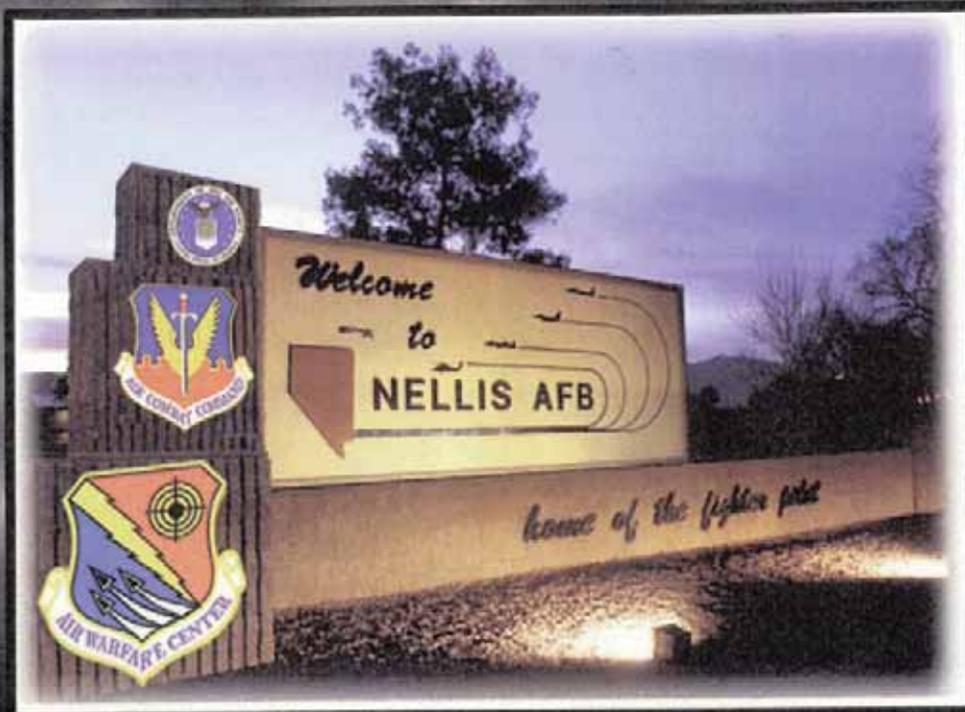




Air Installation Compatible Use Zone (AICUZ) Report



CITIZEN'S BROCHURE

**United States Air Force
Nellis Air Force Base, Nevada**



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR WARFARE CENTER (ACC)
NELLIS AIR FORCE BASE, NEVADA

FROM: HQ AWFC/CC

22 September 2004

SUBJECT: Air Installation Compatible Use Zone (AICUZ) Report

TO: Area Governments

1. This Air Installation Compatible Use Zone (AICUZ) Report for Nellis Air Force Base is an update of the previous AICUZ report dated December 1992. The update was initiated because of the beddown of the F/A-22 aircraft as well as changes in Nellis AFB flight patterns. It is a re-evaluation of aircraft noise and accident potential related to Air Force flying operations. It is designed to aid in the development of local planning mechanisms, which will protect the public safety, health and welfare, as well as preserve the operational capabilities of Nellis AFB.
2. The enclosed report contains a summary description of the affected areas around the base. The report outlines the location of runway clear zones, aircraft accident potential zones and noise contours, and recommends compatible land use for areas in the vicinity of the base. It is our hope that this information will be incorporated into your community plans, zoning ordinances, subdivision regulations, building codes and other related documents.
3. The basic objective of the AICUZ program is to achieve compatible uses of public and private lands in the vicinity of military airfields by controlling incompatible development through local actions. This update provides noise contours based on the Day-Night Average A-Weighted Sound Level (DNL) metric used by the Air Force. This report provides the information necessary to maximize beneficial use of the land surrounding Nellis Air Force Base, while minimizing the potential for degradation of the safety, health and welfare of the affected public.
4. We greatly value the positive relationship Nellis AFB has experienced with its neighbors over the years. As a partner in the process, we have attempted to minimize noise disturbances through such actions as minimizing night flying, avoiding flights over heavily populated areas to the maximum extent possible, installing jet engine noise suppressors for maintenance activities, etc. We solicit your cooperation in implementing the recommendations and guidelines presented in this AICUZ report.

Stephen G. Wood
STEPHEN G. WOOD
Major General, USAF
Commander

What is AICUZ?

Air Installation Compatible Use Zone (AICUZ) is a program concerning people, their comfort, safety and protection. This brochure briefly summarizes the AICUZ report - an extensive analysis of the effects of noise, aircraft accident potential, compatible land use, and development upon present and future neighbors of Nellis Air Force Base (AFB). AICUZ seeks a cooperative understanding and a reasonable solution to this intricate problem.

