

## **Part 150: Records of Approval**

### **Port Columbus International Airport, Columbus, Ohio**

**Approved on 1/10/01**

The Noise Compatibility Program (NCP), for Port Columbus International Airport in Columbus, Ohio, describes the current and future non-compatible land uses based upon the parameters established in FAR Part 150, Airport Noise Compatibility Planning.

The Columbus Municipal Airport Authority (CMAA) previously submitted an NCP in 1987 consisting of nineteen (19) measures, eighteen (18) were approved in full on September 25, 1987. The one measure that was not approved was related to specific flight procedures that required additional information and analysis. Noise Exposure Maps (NEMs), as part of the 1987 NCP, were accepted by the FAA on July 28, 1987.

This document is a comprehensive update of the original Noise Compatibility Program approved by the Federal Aviation Administration (FAA) in 1987. The current and future Noise Exposure Maps are found in volume 1, Sections 1 through 5, of the Noise Compatibility Program documents. The 1998 existing condition noise exposure map was based on 1997 data and is indicative of current conditions at Port Columbus International Airport. The FAA accepted the noise exposure maps on January 3, 2000. The Noise Compatibility Plan (NCP) is found in Volume 2, Sections 6 through 11, of the Noise Compatibility Documents.

The NCP lists 29 alternative measures, which continue or expand the intent of the approved 1987 NCP. The FAA groups these measures into three categories: noise abatement (11), land use (12), and program management (6). Of the 29 measures listed, the sponsor has eliminated (11) from the NCP so no further action is required. The Columbus Municipal Airport Authority recommends eighteen (18) measures in their updated NCP to remedy existing noise problems and prevent future non-compatible land uses. The recommended NCP consists of five (5) noise abatement measures, seven (7) land use measures, and six (6) program management measures.

Each measure of the recommended NCP is identified below by type of measure, and includes a summary of the CMAA's recommendations and a cross-reference to page numbers in the NCP where each program measure is discussed.

Section 7.0 of the NCP report contains the analysis of the noise abatement alternatives considered; Section 8.0 contains the analysis of the land use management alternatives; and Section 9.0 contains the program management alternatives. Section 10 contains the recommended noise program. Table 10.3 depicts the recommended program, implementation schedule, and an estimate of the program costs. The Federal Aviation Administration's (FAA's) share of the eligible cost will be the current program rate set by statute at the time of funding of approved program measures.

The approvals listed here include approvals of actions that the CMAA recommends be taken by the FAA. 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 (ROA) summarize as closely as possible the airport operator's recommendations in the NCP. 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**

There are five Operational (Elements) Measures described in Chapter 7 that are recommended for inclusion in the updated NCP. All five of the Operational Measures have been carried over from the 1987 NCP into this new NCP with modifications.

The 1987 Operational Measures carried over are to designate a new north airfield run-up location and amend existing Nighttime Run-up policy, construct a new noise barrier at the north airfield, increase nighttime use of Runway 10L/28R, maximize east flow, and amend the Runway 10R departure.

NA-1 Amend the Port Columbus International Airport Night Time Aircraft Maintenance Runup Policy to designate a new run-up location such that Executive Jet Aviation's (EJA) new building will provide attenuation of jet engine maintenance run-ups for adjacent residential areas located along I-270.

Pages 7-2, 7-3, Figure 7.1, Table 7.9, 7-14, 10-1, Appendix A.

The CMAA proposes to amend the Port Columbus International Airport Night Time Aircraft Maintenance Run-up Policy to designate an additional run-up location at the north airfield for the relocation of the Executive Jet facility. This measure will provide attenuation of jet engine maintenance run-ups for adjacent residential areas located along I-270.

**APPROVED AS VOLUNTARY.** Previously approved in 1987 NCP, but now revised to include a new runup location for the new EJA site at the north airfield.

