

Part 150: Records of Approval

James M. Cox-Dayton International Airport, Ohio

Approved on 10/30/96

The Noise Compatibility Program (NCP) for James M. Cox-Dayton International Airport in Dayton, 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 city of Dayton recommended twenty four (24) 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 (5), land use management (16), and program management (3). These measures continue, revise, replace or discontinue measures in Dayton existing NCP approved by FAA on September 14, 1988. This NCP also provides new measures that were not included in that earlier document.

Each measure of the new recommended Noise Compatibility Program (NCP) is identified below by plan category, 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. The current Noise Exposure Map (1992) and forecast Noise Exposure Map (1997), found on pages I-8 and I-9, were accepted by FAA on June 6, 1994, as being in compliance with applicable requirements of Section 103 (c) of Aviation Safety and Noise Abatement Act of 1979. They replaced NEM's that were accepted on September 23, 1988. In addition, the airport operator has submitted a revised forecast Noise Exposure Map (1998) and requested FAA to accept this NEM upon approval of the NCP.

The NCP was first submitted March 29, 1995. Chapter 5 of the NCP contains noise abatement alternatives. Chapter 6 contains land use alternatives. Chapter 7 discusses noise compatibility. Table 7D, page 7-25, depicts the recommended program, estimate of program costs, and recommended implementation schedule. The information associated with the Noise Abatement Element of this table has been revised by page 8 of Addendum No. 4 submitted by the city of Dayton. It should be noted that the Federal Aviation Administration's (FAA) share of the eligible cost will be whatever the current eligible percentage rate is at the time of grant issuance. Mr. Roy Williams' letter dated April 25, 1996, officially transmitted the city of Dayton's five documents which supplemented the submitted NCP. The five documents officially supplementing the NCP include: FAR Part 150 NCP Errata Sheets 1 and 2 dated November 22, 1995, and November 29, 1995 (replaced with Addendum No. 4, dated September 11, 1996); FAR Part 150 NCP Study Addendum Nos. 1 and 2 dated January 4, 1996, and April 24, 1996; and Cargo Ramp Noise Analysis dated January, 1996. Subsequently, Mr. Roy Williams' letter dated September 11, 1996, officially transmitted Addendum No. 3, dated September 11, 1996 which contains a copy of public notice regarding the public comment period, and a copy of a comment letter and the airport response; and Addendum No. 4, dated September 11, 1996, which contains the city of Dayton's response to FAA comments concerning Noise Abatement Measures 1 through 5.

The approvals listed here 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. 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.

This Record of Approval, when approved, will replace measures in Dayton's NCP previously approved in a Record of Approval dated September 14, 1988. The 1988 Record of Approval had a slightly different numbering system from the 1988 NCP because of the addition of a Measure 4 dealing with installation of a noise barrier. In the descriptions which follow the relationship of each new measure to measures in the 1988 NCP and, where appropriate, the measure's 1988 Record of Approval (ROA) number is provided.

Two measures in the 1988 NCP have been completed and are not carried over in the new NCP: Measure 1 (1988 ROA Measure 1)- Extend Runway 24R by 1,400 feet to facilitate turning maneuverability and Measure 3 (1988 ROA Measure 3)Extend Runway 18 by 1,500 feet to reduce separation times and increase departing aircraft altitude over the City of Vandalia. Three measures have been dropped from consideration in the new NCP: Measure 2(1988 ROA Measure 2) Extend Runway 6L by 600 feet to increase airfield capacity to accommodate heavier aircraft and increase altitude over lands to the northeast, Measure 4 (1988 ROA Measure 4) Construction of noise barriers, and Measure 11 (1988 ROA Measure 12) Nighttime departure procedure, runway 24R for traffic departing to the south or to the east of the airport.

The measures described below continue, revise, or replace measures in Dayton existing NCP approved by FAA on September 14, 1988. Some of these measures are totally new measures that were not discussed in that earlier approved NCP.

Noise Abatement Measures

NA-1 Runway 24L departures will be instructed to maintain runway heading until passing 2,000 feet MSL (1,000 feet AGL) prior to commencing a turn. (This is a revision of Measure 13 of the NCP (1988 ROA Measure 14) approved in 1988 described on page 1-51. See also pages 7-2; Scenario A, pp. 5-38, 5-39; and Addendum No. 4 dated September 11, 1996, pages 1 and 2).

The city of Dayton recommends that Runway 24L departures will be instructed to maintain runway heading until passing 2,000 feet MSL prior to initiating a turn whenever wind, weather, air traffic, and other operating conditions permit. Addendum No. 4 replaced the word shall in the NCP with the phrase will be instructed as shown in the previous sentence.

The intent of this procedure is to keep aircraft from turning at low altitudes over residential areas in Vandalia south of National Road. While this procedure has little impact on the DNL noise contours, it would help remove annoying single events from some residential areas. This measure was subject to a Finding of No Significant Impact for Air Traffic Control Noise Abatement Procedures at James M. Cox-Dayton International Airport, dated February 8, 1995, and was implemented in Dayton Air Traffic Control Tower Order 7110.30A dated May 3, 1995.

APPROVED AS A VOLUNTARY MEASURE. The procedure was one of the noise abatement measures approved under an EA/FONSI and was subsequently implemented in a tower order. This procedure may not be strictly adhered to at all times. Weather or conflicting traffic may require variations in the procedure for safety reasons. Pilot technique may also be a factor in explaining variations which may be observed in the procedure from time to time.

