



CITIZEN'S BROCHURE

FOR THE

HOMESTEAD AIR RESERVE BASE

AIR INSTALLATION COMPATIBLE

USE ZONE (AICUZ) STUDY

HEADQUARTERS AIR FORCE RESERVE COMMAND



October 2007



What is AICUZ?

Air Installation Compatible Use Zone (AICUZ) is a program concerning people and their comfort, safety, and protection. This pamphlet briefly summarizes the 2007 AICUZ Study—an extensive analysis of the effects of aircraft noise, accident potential, compatible land use, and development on present and future neighbors of Homestead Air Reserve Base (ARB). The AICUZ Program seeks a cooperative understanding and a reasonable solution to this intricate situation.

Is there a problem?

Military airfields attract development to adjacent areas. In the absence of compatible land use controls, inappropriate uses might be made of properties near or adjacent to the installation causing eventual conflicts between flight operations and nearby landowners. Because land close to Homestead ARB is subject to high aircraft noise levels and accident potential, certain types of development are not suitable.

Homestead ARB completed an AICUZ Study in 2004. The 2007 AICUZ Study addresses the changes since the 2004 AICUZ Study was released. Differences between the 2004 AICUZ Study and the 2007 AICUZ Study are attributable to the following:

- Revised flight operations and noise analyses based on the proposed increase in F-16C aircraft operations at Homestead ARB as a result of the 2005 Base Closure and Realignment (BRAC) Commission recommendations
- Modifications to the U.S. Environmental Protection Agency (USEPA)-approved NOISEMAP software program since the release of the 2004 AICUZ Study.

What has been done?

Homestead ARB has attempted to be a good neighbor by voluntarily restricting flying activities that could adversely affect its neighbors. For example, aircraft flying operations are normally conducted between the hours of 7:00 a.m. and 10:00 p.m., Monday through Saturday. Practice approach and departure operations are normally conducted during daylight hours when expected noise disruptions are less than they would be during evening hours. Flight pattern altitudes and runway approach angles have been adjusted over the years in an effort to reduce noise impacts while maintaining safe operations. Continued cooperation by Homestead ARB, local governments, and the local populace will further reduce the potential for land use conflicts. This action helps ensure that future land uses will be compatible and beneficial.

What are the benefits?

In addition to protecting public safety and health, primary benefits include protecting the taxpayers' investment in national defense provided by Homestead ARB, and protecting economic benefits to the neighboring communities generated by installation activities and employment. Homestead ARB's expenditures for salaries, contracts, construction, retirement pay, tuition, aid to schools, health insurance payments, and off-installation

accommodations for travelers enhance the local economy. In the most recent economic impact study conducted in 2006, Homestead ARB employed more than 2,000 military and civilians employees with an annual payroll of more than \$61.6 million. Through service and construction contracts, including primary and secondary employment and payrolls, it is estimated that Homestead ARB's total economic impact on the City of Homestead and surrounding area amounts to almost \$200 million annually.

Why AICUZ now?

The area surrounding Homestead ARB continues to experience growth. Development in the vicinity of the installation is accelerating rapidly. Information provided in the 2007 AICUZ Study is intended to offer assistance to those planning the future of Homestead ARB's neighboring communities. By using the updated noise information provided by installation personnel, neighboring communities are better equipped to make land use decisions and adopt land use controls which are compatible with Homestead ARB, while still accommodating growth.

What does AICUZ mean to me?

The AICUZ Program means protection of the public safety and health as well as protection of the U.S. Air Force's (USAF) national defense mission. The AICUZ Program itself is a composite of many factors: average noise levels, aircraft flight paths and altitudes, and accident potential zones (APZs). The clear zones (CZs) and APZs at each end of the runway are shown in **Figure 1**. Those areas where high noise levels can be expected as a result of the proposed increase of F-16C aircraft stationed at Homestead ARB as a result of the 2005 BRAC Commission recommendations are also shown in **Figure 1**. The AICUZ Program uses a Day-Night Average A-weighted Sound Level (DNL) metric developed and approved in the early 1970s by the U.S. Environmental Protection Agency to describe the noise environment. This AICUZ Study contains noise contours plotted in increments of 5 A-weighted decibels (dBA), ranging from a DNL of 65 dBA up to 80 dBA. The area encompassed by a noise contour is known as a noise zone, as shown in **Figure 1**. **Table 1** provides a quick reference of compatible land uses for various noise zones and APZs. More detailed information can be found in **Section 3** of the *AICUZ Study for Homestead ARB, Florida (October 2007)*.

