 6-12). They include an area on the west side of Frank Avenue south of Portage Road and an area immediately north of Stark Technical College/Kent State University, east of Frank Avenue. The former location includes some land covered in Land Use Management Measure

10, while the latter location is included in land covered by Land Use Management Measure 1. If Jackson Township is willing to consider outright purchase of the land for parks, the Airport Authority plans to encourage the Township to include as much of the undeveloped land along the Runway 1-19 centerline, including these two park sites.

Approved.

8. **Establish Guidelines For Discretionary Review Of Development Projects (NCP pages 5-42, 6-9, Exhibit 6E (preceding page 6-13), 6-18, 6-19, 6-23, 6-25, 6-27, and 6-29).** The Airport Authority will recommend to Green, Jackson and Lake Townships and Stark and Summit Counties, that they adopt informal guidelines for planning commissions, zoning commissions, boards of zoning appeals and planning departments encouraging the consideration of the impact of airport noise on community development proposals and applications for rezoning, variances and conditional uses. Suggested guidelines to be considered are included on pages 6-18 and 6-19.

Approved.

9. **Acquire Land And Homes North Of Airport On Greensburg Road (NCP Exhibit 5K (following page 5-32); NCP pages 5-42, 5-43 (including additional analysis dated August 8, 1989, revised by errata sheet August 24, 1989), 6-6, Table 6B page 6-7, 6-9, Exhibit 6D (following page 6-12), 6-19 (including errata dated July 21, 1989 and additional analysis dated August 8, 1989, revised by errata sheet August 24, 1989), 6-27 (including errata dated July 21, 1989), 6-28 and 6-29; and Addendum titled "Taxiway and Helicopter Ramp Noise Analysis-Impact on Greensburg Road Homes", dated August 8, 1989, revised by errata sheet August 24, 1989), September 6, 1989, letter from Akron-Canton Regional Airport.** The Airport Authority plans to acquire five homes, two on the north side of Greensburg Road and three on the south side. The acquisition boundaries have been adjusted to accommodate the purchase of complete land parcels. These properties are shown on Exhibit 6D, Recommended Land Use Management Measures (following page 6-12) and the Location Map included in the August 8, 1989 Addendum. The two homes on the north side of Greensburg Road are impacted by noise exceeding 65 Ldn, as shown on the 1993 Noise Exposure Map. The other three homes south of Greensburg Road are within the 60 Ldn contour, which is based on overflight noise only, and does not consider the effects of ground noise such as taxiing aircraft, and ground based aircraft (helicopter) noise from a helicopter base. These houses are within 1000 feet from the Ohio National Guard helicopter base and within 2000 feet of the taxiway for Runway 19.

Additional noise analysis was provided in the Addendum titled, "Taxiway and Helicopter Ramp Noise Analysis-Impact on Greensburg Road Homes", revised August 24, 1989. Calculations using values within the tolerance parameters of the predictive noise models indicate that the Ldn level for the sites due to fixed-wing aircraft and helicopter overflight/taxi operations are between 61.6 and 62.7 Ldn at the sites. The INM Standard Grid Analysis Report also indicates that the sites are subject to Sound Exposure Levels of about 90.9 daily. Time Above analysis indicates that the sites experience a total of between 40 and 41.1 minutes a day of noise levels in excess of 65 dB.

Approved.

10. Acquire Land And Homes South of Runway 1-19 (NCP Exhibit 5K (following page 5-32), and pages 5-42, 5-43, 6-9, Exhibit 6D (following page 6-12), 6-19, 6-20 (including errata dated July 21, 1989), 6-22, 6-23, 6-27 (including errata dated July 21, 1989), 6-28, and 6-29 (including errata dated July 21, 1989). The Airport Authority plans to acquire most of the residences and all the residentially zoned land within the Ldn 65 contour as shown on the 1993 Noise Exposure Map and on Exhibit 6D, Recommended Land Use Management Measures (following page 6-12). The latter area consists of approximately 212 acres which is undeveloped and zoned residential. The acquisition boundaries have been adjusted to accommodate the purchase of complete land parcels. Fifty-seven acres of this is currently surfaced mined, which is compatible, but ultimate use can be for residential use. Less than fee simple interest may be acquired for this acreage. The overall area to be acquired also includes eleven homes and one duplex immediately south of the airport. Not included are homes at the extreme southern end of the Ldn 65 contour and three homes on the south side of Mt. Pleasant Street owned by the Timken Company. The latter homes, located between the Timken Plant and the airport, are currently zoned industrial.

Approved.

CONTINUING PROGRAM MEASURES

1. **Noise Monitoring And Noise Contour Updating (NCP pages 6-26 and 6-29).** The Airport Authority plans on monitoring compliance with the recommended noise abatement plan. However this will be done without continuous noise monitoring or employment of a full time noise abatement specialist. If deviations are observed, the airport management will promptly investigate the reasons for any deviations and relay its concerns to the appropriate officials. The airport management will seek periodic feedback from the air carriers, the Army National Guard and the air traffic control tower regarding compliance with the plan. The

Airport Authority plans to update the Ldn noise contour maps approximately every five years, or more often if equivalent operations levels change significantly.

Approved.

2. **Noise Complaint Response (NCP pages 6-26, 6-29, and Appendix D, page D-10).** The Airport Authority plans to maintain its current noise complaint response function. This includes compilation of a noise complaint file, initial response to those complaining, follow-up actions/evaluation of individual complaints where possible, and recurrent reports. A noise complaint form is included in Appendix D to assist in this effort. If the pattern of complaints indicates that some of the recommended noise abatement procedures are not being followed, the airport management will promptly investigate the matter and seek corrective action.

Approved.

3. **Plan Review and Evaluation (NCP pages 6-26, 6-27 and 6-29).** The Airport Authority plans to establish a process for the continuing review and evaluation for making refinements to the NCP, and updating the complete plan every five to eight years.

Approved.