# **RECORD OF APPROVAL**

Bradley International Airport Windsor Locks, Connecticut

#### **FAR PART 150 NOISE COMPATIBILITY PROGRAM**

The Connecticut Department of Transportation (CONNDOT) sponsored an Airport Noise Compatibility Planning Study under a Federal Aviation Administration (FAA) grant, in compliance with Federal Aviation Regulation, Part 150. CONNDOT produced a two-volume report entitled Bradley International 14 CFR Part 150 Study; Noise Exposure Map and Noise Compatibility Program. The Noise Compatibility Program (NCP) and its associated Noise Exposure Maps (NEM) were developed concurrently and submitted to FAA for review and approval on March 2, 2004. The NEM were determined to be in compliance on April 21, 2004. This determination was announced in the Federal Register on May 3, 2004, and included Figure 7-1, "2003 NEM (Noise Exposure Map) on Existing Land Use" and Figure 7-4, "Mitigated 2008 NEM on Existing Land Use".

The study focused on defining an optimum set of noise and land use mitigation measures to improve compatibility between airport operations and community land use, presently and in the future. CONNDOT's Noise Compatibility Program consists of 17 program measures, which are comprised of 2 noise abatement measures, 10 land use compatibility measures, and 5 continuing program measures.

The approvals listed herein include approvals of actions that the airport recommends be taken by the FAA. It should be noted that these approvals indicate only that the actions would, if implemented, be consistent with the purposes of Part 150. These approvals do not constitute decisions to implement the actions. Later decisions concerning possible implementation of these actions may be subject to applicable environmental or other procedures or requirements. Approval does not constitute a commitment by the FAA to financially assist in the implementation of the program nor a determination that all measures covered by the program are eligible for grant-in-aid funding from the FAA. Eligibility for federal funding of measures that are determined in this Record of Approval to meet the approval criteria of 150.33 will be determined at the time the FAA receives an application for funding, using the criteria in the most current version of FAA Order 5100.38, Airport Improvement Program Handbook.

The program measures below summarize as closely as possible the airport operator's recommendations in the noise compatibility program and are cross-referenced to the program with numbered sections that follow the title of each measure. The statements contained within the summarized program measures and before the indicated FAA approval, disapproval, or other determination, do not represent the opinions or decisions of the FAA.

# **Noise Abatement (NA) Measures**

NA-1 – <u>Air Carrier Noise Abatement Departure Flight tracks (Runways 15 and 33)</u> (5.2.3(a) and 7.2.1.a). While there would be no noticeable change in the DNL contour,

changes in certain flight tracks for air carrier departures from Runway 15 (Figure 5-10. tracks 15DP4, 15DP5, and 15DP6) and Runway 33 (Figure 5-11, track 33DP8) would produce net decreases in population exposure within the single event 90 dBA Sound Exposure Level (SEL) contours for a departing B737-200 aircraft, one of the loudest and most common hushkitted aircraft in the 2008 forecast fleet. (Hushkitted aircraft have been particularly problematic in the affected communities.) For Runway 15, when operating in a flow that makes use of Runways 24 and 15, this air traffic control procedural change would result in air carrier departures making an initial 15-degree right turn to fly over less populated areas of Windsor Locks. A reduction in population exposure of 450-670 people within the 90 dBA SEL would result, depending on the departure fix (Table 5.10). For Runway 33, this air traffic control procedural change would result in a turn directly to Chester as soon as possible in order to overfly less populated areas to the northwest. A reduction in population exposure of approximately 30 people within the 90 dBA SEL would result (Table 5-11). There would be no discernable difference within the 60 DNL contour (Figures 7-1 thru 7-5) from changes to either Runway 15 or Runway 33 departure procedures.

**Approved as voluntary**. When there is no change in the DNL noise contour, the FAA will accept supplemental metrics to demonstrate a noise benefit associated with some measures. This measure would shift flight tracks away from denser population areas and would reduce the number of people exposed to high single event noise. Approval of this measure as voluntary should not be construed as authorizing pilot response to air traffic control instructions as voluntary.