An additional consideration involves areas that the Federal Aviation Administration and USAF have identified for height limitations. USAF obstruction criteria are based on those contained in Federal Aviation Regulation (FAR) Part 77, Subpart C, amended April 1971.

How can I help?

Historically, the citizens in the communities near Homestead ARB have worked together in cooperative efforts to better serve the needs and desires of all concerned. Together, solutions continue to be developed to maximize the benefits of Homestead ARB while minimizing annoyances. If Homestead ARB's future is to be as bright as its past, continued involvement by the citizens from the surrounding communities is needed to ensure solutions best address mutual concerns. Your



careful review of the recommendations contained in Homestead ARB's 2007 AICUZ Study is requested. In brief, these recommendations include:

- (a) The AICUZ Study should be adopted as an official guideline for future planning.
- (b) Comprehensive plans should include the land use recommendations of the AICUZ Study.
- (c) Zoning ordinances should be adopted or modified to reflect the compatible land uses outlined in **Section 3** of the AICUZ Study.
- (d) Fair disclosure ordinances should be enacted to specify disclosure to the public of those AICUZ Study items directly related to aircraft operations at Homestead ARB.
- (e) Height control of structures near flight paths should be regulated by incorporation into zoning ordinances.
- (f) Subdivision regulations should provide for rejection of new subdivisions not compatible with AICUZ Study land use objectives and provide controls for continued development in existing subdivisions.

- (g) Building codes should be amended to require noise level reduction efforts for structures to be located in noise zones.
- (h) Capital improvement programs should be carefully reviewed to discourage incompatible land use patterns, with particular emphasis on utility extension planning.
- (i) Local governments should formalize procedures to share information about planning and zoning activities that have the potential to affect aircraft operations at Homestead ARB.

Who prepared the AICUZ Study?

The AICUZ Study was developed by many concerned people at Homestead ARB under the guidance of the Air Force Reserve Command (AFRC) at Robins Air Force Base, Georgia. The 2007 AICUZ Study is available through the Public Affairs Office at Homestead ARB. Only the major points of the complete 2007 AICUZ Study are included in this pamphlet.

Table 1. Land Use Compatibility Guidelines*

General Land Use	Accident Potential Zones			DNL Noise Contours (dBA)			
	Clear Zone	APZ I	APZ II	65-69	70-74	75-80	80+
Residential	No	No	Yes ¹	No ¹⁰	No ¹⁰	No	No
Manufacturing	No	No ²	Yes	Yes	Yes	Yes	Yes
Transportation, communications, utilities	No ³	Yes ⁴	Yes	Yes	Yes	Yes	No
Trade, business, offices	No	Yes ²	Yes	Yes	Yes	Yes	No
Shopping districts	No	Yes ²	Yes ²	Yes	Yes	Yes	No
Public, quasi-public services	No	No	Yes ⁵	No	No	No	No
Recreation	No	Yes ^{6,7,8}	Yes	Yes	Yes	No	No
Public Assembly	No	No	No	No	No	No	No
Agriculture, mining	No	Yes ⁹	Yes	Yes	Yes	Yes	Yes

Source: U.S. Urban Renewal Administration. 1965. *Standard Land Use Coding Manual*. January 1965.

Notes: 1. Suggested maximum density of 1 to 2 dwelling units per acre, possibly increased under a Planned Unit Development where maximum lot coverage is less than 20 percent.

2. Within each land use category, uses exist where further deliberating by local authorities could be needed due to the variation of densities in people and structures. Shopping malls and shopping centers are considered incompatible use in any accident potential zone (CZs, APZ I, or APZ II).

3. The placement of structures, buildings, or aboveground utility lines in the CZs is subject to severe restrictions. In a majority of the CZs, these items are prohibited. See Air Force Instruction (AFI) 32-7060, *Interagency and Intergovernmental Coordination for Environmental Planning* (25 March 1994), and Unified Facilities Criteria 3-260-01, *Airfield and Heliport Planning and Design* for specific guidance.

Source: U.S. Army Corps of Engineers. 2006. *Airfield and Heliport Planning and Design*. Unified Facilities Criteria 3-260-01. Updated 19 May 2006.

