

APPENDIX H

IMPLEMENTATION ALTERNATIVES

Implementation measures (IM) are designed to provide administrative and management actions to enhance the Kenton County Airport Board's (KCAB's) ability to respond to the public's concerns about aircraft noise and overflights.

H.1 IMPLEMENTATION ALTERNATIVES WORKING PAPER

At the April 12, 2005, Planning Advisory Committee (PAC) the implementation alternatives working paper was presented to the Committee. The working paper outlined the status of previous Part 150 measures, the evaluation of the current alternatives, and a discussion about the different types of measures typically evaluated on behalf of an airport in a Part 150 study. The working paper has been updated/revised to reflect changes to the implementation alternatives analysis that occurred as the study progressed. A copy of the updated/revised working paper is provided at the end of this appendix. The original, unrevised working paper is provided in Appendix I, *Public Advisory Committee*.

H.2 STATUS OF 1999 IMPLEMENTATION MEASURES

Six Implementation Measures (IM) were included in the 1999 FAR Part 150 Update Study, and are listed below in **Table H-1**. Two of these measures were discontinued prior to the 1999 FAR Part 150 Update Study, but are included for continuity in numbering. Two measures (IM-5 and IM-6) recommended the acquisition of a flight tracking system and portable noise monitors. Both of those measures have been completed and no further action is required. Two measures (IM-3 and IM-4) are recommended to be continued.

H.3 RECOMMENDED IMPLEMENTATION ALTERNATIVES

The following section outlines and updates the previous measures that are recommended as part of the Noise Compatibility Program for this Part 150 Study. ***One new implementation alternative was identified and evaluated in this 2004 FAR Part 150 Study.*** Alternative IM-A proposes that the KCAB develop a comprehensive public information website to provide the public with on-line access to information about airport operations, current noise abatement and mitigation programs.

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**Table H-1
 1999 FAR PART 150 STUDY IMPLEMENTATION MEASURES AND
 PROPOSED FAR 2004 PART 150 STUDY IMPLEMENTATION ACTIONS
 Cincinnati/Northern Kentucky International Airport**

1999 FAR Part 150 Study Implementation Measures			Recommended 2004 FAR Part 150 Study Implementation Measures	
<u>Measure</u>	<u>Description</u>	<u>Implementation Status</u>	<u>2004 Proposed Action</u>	<u>Proposed Schedule and Estimated Cost</u>
IM-1	Establish an implementation committee to outline specific implementation steps and program eligibility criteria.	Discontinued in 1992	No FAA Action Required	No Action
IM-2	Conduct noise monitoring of Runway 18L/36R to develop "before and after" comparisons of the new runway.	Discontinued in 1992	No FAA Action Required	No Action
IM-3	Update annual noise contours.	Continue	<i>Continue</i>	Implement upon receipt of FAA ROA (2006) and the availability of FAA AIP or PFC funding.* Estimated cost: \$10,000 per year.
IM-4	Continue the use of a 24-hour public comment system indefinitely.	Continue	<i>Continue</i>	Implement upon receipt of FAA ROA (2006) and the availability of FAA AIP or PFC funding.*
IM-5	Acquire an ARTS (Automated Radar Terminal System) Tracking System to provide information to the KCAB staff on actual operations relative to the NCP; enhance airline, pilots, and air traffic awareness of local noise abatement procedures; and ensure that assumptions used in the annual noise contour updates are consistent with actual flight procedures.	Measure completed in 1997	No FAA Action Required	No Action

**Table H-1, Continued
1999 FAR PART 150 STUDY IMPLEMENTATION MEASURES AND
PROPOSED FAR 2004 PART 150 STUDY IMPLEMENTATION ACTIONS
Cincinnati/Northern Kentucky International Airport**

1999 FAR Part 150 Study Implementation Measures			Recommended 2004 FAR Part 150 Study Implementation Measures	
<u>Measure</u>	<u>Description</u>	<u>Implementation Status</u>	<u>2004 Proposed Action</u>	<u>Proposed Schedule and Estimated Cost</u>
IM-6	Acquire portable noise meters to monitor the implementation and effectiveness of the Noise Compatibility Plan including recommended noise abatement operational procedures and to carry out other noise compatibility projects including recommended residential and school/church sound insulation measures.	Measure completed in 2002	No FAA Action Required	No Action

- * FAA ROA = Federal Aviation Administration Record of Approval
- FAA AIP = Federal Aviation Administration Airport Improvement Program
- PFC = Passenger Facility Charge

Source: Kenton County Airport Board Noise Abatement Staff, Landrum & Brown, 2005

Measure: IM-1

Exhibit: N/A

Description: Establish an implementation committee to outline specific implementation steps and program eligibility criteria.

Relationship to 1999 NCP: There is no relationship to the 1999 NCP. Measure IM-1 was initially approved in the 1990 Part 150 Study. It was not recommended for continuation in the 1992 Supplemental Part 150 Study or the 1999 Far Part 150 Update Study.