NA-2 – Distant Noise Abatement Departure Profile (5.2.4(a) and 7.2.1.a). This measure would formalize the current use of the Distant Noise Abatement Departure profile as the preferred profile for air carrier departure flight operations. As a result of the limited and declining applicability of the Close-In Noise Abatement Departure Procedure, the Distant Noise Abatement Departure Procedure is recommended.

Approved in part as voluntary; disapproved in part for purposes of Part 150. The analysis in the NCP shows that in some cases, the close-in noise abatement departure profile would be the more noise beneficial (i.e., Runway 06, Runway 24, and Runway 15, and Runway 33 Tracks 33DP8, 33ORW2, 33DP7). In some cases, the distant noise abatement departure profile would be the more noise beneficial (i.e., Runway 33 Tracks 33CTR, 33DP4, 33 PWLB, and 33DP5). However, the airlines prefer the distant procedure for reasons of efficiency. Since the distant procedure at Runway 33 for Tracks 33 CTR, 33 DP4, 33PWLB, and 33DP5 does provide a noise benefit over the close-in procedure, it is approved as voluntary for purposes of Part 150. Because the distant procedure at runways 06, 24, 15, and 33 for Tracks 33DP8, 33ORW2, 33DP7 do not provide a noise benefit over the close-in procedure, it is disapproved for purposes of Part 150. However, this disapproval for purposes of Part 150 does not prevent the aircraft operators and the airport operator from agreeing to maintain its current operating procedures since the Distant Procedure is already in widespread use at the airport.

# Land Use (LU) Measures

LU-1—Zoning for Compatible Land Use (6.1.2 and 7.2.1.b). This measure would seek to amend zoning maps and guidelines to prevent new non-compatible development

within the Mitigated 2008 NEM 65 dB DNL contour unless it met the Noise Level Reduction guidelines of 14 CFR Part 150.

**Approved.** FAA's policy is that new noise sensitive land uses should be prevented from developing around airports or, in cases where prevention is not feasible, they should be rendered compatible with noise exposure levels through measures such as sound insulation during construction. Federal Register April 3, 1998 (63 FR 16409, 16411-16412). Part 150 provides that, where the community determines that residential or school uses must be allowed in the 65 DNL db contour, measures to achieve outdoor to indoor noise level reductions (NLR) of at least 25 dB and 30 dB should be incorporated into building codes. 14 C.F.R. Part 150, Table 1. The CONNDOT has no authority to control local land use decisions; the local jurisdictions around the airport have the authority to implement this measure. As it is not feasible for CONNDOT to prevent new noncompatible development, this preventive measure to condition that development upon design and construction to meet NLR standards qualifies for approval under Part 150.

The FAA's policy published in the Federal Register April 3, 1998 (Volume 63, Number 64), states that the FAA will not approve Federal funding to mitigate noise-sensitive land uses constructed after October 1, 1998.

LU-2—Amend Building Codes (6.1.3 and 7.2.1.b). This measure supports the revision of state building codes to ensure interior Noise Level Reduction techniques per Part 150 Guidelines, applicable to areas of new construction and substantial reconstruction within the Mitigated 2008 NEM 65 dB DNL contour.

**Approved.** FAA's policy is that new noise sensitive land uses should be prevented from developing around airports or, in cases where prevention is not feasible, they should be rendered compatible with noise exposure levels through measures such as sound insulation during construction. Federal Register April 3, 1998 (63 FR 16409, 16411-16412). Part 150 provides that, where the community determines that residential or school uses must be allowed in the 65 DNL db contour, measures to achieve outdoor to indoor noise level reductions (NLR) of at least 25 dB and 30 dB should be incorporated into building codes. 14 C.F.R. Part 150, Table 1. The CONNDOT has no authority to control local land use decisions; the local jurisdictions around the airport have the authority to implement this measure. As it is not feasible for CONNDOT to prevent new noncompatible development, this preventive measure to condition that development upon design and construction to meet NLR standards qualifies for approval under Part 150.