NA-2 Construct a new run-up barrier at the north airfield, if the EJA building does not adequately attenuate jet engine maintenance run-up noise for adjacent residential areas located along I-270.

Pages 7-2, 7-3, Figure 7.1, Table 7.9, 7-14, 10-1, Appendix A.

The CMAA proposes to amend the Port Columbus International Airport Nighttime Aircraft Maintenance Runup Policy to construct a new run-up barrier at the north airfield if the new location proposed in NA-1 does not adequately attenuate noise in adjacent residential areas located along I-270.

**APPROVED AS VOLUNTARY.** Previously approved in the 1987 NCP, but now revised to include the construction of a new noise barrier.

NA-3 Increase nighttime use of Runway 10L/28R, and amend FAA Tower Order CMH

ATCT 7110.1 to read as follows:

Unless wind, weather, runway closure, or loss of nav aids dictate otherwise, between the hours of 10:00 p.m. and 8:00 a.m. local time, Runways 28L or 10R are assigned to jet aircraft;

Jet aircraft with Stage 3 engines may use runway 10L/28R for arrival operations between the hours of 10:00 p.m. and 1:00 a.m., local time; and

Jet aircraft with Stage 3 engines may use Runway 10L or 28R after 6:00 a.m.

Pages 7-3, 7-4, 7-5, 7-6, Table 7.1, Figure 7.2, Table 7.2, Table 7.3, Figure 7.3, Table 7.4, 7-14, Table 7.9, 10-2, Table 10.3.

The CMAA proposes to continue use of the informal Nighttime Preferential Runway Use program in effect at CMH with the modification that jet aircraft with stage 3 engines may use Runway 10L/28R for arrival operations between the hours of 10:00 p.m. and 1:00 a.m., local time. By adopting this additional measure in the procedure, the total population exposed to aircraft-generated noise levels greater than 65 DNL is reduced by approximately 19 percent, from 275 people to 222 people. It is noted that this procedure cannot be implemented until an adequate environmental review has been accomplished.

**APPROVED AS VOLUNTARY.** Previously approved in the 1987 NCP, but now revised to increase the nighttime use of Runway 10L/28R.

NA-4 Maximize east flow and amend FAA Tower Order CMH ATCT 7110.1 to incorporate this alternative. Publish this alternative as an informal Preferential Runway Use System in the Airport Facilities Directory.

Pages 7-6, 7-7, Table 7.5, Figure 7.4, Table 7.6, 7-14, Table 7.9, 10-2, Table 10.3.

The CMAA proposes to amend FAA Tower Order CMH ATCT 7110.1 and publish this alternative as an informal Preferential Runway Use System in the Airport Facilities Directory. An analysis of the windrose for CMH, conducted during the Noise Compatibility Study Update, indicated that east flow could be used approximately 65% of the time assuming acceptance of a maximum 3-knot tail-wind component. With maximizing east flow, the total population exposed to aircraft generated noise levels greater than 65 DNL is reduced by approximately 38 percent, from 275 people to 170 people. It is noted that this procedure cannot be implemented until an adequate environmental review has been accomplished.

**APPROVED AS VOLUNTARY.** Previously approved in the 1987 NCP, but now revised to maximize east flow as an informal Preferential Runway Use System in the Airport Facilities Directory.

NA-5 Amend FAA Tower Order CMH ATCT 7110.1 and FAA Notice CMH ATCT N7110.22 to read as follows:

During nighttime operations, 10:30 p.m. to 7:00 a.m. local time, the following procedures shall be used for departures off Runway 10R:

- i. Aircraft normally assigned a runway heading shall be assigned a heading of 100°.
- ii. Propeller driven aircraft, conventional or turboprop, shall be turned no further than 15° left or right (085° to 115°). These headings shall not be altered until the aircraft has reached 3,000 MSL or is 3 miles from runway end.
- iii. The aircraft will begin the turn at 2.2 DME from the Runway 10R LOC/DME.