2004 NCP Action: *Measure IM-1 is included for continuity of numbering. No further FAA action is required.*

Background and Intent: Previously approved Measure IM-1 from the 1990 Part 150 Study recommended the establishment an implementation committee to outline specific implementation steps and program eligibility criteria.

Status: N/A

Land Use Compatibility Improvement: N/A

Responsible Implementing Parties: N/A

Implementation Steps, Costs, and Schedule:

Steps: N/A

Costs: N/A

Schedule: N/A

Effects on Other Programs/Measures: N/A

Measure: IM-2

Exhibit: N/A

Description: Conduct noise monitoring of Runway 18L/36R to develop "before and after" comparisons of the new runway.

Relationship to 1999 NCP: There is no relationship to the 1999 NCP. Measure IM-2 was initially approved in the 1990 Part 150 Study. It was not recommended for continuation in the 1992 Supplemental Part 150 Study.

2004 NCP Action: *Measure IM-2 is included for continuity of numbering. No further FAA action is required.*

Background and Intent: Previously approved Measure IM-1 from the 1990 Part 150 Study recommended conducting noise monitoring of Runway 18L/36R to develop "before and after" comparisons of the new runway.

Status: N/A

Land Use Compatibility Improvement: N/A

Responsible Implementing Parties: N/A

Implementation Steps, Costs, and Schedule:

Steps: N/A

Costs: N/A

Schedule: N/A

Effects on Other Programs/Measures: N/A

Measure: IM-3

Exhibit: N/A

Description: Update annual noise contours.

Relationship to 1999 NCP: Measure IM-3 was originally approved in the 1990 Part 150 Study.

2004 NCP Action: *Measure IM-3 is to be continued with modification.*

Background and Intent: Previously approved Measure IM-3 from the 1990 Part 150 Study recommended updating annual noise contours to monitor shifts in noise impacts when Runway 18L/36R became operational. The 1999 Part 150 Study recommended continuing the annual noise contour updates throughout the current Part 150 planning period. Measure IM-3 is again recommended for continuation throughout the life of the current Part 150 planning period.

Status: N/A

Land Use Compatibility Improvement: N/A

Responsible Implementing Parties: Kenton County Airport Board

Implementation Steps, Costs, and Schedule:

Steps: This measure would be implemented using the existing procedures and processes used by the KCAB to prepare annual noise contours.

Costs: The annual cost to update the noise contours is approximately \$10,000.

Schedule: This measure may be implemented upon receipt of the FAA's Record of Approval and would be subject to FAA and KCAB funding availability.

Effects on Other Programs/Measures: The implementation of this measure is not expected to have any effect on other programs or measures.

Measure: IM-4

Exhibit: N/A

Description: Continue the use of a 24-hour public comment system indefinitely.

Relationship to 1999 NCP: Measure IM-4 was initially approved in the 1992 Supplemental Part 150 Study. The implementation of this measure is continuous.

2004 NCP Action: *Measure IM-4 is to be continued.*

Background and Intent: Previously approved Measure IM-4 recommended the continued use of a 24-hour public comment system indefinitely. This measure has been implemented and should continue.

Status: N/A

Land Use Compatibility Improvement: N/A

Responsible Implementing Parties: Kenton County Airport Board

Implementation Steps, Costs, and Schedule:

Steps: N/A

Costs: The estimated annual cost to maintain and staff the 24-hour public comment system is borne by the KCAB and is not subject to AIP funding.¹

Schedule: N/A

Effects on Other Programs/Measures: N/A

¹ According to FAA Order 5100.38B, *Airport Improvement Program Handbook*, Section 2. *Noise Compatibility Projects*, 810.General, d., May 31, 2002. "Other ineligible noise compatibility proposals include development of new or modified flight procedures or environmental assessments prepared by the FAA for flight procedures approved in an NCP, projects which are not described in sufficient detail to determine their noise mitigation benefits, projects which cannot be implemented by an eligible sponsor, operational or administrative costs of a sponsor's ongoing noise mitigation program, and demonstration programs intended to test the effectiveness of new noise mitigation technology."

Measure: IM-5

Exhibit: N/A

Description: Acquire an ARTS (Automated Radar Terminal System) Tracking System to provide information to the Kenton County Airport Board (KCAB) staff on actual operations relative to the Noise Compatibility Plan; enhance airline, pilots, and air traffic awareness of local noise abatement procedures; and ensure that assumptions used in the annual noise contour updates are consistent with actual flight procedures.

Relationship to 1999 NCP: There is no relationship to the 1999 NCP. Measure IM-5 was approved in the 1992 Supplemental Part 150 Study.

2004 NCP Action: *Measure IM-5 has been completed and is included for continuity of numbering. No further FAA action is required.*

Background and Intent: The KCAB purchased an Aircraft Operations Monitoring System (AOMS) to collect ARTS data in 1997. This system provides detailed aircraft operations data to assist the KCAB staff in preparing reports for the KCAB Board, local governments, and the public. It also ensures that the assumptions used in the airport's ongoing analysis of noise conditions are consistent with actual aircraft operations. Although it is not intended as an enforcement technique, the ARTS data also provides information for the tenant airlines at CVG to evaluate the compliance of their pilots and the need for improved pilot training and awareness programs.

