

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
RECORD OF APPROVAL  
14 CFR PART 150  
NOISE COMPATIBILITY PROGRAM**

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**McCARRAN INTERNATIONAL AIRPORT  
LAS VEGAS, NEVADA**

*[Signature]*  
Regional Counsel, AWP-9

*9/17/08*  
Date

CONCUR

NONCONCUR

*[Signature]*  
Manager, Airports Division, AWP-600

*9/18/08*  
Date

APPROVED

DISAPPROVED

Record of Approval  
McCarran International Airport  
Las Vegas, Nevada  
Noise Compatibility Program Update

**INTRODUCTION**

The McCarran International Airport (LAS), Las Vegas, Nevada, Noise Compatibility Program (NCP) Update (No. 2) describes the current and future noncompatible land uses based upon the parameters established in Title 14, Code of Federal Regulations, (CFR) Part 150, *Airport Noise Compatibility Planning*. This NCP is to replace the NCP measures approved by the FAA on February 15, 1995. The FAA approved the first NCP for LAS on September 18, 1989. NCP Update No. 2 recommends a total of 22 measures to reduce the effect of noise generated at the airport. The recommendations include 13 Noise Abatement (aircraft operational) measures and 9 Noise Mitigation (land use) measures. Nine noise abatement measures continue previously approved, or are slightly modified from, the last NCP; two land use measures are continuations of previously approved measures. The recommended program measures are summarized in Tables V-1 and V-2, and described in detail in Sections III and IV and Appendices A and B of the NCP (Volume 2 of the three volume submittal dated February 2007).

The measures are identified below by program element and are reference 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 FAA approval, disapproval, or other determination do not represent the opinions or decisions of the FAA.

The approvals listed herein include approvals of actions that the Clark County Department of Aviation (CCDOA, the airport sponsor) recommend 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 14 CFR 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 or other procedures or requirements.

**NOISE ABATEMENT MEASURES**

**1. NA-1 – Maintain and clarify the existing informal preferential runway use program.**

**Description:** The airport's preferential runway use program consists of six components that apply to all turbojets weighing more than 75,000 pounds. The FAA and pilots, to a high degree, voluntarily adhere to the preferred runway use program when weather, safety, construction, and traffic conditions permit.

1. Runway 25R is the preferred departure runway. This measure has been in place since the late 1970's and has been assumed to be the primary departure runway in several environmental assessments for runway improvements/extensions. It was included in the previous NCPs and approved by the FAA as a voluntary measure.
2. Runway 25L is the preferred arrival runway. This procedure has been assumed to be the primary arrival runway in environmental assessments for LAS. It was included in the past two NCPs and approved by the FAA as a voluntary measure.
3. When southerly departures are required, Runway 19L is the preferred departure runway. This measure was assumed to be the primary southerly departure runway in several environmental assessments for LAS.

4. When northerly departures are required, Runway 1R is the preferred departure runway. This measure was assumed to be the primary northerly departure runway in several environmental assessments for LAS.
5. When easterly departures are required, Runway 7L is the preferred departure runway. This was assumed to be the primary departure runway for required easterly departures in several environmental assessments for LAS.
6. Between 8 pm and 8 am, use of Runways 1L-19R and 1R-19L is discouraged. This voluntary limitation on nighttime operational use of these runways is a long-standing policy, since the 1970's. This was recommended in the two previous NCPs and approved by the FAA as voluntary.

The components of NA-1 help reduce noise exposure to residences in the vicinity of the airport and help to minimize the number of aircraft flyovers in densely populated areas. Continuation of these measures also helps promote compatibility since existing comprehensive plans and land use plans for Clark County and the City of Henderson were developed in consideration of this measure's impact on the noise contour. (Table II-1, Pages III-2 to 5; Table III-2, Table V-1 at page V-4; Section A-5 in Appendix A, Pages A-24 to 30).

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

**2. NA-2 – Encourage the use of existing noise abatement flight tracks to ensure that aircraft fly over historic flight corridors.**

**Description:** Several noise abatement departure tracks and/or preferred flight corridors have been identified for LAS. Exhibit III-1 illustrates the existing noise abatement flight tracks for the airport. They include:

Pilots departing Runway 25L or 25 R will proceed on runway heading to 4 DME before turning north and will proceed on runway heading to 3 DME before turning south;

Pilots departing Runway 19L or 19R will proceed on runway heading to 3 DME before turning;

Pilots departing Runway 1L or 1R will proceed on runway heading to 2 DME before turning;

Helicopter pilots headed to tour destinations will fly north to Tropicana Avenue and proceed east along the centerline of Tropicana Avenue.