Is there a problem?

Military airfields attract development to immediately surrounding areas. In the absence of compatible land use controls, inappropriate uses may be made of property near or adjacent to the installation causing eventual conflicts between flight operations and landowners. Because land close to Nellis AFB is subject to high noise levels and aircraft accident potentials, certain types of development are not suitable.

What has been done?

Nellis AFB has attempted to be a good neighbor by restricting flying activities that could adversely affect its neighbors. For example, aircraft approach and departure operations are normally conducted during daylight hours when noise causes less disruption than it would during evening hours. During the 80s, Nellis AFB installed two engine test cells employing sound suppression equipment to muffle the noise of engine run up tests. Flight pattern altitudes and the runway approach angles have been adjusted over the years in an effort to reduce noise impacts while maintaining safe operations. The base has worked closely with Clark County, the City of Las Vegas, and the City of North Las Vegas to incorporate AICUZ policies and guidelines into their comprehensive plans and area-wide planning process. Continued coordination and cooperation by Nellis AFB, local governments, and local populace will further reduce potential air environs health and safety concerns and ensure that future land uses are compatible and beneficial to growth of the entire community.

What are the benefits?

In addition to protecting the public safety and health, primary benefits include protecting the taxpayer's investment in national defense provided by Nellis AFB and protecting economic income to the surrounding communities generated by base activities and employment. The local economy is enhanced by Nellis AFB's expenditures for salaries, contracts, construction, retirement pay, tuition, aid to schools, health insurance payments, and off-base accommodations for travelers. Nellis AFB employed over 9,600 people in fiscal year 2001 with an annual payroll of \$237.7 million. Through services and contracts, an additional \$229.4 million enters the local economy. Military retiree annual payroll provides an additional \$359.1 million to the local economy. While shrinking budgets challenge the leadership at Nellis AFB, the base continues to be a strong partner in the economic vitality and future growth of the surrounding communities of Clark County and the City of North Las Vegas.

Why AICUZ now?

Clark County is growing rapidly with development encroaching on northern boundaries of the base. Modifications to flight operations at Nellis AFB have resulted in changes to the noise contours outlined in the AICUZ report. Information provided in the AICUZ report is intended to offer assistance to those planning the future of Clark County, the City of North Las Vegas and its surrounding communities. By using the updated AICUZ map and information provided in the AICUZ report, neighboring communities are better equipped to make land use decisions and adopt land use controls which are compatible with Nellis AFB operations, yet accommodate future growth.

What does AICUZ mean to me?

AICUZ means protection of the public safety and health; as well as protection of the Air Force's national defense mission. The AICUZ itself is a composite of many factors such as: average noise levels, accident potential, and aircraft flight paths and altitudes. The noise and accident potential zones have been combined and displayed on the contour map found on page six of this brochure. The numbers 65 dB through 80 dB indicate the average sound levels in decibels for a particular area using the Day-Night Average A-Weighted Sound Level (DNL) metric for describing the noise environment.

The clear zones and accident potential zones (APZs) are based upon statistical analysis of past DoD aircraft accidents. The clear zone, the area closest to the runway end, is the most hazardous. The overall risk is so high that DoD generally acquires the land through purchase or easement to prevent development. Nellis AFB clear zones are located on base property and restricted from development. APZ I is an area beyond the clear zone that possesses a significant potential for accidents. APZ II is an area beyond APZ I having reduced, yet still significant, potential for aircraft accidents. While aircraft accident potential in APZs I and II does not warrant acquisition by the Air Force, land use planning and controls are strongly encouraged in these areas for the protection of the public. An additional constraint involves height restrictions near flight paths controlled by Federal Aviation Administration (FAA) regulations. Air Force obstruction criteria are based upon those contained in Federal Aviation Regulation Part 77, Subpart C and Unified Facilities Criteria (UFC) 3-260-01.

The accompanying generalized land use charts and AICUZ map provide a quick reference to the various noise and accident potential zones around Nellis AFB. More detailed information can be found in the Nellis AFB, AICUZ Report, Volume I.

The map in this brochure represents the maximum extent of noise exposure levels above DNL 65 dB from aircraft operations in the past; it is a hybrid (composite) of the flight activity for two time periods. To the south and west of Nellis AFB noise exposure levels were greatest in 1992 and to the north and east noise exposure levels were greatest as predicted in the 1999 Environmental Impact Statement for the F/A-22 Aircraft Force Development Evaluation and Weapon School Beddown. The noise contours in the F/A-22 EIS revealed a shift to the north in the area exposed to high noise levels. This shift was due in part to operational changes by Nellis AFB to minimize noise impacts on residential areas by departing primarily to the north and arriving from the north as much as possible; however, there is no guarantee that this can continue into the future.

