

**Record of Approval
Flagstaff Pulliam Airport
Noise Compatibility Program**

INTRODUCTION

The Flagstaff Pulliam Airport Noise Compatibility Program (NCP) and supplemental information dated May 7, 2007, describes the current and future non-compatible land uses based on the parameters as established in Title 14, Code of Federal Regulations, Part 150, *Airport Noise Compatibility Planning*. The noise compatibility program includes five recommended noise abatement elements; seven land use planning elements, and three program management elements. These measures are summarized in Table 7D on Pages 7-17 and 7-18 of the NCP.

The approvals listed herein include approval of actions that the airport recommends be taken by the Federal Aviation Administration (FAA). It should be noted that these approvals indicate only that the actions would, if implemented, be consistent with the purposes of 14 CFR Part 150. The approvals do not constitute decisions to implement the proposed actions or a commitment by the FAA to provide federal financial assistance for these actions. Later decisions concerning possible implementation of these actions may be subject to applicable environmental or other procedures or requirements.

The recommendations below summarize, as closely as possible, the airport operator's recommendations in the noise compatibility program and are cross-referenced to the program. The statements contained within the summarized recommendations and before the indicated FAA approval, disapproval or other determinations do not represent the opinions or decisions of the FAA.

NOISE ABATEMENT ELEMENTS

1. Runway 21 Departure Procedure for piston aircraft weighing less than 12,500 pounds.

Description: This measure recommends routing departing aircraft over compatibly developed land uses. Piston aircraft weighing less than 12,500 pounds will be directed to make a left turn when safe and practical upon reaching Interstate 17. The intent of this measure is to prevent overflight of residential development southwest of the airport. (NCP Page 5-5, 5-26, 7-2, and Table 7D)

FAA Action: Approved as a voluntary measure subject to weather, air traffic safety and efficiency.

2. Discourage intersection and midfield takeoffs.

Description: This measure recommends intersection and midfield departures be discouraged and this procedure be included in the pilot guide (See Program Management Element Measure 1). Analysis of intersection takeoffs compared to use of the full runway length showed a slight increase in the noise contours to the south over residential areas. This increase was verified with a grid point analysis. (NCP Page 5-6, 5-7, 7-2, and Table 7D)

FAA Action: Approved.

3. Promote use of Industry Standard Thrust Cut-Back Procedures.

Description: This measure recommends the use of manufacturer's standard noise abatement procedure for jets departing the airport. Due to the location of the noise sensitive land uses, a thrust cutback procedure that results in higher altitudes and lower noise levels over down range locations is preferred. The NBAA Standard Procedure or aircraft manufacturer's distant thrust cutback procedure should be encouraged when safe and practical. (NCP Pages 5-11, 7-3, and Table 7D)

FAA Action: Approved as a voluntary measure subject to weather, air traffic, safety and efficiency.

4. Promote use of Aircraft Owners and Pilots Association (AOPA) Noise Awareness Steps by light single and twin-engine aircraft.

Description: This measure encourages quiet and neighborly flying by distributing generalized noise abatement procedures for use by propeller aircraft. The AOPA Noise Awareness Steps have recommendations on how to fly the aircraft, as well as where to fly and provide guidance on pilot techniques when maneuvering near noise-sensitive areas. These procedures are listed in Appendix D of the NCP. (NCP Page 7-3, Table 7D, and Appendix D1-D3).

FAA Action: Approved as a voluntary measure subject to weather, air traffic safety and efficiency.

5. Change Phoenix Sectional Aeronautical Chart to depict the location of Walnut Canyon National Monument.

Description: This measure is recommended to reduce low aircraft overflights of Walnut Canyon National Monument; its location should be depicted on the Phoenix Section Aeronautical Chart. This would alert pilots to maintain a minimum altitude of 2,000 feet above the surface of the monument in accordance with FAA Advisory Circular 91-36D. (NCP Page 5-31, 7-4 and Table 7D)

FAA Action: Disapproved for the purposes of Part 150. The NCP does not provide analysis of the noise impacts or the noise benefit of this measure. This disapproval does not preclude the publication by FAA of such a revision to the Phoenix Sectional Aeronautical Chart under separate authority for landmark or other type of navigational value.