- iv. The aircraft must climb to an altitude of 1,215 feet MSL before turning. Pages 7-9, 7-14, 7-15, Table 7.9, 10-2, Table 10.3

The CMAA proposes to amend the language used in the current FAA Tower Order CMH ATCT 7110.1 and FAA Notice CMH ATCT N7110.22 in order to comply with a change in the way that the FAA implements the procedure. This modification will not affect the existing flight tracks or noise contours. Since the wording of the procedure will be rather long after these changes are made, it is recommended that it be described in a published departure procedure, rather than being issued verbally to each pilot in their departure clearance instructions.

#### **APPROVED AS VOLUNTARY.**

Approved in the 1987 NCP, but revised to change the language in the tower order to comply with FAA requirements.

#### **LAND USE MEASURES**

There are six Land Use Measures described in Chapter 8 that are recommended for inclusion in the updated NCP. Two (2) of the Land Use Measures are continued from the 1987 NCP with modifications. These are Land Use Measure L-1, Offer noise insulation of noncompatible residential structures; and LU-2, Offer noise insulation of noncompatible church.

Four (4) new land use measures, LU-3, Establish compatible land use zoning; LU-4, Establish compatible land use zoning; LU-5, Establish subdivision regulations; LU-6, Establish building code regulations; and LU-7, Establish fair disclosure regulations, have been added to the updated NCP.

LU-1 Offer a program for noise insulation of noncompatible structures for noncompatible residences within the DNL 65+ dB contour of the Year 2003 Future Condition Exposure Map, with program implementation, in exchange for an aviation easement.

Pages 8-5, 8-6, 8-7, 8-8, Figure 8.1, 8-15, Table 8.6, 10-2, Table 10.3, Appendix B, Appendix C.

The CMAA completed a Sound Insulation Pilot Project consisting of eight homes in December 1992. An additional 270 homes have participated in the Residential Sound Insulation Program as approved in the 1987 NCP. This measure is a continuation of this measure modified to include noncompatible residential structures identified in the 65+ DNL contour of the Year 2003 Future Condition Noise Exposure Map, with program implementation, in exchange for an aviation easement.

**APPROVED.** Previously approved as a Land Use Measure in the 1987 NCP, but modified to include residences within the 65+ DNL of the Future Year 2003 NEM.

LU-2 Offer a program for noise insulation of noncompatible structures for noncompatible churches within the DNL 65+ dB contour of the Year 2003 Future Condition Noise Exposure Map, With Program Implementation, in exchange for an aviation easement. Pages 8-5, 8-6, 8-7, 8-8, Figure 8.1, 8-15, Table 8.6, 10-2, Table 10.3, Appendix B, Appendix C.

The CMAA proposes to complete sound insulation for one church located inside the 65+ DNL contour of the Year 2003 Future Condition Noise Exposure Map, with program Implementation. This is the Mount Judia Church of Old Regular Baptists of Jesus Christ.

**APPROVED.** Previously approved as a Land Use measure in the 1987 NCP, but modified to include noncompatible structures within the 65+ DNL of the Future Year 2003 NEM.

LU-3 Seek cooperation from the City of Columbus and Franklin County to amend their Land Use Compatibility Standards to achieve the level of compatibility identified in the Recommended Land Use Compatibility Guidelines.

Pages 8-8, 8-9, 8-10, Figure 8.2, Table 8.5, Table 8.6, 10-3, Table 10.3, Appendix D.

The CMAA proposes to seek the cooperation from the City of Columbus and Franklin County to amend the definition of airport environs” from the most restrictive 65 Ldn Contour and greater noise exposure areas” to “the most restrictive DNL 60 dB contour and greater noise exposure areas.”

**APPROVED.** The Federal government has no authority to control local land use; the local government has the authority to implement this measure.

LU-4 Seek cooperation from the City of Columbus and Franklin County to amend the boundaries of the Airport Environs overlay (AEO) district to correspond to the DNL 60 dB and greater noise contours.