NA-2 North and west bound turbojet departures off Runway 6L shall be given a heading or headings that will position the aircraft west of, or parallel to I-75 (Normally between 320 degrees and 360 degrees) and maintain that heading until either passing 4,000 feet MSL, or until 5 miles from the airport. Aircraft unable to make the turn should hold runway heading for five miles before turning. (This is a revision of Measure 14 of the NCP (1988 ROA Measure 15) approved in 1988 described on pages 1-51 and 1-52. See also pages 7-2; Exhibit 7A; Scenario A, pp. 5-38, 5-39; and Addendum No. 4 dated September 11, 1996, pages 2 and 3).

The city of Dayton recommends in Addendum No. 4, pages 2 and 3, that turbojet aircraft in excess of 12,500 pounds departing to the north or west be instructed to initiate a left turn, by being given a heading or headings that will track west of or parallel to I-75 (normally between 320 degrees and 360 degrees) and maintain that heading for either 5 miles or until reaching an altitude of 4,000 feet mean sea level (MSL) whenever wind, weather, and other operational conditions permit without compromising safety. If the operational characteristics prohibit initiation of a turn west of I-75 or if the aircraft is departing to the northeast, the aircraft will be instructed to maintain runway heading for 5 miles or until reaching an altitude of 4,000' MSL. Aircraft destined to the south or east may proceed on course.

This revised procedure is a modification from that found in the NCP and recent Finding of No Significant Impact for Air Traffic Control Noise Abatement Procedures at James M. Cox-Dayton International Airport dated February 8, 1995, for implementing this measure. These earlier documents called for the initiation of the left turn, due north, upon crossing the middle marker. In addition, the NCP indicates that this procedure be required at night - between 10:00 p.m. and 7:00 a.m. Addendum No. 4 deletes reference to its required use at night, indicating that it should be applicable all the time. The Addendum No. 4 also deletes reference to the middle marker and discusses the safety reasons for eliminating pilot reliance on the middle marker. Flight Standards has indicated to the city of Dayton that having the flight crew cross checking another item during the critical portion of the flight departure adds unnecessary complexity to the pilots workload. Air Traffic commented to the city that reference to the middle marker is not needed and is often omitted from current instructions as being too wordy. Air Traffic believes that such a modification will not change the flight tracks used or the percentage of runway end utilization. Therefore, the city of Dayton believes that this change will not materially affect the noise distribution defined by this noise abatement measure.

The intent of this procedure is to route north and west bound turbojet departures to the north along the interstate and west of Tipp City. The turn would also avoid direct over flights of the Deer Cliff subdivision northeast of the airport on the Runway 6L extended centerline. This measure would be implemented through a revision of Tower Order 7110.30A dated May 3, 1995 by the Dayton Air Traffic Control Tower Manager.

APPROVED AS A VOLUNTARY MEASURE. The revised procedure described above is approved. Reference in the NCP to use of navigation aids has been deleted and requiring its use at night has been extended to daytime as well. These changes have been coordinated with both Air Traffic and Flight Standards and changed for the reasons stated above. This noise abatement measure was one of several noise abatement measures approved under an EA/FONSI and implemented in a tower order. The tower order will be revised to delete reference to the middle marker. Air Traffic often omits reference to the middle marker already because the pilots are familiar with the procedure and its mention is considered unnecessary. Air Traffic agrees that deleting reference to the middle marker would not affect the flight tracks used or the percentage of runway end utilization. Therefore, FAA agrees that the changes will not materially affect the

noise distribution defined by this noise abatement measure in the previously approved FONSI or in the Part 150 Study's NEM's.

NA-3 Arrivals to Runway 24R will be instructed to establish a straight in final approach at least four miles from the runway. (This is a revision of Measure 15 of the NCP (1988 ROA Measure 16) approved in 1988 described on page 1-52. See also pages 7-3; Scenario A, pp. 5-38, 5-39; and Addendum No. 4 dated September 11, 1996, pages 3 and 4).

The city of Dayton recommends in Addendum No. 4, pages 3 and 4, that the measure found in the NCP be changed so that aircraft arriving from the north and northeast to runway 24R observe a straight in final approach of at least 4 miles. The intent of this procedure is to avoid using approaches that will turn arriving aircraft at low altitudes over large, heavily populated residential areas immediately north of the Runway 24R final approach course. This would be particularly beneficial for Tipp City. This measure was subject to a Finding of No Significant Impact for Air Traffic Control Noise Abatement Procedures at James M. Cox-Dayton International Airport, dated February 8, 1995, and was implemented in Dayton Air Traffic Control Tower Order 7110.30A dated May 3, 1995.

This revised procedure is a modification from that found in the NCP, which called for night time arrivals to both Runways 24L and 24R to observe a straight in final approach of at least four miles to avoid short approaches turning over residential areas north and south of the extended runway centerlines near the airport. Air Traffic has indicated to the city of Dayton that traffic from the south is not a problem and can be routed over compatible land uses. Also, if traffic from the north or northeast desires to use Runway 24L, the aircraft will be directed around traffic using Runway 24R and thus would be put on final approach to Runway 24L beyond four miles. This procedure is currently applied during the day as well as night. Air Traffic believes that this modification has not changed the flight tracks used or the percentage of runway end utilization. Therefore, the city of Dayton believes that this change will not materially affect the noise distribution defined by this noise abatement measure in the NCP.