LAND USE PLANNING ELEMENTS

1. Consideration should be given to re-designated undeveloped parcels within the hybrid 60 DNL noise contour to a compatible land use designation such as commercial, industrial, or designated open space as detailed in the *Flagstaff Area Regional Land Use and Transportation Plan*.

Description: A number of undeveloped parcels within the "hybrid" 60 DNL noise contour are planned for potential residential land uses. The "hybrid" DNL noise contour combines the farthest reaches of the 1991 and 2003 noise contours to form a single contour for the purposes of land use planning and local zoning. The City of Flagstaff and Coconino County should consider revising the general plan in a manner, which would not allow noise-sensitive development. This could be accomplished by re-designating the parcels for commercial, industrial, or designated open space. (NCP Pages 6-4, 7-5, Revised Exhibits 6F and 7E and Table 7D).

FAA Action: Approved in part. The NCP describes the hybrid contour as incorporating the noise contours, adopted from a 1991 airport master plan, and updating this contour to include the DNL 60 dB noise contours for this NCP, depicting years 2003 and 2008. Exhibit 6E, and revised Exhibits 6F, and 7E show how this "hybrid" noise contour would be applied to local land use zoning decisions. That portion of the hybrid noise contour that depicts the DNL 60 dB from the sponsor's formally adopted noise exposure maps (2003 and 2008) is approved. These NEMs are depicted at Exhibits 1 and 2 in the NEM documentation.

That portion of the "hybrid" contour that depicts noise from a 1991 airport master plan is **disapproved for purposes of part 150**. The officially adopted NEMs do not depict this area as noncompatible. This disapproval for purposes of part 150 does not prohibit local land use jurisdictions from carrying out a local land use program. The Federal government does not control land uses; this is within the purview of the local jurisdictions with land use control authority.

2. Consideration should be given to incorporating hybrid 60 and 65 DNL noise contours into the general plan in lieu of the currently referenced noise contours prepared in the *Flagstaff Area Regional Land Use and Transportation Plan*.

Description: This measure would ensure that the areas surrounding the airport are developed in a compatible manner by incorporating a hybrid 60 and 65 DNL noise contour into the general plan. The "hybrid" DNL noise contour combines the farthest reaches of the 1991 and 2003 noise contours to form a single contour for the purposes of land use planning and local zoning. Within the Community Facilities and Services Element of this plan, the Airport Noise Sensitive Zone is defined as the area within the 60 DNL noise contour as established in the 1991 *Flagstaff Pulliam Airport Master Plan*. Residential development is discouraged within this zone in the interest of protecting not only the airport, but also the general public. A comparison of the 1991 noise contours and those prepared as part of this study indicates that in many areas the noise contours have begun to shrink. In order to protect the general public from non-compatible development around an airport with fluctuating noise contours, some communities opt to incorporate hybrid noise contours into their land use plans. These hybrid contours can be a reflection of the previous contours as well as the anticipated future noise condition for the airport. Incorporation of a hybrid contour often provides the community with an equal level of protection from impacts resulting from operation of the airport. The hybrid contour would consist of a combination of the 1991, 2003, and 2008 noise contours. Recommended land uses within these two hybrid contours would mirror what is presented within the overlay zoning discussion later on in this chapter. (NCP Pages 6-4, 7-5, Revised Exhibits 6F and 7E, and Table 7D)

FAA Action: Approved in part. The NCP describes the hybrid contour as incorporating the noise contours, adopted from a 1991 airport master plan, and updating this contour to include the DNL 60 dB noise contours for this NCP, depicting years 2003 and 2008. Exhibit 6E, and revised Exhibits 6F, and 7E show how this "hybrid" noise contour would be applied to local land use zoning decisions. That portion of the hybrid noise contour that depicts the DNL 60 dB from the sponsor's formally adopted noise exposure maps (2003 and 2008) is approved. These NEMs are depicted at Exhibits 1 and 2 in the NEM documentation.

