

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

### **Phoenix Sky Harbor International Airport, Phoenix, Arizona**

**Approved on 9/7/01**

#### **INTRODUCTION**

The Phoenix Sky Harbor International Airport, Phoenix, Arizona, Noise Compatibility Program (NCP) describes the current and future noncompatible land uses based upon the parameters established in Federal Aviation Regulation (FAR) Part 150, Airport Noise Compatibility Planning. The program recommends a total of thirty-two measures to prevent the introduction of noncompatible land uses and to reduce the effect of the noise generated at the airport. The recommendations include thirteen noise abatement measures, five noise mitigation measures, ten land use planning measures, and four program management measures.

The measures are identified below by program element and referenced to the NCP by page number. Each element summarizes as closely as possible the airport operator's recommendations as found in the NCP. The statements contained within the summarized recommendations and before the indicated Federal Aviation Administration (FAA) approval, disapproval, or other determinations do not represent the opinions or decisions of the FAA.

The approvals listed herein include approvals of actions that the city of Phoenix 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 the Part 150. These approvals do not constitute decisions to implement the actions. These approvals do not constitute a commitment by the FAA to provide federal financial assistance for these projects. Later decisions concerning possible implementation of the actions may be subject to applicable environmental approval and other procedures or requirements.

#### **1 - NOISE ABATEMENT ELEMENT**

1. Continue the runway use program calling for the equalization of departure operations to the east and west for both daytime and nighttime. (Pages, 4-8 and 6-7)

Description: This measure recommends that the city of Phoenix continue an existing informal runway use program to equalize aircraft operations to both the east and west so that the overall noise impacts can be distributed equitably. This measure was previously approved by the FAA as an element of the 1989 NCP.

FAA Action: APPROVED as a voluntary measure only. This informal runway use procedure is approved as a voluntary measure when air traffic and weather conditions permit. Runway equalization was included in the 1993 Environmental Impact Statement supporting the development of Runway 7R-25L, the 1994 Record of Decision, and is identified in an Intergovernmental Agreement between the city of Phoenix and city of Tempe.

2. Continue promoting use of AC 91-53A Noise Abatement Departure Procedures by air carrier jets. (Pages 4-15 and 6-7)

Description: This measure recommends that the city of Phoenix continue promoting the use of noise abatement departure procedures in Advisory Circular 91-53A by airlines operating jet aircraft over 75,000 pounds, certificated gross takeoff weight. This measure was previously approved by the FAA as an element of the 1989 NCP.

FAA Action: APPROVED as a voluntary measure only.

3. Continue promoting use of NBAA Noise Abatement Procedures or equivalent manufacturer procedures, by general aviation jet aircraft. (Pages 4-15 and 6-8)

Description: This measure recommends that the city of Phoenix continue to actively encourage jet operators to use the National Business Aviation Association (NBAA) Approach and Landing Procedure and Standard Noise Abatement Departure Procedures, or equivalent quiet flying procedures developed by aircraft manufacturer. This measure was previously approved by the FAA as an element of the 1989 NCP.

FAA Action: APPROVED as a voluntary measure only.

4. Continue DP (departure) procedure for Runway 26L (now 25R) requiring a turn to a 240-degree heading (Pages 4-9 and 6-9).

Description: This measure recommends continued use of existing published departure procedures that call for a turn to 240 degrees after departure from Runway 26L (Now identified as Runway 25R). These are existing FAA published air traffic control departure procedures. A Measure recommending a turn to 245 degrees was approved by the FAA as an element of the 1989 NCP. It was later implemented and published as a turn to 240 degrees.

FAA Action: APPROVED as a voluntary measure only. This is approved as a voluntary measure when air traffic and weather conditions permit.

5. Continue the 4-DME departure route procedure which over flies the Salt River by all jets and large propeller aircraft departing Runway 8L/R (now 8 and 7L). (Pages 4-10, 4-34, 6-9)

Description: This measure recommends the continued use of the 4-DME departure procedure by all jet aircraft and all large turboprop aircraft (over 12,500lbs) departing to the east. This is an existing FAA published air traffic control departure procedure. Essentially the same measure was approved by the FAA as an element of the 1989 NCP.

FAA Action: APPROVED as a voluntary measure only. This is approved as a voluntary measure when air traffic and weather conditions permit.