Pages 8-8, 8-9, 8-10, Figure 8.2, Table 8.5, Table 8.6, 10-3, Table 10.3, Appendix D.

The CMAA proposes to seek the cooperation from the City of Columbus and Franklin County to amend the AEO (Airport Environs Overlay) District boundaries. The current boundaries of the AEOs are based upon noise contours developed in the 1987 entitled “Noise Exposure – 2005 Unconstrained.” It is the goal to update the AEOs in the City of Columbus and Franklin County to correspond to the 1998 60+ DNL noise contour.

**APPROVED.** The Federal government has no authority to control local land use; the local government has the authority to implement this measure.

LU-5 Seek cooperation from Franklin county to amend Franklin county Zoning Resolution, Section 660.07, Avigation easement, to require applicant for rezoning, change of use, or special use permit to convey an avigation easement to the appropriate airport.

Pages 8-8, 8-9, 8-10, Figure 8.2, Table 8.5, Table 8.6, 10-3, Table 10.3, Appendix D.

The Columbus City Codes, 1959, Section 3384.08, Avigation Easement, requires applicants for a variance, rezoning, change of use, or special use permit, to convey an avigation easement to the operating authority of the appropriate airport. Franklin County Zoning Resolution, Section 660.07, Avigation Easement, requires applicants for a variance or conditional use permit to convey an avigation easement to the appropriate airport. It does not require applicants for rezoning or change of use to convey an avigation easement. The CMAA proposes to seek the cooperation of Franklin County to amend their Zoning resolution to include these measures.

**APPROVED.** The Federal government has no authority to control local land use; the local government has the authority to implement this measure.

LU-6 Seek cooperation from Jefferson Township and the City of Gahanna to adopt the AEO-Airport Environs Overlay District as part of their official zoning regulations.

Pages 8-8, 8-9, 8-10, Figure 8.2, Table 8.5, Table 8.6, 10-3, Table 10.3, Appendix D.

The CMAA proposes to seek the cooperation of Jefferson Township and City of Gahanna to adopt specific zoning districts that address aircraft noise exposure and compatible land use.

**APPROVED.** The Federal government has no authority to control local land use; the local government has the authority to implement this measure.

LU-7 Seek cooperation from Franklin County, Jefferson Township, Mifflin Township, and the City of Gahanna to adopt subdivision codes applicable to the AEO-Airport Environs Overlay District.

Pages 8-11, 8-12, 8-15, 8-16, 10-3, Table 10.3, Appendix D.

This CMAA proposes to seek the cooperation of Franklin County, Jefferson Township, Mifflin Township, and the City of Gahanna in adopting the Columbus City Code, Chapter 3123, Airport Environs Subchapter as a model for a subdivision code in these communities. The impact of airport-related noise can be minimized by managing the built environment and directing noise-sensitive land uses away from noise-sensitive locations to prevent unnecessary health impacts on area residents.

**APPROVED.** The Federal government has no authority to control local land use; the local government has the authority to implement this measure.

LU-8 Seek cooperation from Franklin County, Jefferson Township, Mifflin Township, and the City of Gahanna to adopt building codes applicable to the AEO-Airport Environs Overlay District.

Pages 8-12, 8-13, 8-15, 8-16, 10-3, Table 10.3, Appendix D.

The CMAA proposes to seek the cooperation of Franklin County, Jefferson Township, Mifflin Township, and the City of Gahanna to adopt the Airport Environs Building Code which establishes uniform insulation standards to protect persons within hotels, motels, apartment houses, attached and detached single-family dwellings, other residential buildings, and other buildings where noise-sensitive activities are affected by excessive aircraft noise. It is through these building codes that the mitigation of noise impacts can be accomplished by use of specific construction methods and uniform insulation standards.

**APPROVED.** The Federal government has no authority to control local land use; the local government has the authority to implement this measure.