That portion of the "hybrid" contour that depicts noise from a 1991 airport master plan is **disapproved for purposes of part 150**. The officially adopted NEMs do not depict this area as noncompatible. This disapproval for purposes of part 150 does not prohibit local land use jurisdictions from carrying out a local land use program. The Federal government does not control land uses; this is within the purview of the local jurisdictions with land use control authority.

3. The City of Flagstaff should consider revising their current project review guidelines to incorporate noise-related criteria. It would also be suitable to include these guidelines within the *Flagstaff Regional Area Land Use and Transportation Plan*.

Description: This measure would require all projects within the Flagstaff Pulliam Airport's designated Airport Influence Area (AIA) to undergo some type of airport noise review, which would reflect what is currently in place in the City of Flagstaff and would help to ensure that the areas south of the airport undergo project review. (NCP Pages 6-6, 7-5 and Table 7D)

FAA Action: Approved. Implementation of this measure is considered to be within the authority of the city of Flagstaff. This measure would help to prevent the introduction of new noise-sensitive land uses into the vicinity of the airport

4. The City of Flagstaff and Coconino County should maintain compatibility –zoned areas within the 60 DNL noise contour.

Description: This measure would be implemented by the City of Flagstaff and Coconino County as an on-going measure. A number of areas within the hybrid 60 DNL noise contour are currently zoned for compatible land uses. When possible, the areas that are zoned for compatible use should be maintained. The "hybrid" DNL noise contour combines the farthest reaches of the 1991 and 2003 noise contours to form a single contour for the purposes of land use planning and local zoning. (NCP Pages 6-8, 7-8 Revised Exhibits 6F and 7E, and Table 7D)

FAA Action: Approved in part. The NCP describes the hybrid contour as incorporating the noise contours, adopted from a 1991 airport master plan, and updating this contour to include the DNL 60 dB noise contours for this NCP, depicting years 2003 and 2008. Exhibits 6E, and revised Exhibits 6F, and 7E and 7D show how this "hybrid" noise contour would be applied to local land use zoning decisions. That portion of the hybrid noise contour that depicts the DNL 60 dB from the sponsor's formally adopted noise exposure maps (2003 and 2008) is approved. These NEMs are depicted at Exhibits 1 and 2 in the NEM documentation.

That portion of the "hybrid" contour that depicts noise from a 1991 airport master plan is disapproved for purposes of part 150. The officially adopted NEMs do not depict this area as noncompatible. This disapproval for purposes of part 150 does not prohibit local land use jurisdictions from carrying out a local land use program. The Federal government does not control land uses; this is within the purview of the local jurisdictions with land use control authority.

5. The City of Flagstaff and Coconino County should rezone undeveloped parcels within the hybrid 60 DNL noise contour to a compatible zoning designation.

Description: This measure would be implemented by the City of Flagstaff and Coconino County through an amendment to their respective zoning ordinances. As depicted on Exhibit 7E, a number of parcels within the hybrid 60 DNL noise contour are currently zoned in a manner which would allow residential development. The City of Flagstaff and Coconino County should consider rezoning these parcels to a zoning classification, which does not allow residential or other noise-sensitive development. The "hybrid" DNL noise contour combines the farthest reaches of the 1991 and 2003 noise contours to form a single contour for the purposes of land use planning and local zoning. (NCP Pages 6-8, 7-8, Revised Exhibits 6F and 7E and Table 7D).

