

# AIR INSTALLATION COMPATIBLE USE ZONE STUDY

## CITIZEN'S BROCHURE



### Randolph Air Force Base, Texas



April 2008

## **What is AICUZ?**

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

## **Is there a problem?**

Military airfields, as employment centers, attract development in the immediate area. In the absence of compatible land use controls, inappropriate uses of land that is nearby or adjacent to the installation may be made, causing eventual conflicts between flight operations and landowners. Because land close to Randolph AFB is subject to high noise levels and potential aircraft accidents, certain types of development are not compatible. There are 925 acres of incompatible residential, commercial, public/quasi-public, and recreation/open/agriculture/low density land development within the Clear Zones (CZs), Accident Potential Zones (APZs), and four noise zones at Randolph AFB.

## **What has been done?**

Randolph AFB has placed restrictions on flying activities that could adversely affect its neighbors in an effort to reduce noise impacts while maintaining safe operations. Randolph AFB has also demonstrated a spirit of cooperation by consulting with local communities in the area-wide planning process relating to land use near the base. Bexar and Guadalupe Counties and the cities of Universal City, Schertz, Selma, Cibolo, Live Oak, and Converse have also played a major role by supporting the Randolph AFB AICUZ Program in its ongoing planning and zoning decisions. Continued cooperation between Randolph AFB, the local authorities, and local populace around the base will further reduce potential land use conflicts. This action will also help to ensure that future land uses are compatible and beneficial.

## **What are the benefits?**

In addition to protecting the public safety and health, other benefits provided by Randolph AFB include protecting the taxpayer's investment in national defense and protecting economic benefits to the surrounding communities generated by Randolph AFB. The local economy is enhanced by Randolph AFB's expenditures for salaries, contracts, construction, retirement pay, tuition aid to schools, health insurance payments, and off-installation accommodations for travelers. In terms of total economic impact in the region, Randolph AFB

employs over 10,000 people and generates nearly \$224 million associated with indirect jobs in the region. The economic impact is felt not only in the area of employment, but also in the total annual payroll of nearly \$648 million that is spent in the local community. Randolph AFB is a strong partner in the economic future of the region.

## **Why AICUZ now?**

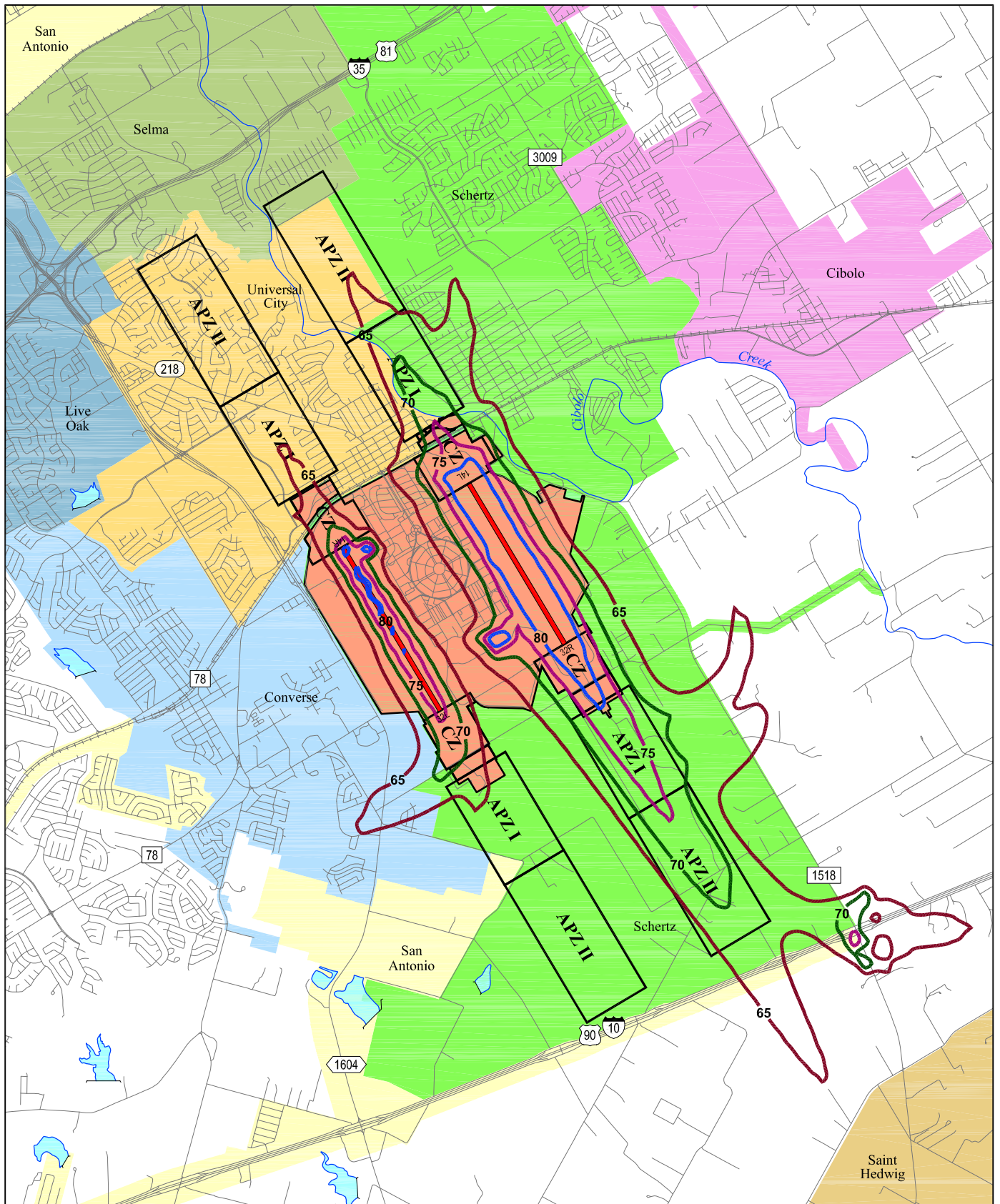
It is important that local governments have an understanding of the current noise and accident potential data related to aircraft operations at Randolph AFB. Information provided in this AICUZ Brochure is intended to offer assistance to those planning the future of the cities of Universal City, Schertz, Selma, Cibolo, Live Oak, and Converse and Bexar and Guadalupe Counties. By using the updated AICUZ map and information provided in the AICUZ Study, neighboring communities are better equipped to make land use decisions and adopt land use controls compatible with Randolph AFB, while accommodating growth and economic development.