Over the past five years, all of the noise abatement flight tracks have been published by the FAA in the form of Standard Instrument Departure (SID) procedures in connection with recent airspace redesigns, with the exception of the preferred helicopter route. The DDCA has collaborated extensively with the helicopter operators and FAA ATCT personnel to define preferred departure and arrival routes. The CCDOA is not recommending any modifications to existing airport operational procedures.

The flight track procedures help to minimize aircraft overflights in Clark County and the City of Henderson by eliminating fanning in multiple directions. Adherence reduces the cumulative noise exposure and single event noise levels throughout the airport environs. Existing comprehensive plans in the City and County were developed using noise exposure contours that included these procedures. Continuing the procedures promotes compatibility with adopted land use plans. (Table II-1, Pages III-5 to 8; Exhibit III-1; Table V-1, Appendix A, pages A-5 through A-24).

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

**3. NA-3 – Continue to use designated engine run-up areas at the airport for maintenance purposes.**

**Description:** Previous NCPs included recommendations for the preferred engine run-up location. Two preferred locations are shown on Exhibit III-2. Permission must be obtained from the Airport Operations Coordinator. The CCDOA recommends that existing designated locations continue to be used and that information regarding the run-up location be included in the “fly quiet and safely” program brochure described in NA-13. Requiring engine run-up activity to occur in the middle of the airfield is an effective way to minimize ground noise exposure in the vicinity of the airport. The existing policies concentrate activity in the middle of the airfield, minimizing noise levels off airport. (Table II-1, Page III-9, Exhibit III-2, Table V-1, Appendix A, pages A-34 and A-35).

**FAA Action:** Approved as voluntary.

**4. NA-4 – Continue to support the use of general aviation reliever airports in the Clark County Airport System.**

**Description:** CCDOA manages a system of airports and has invested in upgrading North Las Vegas and Henderson Executive Airports to better accommodate general aviation operations. Over time, general aviation users at LAS have shifted their operations to these airports, helping to reduce arrival and departure delays at LAS. This shift has also reduced noise exposure north of Runway 1L-19R because almost no training operations or touch and go operations are performed at LAS. The CCDOA recommends continued support for the use of general aviation reliever airports. The CCDOA has also proposed to relocate helicopter operations from LAS to a non-urban heliport at NA-12. This shift in operations to general aviation airports also has added flexibility to implement voluntary noise abatement procedures at LAS. (Pages III-9 to 12; Exhibit III-3, Table V-1).

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

**5. NA-5 – Continue the biannual noise monitoring program for fixed-wing aircraft and annual noise monitoring for helicopter tour traffic.**

**Description:** Since 2002, the CCDOA has conducted monitoring to collect data regarding noise levels generated by these aircraft types. The noise monitoring provides useful information regarding existing aircraft noise levels in the vicinity of the airport and allows the CCDOA to keep abreast of changes in aircraft noise exposure. This data is routinely used for noise compatibility planning and to monitor the level of compliance with existing noise abatement programs. Data collection is also important in the ongoing public information programs. (Pages III-12 to 14; Exhibit III-4 Table V-1)

**FAA Action:** 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.

6. **NA-6 – Conduct a study to determine if the use of advanced navigational technologies could enable pilots to follow more predictable and precise flight tracks, thereby minimizing over flights and noise in areas developed with noise-sensitive land uses.**

**Description:** The intent of implementing advanced navigational procedures would be for pilots to use a series of waypoints to fly procedures that follow preferred historic flight corridors. This would reduce noise exposure for noise sensitive land uses from single aircraft over flights that are not within the preferred flight corridors. The noise impact analysis indicated implementing advanced RNAV procedures could reduce the numbers of people by 23 in the DNL 65 dB on a net basis. (Pages III-14 to 15; Table V-1; Appendix A at pages A-11 to 13; Exhibits A-4 through A-7; graphics contained in Appendix D depicting flight tracking reports).