APPROVED AS A VOLUNTARY MEASURE. The procedure described in this measure above is approved. It was one of the noise abatement measures approved under an EA/FONSI and was implemented in a tower order. Air Traffic agrees that deleting reference to Runway 24L and extending the measure's application to daytime as well as nighttime operations should not affect the flight tracks used or the percentage of runway end utilization. Therefore, FAA agrees that the changes will not materially affect the noise distribution defined by this noise abatement measure in the previously approved FONSI or in the Part 150 Study's NEM's. This procedure may not be strictly adhered to at all times. Weather or conflicting traffic may require variations in the procedure for safety reasons. Pilot technique may also be a factor in explaining variations which may be observed in the procedure from time to time.

NA-4 Between the hours of 10:00 p.m. and 7:00 a.m., all west, north, and northeast bound jet aircraft departures off Runway 24R shall be given a heading or headings that will track within the Stillwater River basin for approximately five miles before proceeding on course. (This revision of Measure 12 of the NCP (1988 ROA Measure 13) approved in 1988 described on page 1-51. See also pages 7-3, 7-4: Exhibit 7A, Alternative 7, p 5-35; Exhibit 5N; Scenario F, p. 5-41; and Addendum No. 4 dated September 11, 1996, pages 4, 5 and 6).

The city of Dayton, in Addendum No. 4, pages 4, 5 and 6, recommends that between the hours of 10:00 p.m. and 7:00 a.m., all west, northwest, and

northbound jet departures off Runway 24R shall be given a heading or headings that will track within the Stillwater River basin for approximately five miles before proceeding on course.

This revised procedure is a modification from that found in the NCP, which called for the pilot to turn right at Runway 6L middle marker; then establish a 350 degree heading at 4.0 DME from Runway 6L LOC/DME and hold that heading until 6.0 DME where the pilot could turn to assigned heading. Establishment of distance measuring equipment (DME) and the use of the middle marker to aid in defining the turns were removed from this measure because of concerns expressed by Flight Standards that cross checking these navigation aids at this critical stage of flight added unnecessary complexity to the pilot's workload.

The city of Dayton also removed a portion of the procedure in the NCP dealing with runway 24L which calls for the pilot to turn right at 2.5 DME from Runway 6L LOC/DME; then establish a heading of 350 degrees at 4.0 DME and hold the 350 heading until 6.0 DME where the pilot could turn to assigned heading. This modification was done to meet Air Traffic's concerns regarding the possibility that smaller and slower aircraft would turn across the centerline of the Runway 6L/24R increasing complexity for air traffic controllers launching larger and faster cargo aircraft.

Both this revised procedure and the original are intended to apply only to jets to facilitate efficient air traffic control and allow safe separation of jets from slower propeller aircraft. The procedure intends to avoid direct overflights of Englewood and Union by utilizing the unpopulated floodplain area that comprises the Stillwater Conservancy Reserve area. Execution of the turns and assignment of specific headings by air traffic control will be dependent on traffic and other operational and safety concerns. Normally, turns will be executed no sooner than one-half mile and no later than one mile from the departure end of the runway.

This procedure has been modified through Addendum No. 4 to address the safety of flight and air traffic concerns raised about this element. The modified version calls for ATC to issue departure instructions similar to other instructions routinely assigned by ATC to almost all other departures. The only difference is that ATC now agrees to issuance of these instructions. It is not anticipated that the proposed revised procedure will materially affect the noise distribution defined by this noise abatement measure.

An Environmental Assessment on this procedure is required. After a finding, implementation would occur by the Air Traffic Control Tower manager revising the existing tower order to include this procedure. It has been determined that implementation of the procedure through publication of a Standard Instrument Departure (SID), as originally suggested in the NCP, is not needed because it reduces air traffic controller's flexibility. Implementation of a revision to Tower Order 7110.30A is proposed for 1997.

APPROVED AS A VOLUNTARY MEASURE. This procedure may not be strictly adhered to at all times. Weather or conflicting traffic may require variations in the procedure for safety reasons. Pilot technique may also be a factor in explaining variations which may be observed in the procedure from time to time. The revised procedure as described above is approved. This procedure would be implemented through a revision to an existing tower order. The revisions to the procedure discussed in Addendum No. 4 would not materially affect the noise distribution defined by this noise abatement measure. Reference to use of

navigation aids, the DME, has been deleted because of Flight Standards concerns regarding having the flight crew cross checking another item during the critical portion of the flight departure. An environmental assessment will be required for this proposed procedure.

NA-5 Establish rotational runway use program at night on Runway 6L-24R. (This is a new measure not included in the NCP approved in 1988. See pages 7-4, 7-5; Alternative 4, p. 5-28; Scenario F, p. 5-41; and Addendum No. 4 dated September 11, 1996, pages 6 and 7).

The city of Dayton recommends establishment of a rotational runway use program at night on Runway 6L-24R. Air Traffic Control personnel would switch the active runway from Runway 6L to Runway 24R on alternating nights, wind and weather permitting. This program would apply from 10:00 p.m. to 7:00 a.m., and would attempt to evenly distribute noise off both runway ends over the year. The active runway would be changed on alternating nights, provided that tailwinds are less than 5 knots and crosswinds are 15 knots or less. Addendum No. 4, page 6 changed the recommendation in the NCP from 5 knots or less to less than 5 knots because of pilots concerns.