The FAA's policy published in the Federal Register April 3, 1998 (Volume 63, Number 64), states that the FAA will not approve Federal funding to mitigate noise-sensitive land uses constructed after October 1, 1998.

LU-3—Fair Disclosure Policy (6.1.4 and 7.2.1.b). This measure would incorporate aircraft noise information in sales documents for existing (if ownership changes) and new residential development, including a signed acknowledgement from the buyer, for properties within the Mitigated 2008 NEM 65 dB DNL contour.

**Approved in part, Disapproved in part.** Establishing a policy to incorporate aircraft noise information in residential sales documents is approved as being consistent with

the purposes of Part 150 and is approved. To the extent this measure contemplates construction of new noncompatible land uses without the Noise Level Reduction (NLR) requirements within the 65 dB noise contour outlined in Measure LU-1 or avigation easements as outlined in Measure LU-6, this measure is disapproved. Potential homebuyers would be given the opportunity for an informed decision regarding airport-related noise impacts. FAA's policy is that new noise sensitive land uses should be prevented from developing around airports or, in cases where prevention is not feasible, they should be rendered compatible with noise exposure levels through measures such as sound insulation during construction. Federal Register April 3, 1998 (63 FR 16409, 16411-16412). Part 150 provides that, where the community determines that residential or school uses must be allowed in the 65 DNL db contour, measures to achieve outdoor to indoor noise level reductions (NLR) of at least 25 dB and 30 dB should be incorporated into building codes. 14 C.F.R. Part 150, Table 1. The CONNDOT has no authority to control local land use decisions; the local jurisdictions around the airport have the authority to implement this measure.

The FAA's policy published in the Federal Register April 3, 1998 (Volume 63, Number 64), states that the FAA will not approve Federal funding to mitigate noise-sensitive land uses constructed after October 1, 1998.

LU-4—Purchase of Undeveloped Land (6.1.5 and 7.2.1.b). Selected parcels of undeveloped land within the Mitigated 2008 NEM 70 dB DNL contour would be acquired and maintained as vacant, sold for development into compatible uses, or developed for a compatible public use.

**Approved.** This measure would prevent the development of land available for non-compatible use.

LU-5—Purchase of Development Rights (6.1.6 and 7.2.1.b). Development rights for parcels within the Mitigated 2008 NEM 65 dB DNL contour could be acquired and disposed of by the airport, thus precluding additional non-compatible development.

**Approved**. This measure could reduce future non-compatible land use within areas that have potential for development.

LU-6—Avigation Easements (6.1.7 and 7.2.1.b). This measure would require the grant of avigation easements and non-suit covenants to the airport owner as a condition of building permits for specified non-compatible land uses within the Mitigated 2008 NEM 65 dB DNL contour. The measure would ensure notice of the right of overflight and associated noise for property already zoned to permit non-compatible development.

**Approved.** This measure could provide legal protection to the airport and would notify potential homebuilders of the noise environment before construction. FAA's policy is that new noise sensitive land uses should be prevented from developing around airports or, in cases where prevention is not feasible, they should be rendered compatible with noise exposure levels through measures such as sound insulation during construction. Federal Register April 3, 1998 (63 FR 16409, 16411-16412). The CONNDOT has no authority to control local land use decisions; the local jurisdictions around the airport have the authority to implement this measure. As it is not feasible for CONNDOT to prevent new noncompatible development, this preventive measure to condition that

development upon design and construction to meet NLR standards qualifies for approval under Part 150.

The FAA's policy published in the Federal Register April 3, 1998 (Volume 63, Number 64), states that the FAA will not approve Federal funding to mitigate noise-sensitive land uses constructed after October 1, 1998.