**FAA Action: Approved for study.** The NCP states there is likely to be a net benefit in the DNL 65 dB noise contour. The NCP also indicates there will be an increase in noise to a smaller number of people within the DNL 65 dB and several hundred people within the DNL 60 dB noise contour.

7. **NA-7 – Conduct a study to determine the feasibility and noise reduction benefits of establishing continuous descent approach (CDA) procedures at the airport.**

**Description:** CDAs are designed to allow a slow, gradual descent at reduced engine power settings at higher altitudes and greater distances from the airport than standard approach procedures. Exhibit III-5 illustrates the CDA concept. Based on ongoing research, it appears that the noise reduction benefits of a CDA procedure occur 7 to 20 miles from the runway. The procedure as tested at two other airports was successful in reducing noise between 7 to 15 nautical miles from the airports. While the terrain in the vicinity of LAS may make the use of CDA approaches impractical, the CCDOA concluded that further study is warranted. The study proposed may lead to the conclusion that a CDA at LAS would result in reduced noise exposure in residential areas under the primary arrival corridors and specifically to households exposed to significant levels of aircraft noise. (Pages III-15 to 17; Table V-1, Appendix A, pages A-32 to 33).

**FAA Action: Approved for study.** Recent research indicates aircraft making a long, steady approach create less noise when close to the ground. The CDA reduces noise throughout the aircraft's operational descent by eliminating the need to adjust the flight path for final approach at key points, including close to the airport over noise-sensitive land uses. While this measure is approved for study for purposes of Part 150, the procedure for conducting such a study is complex and lengthy, and it requires the cooperative efforts of several parties, both within and outside of the FAA.

8. **NA-8 – Request that FAA increase the length of the final straight-in approach segment for arrivals on Runways 1L, 1R, 7L and 7R during visual meteorological conditions (VMC).**

**Description:** Noise sensitive land uses west and south of the airport are exposed to some of the highest aircraft noise levels in the airport environs. Exhibit III-6 shows pilots landing on Runways 1L/R occasionally perform turns over residences before they establish a straight in approach. Similarly, pilots landing Runway 7L/R occasionally overfly residences south of I-215 and west of the railroad tracks near Rainbow Boulevard. The purpose of this measure would be to minimize turns over these neighborhoods by shifting the turn locations further south and west by extending the length of the final approach segment. This would require that aircraft be established on a straight-in final approach at 9 DME and 3 DME, respectively. If the FAA approves this measure, it is recommended that it be implemented through publication of visual approach procedures. Information could be published in the Jeppesen Sanderson manual. The noise analysis indicates

that implementing this measure would result in a net decrease in the number of people exposed to DNL 65 dB by 10. It is anticipated that it also would reduce the frequency and severity of single event noise in communities south and west of the airport that currently experience overflights by arriving aircraft. (Pages III-17 to 20, Exhibits III-6 and III-7; Table V-1; Appendix A, pages A-18 to A-20).

**FAA Action:** Disapproved for purposes of Part 150. High terrain to the west and traffic volumes prevent the straight in approach segment from being modified.

**9. NA-9 – Conduct a study of the “distant” noise abatement departure profile (NADP) as described in FAA Advisory Circular 91-53A, Noise Abatement Departure Profiles, to determine the potential for reducing aircraft noise exposure in the airport environs.**

**Description:** The potential for implementing either the close-in or distant NADP at LAS was considered during the 1994 NCP update. Computer modeling at other airports has indicated that implementing NADP can reduce the noise levels of individual aircraft by 3 to 5 dB. Because each airline has developed specific NADPs for each aircraft in its fleet, it would be necessary to develop a set of profiles for each aircraft type for each airline. A study and/or live testing of the distant procedure is recommended since noise-sensitive land uses that are impacted by departure operations at the airport are generally several miles from the airport. The specific recommendation is to test the distant NADP from each runway end, except Runways 1L and 1R, to determine the potential for noise relief. The information would be used to determine whether adoption of the distant procedure would be recommended in the next part 150 update. (Pages III-20 to 22; Table V-1; Appendix A, pages A-31 to 32)

**FAA Action:** Approved for study.

**10. NA-10 – Continue to encourage airlines to use quieter aircraft and establish a recognition program for airlines that adhere to the principles of the Department of Aviation’s “fly quiet and safely” program.**