If, due to winds, weather, or other reasons it is necessary to operate with the same active runway on successive nights, the rotational pattern would be reestablished at the first available opportunity. It is not proposed that traffic should be operated in the other direction for an equal number of days in an attempt to achieve exact parity. The proposal is simply that the active runway would be rotated, as possible, on alternating nights.

When this measure was first proposed in the NCP its implementation was contingent on the lengthening of Taxiway W on the northwest side of Runway 6L-24R the full length of the runway. Without that taxiway, northeast flow on Runway 6R is difficult and slow because of the need for aircraft to cross the active runway to get to the runway end for takeoff. Taxiway W was completed in November of 1995 and is now available for use with this procedure.

This is proposed as an official, "informal" runway use program. In addition to the wind criteria described above, all criteria described in FAA Order 8400.9, "National Safety and Operational Criteria for Runway Use Programs" must be observed. As an informal program, compliance by pilots is optional. This means that a pilot could request a runway other than assigned.

An Environmental Assessment on this procedure is required. After a finding, implementation would occur by the Air Traffic Control Tower manager revising the existing tower order to include this procedure. Implementation of a revision to Tower Order 7110.30A is proposed for 1997.

APPROVED AS A VOLUNTARY MEASURE. This revised procedure, as described above, is approved. Changing the wording of the measure from 5 knots or less for tailwinds to less than 5 knots would not materially affect the noise distribution defined by this noise abatement measure. The procedure would be implemented through revising an existing tower order. This procedure may not be strictly adhered to at all times. Weather or conflicting traffic may require variations in the procedure for safety reasons. Pilot technique may also be a factor in explaining variations which may be observed in the procedure from time to time. An environmental assessment will be required for this proposed procedure.

Land Use Management Measures

LU-1 Follow through with acquisition of noise-impacted homes as recommended in 1988 NCP. (This a continuation of Measure 4 of the NCP (ROA Measure 5) approved in 1988 described on page 1-49. See also pages 7-8, 7-9; Exhibit 7E).

The city of Dayton plans to acquire the balance of property proposed for acquisition in the 1988 Noise Compatibility Program (NCP). Exhibit 7E shows the property proposed for acquisition in the 1988 NCP. A voluntary acquisition program is proposed.

APPROVED. The acquisitions must comply with the Uniform Relocation Assistance and Real Property Acquisitions Act in order to be eligible for Federal funding.

LU-2 Acquire homes within the 75 DNL noise contour, including several homes within the 70 DNL contour experiencing significant noise impacts, based on 1992 baseline and 1997 Noise Compatibility Plan which are not already designated for acquisition. (This is a new measure not included in the NCP approved in 1988. See page 7-9; Exhibit 7E; Addendum No. 1 dated January 4, 1996).

The city of Dayton plans to acquire additional homes proposed for acquisition within the 75 DNL contour. Exhibit 7E shows the additional homes proposed for acquisition. A voluntary acquisition program is proposed.

Addendum No. 1 dated January 4, 1996 further clarifies homes to be acquired under this measure. Homes recommended for acquisition include those within the 75 DNL contour, based on 1992 baseline conditions. In addition, some homes outside the 75 DNL contour are recommended for acquisition where specific circumstances indicate that this is the fairest course of action. These homes are within or very near the 70 DNL contour (based on 1997 noise with the Plan). In addition to the high cumulative noise levels, these homes are so near to the airport that they are also exposed to other airport-related problems. These include very high single event noise levels, noise from airport ground activity, and exposure to nighttime lighting.

Specific areas where acquisition outside the 75 DNL contour is recommended are discussed in Addendum No. 1.

APPROVED. Federal reimbursement for the acquisition of the additional homes cannot be considered until the updated NCP is approved by FAA. Although styled by the airport sponsor as a voluntary acquisition measure, this measure is, in fact, an outright purchase by the airport conducted under conditions of "willing-buyer/willing-seller" rather than under condemnation. A key element in this plan is the conversion of non-compatible land uses (residential) to compatible land uses. The acquisitions must comply with the Uniform Relocation Assistance and Real Property Acquisitions Act in order to be eligible for Federal assistance.

LU-3 Acquire 5 homes across Old Springfield Road from the Emery sort facility, 3 homes on Peters Road just north of Old Springfield Road, and 2 homes on Macy Lane adjacent to Peters Road. (This is a new measure not included in the NCP approved in 1988. See pages 7-9, 7-10;

Exhibit 7E; Cargo Ramp Noise Analysis dated January, 1996, pp. 6,7; Addendum No. 2 dated April 24, 1996.).

The city of Dayton plans to acquire 5 homes across Old Springfield Road from the Emery sort facility, as well as 3 homes on Peters Road just north of Old Springfield Road. Exhibit 7E shows the location of these homes. Residents are exposed to significant noise from aircraft taxiing on the ramp and from auxiliary power units (APUs) on aircraft awaiting unloading and reloading. These homes are also impacted by noise from late night truck traffic and aircraft fueling and exhaust fumes. The homes are isolated and are within 2,000' of the sort building. A voluntary acquisition program is proposed.