6. Continue requiring compliance with the Airport Engine Test Run-up Policy. (Page 4-28, 4-43, and 6-10)

Description: This measure recommends the continuation of an existing noise abatement rule prohibiting maintenance engine run-ups between 11:00 p.m. and 5:00 a.m. Continuation of this measure would eliminate nighttime single event noise levels associated with engine runups for a potential population of up to 2,215 people. This measure was previously approved by the FAA as an element of the 1989 NCP.

FAA Action: APPROVED.

7. Implement the 4-DME departure route procedure for all jet and large propeller aircraft departing Runway 7 (now 7R). (Pages 4-9, 4-34, and 6-9)

Description: This measure recommends the implementation of the 4-DME departure route for all jet and large propeller aircraft departing Runway 7R. This procedure reduces the number of over flights of noise sensitive land uses east of the airport along the Runway 7R centerline and is consistent with existing departure procedures for Runway 7L and Runway 8. This procedure is identified as a mitigation measure in the 1993 Environmental Impact Statement and 1994 Record of Decision supporting the development of Runway 7R-25L, and is identified in an Intergovernmental Agreement between the city of Phoenix and city of Tempe.

FAA Action: Approved as a voluntary measure. This procedure has been utilized since the commissioning of Runway 7R-25L on October 5, 2000 and, therefore, can be considered as a continuation of an existing policy. It should be noted that existing flight procedures call for aircraft to climb on the runway heading to an altitude of 1,550 prior to initiating a turn to 070 degrees.

8. Direct propeller aircraft departing Runway 7 (now 7R) to turn to a 120-degree heading upon reaching the end of the runway. (Pages 4-9, 4-37, and 6-11)

Description: This measure recommends the implementation of a departure turn to a heading of 120 degrees for propeller aircraft departing Runway 7R. This procedure reduces the number of over flights of noise sensitive land uses east of the airport along the Runway 7R centerline.

FAA Action: APPROVED as a voluntary measure only. This procedure has been utilized since the commissioning of Runway 7R-25L on October 5, 2000 and, therefore, can be considered as a continuation of an existing policy.

9. Direct aircraft departing Runway 25 (now 25L) to turn to a 240-degree heading upon reaching the end of the runway. (Pages 4-9 and 6-12)

Description: This measure recommends the implementation of a departure turn to a heading of 240 degrees for aircraft departing Runway 25L. This procedure reduces the number of over flights of noise sensitive land uses west of the airport along the Runway 25L centerline and is consistent with existing procedures for Departures on Runway 25R. This procedure is identified as a mitigation measure in the 1993 Environmental Impact Statement and 1994 Record of Decision supporting the development of Runway 7R-25L and is identified in an Intergovernmental Agreement between the city of Phoenix and city of Tempe.

FAA Action: APPROVED as a voluntary measure only. This procedure has been utilized since the commissioning of Runway 7R-25L on October 5, 2000 and, therefore, can be considered as a continuation of an existing policy. It should be noted that existing flight procedures call for aircraft to climb on the runway heading to an altitude of 1,550 prior to initiating a turn to 240 degrees.

10. Establish a side-step approach to Runway 25 (now 25L) for noise abatement. (Pages 4-40 and 6-13)

Description: This measure recommends the implementation of a side step procedure for approaches from the east to Runway 25L. Aircraft approaching from the east would maintain alignment with Runway 25R until reaching a point approximately three miles east of the runway followed by a turn to align with Runway 25L. This procedure is identified as a mitigation measure in the 1993 Environmental Impact Statement and 1994 Record of Decision supporting the

development of Runway 7R-25L and is identified in an Intergovernmental Agreement between the city of Phoenix and city of Tempe.

FAA Action: APPROVED as a voluntary measure only. This procedure has been utilized since the commissioning of Runway 7R-25L on October 5, 2000 and, therefore, can be considered as a continuation of an existing policy.

11. Encourage the use of DGPS, RNAV, and FMS equipment to enhance noise abatement navigation. (Page 6-14)

Description: This measure recommends that the city of Phoenix Aviation Department monitor the progress, development, and integration of Differential Global Positioning System (DGPS), Area Navigation (RNAV), and Flight Management System (FMS) technology and encourage its use to refine noise abatement route procedures.

FAA Action: APPROVED.