**Description:** As part of this measure, the CCDOA will further encourage the use of quieter aircraft at the airport to its users, and will publish data which identifies individual airline fleet mixes using the airport. The CCDOA would also establish a recognition program for airlines that use quieter aircraft and that adhere to the principles of the “fly quiet and safely” program brochure (NA-13). The potential outcome of meeting with users to encourage use of quieter aircraft could be fewer operations performed at LAS by the noisiest aircraft in the U.S. fleet. Information collected through this measure would allow the CCDOA to expand its public information programs and be able to disseminate the proposed program brochure described in NA-13 to aircraft operators. (Pages III-22-23; Table V-1; cross reference to Measure NA-13 at pages III-27 to 28; Appendix A, page A-36).

**FAA Action:** Approved as voluntary.

**11. NA-11 – Continue to support legislation that establishes quieter engine standards for all aircraft types.**

**Description:** The CCDOA and the working group recognize that phase out of modified Stage 2 aircraft and Stage 2 aircraft under 75,000 pounds could further reduce noise exposure in the airport environs. Therefore, as a measure of this NCP update, the CCDOA will support U.S. Congressional efforts to seek more stringent aircraft engine noise standards that would eventually lead to the phase out of noisier aircraft currently in operation. Stricter aircraft engine noise standard and a schedule to phase out noisier aircraft from the fleet would result in reductions in

single event noise levels. In some cases, the aircraft that would replace modified Stage 2 engines generate noise levels 100 to 20 decibels quieter. Additionally, Stage 2 weighing less than 75,000 pounds operating at LAS have very high noise emissions. (Pages III-23 to 24; Table V-1; Appendix A, page A-36).

**FAA Action: Disapproved for Part 150 purposes.** Action on this measure would conflict with anti-lobbying restrictions on Federal agencies. This does not prohibit Clark County from contacting local, state, and Federal representatives to lobby Congress in support of legislation to amend the Airport Noise and Capacity Act of 1990. As a factual matter, it should be noted that Stage 2 aircraft, over 75,000 pounds, have been modified to meet Stage 3 noise standards and are officially classified as Stage 3 aircraft, rather than "modified Stage 2 aircraft."

**12. NA-12 – Continue to pursue the construction of a Southern Nevada Regional Heliport.**

**Description:** Helicopter tour operations originating at LAS are a source of noise exposure in the airport environs and, although helicopters do not contribute significantly to cumulative noise exposure, can be considered annoying by airport neighbors. The CCDOA has been successful in working with helicopter air tour operators to implement informal noise reduction measures (see page III-24). Each of the existing strategies has been effective in minimizing noise-related impacts at LAS. In 2003, the CCDOA initiated planning studies for a non-urban heliport and is preparing an environmental assessment. The CCDOA seeks to incorporate pursuit of this heliport as an NCP measure. Implementation of [the ultimate goal of] this measure would reduce noise in the vicinity of LAS caused by Grand Canyon helicopter air tour operations. While noise reductions would not be significant cumulatively, the primary benefit of the measure would be the substantial reduction in the frequency of helicopter operations in the airport environs. It could also help reduce air carrier aircraft delays and in turn improve the ability of FAA ATCT to implement noise abatement procedures. The CCDOA is not seeking FAA funding through part 150 related to this measure, but desires to officially indicate its intent to pursue the construction of a new heliport at a non-urban location to reduce helicopter noise levels in the vicinity of LAS. (Pages III-24 to 25; Exhibit III-9; Table V-1)

**FAA Action: Approved.** Implementation of this planning effort is within the authority of Clark County. This measure indicates the CCDOA's intent to pursue a non-urban heliport, which would reduce helicopter noise in the vicinity of LAS, outside of the Part 150 process. NA-12 incorporates this separate process as an element in the LAS overall Part 150 program update. This approval is only for purposes of the Part 150 process. It does not constitute a decision by FAA under the National Environmental Policy Act of 1969, as amended, 42 U.S.C. §§ 4321-4347. Further, approval under Part 150 does not commit the FAA to provide Federal financial assistance for the project. This approval does not constitute a decision to implement the action on the part of the FAA. Later decisions concerning possible implementation of the action may be subject to applicable environmental or other procedures or requirements.