A cargo ramp noise analysis was conducted December 13-15, 1995. It concluded that 5 homes on Old Springfield Road and 3 homes on Peters Road are all exposed to aircraft noise above 65 DNL, including both ramp and overflight noise. In addition, these homes are exposed to other annoyances attributable to the airport including late night auto and truck traffic, outdoor lights at the Emery facility, and aircraft engine exhaust fumes. All 8 homes are recommended for purchase by the airport and the residents relocated.

Addendum No. 2 dated April 24, 1996, recommends that the city of Dayton acquire an additional 2 homes located on Macy Lane adjacent to Peters Road. Exhibit E attached to Addendum No. 2 indicates that one of the homes on Macy Lane is well within the 65 DNL noise contour, and the other home on Macy Lane lies just outside the 65 DNL noise contour. It is in close proximity to the other home within the 65 DNL noise contour and, therefore, is recommended to be purchased. The noise contours were generated from the cargo ramp noise analysis conducted December 13-15, 1995.

APPROVED. Although styled by the airport sponsor as a voluntary acquisition measure, this measure is, in fact, an outright purchase by the airport conducted under conditions of "willing-buyer/willing-seller" rather than under condemnation. A key element in this plan is the conversion of non-compatible land uses (residential) to compatible land uses. The acquisitions must comply with the Uniform Relocation Assistance and Real Property Acquisitions Act in order to be eligible for Federal assistance.

LU-4 Acquire undeveloped land within the 70 DNL based on the 1997 Noise Compatibility Plan. (This is a new measure not included in the NCP approved in 1988. See pages 7-10, 7-11; Exhibit 7E; Addendum No. 1 dated January 4, 1996).

The city of Dayton plans to acquire undeveloped land within the 70 DNL based on the 1997 NCP. Exhibit 7E shows the location of this land. This land is zoned for residential use and has no reasonable alternative compatible use, other than agricultural. Because the land is so near to an urbanized area, it is not considered possible to permanently prohibit residential development of this land through land use regulations. Compatible parks and open space may be a good use of some of this property. A voluntary acquisition program is proposed.

Addendum No. 1 dated January 4, 1996 further clarifies the acquisition of undeveloped land under this measure. While this measure is focused on the acquisition of undeveloped land to foreclose the risk of future home development, many of the undeveloped tracts shown for acquisition include homes. They are either farms or large acreage. As indicated in Exhibit 7E, homes surrounded by and adjacent to the undeveloped land are designated for sound insulation. This measure assumes that none of these homes will be acquired and removed by the airport. The intent is that the home and a small lot (one or two acres) would

be partitioned and left in place. The balance of the tract would be purchased by the airport to ensure future compatible land use (i.e. agricultural or commercial/industrial use). The airport should review the acceptability of this approach on a case-by-case basis as it implements the land acquisition recommendation. Homes should be left in place only if they can be cost-effectively sound-insulated.

It is likely that at least some landowners will want to sell their entire property rather than keeping only the home and a relatively small lot. In these cases, the airport should buy the entire tract, including the home. It should then sound-insulate and resell the home subject to a noise and aviation easement. If the home cannot be cost-effectively sound-insulated or if, because of site-specific problems (such as poor road access or water or septic system problems), the home cannot be resold for a reasonable and fair price, the airport should keep the entire parcel and remove the home.

APPROVED. Acquisition of vacant land is approved on the basis that noncompatible development is highly likely because the land is near an urban area and is zoned for residential development. Federal reimbursement for the acquisition of the undeveloped land cannot be considered until the updated NCP is approved by FAA. The acquisitions must comply with the Uniform Relocation Assistance and Real Property Acquisitions Act in order to be eligible for Federal assistance.

LU-5 Offer sound insulation to homes within the 65-70 DNL based on the 1997 Noise Compatibility Plan. (This a modification and continuation of part of Measure 5 of the NCP (ROA Measure 6) approved in 1988 described on pages 1-49 and 1-50. See also pages 7-11, 7-12, 7-13; Exhibit 7F; Addendum No. 1 dated January 4, 1996).

The city of Dayton plans to offer sound insulation to homeowners within the 65 - 70 DNL based on the 1997 Noise Compatibility Plan. This is a modification and continuation of the 1988 NCP. The airport has developed an initial pilot program. The program should be continued and applied to all homes within the 65 - 70 DNL contour based on 1997 conditions with the recommended NCP. The location of the homes proposed for sound insulation is shown in Exhibit 7F. The design goal should be to achieve an indoor to outdoor noise level reduction (NLR) of 30 dB within the 70 DNL contour, 25 dB within the 65 DNL, and an improvement in NLR of at least 5 dB. The City should secure noise and aviation easements from property owners as a condition of participating in the sound insulation program.

The city of Dayton should administer the program. Priorities for program participation should be based on the following considerations in order of importance:

1. Homes subject to the highest DNL values.
2. Homes nearest the extended runway centerlines and flight tracks.
3. Homes within the 70 DNL experiencing an increase in noise resulting from the approved noise abatement procedures which are also subject to noise above unabated conditions.
4. Other homes subject to noise above 70 DNL based on abated conditions.

5. Homes within the 65 DNL experiencing an increase in noise resulting from the approved noise abatement procedures.

6. Homes within the eligibility area which are subject to noise above 65 DNL based on abated conditions.

7. Period of time occupant has resided in the home with the higher priority going to longer term residents.

Addendum No. 1 dated January 4, 1996 further clarifies the sound insulation of homes under this measure. The sound insulation program would be offered for all homes within the 65 DNL contour not included in the acquisition programs.