Status: The AOMS has been operational since November 1997.

Land Use Compatibility Improvement: N/A

Responsible Implementing Parties: Kenton County Airport Board

Implementation Steps, Costs, and Schedule:

Steps: N/A

Costs: N/A

Schedule: N/A

Effects on Other Programs/Measures: N/A

Measure: IM-6

Exhibit: N/A

Description: Acquire portable noise meters to monitor the implementation and effectiveness of the Noise Compatibility Plan including recommended noise abatement operational procedures and to carry out other noise compatibility projects including recommended residential and school/church sound insulation measures.

Relationship to 1992 NCP: Measure IM-6 was initially approved in the 1999 FAR Part 150 Update Study.

2004 NCP Action: *Measure IM-6 has been completed and is included for continuity of numbering. No further FAA action is required.*

Background and Intent: In November 1997, the KCAB began operating an Aircraft Operations Monitoring System (AOMS) system (Measure IM-5) to collect aircraft flight track data. The AOMS system provides detailed aircraft operations data to assist the KCAB staff in preparing reports for the KCAB Board, local governments, and the public. It also ensures that the assumptions used in the airport's ongoing analysis of aircraft noise conditions are consistent with actual aircraft operations. Measure IM-6 recommended the acquisition of portable noise monitoring equipment for use in monitoring the effectiveness of the recommended noise abatement procedures and to aid in determining eligibility for the approved school and church sound insulation programs (Measures LU-7 and LU-17).

In 2002, the KCAB acquired six portable Environmental Monitoring Unit (EMU) 1200 noise monitors from Lochard. The noise monitoring systems are operational and are used regularly to monitor aircraft operations and to determine eligibility for sound insulation programs.

Data gathered from the noise meters placed in surrounding communities is used for public information purposes and school and church eligibility studies. Part 150 regulations require the Integrated Noise Model to be used in preparing the official noise contours and subsequent noise exposure maps. Noise monitor data can be and is used to refine and verify the input data used in the INM, however, at this time, the INM cannot directly utilize noise monitor data in the preparation of noise contours.

Although not intended as an enforcement technique, the noise monitoring data in combination with the ARTS data, provides information to KCAB staff on the performance of aircraft operating at CVG and the overall accuracy and compliance with the approved noise abatement procedures.

Status: N/A

Land Use Compatibility Improvement: N/A

Responsible Implementing Parties: Kenton County Airport Board

Implementation Steps, Costs, and Schedule:

Steps: N/A

Costs: N/A

Schedule: N/A

Effects on Other Programs/Measures: N/A

Alternative: IM-A

Description: Develop a community outreach website.

Relationship to 1999 NCP: There is no relationship to the 1999 NCP. Alternative IM-A is a new alternative.

2004 NCP Action: *Alternative IM-A is a new alternative.*

Background and Intent: This alternative proposes that the Kenton County Airport Board (KCAB) develop and maintain a comprehensive public information website to provide the public with on-line access to information about current airport operations, noise abatement and land use mitigation programs, and an on-line noise complaint form.

The KCAB has maintained an active noise abatement program since 1990 that has included a 24-hour noise complaint hotline, three Part 150 Studies, the acquisition of a flight tracking system and portable noise monitors, land use mitigation programs, and a full-time staff of four. In addition to the extensive public outreach program undertaken in this current Part 150 Study, the KCAB desires to develop additional avenues to convey noise abatement information.

A number of important factors affect the way aircraft will operate during this Part 150 planning period. These include the opening of the new north/south third parallel runway (Runway 18R/36L), the continuation of FAA nighttime operational runway use tests, the changes to the nighttime runway utilization program being proposed as part of this Part 150 study (Alternative NA-A, Alternative NA-C, and Alternative NA-F), and a series of runway pavement rehabilitation projects that will close the existing runways for periods of time up to four months between 2006 and 2010. While the KCAB will continue to maintain the noise complaint hotline, a community outreach website would allow the public to access important information about airport projects and operations at their convenience.

Status: N/A

Land Use Compatibility Improvement: N/A

Alternative: IM-A
Continued

Responsible Implementing Parties: Kenton County Airport Board

Implementation Steps, Costs, and Schedule:

Steps: The KCAB would adopt the 2004 FAR Part 150 and the FAA would issue a Record of Approval. The KCAB could then develop a community outreach website.

Costs: The cost for this alternative is expected to be approximately \$100,000 for the initial set-up and approximately \$5,000 per month to maintain the site with the most current and up-to-date information.

Schedule: This alternative may be implemented upon receipt of the FAA's Record of Approval. The implementation of this alternative also would be subject to the availability of funding from the FAA Airport Improvement Program (AIP) or from Passenger Facility Charges (PFC).

Effects on Other Programs/Measures: N/A