LU-9 Seek cooperation from the Board of Realtors to participate in a voluntary fair disclosure program for property located within the AEO District.

Pages 8-13, 8-14, 8-15, 8-16, 10-3, Table 10.3, Appendix E.

The CMAA proposes to seek the cooperation from the Board of Realtors to participate in a volunteer fair disclosure program for property located within the AEO District. This measure is intended to ensure that prospective buyers of property are informed that the property is or will be exposed to potentially disruptive aircraft noise.

**APPROVED.**

LU-10 Periodically place advertisements in the real estate sections of local newspapers delineating the boundaries of the AEO District.

Pages 8-13, 8-14, 8-15, 8-16, 10-3, Table 10.3, Appendix E.

The CMAA proposes to periodically place advertisements in the real estate section of local newspapers in order to participate in the volunteer fair disclosure program described above. This measure is intended to ensure that prospective buyers of property are informed that the property is or will be exposed to potentially disruptive aircraft noise.

**APPROVED.**

LU-11 Purchase the Buckles property to prevent imminent noncompatible developments from occurring.

Pages 8-14, 8-15, 8-16, Figure 8.1, 10-3, Table 10.3.

The CMAA proposes to purchase the Buckles property to prevent the introduction of additional noncompatible development. This property is a large vacant parcel directly east of the extended centerline of Runway 10L/28R, between Hamilton Road and I-270. Several noncompatible developments have been proposed for this property, including a sports complex and a multi-story office complex. The land could be resold with covenants or easements retained to assure long-term compatibility with the airport.

**APPROVED.**

**PROGRAM MANAGEMENT MEASURES**

There are six Program Management (Elements) Measures recommended in the update of the NCP. These measures are described in Chapter 9 of the NCP document. Three of the measures, IM-1, Maintain certain existing noise abatement procedures; IM-2, Maintain the Noise Management Office for noise compatibility program management; and IM-3, Maintain an ongoing public involvement program regarding the noise compatibility program in the new NCP are essentially as described in the 1987 NCP. One of the Program Management Measures IM-4, Maintain and upgrade the noise and flight track monitoring system has been revised and is included in the new NCP.

Two new Program Management Measures IM-5, Routinely update the noise contours and periodically update the noise program; and IM-6, Establish a land use compatibility task force have been added to the new NCP.

IM-1 Maintain the following noise abatement elements of the FAA ATCT Tower Order: Except during an emergency, arriving jet aircraft shall not be descended below 6,000 feet until they are within:

1. The geographical confines of federally regulated airspace and inside the 20-mile range mark, for satellite airports, within 20 flying miles of the landing runway.
2. Within the 20 mile range mark or 20 flying miles of the landing runway and inside a 45 degree line extending from the approach end of the landing runway Category III and turboprop aircraft shall be kept at or 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. Same issue. Visual approaches may be approved or initiated. However, the descent profile shall conform with the National Local Flow Management Program. Descent below the altitudes in a. and b. above shall not be issued until the aircraft is within 19 flying miles of the landing threshold. Jet arrival aircraft on a visual approach shall not be permitted to turn inside the final approach fixes; i.e.

1. GRENS for runway 10L.

2. ARLIG for runway 10R.
3. SUMIE for runway 28L.
4. COMOZ for runway 28R.

Departing jet aircraft shall not be turned until reaching an altitude of 3,500 feet or a point 5 miles from the departure end of the runway.

Helicopter aircraft utilizing runways 28R or 10L for transition landings shall be required to adjust their traffic pattern to remain within the airport boundaries south and west of Interstate 270 (I-270).