One special situation deserves further comment. As indicated in Exhibit 7E, some homes designated for sound insulation abut or are surrounded by undeveloped land recommended for acquisition. On the southwest side of the airport these include homes on the south side of Jackson Road and on the east side of Frederick Pike near the Meeker Road intersection. On the northeast side of the airport these include homes east of Interstate 75 along Old Springfield Road and Tipp-Cowlesville Road.

Many of these homes are on farms or large acreage that extend into the undeveloped land acquisition area. This measure envisions that these homes and the surrounding lot (one or two acres) would either (1) not be acquired by the airport, or (2) be bought by the airport as part of the deal for the entire tract and then sold back to a private owner. Since the homes would remain, they would be eligible for sound insulation. As discussed in Land Use Measure No. 4 above, the only homes that would remain are those that can be cost-effectively sound-insulated and resold for a fair price to the airport. This would be determined on a case-by-case basis as the land acquisition program is underway.

APPROVED. FAA believes that prevention of additional residential land uses within the DNL 65 dB contour is highly preferred over allowing such land uses even at low densities and combined with sound attenuation. The airport operator and local land use jurisdiction are urged to pursue all possible avenues to discourage new residential development within these levels of noise exposure

LU-6 Maintain existing commercial and industrial zoning within the 65 DNL. (This is a new measure not included in the NCP approved in 1988. See page 7-13; Exhibit 7G).

The city of Dayton plans to encourage adoption of policies that limit rezoning of compatibly zoned areas for non-compatible use. Such policies could be implemented in a variety of ways including comprehensive plan amendments, adoption of resolutions by the City Council, County Board, Township Board, or Planning Commission declaring the policy, or through the publication of airport vicinity planning guidelines.

APPROVED.

LU-7 Consider rezoning undeveloped residential land for commercial or industrial use northeast of the airport in Butler and Monroe Townships, and Vandalia. (This a continuation and expansion of part of Measure 9 of the NCP (ROA Measure 10) approved in 1988 described on pages 1-50 and 1-51. See also pages 7-13, 7-14; Exhibit 7G).

The city of Dayton plans to encourage the local jurisdictions to consider rezoning undeveloped residential land for commercial or industrial use northeast of the

airport in Butler and Monroe Townships, and in Vandalia. Exhibit 7G shows areas which could be considered for rezoning to commercial or industrial use. All have reasonably good road access and are visible from U.S. highways or interstates. Most are near existing commercial or industrial areas and appear capable of development without creating adverse impacts on nearby residential areas. The City should strongly discourage any residential development proposals for these areas.

APPROVED.

LU-8 Maintain existing A-2 General Agriculture zoning in areas impacted by noise above 65 DNL, strongly discouraging residential zoning outside the Urban Service Boundary in Bethel and Monroe Townships. (This a continuation of Measure 9 of the NCP (ROA Measure 10) approved in 1988 described on pages 1-50 and 1-51. See also page 7-14).

The city of Dayton plans to encourage Bethel Township and Miami County, which administers zoning in Monroe Township, to adopt policies discouraging rezoning of A-2, General Agriculture zoned areas for residential use outside the Urban Service Boundary and inside the 65 DNL. The Urban Service Boundary defines the limits of the area where urban services such as municipal water and sewer are planned. Preservation of the area beyond that boundary for agriculture offers the opportunity for reasonable economic use of the land while promoting airport land use compatibility. The policies could be implemented in a variety of ways including comprehensive plan amendments, adoption of resolutions by the City Council, County Board, Township Board, or Planning Commission, or through the publication of airport vicinity planning guidelines.

APPROVED.

LU-9 Maintain existing open space and flood plain zoning of areas impacted by noise above 65 DNL and strongly discourage residential rezoning in Bethel, Butler and Monroe Townships, and Englewood. (This is a new measure not included in the NCP approved in 1988. See pages 7-14, 7-15; Exhibit 7G).

The city of Dayton plans to encourage adoption of policies discouraging rezoning of compatibly zoned areas for non-compatible use in Bethel, Butler and Monroe Townships, and Englewood. Exhibit 7G shows areas which are currently zoned for open space. They are in the Stillwater and Great

Miami River flood plains. It would be appropriate for the local jurisdictions to adopt policies discouraging residential rezoning of areas within the 65 DNL contour zoned for open space. Such policies could be implemented in a variety of ways including comprehensive plan amendments, adoption of resolutions by the City Council, County Board, Township Board, or Planning Commission declaring the policy, or through the publication of airport vicinity planning guidelines.

APPROVED.

LU-10 Establish a new agricultural use zoning district. Rezone the area outside the Urban Service Area west of the airport in Butler Township for agriculture. (This a continuation and expansion of part of Measure 8 of the NCP (ROA Measure 9) approved in 1988 described in page 1-50. See also page 7-15; Exhibit 7G).

The city of Dayton plans to encourage Butler Township to establish a new agricultural use zoning district. In Butler Township, a large area west and southwest of the airport outside the Urban Service Boundary has been designated in the Township Land Use Plan for agricultural use. The township

does not have a true agricultural zoning district. It should establish one and zone the area shown in Exhibit 7G accordingly.

APPROVED.