FAA Action: Approved in part. The NCP describes the hybrid contour as incorporating the noise contours, adopted from a 1991 airport master plan, and updating this contour to include the DNL 60 dB noise contours for this NCP, depicting years 2003 and 2008. Exhibits 6E, and revised

Exhibits 6F, and 7E, and 7D show how this "hybrid" noise contour would be applied to local land use zoning decisions. That portion of the hybrid noise contour that depicts the DNL 60 dB from the sponsor's formally adopted noise exposure maps (2003 and 2008) is approved. These NEMs are depicted at Exhibits 1 and 2 in the NEM documentation.

That portion of the "hybrid" contour that depicts noise from a 1991 airport master plan is disapproved for purposes of part 150. The officially adopted NEMs do not depict this area as noncompatible. This disapproval for purposes of part 150 does not prohibit local land use jurisdictions from carrying out a local land use program. The Federal government does not control land uses; this is within the purview of the local jurisdictions with land use control authority.

6. The City of Flagstaff and Coconino County should consider revising its existing Airport Overlay District to reflect the results of the noise analysis conducted as part of this Part 150 Study. Additionally, Coconino County should consider enacting an Airport Overlay District for areas contained within the AIA.

Description The purpose of this measure is to create a district that would ensure compatible development within airport environs. Both land use and height restrictions are outlined within the overlay district. This overlay district consists of three Airport Noise Impact Areas and one Clear Zone Area. The purpose of the Clear Zone Area is to regulate the height of structures within the airport environs. The boundaries of the Airport Noise Impact Areas regulate land uses within the three impact areas. According to the *City of Flagstaff Land Development Code*, these impact areas change automatically as new contours are developed as part of airport master plan updates. (NCP Pages 6-9, 7-8 and Table 7D).

FAA Action: Approved. This measure would help to prevent the introduction of new noise-sensitive land uses into the vicinity of the airport.

7. The City of Flagstaff and Coconino County should consider amending their respective building codes to incorporate prescriptive noise standards.

Description: This measure recommends the city of Flagstaff and Coconino County consider building code amendments incorporating prescriptive noise standards. Implementation of this alternative would not only protect future noise sensitive development within the 60 DNL noise contour, but would also protect structures that undergo extensive remodeling or reconstruction, as these types of construction typically require a building permit and inspections. A sample building code is contained within Appendix D. (NCP Pages 6-15, 7-10 and Table 7D)

FAA Action: Approved. Implementation of this measure is considered to be within the authority of the city of Flagstaff and Coconino County.

PROGRAM MANAGEMENT ELEMENTS

1. Publish a pilot guide.

Description: This measure recommends that a pilot guide describing airport noise abatement information should be prepared for wide distribution to pilots using Flagstaff Pulliam Airport. (NCP Page 7-13 and Table 7D)

FAA Action: Approved. This measure is within the jurisdiction of the airport operator and does not obligate the FAA to provide funding.

2. Monitor implementation of the Part 150 Noise Compatibility Program.

Description: This measure recommends the airport management monitor compliance with the Noise Abatement Element. This will involve checking periodically with airport users and the local Tower Manager regarding compliance with the procedures. (NCP Page 7-13 and Table 7D)

FAA Action: Approved. This approval does not imply approval of any enforcement actions to ensure compliance with flight procedures by the Airport operator.

3. Update Noise Exposure Maps and Noise Compatibility Program.

Description: This measure recommends the airport management review the Noise Compatibility Program and consider revisions and refinements as necessary. Updates are typically needed every seven to ten years, depending on how much change occurs at the Airport and in the local area. (NCP Page 7-14 and Table 7D).

FAA Action: Approved. An update to the NCP if made necessary by NEM changes would address requirements of 14 CFR Part 150.23(e)(9). The FAA clarifies herein the requirements of 150.21, as described in the NCP at pages 7-20 to 7-21. Section 150.21(d), as amended, states that the NEM should be updated if there is either a substantial new non-compatible use within the DNL 65 dB noise contour, or if there is a significant reduction in noise over existing non-compatible land uses. [69 FR 57622, dated September 24, 2004].