4. No passenger terminals and no major aboveground transmission lines in APZ I.

5. Low-intensity office uses only. Meeting places, auditoriums, and similar structures are not recommended.

6. Facilities must be low-intensity.

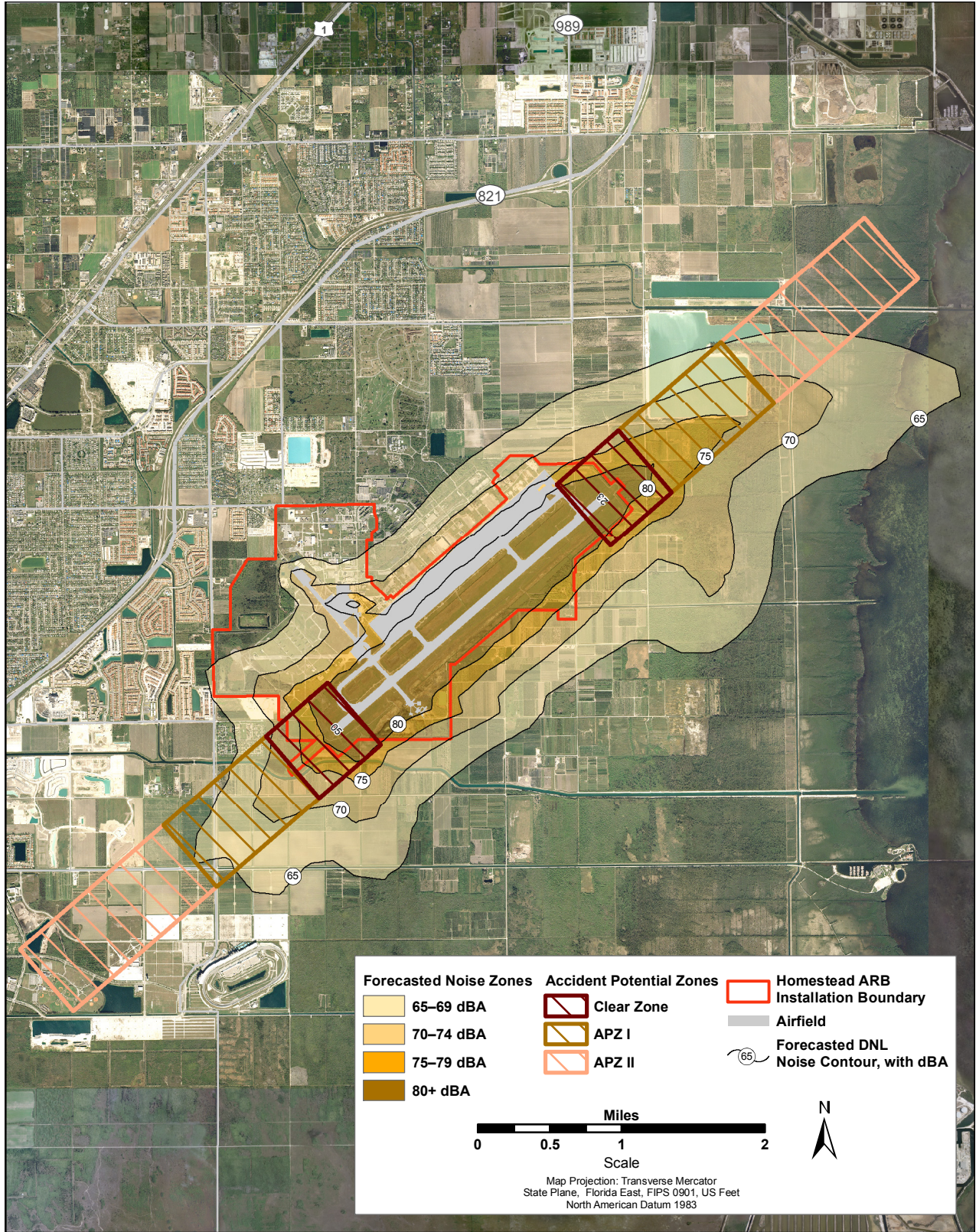
7. Clubhouse not recommended.

8. Areas for gatherings of people are not recommended.

9. Factors to be considered: labor intensity, structural coverage, explosive characteristics, and air pollution.

10. Unless sound attenuation materials are installed.

* For additional details on the land use compatibility guidelines presented in this table, please refer to **Section 3** of the Homestead ARB 2007 AICUZ Study, which includes a more comprehensive summary of land use compatibility with respect to aircraft noise exposure and accident potential.



Sources: Forecasted Noise Zones: Homestead ARB BRAC Scenario.05.18_Contour_Lines.shp
Accident Potential Zones and December 2005 Aerial Photography: 482 FW 2006

Figure 1: Homestead ARB Accident Potential Zones and Forecasted Noise Zones