LU-11 Adopt joint airport zoning for the airport environs in Montgomery and Miami Counties. (This a continuation and expansion of parts of Measures 7 and 10 of the NCP (ROA Measures 8 and 11) approved in 1988 described on pages 1-50 and 1-51. See also pages 7-15 through 7-19; Exhibit 7H; Table 7C, p. 7-17).

The city of Dayton plans to continue to encourage Montgomery and Miami Counties to adopt joint airport zoning for the airport environs. Exhibit 7H depicts the potential noise overlay zoning boundaries. Airport overlay zoning establishes special standards within noise-impacted areas to help mitigate the problems caused by noise. These provisions supplement the standards of the underlying zoning classifications and would apply only to new development.

A zoning task force including representatives of the City of Dayton, Montgomery County, and Miami County has developed preliminary draft airport zoning regulations. The purposes of the regulations would be to, (a) protect the public health, safety, and welfare by regulating development and land use within noise sensitive areas and airport hazard areas, (b) ensure compatibility between the Dayton International Airport and surrounding land uses, and (c) protect the airport from incompatible encroachment. The regulations would provide for various zoning districts which represent differing levels of noise impacts and/or safety concerns. These districts include:

- District 1 (Runway Protection Zone)-regulates land uses in areas characterized by extreme noise impacts and safety hazards.
- District 2 (75 DNL Noise Contour)-regulates land use in extreme noise impact areas.
- District 3 (70 DNL Noise Contour)-regulates land use in significant noise impact areas.
- District 4 (65 DNL Noise Contour)-regulates land use in moderate noise impact areas.

The proposed table of land use compatibility standards from the draft ordinance is shown in Table 7C.

APPROVED.

LU-12 Amend subdivision regulations to require dedication of avigation easements and recording of plat notes for new subdivisions within airport noise overlay zoning districts in Miami and Montgomery Counties, Englewood, Tipp City, Vandalia and Union. (This a continuation of part of Measure 7 of the NCP (ROA Measure 8) approved in 1988 described on page 1-50. See also page 7-19; Appendix C, Pages C-1 through C-5).

The city of Dayton plans to continue to encourage approval of amended subdivision regulations to require dedication of avigation easements and recording of plat notes for new subdivisions within airport noise overlay zoning districts in Miami and Montgomery Counties, Englewood, Tipp City, Vandalia and Union. The amendment would require that avigation easements be dedicated to the city of Dayton as a condition of approval of any subdivision or lot split within any airport overlay zone district. In addition, a plat note would be affixed to the final plats of subdivisions in the airport environs district noting that the area is subject to potentially disturbing levels of aircraft noise. A copy of the proposed

model subdivision regulations amendment and proposed model easement is in Appendix C.

APPROVED.

LU-13 Adopt local amendments to building codes setting forth sound insulation standards to use in airport noise overlay zones in Miami and Montgomery Counties, Englewood, Tipp City, Vandalia, and Union. (This a continuation of Measure 10 of the NCP (ROA Measure 11) approved in 1988 described on page 1-51. See also pages 7-19, 7-20).

The city of Dayton plans to encourage approval to adopt local amendments to building codes setting forth sound insulation standards to use in airport noise overlay zones in Miami and Montgomery Counties, Englewood, Tipp City, Vandalia, and Union. These standards would be used in the construction of buildings for which sound insulation is required by the joint airport zoning regulations. The proposed joint airport zoning regulations include a chapter defining sound insulation standards for new construction in high noise areas. This is a satisfactory method of ensuring that these important standards are put in force. If, upon detailed consideration, it is decided by Miami and Montgomery Counties not to include these standards in the joint airport zoning regulations, the city of Dayton should encourage local governments to amend their building codes to define these standards.

APPROVED.

LU-14 Consider joining with other public airport operators in Ohio to request state legislation mandating full disclosure of potential airport impacts when property in the airport environs is offered for sale. (This is a new measure not included in the NCP approved in 1988. See page 7-20).

The city of Dayton plans to confer with other public airport operators in Ohio to request legislation mandating full disclosure of potential airport impacts when property in the airport environs is offered for sale. State law governs the transfer of real estate and requires the disclosure of various conditions affecting property offered for sale. The law does not require the specific disclosure of the proximity of airports or the impacts of the use of that airport on property.

It is proposed that the city of Dayton collaborate with other airport operators in Ohio to request the State Legislature to adopt a statute requiring the disclosure of these impacts on property offered for sale in the environs of an airport.

APPROVED.

LU-15 Consider incorporating airport land use compatibility policies developed in this Noise Compatibility Program update into local comprehensive plans in Miami and Montgomery Counties, Englewood, Tipp City, Vandalia, and Union. (This is a new measure not included in the NCP approved in 1988. See pages 7-20, 7-21).

The city of Dayton plans to encourage affected jurisdictions of Miami and Montgomery Counties, Englewood, Tipp City, Vandalia, and Union to incorporate airport land use compatibility policies developed in this NCP into local comprehensive plans. Such policies could be implemented in a variety of ways including comprehensive plan amendments, adoption of resolutions by the city council, or through the publication of airport vicinity planning guidelines.

All jurisdictions in the study area except the cities of Union and Englewood have reasonably up-to-date comprehensive plans or land use plans. The plans for

Butler Township, Bethel Township, Monroe Township, and the city of Vandalia clearly have been developed in recognition of the airport and its impacts. In the future, it would be appropriate for those jurisdictions to seriously consider incorporating appropriate recommendations from this NCP into their plans.