12. Build engine maintenance run-up enclosure. (Pages 4-14, 4-45, and 6-14)

Description: This measure recommends the construction of an engine run-up enclosure to attenuate noise from maintenance run-ups. This measure further recommends the city of Phoenix Aviation Department establish policies governing the use of the run-up enclosure. Such policies may include the requirement that all maintenance run-ups done at more than idle power be required to use the facility. With the required use of the run-up enclosure, consideration may also be given to the removal of existing nighttime maintenance run-up restrictions (Measure 6) if it can be demonstrated that no adverse noise impacts will be caused in residential areas as a result of such action.

FAA Action: APPROVED.

13. Support 161st Air Refueling Wing of the Arizona Air National Guard's efforts to re-engine KC-135 Aircraft. (Page 6-15).

Description: This measure recommends that the city of Phoenix Aviation Department monitor and support the re-engining of Air National Guard 161st Air Refueling Wing KC-135 Aircraft. The proposed new CFM-56 engines are substantially quieter than the existing TF-33 engines used on these aircraft.

FAA Action: APPROVED. This approval does not constitute a commitment of federal aid by the Federal Aviation Administration nor does it constitute an approval of the use of airport revenue for acquisition of any equipment for federal government purposes.

## 2 - NOISE MITIGATION ELEMENT

1. Sound insulate single family homes within the 1992 65 DNL contour and single family homes outside the 1992 65 DNL contour but inside the 1999 65 DNL Contour. (Page 5-28 and 6-16)

Description: This measure recommends the city of Phoenix Aviation Department continue the acoustical treatment program for all single-family homes within the 65 DNL noise contour based on projected noise for the year 1992 developed in the 1989 Noise Compatibility Study and to expand the program to include single-family homes that are outside of the 1992 contour but are within the 1999 65 DNL contour as identified in the current Noise Compatibility Program.

FAA Action: APPROVED. The city of Phoenix may, at its discretion, continue its acoustical treatment program for all single family homes that are within the 65 DNL contour shown on the 1992 NEM submitted in 1989 but that are now outside of the 65 DNL contour for the 1999 NEM accepted by the FAA on October 10, 2000. Eligibility for federal financial assistance, however, will be limited to those residence located within the 1999 65 DNL noise contours as shown on the Noise Exposure Map accepted by the FAA on October 10, 2000. To ensure neighborhood equity, contiguous areas may also be eligible for federal financial assistance. The FAA will not approve remedial noise mitigation measures under Part 150 for new noncompatible development that occurs in the vicinity of airports after October 1, 1998, and consequently such remedial noise mitigation measures will not be eligible for federal financial assistance.

2. Sound Insulate approximately ten schools within the 1999 65 DNL Contour. (Pages 5-28 and 6-18)

Description: This measure recommends the acoustical treatment of ten schools within the 65 DNL contour based on the 1999 NEM. The ten schools include Lowell Elementary, Herrera Elementary, Annett Elementary, Dunbar, Maricopa Skills Center, Gateway Community College, Tertulia, Enterprise, Friendly House, and the Phoenix Day Preschool. A similar measure was previously approved by the FAA as an element of the 1989 NCP.

FAA Action: APPROVED. The FAA will not approve remedial noise mitigation measures under Part 150 for new noncompatible development that occurs in the vicinity of airports after October 1, 1998, and consequently such remedial noise mitigation measures will not be eligible for federal financial assistance.

3. Acoustical Treatment of Community Center and place of worship classrooms/meeting rooms within the 1999 65 DNL Contour. (Pages 5-28 and 6-19)

Description: This measure recommends the acoustical treatment of the class and meeting rooms of two community centers and two places of worship within the 70-75 DNL contour and one community center and 20 places of worship within the 65 DNL contour based on the 1999 NEM.

FAA Action: APPROVED. The FAA will not approve remedial noise mitigation measures under Part 150 for new noncompatible development that occurs in the vicinity of airports after October 1, 1998, and consequently such remedial noise mitigation measures will not be eligible for federal financial assistance.

4. Voluntary Acquisition and Redevelopment: Acquire dwellings north and west (to 7th street) of the airport within the 1999 [65 and] 70 DNL Contour. (Pages 5-23, 5-25, and 6-20)

Description: This measure recommends the acquisition of up to one thousand one hundred and eleven dwellings within the 65 and 70 DNL contours based on the 1999 NEM. All property acquired under this program will be redeveloped with compatible land uses.