**13. NA-13 – Expand the public information program related to the NCP for LAS and publish a "fly quietly and safely" program brochure.**

**Description:** Under this recommendation, the CCDOA would continue all of its existing efforts established in the 1980's through its ANCLUC study. Further, to enhance public information and take advantage of available information, the CCDOA recommends improving certain aspects of the existing program. Runway use statistics, operations per hour, fleet mix information have been provided in recent editions of the *Airport Noise Complaint Report*. Under this recommendation, this new information would continue to be included. It is recommended the CCDOA establish a means of reporting noise abatement procedure compliance by airline, as well as the operation of

quieter aircraft by airline. It could be provided in a number of forms, including the *Report*, the airport website, and potentially local media.

Also, the CCDOA would undertake a number of actions to alert and educate pilots on the noise-sensitive nature of land uses in the vicinity, and would provide additional information to the community regarding noise exposure and the NCP. Recommended actions include:

- Develop and distribute a “fly quiet and safely” brochure for turbojets weighing 75,000 pounds or more as well as for smaller general aviation aircraft.
- Develop input for Jeppesen charts depicting the location of noise-sensitive areas and describing noise abatement procedures in effect at the airport.
- Install signs on airport property and in other locations clearly visible to aircraft pilots, stating that the airport environs is noise-sensitive and reminding pilots to follow published noise abatement procedures.
- Establish regular meetings with airline chief pilots and/or station managers to discuss noise abatement procedures and compliance, and types of aircraft operated at the airport.
- Post additional information on the airport website regarding the NCP and noise abatement procedures at the airport.

The CCDOA has developed a “Fly Quiet and Safely” Brochure for Henderson Executive Airport, shown on Exhibit III-10, for North Las Vegas Airport, and for helicopter tours. Under this measure, the CCDOA would develop similar brochures for distribution to LAS aircraft operators. [Several methods of distribution are included at page III-28, and detailed description of developing information for the various methods bulleted above are included on pages III-30 to III-31.] The brochures would be updated and redistributed any time that noise abatement procedures are modified or if some other change at or around the airport warrants a revision. (Pages III-27-31, Exhibit III-10; Table V-1; Appendix A, page A-36).

**FAA Action: Approved.** This measure is considered a “program management” measure – it is intended to keep the pilots aware of the noise sensitive nature of the communities surrounding the airport, and to inform prospective homebuyers of the location of the airport in order to make informed decisions. Wording for publications and signage, and location of any on-airport signage, must be coordinated with the FAA before final issuance. Signs and other publications must not construe voluntary noise abatement procedures as mandatory.

## **NOISE MITIGATION MEASURES**

1. **NM-1 – Establish a voluntary program to acquire properties developed with airport-incompatible land uses that will be exposed to aircraft noise of DNL 70 dB and higher based on the 2011 noise exposure map.**

**Description:** The 1994 NCP includes two remedial measures to address residential and other noise-sensitive uses exposed to noise of DNL 70 and higher. The first targeted land uses exposed to DNL 75 and higher. That has been completed. The second was a property transaction assistance program that targeted these same uses in the DNL 70 to 75. There are still several residences exposed to noise at this level. The CCDOA intends to continue with voluntary property acquisition to address residential developments exposed to aircraft noise of DNL 70 dB and higher based on the 2011 noise exposure map. The number of people and households exposed to aircraft noise of DNL 70 dB and higher would be permanently reduced if the measure were implemented. Participation would be voluntary under the conditions of a willing buyer/willing seller. The CCDOA would also retain an aviation easement on all properties acquired with noise funds if such properties are later resold. Property would carry restrictions with respect to future use, including a prohibition against development of residential land uses. Eligible households are listed at Table IV-4 and include a total of 4 homes. (Pages IV-2-6; Exhibits IV-1 and IV-2; Table V-1; Appendix B, pages B-2 to B-4)

**FAA Action: Approved.** The Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act must be followed. Federal participation is based on the FAA's Mitigation Policy, which states that: Beginning October 1, 1998, the FAA will approve remedial noise mitigation measures (sound insulation, acquisition, purchase assurance, etc.) under Part 150 only for incompatible development that exists as of that date. Incompatible development that potentially may occur on or after October 1, 1998, may only be addressed in Part 150 programs with preventive noise mitigation measures (land use controls— comprehensive plan, zoning regulations, subdivision regulations, building code, etc.).