APPROVED.

LU-16 Adopt discretionary project review guidelines for subdivision, rezoning, special use, conditional use, and variance applications in Miami and Montgomery Counties, Bethel and Butler Townships, Englewood, Tipp City, Vandalia, and Union. (This is a new measure not included in the NCP approved in 1988. See pages 7-21, 7-22).

The city of Dayton plans to encourage Miami and Montgomery Counties, Bethel and Butler Townships, Englewood, Tipp City, Vandalia, and Union to adopt discretionary project review guidelines for subdivision, rezoning, special use, conditional use, and variance applications. The jurisdictions affected by the final 65 DNL contours should consider special review procedures for planning commissions, governing boards, and boards of zoning appeals.

In implementing discretionary project review procedures, a simple checklist could be prepared listing the important factors to consider in reviewing development proposals within the 65 DNL noise contour. The following checklist criteria are suggested:

A. Determine the sensitivity of the subject land use to aircraft noise levels. The FAA Part 150 land use compatibility table could be used for this purpose.

B. Advise the airport management of development proposals involving noise-sensitive land uses within the 65 DNL noise contour (or within any noise overlay zone).

C. Locate noise-sensitive public facilities outside the 65 DNL noise contour, if possible. Otherwise, encourage building construction to attenuate interior noise levels to 45 DNL or less.

D. Discourage the approval of rezoning, exceptions, variances and conditional uses which introduce noise-sensitive development into areas impacted by noise exceeding 65 DNL.

E. Where development within the 65 DNL contour must be permitted, encourage developers to incorporate the following measures into their site designs.

(1) Where noise-sensitive uses will be inside a larger, mixed use building, locate noise-sensitive activities on the side of the building opposite the airport or, if the building is beneath a flight track, opposite the prevailing direction of aircraft flight.

(2) Where noise-sensitive uses are part of a larger mixed use development, use the height and orientation of compatible uses, and the height and orientation of landscape features such as natural hills, ravines and

manmade berms, to shield noise-sensitive uses from ground noise generated at the airport.

APPROVED.

Program Management Measures

PM-1 Maintain complaint response system. (This a modification and continuation of part of Measure 6 of the NCP (ROA Measure 7) approved in 1988 described on page 1-50. See also page 7-22; Appendix C, p. C-15).

The city of Dayton plans to continue to maintain a complaint response system. The airport has a well organized system of recording and responding to noise complaints. It is important for the airport management to acknowledge and respond to complaints, even if it is not possible to take remedial action. Recognizing that complaints are limited in their ability to clearly reveal the existence of noise problems, the airport staff will nevertheless periodically analyze the complaint records. If the geographic pattern of complaints, or the causes of complaints, indicate that consistent problems exist, the airport management plans to investigate and, if possible, seek corrective action. A noise complaint form to assist in securing all relevant data is in Appendix C.

APPROVED.

PM-2 Program review. (This a modification and continuation of part of Measure 6 of the NCP (ROA Measure 7) approved in 1988 described on page 1-50. See also pages 7-22, 7-23).

The city of Dayton plans to continually review the progress of various agencies and organizations in implementing the Noise Compatibility Plan, including preparation of periodic reports for the city commission. Specifically, the airport management will maintain communications with local governments and local planning officials to follow their progress in implementing the land use management element.

The airport management will also monitor compliance with the noise abatement element. This includes checking periodically with the air traffic control manager regarding compliance with the air traffic control procedures. Where appropriate, the airport management will check with air carriers, business users, and military users. This can serve as a friendly reminder as to the importance which the airport management places on the program while providing on opportunity to find out about any difficulties with the application of the noise abatement measures.

It may be necessary from time to time to arrange for noise monitoring, noise modeling, or flight track analysis to study issues that may arise in the future. The airport will hire consultants as needed for these special studies.

APPROVED.

PM-3 Program update. (This a modification and continuation of part of Measure 6 of the NCP (ROA Measure 7) approved in 1988 described on page 1-50. See also pages 7-23, 7-24).

The city of Dayton plans to review the NCP and consider revisions and refinements as necessary. A complete plan update will be needed periodically to respond to changing conditions in the local area and in the aviation industry. This can be anticipated every 5 to 8 years. An update may be needed sooner,

however, if major changes occur and later if conditions at the airport and in the surrounding area remain stable.

Proposed changes to the NCP would be reviewed by the FAA and all affected aircraft operators and local agencies. Proposed changes would be submitted to FAA for approval after local consultation and a public hearing in order to comply with FAR Part 150.

Even if the NCP does not need to be updated, it may become necessary to update the Noise Exposure Maps. FAR Part 150 requires the NEMs to be updated if any change in the operation of the airport would create a substantial, new non-compatible use. FAA interprets this to mean an increase in noise levels of 1.5 Ldn or more over non-compatible areas which had formerly been compatible.

As a rule of thumb, the trigger for determining the need for contour updating is a 17 percent change in equivalent operations by jet aircraft, based on the FAA's Area Equivalency Method (AEM) for estimation of noise contour areas. To calculate "equivalent operations", all nighttime operations (between 10:00 p.m. and 7:00 a.m.) would be multiplied by ten and added to daytime operations. Noise contours would be mapped and compared to previously calculated noise contours to identify significant changes, namely changes exceeding 1.5 DNL.

APPROVED.