FAA Action: APPROVED. Use or resale, of any property acquired pursuant to this measure, for a noncompatible land uses would not be consistent with the objectives Part 150. Federal funding eligibility is subject to compliance with Title 49, Code of Federal Regulations, Part 24, Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.

5. Exchange dwellings impacted within the 70 DNL noise contour with a dwelling outside the 65 DNL noise contour. (Pages 5-26 and 6-16)

Description: This measure recommends the establishment of a voluntary program for the

exchange of a dwelling within the voluntary acquisition area for a new replacement dwelling located outside of the 65 DNL contours. This measure is recommended as an alternative to the voluntary acquisition program identified in Noise Mitigation Element Measure 4 above. All property acquired under this program will be redeveloped with compatible land uses.

FAA Action: APPROVED. Use or resale, of any property acquired pursuant to this measure, for a noncompatible land use would not be consistent with the objectives of Part 150. Federal funding eligibility is subject to further review by the FAA to determine cost-effectiveness and subject to compliance with Title 49, Code of Federal Regulations, Part 24, Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs.

## 2 - LAND USE PLANNING ELEMENT

1. Update General Plans to reflect the 1999 noise contour planning boundary from Part 150 Study as basis for noise compatibility planning. (Page 6-23)

Description: This measure recommends that the city of Phoenix, city of Tempe, city of Scottsdale, the Salt River Pima-Maricopa Indian Community, and Maricopa County update their general plans to show the 1999 noise exposure contour planning boundary which encompasses the 65 DNL contour. A similar measure was previously approved by the FAA as an element of the 1989 NCP.

FAA Action: APPROVED.

2. Amend General Plan designations to reflect existing compatible and existing lower density land uses within the Noise Contour Planning Boundary (NCPB). (Page 6-24)

Description: This measure recommends that the city of Phoenix and city of Tempe amend their general plans to reflect the existing compatible land uses or lower density residential use within the Noise Compatibility Planning Boundary (NCPB) which encompasses the 65 DNL contour. Several areas within the NCPB are developed with compatible land used but are planned for noncompatible land use or higher concentrations of noncompatible land uses.

FAA Action: APPROVED. The FAA will not approve remedial noise mitigation measures under Part 150 for new noncompatible development that occurs in the vicinity of airports after October 1, 1998, and consequently such remedial noise mitigation measures will not be eligible for federal financial assistance.

3. General Plan Amendment: Amend Mixed Use designations within the 1999 65 DNL contour to exclude residential. (Page 6-24)

Description: This measure recommends that the city of Phoenix and city of Tempe amend their general plans to include a new mixed-use category that does not allow residential uses inside the 65 DNL contour. Current policies allow for high concentrations of residential development within mixed-use areas.

FAA Action: APPROVED. The FAA will not approve remedial noise mitigation measures under Part 150 for new noncompatible development that occurs in the vicinity of airports after October 1, 1998, and consequently such remedial noise mitigation measures will not be eligible for federal financial assistance.

4. Enact guidelines specifying noise compatibility criteria for the review of development projects within the Noise Contour Planning Boundary (NCPB). (Page 6-24)

Description: This measure recommends that the city of Phoenix, city of Tempe, and the Salt River Pima-Maricopa Indian Community adopt airport land use compatibility guidelines for discretionary review of development project within the 65 DNL contour based on the 1999 NEM. A similar measure was previously approved by the FAA as an element of the 1989 NCP.

FAA Action: APPROVED. The FAA will not approve remedial noise mitigation measures under Part 150 for new noncompatible development that occurs in the vicinity of airports after October 1, 1998, and consequently such remedial noise mitigation measures will not be eligible for federal financial assistance.

5. Retain compatible land use zoning within the Noise Contour Planning Boundary (NCPB). (6-26)

Description: This measure recommends that the city of Phoenix, city of Tempe, and the Salt River Pima-Maricopa Indian Community retain compatible land use zoning within the Noise Contour Planning Boundary for all areas currently zoned for compatible land uses.

FAA Action: APPROVED. The FAA will not approve remedial noise mitigation measures under Part 150 for new noncompatible development that occurs in the vicinity of airports after October 1, 1998, and consequently such remedial noise mitigation measures will not be eligible for federal financial assistance.