**2. NM-2 – Establish a voluntary program to acquire properties developed with airport-incompatible land uses that will be exposed to aircraft noise of DNL 65-70 dB based on the 2011 noise exposure map and adjacent properties, as appropriate, to prevent neighborhood abandonment.**

**Description:** The 1994 NCP recommended a property transaction assistance program for single family residences exposed to noise of DNL 65 to 70. While the CCDOA has acquired several residences through the property transaction assistance program, several hundred single and multi family residences are still exposed to this noise level. The CCDOA intends to establish a property acquisition program to address single and multi family residential developments exposed to aircraft noise of DNL 65 to 70 based on the 2011 NEM. This is an extension of NM-1. NM-3 would also address the remaining single and multi family residential developments exposed to aircraft noise of DNL 65 to 70 based on the 2011 NEM. Residential land uses projected to be exposed that would potentially be eligible are described on page IV-6. Numbers of properties and residents eligible are described on table IV-2 and include approximately 1,085 households. The phasing of mitigation is described on page IV-11. (Pages IV-6 to IV-12; Exhibits IV-3 through 6; Table V-1; Appendix B, pages B-2 to B-4)

**FAA Action: Approved.** The Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act must be followed. Federal participation is based on the FAA's Mitigation Policy, which states that: Beginning October 1, 1998, the FAA will approve remedial noise mitigation measures (sound insulation, acquisition, purchase assurance, etc.) under Part 150 only for incompatible development that exists as of that date. Incompatible development that potentially may occur on or after October 1, 1998, may only be addressed in Part 150 programs with preventive noise mitigation measures (land use controls— comprehensive plan, zoning regulations, subdivision regulations, building code, etc.).

**2. NM-3 – Establish a voluntary sound insulation and/or transaction assistance program for properties developed with airport-incompatible land uses that will be exposed to aircraft noise DNL 65 to DNL 70 based on the 2011 noise exposure map.**

**Description: Sound insulation:** The 1989 NCP recommended a limited sound insulation program for single family residences exposed to noise of DNL 65 to 70. The CCDOA never implemented this measure and has used noise mitigation funds to acquire incompatible properties. With this NCP update, the CCDOA concluded that a residential sound insulation program could be a cost effective method for addressing aircraft noise in neighborhoods due west of the airport where homes are older and larger and residents appear to be less concerned with overflights and noise compared to other residential neighborhoods. The purpose would be to achieve an interior noise level of DNL 45 or lower in all habitable rooms. The number of households and people that would be eligible is presented in Table IV-3. There would be potentially 24 households.

**Transaction Assistance:** Homeowners that choose not to participate in the residential sound insulation program would be eligible to participate in the voluntary transaction assistance program. Homeowners would be given the opportunity to participate in lieu of voluntary sound insulation. Details are described on pages IV-15 and 16. (Pages IV-12 to 16; Exhibit IV-7; Table V-1; Appendix B, pages B-4 to B-7)

**FAA Action: Approved.** The Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act must be followed. Federal participation is based on the FAA's Mitigation Policy, which states that: Beginning October 1, 1998, the FAA will approve remedial noise mitigation measures (sound insulation, acquisition, purchase assurance, etc.) under Part 150 only for incompatible development that exists as of that date. Incompatible development that potentially may occur on or after October 1, 1998, may only be addressed in Part 150 programs with preventive noise mitigation measures (land use controls— comprehensive plan, zoning regulations, subdivision regulations, building code, etc.).

3. **NM-4 – Continue to work with the Clark County Department of Comprehensive Planning, the City of Henderson Community Development Department, the University of Nevada, Las Vegas (UNLV), and other appropriate agencies to amend land use and/or master plans to discourage the introduction of noise-sensitive and otherwise incompatible land uses in areas exposed to aircraft noise of DNL 60 and higher.**