Use of the composite noise contours in the community planning and zoning process will help to avoid fluctuating local zoning criteria due to aircraft noise impacts. In addition, it will help maintain consistent land use controls, minimize inconsistent residential development during periods of reduced noise levels, better safeguard the health and safety of the surrounding communities, and promote beneficial land use that will be compatible with Nellis AFB operations for the foreseeable future.

COMPATIBILITY CHART * LAND USE/AIRCRAFT NOISE

Generalized Land Use	DNL NOISE CONTOURS			
	65-70 dB	70-75 dB	75-80 dB	≥80 dB
Residential	No ¹	No ¹	No	No
Manufacturing	Yes	Yes	Yes	Yes
Transportation, Communications, and Utilities	Yes	Yes	Yes	No
Trade, Business, and Offices	Yes	Yes	Yes	No
Shopping Districts	Yes	Yes	Yes	No
Public and Quasi-Public Service	Yes	No	No	No
Recreation	Yes	Yes	No	No
Public Assembly	Yes	No	No	No
Agriculture and Mining	Yes	Yes	Yes	Yes

* This chart is for general information. Refer to Volume I, Figure 4, for specific land uses and guidelines.

¹ Residential development is discouraged within DNL 65-70dB noise contours, and strongly discouraged within DNL 70-75dB noise contours. If a municipality approves residential development within these contours, the installation of sound attenuation material is strongly recommended.

COMPATIBILITY CHART * LAND USE/ACCIDENT POTENTIAL ZONES

Generalized Land Use	ACCIDENT POTENTIAL ZONES		
	Clear Zone	APZ I	APZ II
Residential	No	No	Yes ¹
Manufacturing	No	Yes ²	Yes ²
Transportation, Communications, and Utilities	No	Yes ²	Yes ²
Trade, Business, and Offices	No	Yes ²	Yes ²
Shopping Districts	No	No	Yes ²
Public and Quasi-Public Service	No	No	Yes ²
Recreation	No	Yes ²	Yes ²
Public Assembly	No	No	No
Agriculture and Mining	No ³	Yes ²	Yes ²

* This chart is for general information. Refer to Volume I, Figure 4 for specific land uses and guidelines.

¹ Suggested maximum density 1 dwelling unit per acre.

² Only limited low-density, low-intensity uses recommended.

³ Except limited agricultural uses are permitted.

The AICUZ report includes the following recommendations:

The AICUZ report *should be adopted by affected jurisdictions as an official guideline for future planning.*

Zoning ordinances *should be adopted, or modified to reflect the compatible land uses outlined in the 2003 Nellis AFB AICUZ report.*

Fair disclosure ordinances *should be enacted to specify disclosure to the public those AICUZ items directly related to operations at Nellis AFB.*

Height control *of structures near flight paths should be enacted through zoning ordinances to reflect current FAA Part 77, Subpart C and Unified Facilities Criterion 3-260-01 height restrictions.*

Comprehensive plans *should include the land use recommendations of the AICUZ report.*

Subdivision regulations *should provide for rejection of new subdivisions not compatible with AICUZ land use objectives and provide controls for continued development in existing subdivisions.*

Building codes *should be amended to require noise level reduction in areas impacted by AICUZ noise zones.*

Capital improvement programs *should be carefully reviewed to discourage incompatible land use patterns, with particular emphasis on infrastructure planning.*

How can I help?

Historically, the citizens of Clark County, Las Vegas, and North Las Vegas and the personnel of Nellis AFB have worked together in cooperative and harmonious efforts to better serve the needs and desires of all concerned. We have collectively found solutions, which have maximized the benefits of Nellis AFB while minimizing annoyances. If the future of Nellis AFB is to be as bright as it's past, you, the citizens of Clark County, Las Vegas, and North Las Vegas, need to participate in achieving a suitable resolution of our mutual concerns. We request your careful and considered review of the recommendations contained in the brochure.

Who prepared the AICUZ Report?

The AICUZ Report was developed by many concerned people at Nellis AFB under the supervision of Headquarters United States Air Force and Headquarters Air Combat Command. When the AICUZ report is completed, it will be available at Nellis AFB from the Public Affairs Office, 4370 North Washington Blvd., Suite 223, Nellis AFB, Nevada 89191, 702-652-2750, e-mail address: awc.pa@nellis.af.mil. Only a summary of the complete AICUZ report is included in this brochure.