6. Amend Zoning Map to reflect General Plan and existing compatible land uses within the Noise Contour Planning Boundary (NCPB). (6-26)

Description: This measure recommends that the city of Phoenix and city of Tempe rezone areas that are currently developed with compatible land uses but are currently zoned for noncompatible land uses. This measure recommends that these areas be rezoned for compatible land uses.

FAA Action: APPROVED. The FAA will not approve remedial noise mitigation measures under Part 150 for new noncompatible development that occurs in the vicinity of airports after October 1, 1998, and consequently such remedial noise mitigation measures will not be eligible for federal financial assistance.

7. Encourage rezoning several large tracts of land currently developed with low density residential but zoned for higher density non-compatible land uses within the 1999 65 DNL noise exposure contour. (6-27)

Description: This measure recommends that the city of Phoenix and city of Tempe rezone areas within the 65 DNL contour that are currently developed with low density residential uses but are zoned for higher density non-compatible land uses. This measure applies to are large tracks both west and northeast of the airport.

FAA Action: APPROVED. The FAA will not approve remedial noise mitigation measures under Part 150 for new noncompatible development that occurs in the vicinity of airports after October 1, 1998, and consequently such remedial noise mitigation measures will not be eligible for federal financial assistance.

8. Enact overlay zoning to provide noise compatibility land use standards near Airport. (6-27)

Description: This measure recommends that the city of Phoenix, city of Tempe, city of Scottsdale, the Salt River Pima-Maricopa Indian Community, and Maricopa County enact airport noise

overlay zoning policies. A similar measure was previously approved by the FAA as an element of the 1989 NCP.

FAA Action: APPROVED. The FAA will not approve remedial noise mitigation measures under Part 150 for new noncompatible development that occurs in the vicinity of airports after October 1, 1998, and consequently such remedial noise mitigation measures will not be eligible for federal financial assistance.

9. Subdivision Regulation Amendment: Require recording of fair disclosure agreements and covenants within the Noise Contour Planning Boundary (NCPB). (6-32)

Description: This measure recommends that the city of Phoenix, city of Tempe, city of Scottsdale, the Salt River Pima-Maricopa Indian Community, and Maricopa County amend their respective subdivision regulations to support the proposed amendments to Airport Overlay Zoning Ordinance requiring the recording of fair disclosure agreements and covenants and the dedication of aviation easements in certain areas.

FAA Action: APPROVED.

10. Building Code Amendment: Enact construction standards within the Noise Contour Planning Boundary (NCPB). (6-24)

Description: This measure recommends that the city of Phoenix, city of Tempe, city of Scottsdale, the Salt River Pima-Maricopa Indian Community, and Maricopa County amend their local building codes to establish specific construction standards for sound insulation.

FAA Action: APPROVED.

### 3 - PROGRAM MANAGEMENT ELEMENTS

1. Continue noise abatement information program. (Page 6-33)

Description: This measure recommends the city of Phoenix continue use of the noise monitoring and flight track system to investigate aircraft noise complaints and provide general information to the public and airport users upon request. This measure also recommends that the airport authority maintain the noise complaint phone number to log aircraft noise complaints and better respond to area residents.

FAA action: APPROVED. For purposes 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.

2. Monitor implementation of updated Noise Compatibility Program. (Page 6-33)

Description: This measure recommends that the city of Phoenix monitor implementation and compliance with the Noise Abatement Element of the Noise Compatibility Plan through periodic communications with the FAA Airport Traffic Control Tower, airport users, and planning officials of the city of Phoenix, city of Tempe, city of Scottsdale, the Salt River Pima-Maricopa Indian Community, and Maricopa County. This measure also recommends that the city of Phoenix develop informational and promotional materials explaining the noise abatement program to pilots.

FAA action: APPROVED.



3. Update Noise Exposure Maps and Noise Compatibility Program. (Page 6-34)

Description: This measure recommends that the city of Phoenix review the Noise Exposure Maps and the Noise Compatibility Program and consider revisions and refinements as necessary.

FAA action: APPROVED.

4. Expand flight track monitoring coverage. (Page 6-35)

Description: This measure recommends that the city of Phoenix expand the flight track monitoring coverage from 15 miles to 30 miles. This will provide additional coverage that will allow airport staff to better respond to aircraft noise complaints, monitor potential route changes, and provided information for request in outlying areas.

FAA action: APPROVED. For purposes 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.