**Description:** Clark County has several planning districts covering incorporated and unincorporated areas. For many years the CCDOA has worked with the Clark County Department of Comprehensive Planning (CCDCP), the City of Henderson Community Development Department (HCDD), and other local agencies to ensure aircraft noise at LAS is factored into land use planning decisions and reflected in comprehensive or land use plans adopted for the various planning districts in Clark County. The CCDOA intends to continue working with the aforementioned agencies and the UNLV to prevent the introduction of noise-sensitive and other incompatible land uses in areas exposed to noise of DNL 60 and higher, as depicted on the 2017 NEM and within the area subject to the Cooperative Management Agreement. Exhibit IV-8 shows areas planned for single and multi family residential uses based on existing adopted plans. Several areas are within the 2017 DNL 60 contour. Some of the areas have already been developed, while others are undeveloped and residential encroachment could be prevented if the plans are changed. As part of NM-4, the CCDOA would work with the CCDCP and UNLV and with the HCDD to review land use recommendations. (Pages IV-17 to 19; Exhibit IV-8, Table V-1; Appendix B, pages B-7 to B-12)

**FAA Action: Approved.** The local governments have the authority to implement this measure. The Federal government has no authority to control local land uses. As the airport sponsor, Clark County is required under its grant agreements to ensure land uses within its jurisdiction are compatible with normal airport operations. FAA's Mitigation Policy states that: Beginning October 1, 1998, the FAA will approve remedial noise mitigation measures (sound insulation, acquisition, purchase assurance, etc.) under Part 150 only for incompatible development that exists as of that date. Incompatible development that potentially may occur on or after October 1, 1998, may only be addressed in Part 150 programs with preventive noise mitigation measures (land use controls— comprehensive plan, zoning regulations, subdivision regulations, building code, etc.).

4. **NM-5 – Continue to support redevelopment in areas exposed to aircraft noise of DNL 65 and higher that are transitioning from noise sensitive land uses to airport-compatible land uses.**

**Description:** The CCDOA intends to continue its efforts to support redevelopment in areas exposed to aircraft noise of DNL 65 and higher that are transitioning from noise-sensitive to airport compatible land uses. Although the CCDOA has acquired land for noise compatibility

purposes, other properties exposed to noise of DNL 65 and higher are or may be subject to redevelopment and are not owned by Clark County. Some of these areas are currently zoned or planned for residential uses. (Pages IV-19 to 21; Exhibit IV-9; Table V-1; Appendix B, pages B-7 to B-12)

**FAA Action: Approved.** The local governments have the authority to implement this measure. The Federal government has no authority to control local land uses. As the airport sponsor, Clark County is required under its grant agreements to ensure land uses within its jurisdiction are compatible with normal airport operations. FAA's Mitigation Policy states that: Beginning October 1, 1998, the FAA will approve remedial noise mitigation measures (sound insulation, acquisition, purchase assurance, etc.) under Part 150 only for incompatible development that exists as of that date. Incompatible development that potentially may occur on or after October 1, 1998, may only be addressed in Part 150 programs with preventive noise mitigation measures (land use controls— comprehensive plan, zoning regulations, subdivision regulations, building code, etc.).

**5. NM-6 – Update the Airport Environs Overlay District (AEOD) map to reflect changes in aircraft noise patterns that have occurred since the AEOD was last updated, and add a new AE-60 subdistrict.**

**Description:** The Clark County Board of County Commissioners adopted an AEOD in 1986 based on the 1992 NEMs, and the City of Henderson updated its AEOD to reflect the 1997 NEMs from the LAS Part 150 update. The CCDOA recommends that Clark County and the City of Henderson update their respective AEOD maps for LAS to reflect the 2017 NEMs, including the DNL, provided in Volume I of this NCP update, and reproduced as Exhibit I-4. A comparison of the adopted AEOD maps and the proposed AEOD is provided in Exhibit IV-10. As presented on Exhibit IV-10, it is recommended that a new subdistrict be added – the AE-60. This subdistrict corresponds to the DNL 60 NEM contour as presented on the 2017 NEM. Land use requirements/restrictions that would be applied are described under NM-7. An uncodified AE-60 subdistrict has been used for land use planning purposes by several agencies in Clark County since 1998. The CCDOA also intends to add information regarding the location of major flight corridors and the mixed use overlay district (MUOD) to the AEOD map to ensure that future land use decisions reflect consideration and understanding of the MUOD ordinance. The boundaries are presented on Exhibit IV-11. NM-7 describes the MUOD in more detail. (Pages IV-21 to 23; Exhibit IV-10; Table V-1; Appendix B, pages B-7 to B-12)

**FAA Action: Approved.** The local governments have the authority to implement this measure. The Federal government has no authority to control local land uses.