In addition to the above, the following shall be utilized between the hours of 10:00 p.m. and 8:00 a.m., local time:

1. All arriving aircraft shall be kept at or above 4,000 feet (IFR) or 3,500 feet (VFR) until intercepting the glide slope or within 10 flying miles of the landing threshold. Aircraft below these altitudes shall be kept as high as possible as long as possible.
2. Practice approaches for high noise level aircraft shall not be approved unless runways 28L or 10R are used and the approach will terminate in a full stop taxi back operation.
3. Helicopter transition landings to runways 28R or 10L shall not be permitted.

Pages 9-1, 9-2, 9-4, 9-5, Table 9.1, 10-3, 10-4, Table 10.3.

The CMAA proposes to maintain the aforementioned noise abatement elements of the FAA ATCT Tower Order.

**APPROVED.** Measure previously approved in the 1987 NCP. It was noted in that NCP that these measures provided single event noise impact reduction through removal of flights from noncompatible land uses.

IM-2 Maintain the Noise Management Office for noise compatibility program management.

Pages 9-2, Table 9.1, 9-5, 10-4, Table 10.3.

The CMAA proposes to maintain the established Noise Management Office with several staff positions dedicated to noise project administration, including receiving and responding to noise complaints, reviewing compliance with noise abatement procedures, evaluating progress on implementing land use recommendations, etc.

**APPROVED.** This measure previously approved in the 1987 NCP.

IM-3 Maintain an ongoing public involvement program regarding the Noise

Compatibility Program.

Pages 9-2, 9-5, Table 9.1, 10-4, Table 10.3.

The CMAA proposes to maintain the basic elements of the Part 150 Study public involvement program, which include the Technical Assistance Committee, holding routine Public Workshops, routine distribution of newsletters, and sending out press releases.

**APPROVED.** Previously approved Measure of the 1987 NCP.

IM-4 Maintain the noise and flight track monitoring system, and expand and upgrade the system as necessary. Add four permanent NMTs (noise monitoring terminals) and upgrade computer software and hardware as necessary.

Pages 9-2, 9-3, Figure 9.1, 9-5, Table 9.1, 10-4, Table 10.3.

The CMAA is in the process of acquiring and installing a permanent noise and flight track monitoring system. The system will have the capability to record aircraft noise levels, aircraft flight tracks, identify aircraft, and provide several other methods of gathering data. Eight permanent Noise Monitoring Terminals (NMTs) will be installed initially, with the capability for expansion up to twenty NMTs. This CMAA proposes to maintain and upgrade the system as necessary.

**APPROVED.** This measure is a refinement of a program measure approved in the 1987 NCP, previously approved by the FAA. For reasons of aviation safety, this approval does not extend to use of the monitoring equipment for enforcement purposes by in situ measurement of any present noise thresholds.

IM-5 Routinely update the noise contours and periodically update the noise program.

Pages 9-3, 9-5, Table 9.1, 10-4, Table 10.3.

The CMAA proposes to routinely re-examine the noise and land use compatibility characteristics of the airport. On a routine basis, the operational characteristics of the airport should be re-examined and new noise contours developed. Changes in land use and zoning should also be reviewed. If it is determined that there are new noise impacts that were not previously accounted for in the Part 150 Study, it is recommended that the Part 150 Noise Exposure Maps and/or Noise Compatibility Program be revised and resubmitted to the FAA. If updates do not appear necessary based on an annual review, the program should be updated every five years to stay current with changes in aircraft and airport technological advancements and improved noise modeling methodologies.

**APPROVED.**

IM-6 Establish a land use compatibility task force which meets periodically to discuss issues relevant to airport noise compatibility planning.

Pages 9-3, 9-5, Table 9.1, 10-4, Table 10.3, Appendix G.

The CMAA proposes to establish a land use compatibility task force consisting of representatives from the City of Columbus, Franklin County, Port Columbus International Airport, Ohio State University Airport, and Rickenbacker International Airport. The group should meet periodically to discuss land use compatibility planning issues that relate to all airports in the Columbus area. Jurisdictions that do not currently have an Airport Environs Overlay District in place should also be invited to participate.

**APPROVED.**