LU-7—Airport Noise Overlay Zone (6.1.8 and 7.2.1.b). An Airport Noise Overlay Zone would be established for areas within the Mitigated 2008 NEM 65 dB DNL contour, with provisions for avigation easements, fair disclosure, and noise level reduction construction techniques.

Approved. FAA's policy is that new noise sensitive land uses should be prevented from developing around airports or, in cases where prevention is not feasible, they should be rendered compatible with noise exposure levels through measures such as sound insulation during construction. Federal Register April 3, 1998 (63 FR 16409, 16411-16412). Part 150 provides that, where the community determines that residential or school uses must be allowed in the 65 DNL db contour, measures to achieve outdoor to indoor noise level reductions (NLR) of at least 25 dB and 30 dB should be incorporated into building codes. 14 C.F.R. Part 150, Table 1. The CONNDOT has no authority to control local land use decisions; the local jurisdictions around the airport have the authority to implement this measure. As it is not feasible for CONNDOT to prevent new noncompatible development, this preventive measure to condition that development upon design and construction to meet NLR standards qualifies for approval under Part 150.

The FAA's policy published in the Federal Register April 3, 1998 (Volume 63, Number 64), states that the FAA will not approve Federal funding to mitigate noise-sensitive land uses constructed after October 1, 1998.

LU-8—Property Purchase Assurance Program (6.1.9 and 7.2.1.b). This measure would guarantee that an owner-occupied property within the Mitigated 2008 NEM 65 dB DNL contour would be acquired by ConnDOT at fair market value and would then be returned to residential use with appropriate sound insulation measures, releases, and restrictions.

**Approved**. This measure would facilitate the establishment of compatible land use for existing residences. The FAA's policy published in the Federal Register April 3, 1998 (Volume 63, Number 64), states that the FAA will not approve Federal funding to mitigate noise-sensitive land uses constructed after October 1, 1998. The Federal government has no authority to control local land use decisions; the local government has the authority to implement this measure.

LU-9—Purchase Non-compatible Land (6.1.10 and 7.2.1.b). Selected parcels of developed non-compatible land within the Mitigated 2008 NEM 70 DNL contour would be acquired and converted to compatible land use.

**Approved**. This measure would enable residents who desire to relocate due to noise impacts to do so.

LU-10—Sound Insulation Program (6.1.11 and 7.2.1.b). This measure would provide for sound insulation of residential and other noise-sensitive public buildings within the

Mitigated 2008 NEM 65 dB DNL contour. Avigation easements would be required in exchange for sound insulation. The program could cover approximately 400 homes.

**Approved.** This will provide mitigation inside existing noise-sensitive structures. The FAA's policy published in the Federal Register April 3, 1998 (Volume 63, Number 64), states that the FAA will not approve Federal funding to mitigate development of noise-sensitive land uses that occurs after October 1, 1998.

# Continuing Program (CP) Measures (Table 7.1 and 7.2.1.c).

CP-1—Public Information Program. This measure would establish a program to enhance public awareness of aircraft noise issues and the NCP.

# Approved.

CP-2—BDL Airport Noise Committee. This measure would establish a standing committee to encourage dialogue between community representatives and the airport.

# Approved.

CP-3—Operations and Noise Monitoring System. An operations and noise monitoring system would be acquired to track and analyze ongoing aircraft flight operations at the airport, and aircraft-induced noise exposure to nearby communities.

**Approved.** Note, for the purpose of aviation safety, this approval does not extend to the use of monitoring equipment for enforcement purposes by in-situ measurement of any pre-set noise thresholds.

CP-4—Periodic Evaluation of Noise Exposure. This measure would seek to update the NEMs when needed to account for significant changes in airport operations or procedures.

**Approved.** CONNDOT must also update the NCP if made necessary by revisions of the NEM pursuant to section 150.23(e)(9) .

CP-5—Noise Abatement Officer. An additional staff position at BDL would be created to facilitate communication with neighboring communities, and facilitate the implementation of the NCP measures.

# Approved.