**7. NM-7 – Revisit land use compatibility requirements codified in the AEOD ordinance and update sections of the ordinance, as necessary, to include a new AE-60 subdistrict and to reflect sound attenuation requirements recently adopted as part of the MUOD ordinance.**

**Description:** As discussed in NM-6, the AEOD maps for Clark County and the City of Henderson should be updated to reflect current information regarding projected aircraft noise exposure. It is recommended that the AE-65, -70, and -75 subdistricts be based on noise exposure contours for the 2017 NEM presented in Volume I of this Part 150 update. It is further recommended that a new subdistrict, the AE-60, be added which corresponds to the 2017 DNL 60 noise exposure contour and that information regarding major flight corridors in the MUOD also be added to the AEOD maps, as appropriate. Table IV-4 presents recommended changes to the Clark County AEOD ordinance. It is recommended that adequate cross-references to the MUOD ordinance be added to the AEOD ordinance to ensure the consistent application of land use standards and requirements to proposed mixed use developments. The MUOD requires additional sound attenuation in mid to high rise projects if it is located within the major flight corridor. The CCDOA would work with the CCDCP and the HCDD to ensure appropriate

revisions are incorporated into the AEOD ordinance. (Pages IV-23 to 26, Table IV-4; Table V-1; Appendix B, pages B-7 to B-12).

**FAA Action: Approved.** The local governments have the authority to implement this measure. The Federal government has no authority to control local land uses. Table IV-4 shows the local compatibility standard for the overlay district.

8. **NM-8 – Continue to actively support enforcement of the AEOD through ongoing review of development applications and condition airport related issues as appropriate.**

**Description:** The CCDOA has, since the 1980's, taken an active role in reviewing development applications for residential projects proposed for construction in the vicinity of LAS. While development applications have been reviewed on a case-by-case basis, the CCDOA has not included information about its review policies in its NCP for LAS. The CCDOA intends to formalize its policy for reviewing development applications and is providing information in this NCP update that outlines its current policy. This existing policy enhances the effectiveness of the existing NCP and promotes enforcement of existing requirements (e.g., sound attenuation) that apply within the adopted AEOD. Pages IV-27 to 29; Exhibit IV-12; Table V-1; Appendix B, pages B-7 to B-12)

**FAA Action: Approved.** The local governments have the authority to implement this measure. The Federal government has no authority to control local land uses.

9. **NM-9 – Pursue the establishment of airport noise disclosure requirements at the local or state level.**

**Description:** *Enactment of a fair disclosure ordinance was recommended in the 1989 NCP but not in the 1994 NCP. It was never implemented by local jurisdictions in the airport environs. It is also a recommended policy in the Airport Environs Element of the Clark County Comprehensive Plan. An ordinance has not been adopted in Clark County. The CCDOA intends to work with the Greater Las Vegas Association of Realtors, the Clark County Department of Comprehensive Planning, and the Cities of Henderson, Boulder City, Las Vegas, and North Las Vegas to enact State legislation requiring fair disclosure or local ordinances requiring aircraft noise disclosure. This could take several years to implement. In the interim, the CCDOA intends to continue NM-8. In addition, the CCDOA intends to disseminate current information to the Clark County real estate community regarding noise levels in the vicinity of LAS and the location of major departure and arrival flight corridors as defined in this Part 150 Update. In 2003, CCDOA sent a letter to approximately 15,000 individuals and organizations in Clark County regarding general airport operations and associated noise impacts. A copy of the letter is provided in Appendix D. Additional information that would be provided includes a sample noise disclosure statement, as presented on Exhibit IV-13 (page IV-30 of this NCP update); a sample proximity map (Exhibit IV-14) and a sample number of noise events contour map (Exhibit IV-15). The CCDOA would continue working with realtors and the real estate boards on a case-by-case basis to ensure prospective buyers are informed about aircraft noise levels and the proximity of major flight corridors. (Pages IV-29 to IV-33; Exhibits IV-14 and IV-15; Table V-1; Appendix B, pages B-7 to B-12).*

**FAA Action: Approved.** The local governments have the authority to implement this measure. The Federal government has no authority to control local land uses. FAA encourages public disclosure of airport noise impacts.

**END OF RECORD OF APPROVAL**