The 2008 AICUZ Study provides an update to the previous 2000 AICUZ Study, and documents changes to the AICUZ for the period 2000-2007 based on current and projected operations at Randolph AFB. This AICUZ Study documents changes in flight operations since the last study and provides noise contours and compatible use guidelines for land areas surrounding Randolph AFB.

## **What does the AICUZ Program mean to me?**

The AICUZ Program means protection of the public safety and health as well as protection of the Air Force's national defense mission. The AICUZ Program itself is a composite of many factors: average noise levels; accident potential; and aircraft flight paths and altitudes. Noise and accident potential zones reflecting current conditions have been combined and are displayed on the contour map on the next page. The numbers 65 decibels (dB) through 80 dB indicate the average sound levels in decibels using the Day-Night Average A-Weighted Sound Level (DNL) metric for describing the noise environment. DNL is the energy-averaged sound level measured over 24 hours with a 10 dB penalty applied to nighttime (10:00 p.m. to 7:00 a.m. as defined by the noise metric) sound events to account for increased annoyance from late night noise.

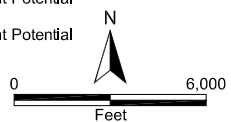
The CZs and APZs are based on statistical analysis of Air Force aircraft accidents throughout the United States. The CZ, the area closest to the runway end, is the most hazardous. The Air Force generally acquires the land in the CZ through purchase or easement to prevent development.



**Randolph Air Force Base 2008 AICUZ**

**LEGEND**

- |   |                   |   |              |   |        |                            |
|---|-------------------|---|--------------|---|--------|----------------------------|
|  | DNL 65 dB Contour |  | Runway       |  | CZ     | Clear Zone                 |
|  | DNL 70 dB Contour |  | Roadway      |  | APZ I  | Accident Potential Zone I  |
|  | DNL 75 dB Contour |  | Randolph AFB |  | APZ II | Accident Potential Zone II |
|  | DNL 80 dB Contour |   |              |   |        |                            |



**Average Busy-Day Noise  
Contours for Aircraft  
Operations and Clear Zones  
& Accident Potential Zones**

745472 RAND07-CITZ.DWG

APZ I is an area beyond the CZ that possesses a significant potential for accidents. APZ II is an area beyond APZ I having a lower, but still significant, potential for accidents. Statistically, 68 percent of Air Force accidents occur along the runway or within the CZ, APZ I, and APZ II. 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 areas that the Federal Aviation Administration and Department of Defense have identified for height limitations. Air Force obstruction criteria are based on those contained in Federal Aviation Regulation (FAR) Part 77, Subpart C, and Unified Facilities Criteria (UFC) 3-260-01, *Airfield and Heliport Planning and Design*.

The accompanying AICUZ map and Land Use Compatibility table provide a quick reference to the various noise and land use compatibility of the APZs associated with flying operations projected for Randolph AFB. More detailed information can be found in the 2008 Randolph AFB AICUZ Study.

### How can I help?

Historically, citizens of the cities of Universal City, Schertz, Selma, Cibolo, Live Oak, and Converse and Bexar and Guadalupe Counties and personnel from Randolph AFB have cooperated to better serve the needs and desires of all concerned. The Air Force has developed strategies intended to maximize the benefits of Randolph AFB while minimizing annoyances. If the future of Randolph AFB is to be as bright as its past, you, the citizens of this area, need to participate in the process of achieving a suitable resolution of our mutual concerns. We request your careful consideration of the recommendations contained in the Randolph AFB AICUZ Study.

### Who prepared the AICUZ Study?

The AICUZ Study was developed by concerned people at

Randolph AFB under supervision of Headquarters United States Air Force and Headquarters Air Education and Training Command.

This Citizen's Brochure is a summary of the AICUZ Study, with only the major points of the report included. The complete report is available from the Public Affairs Office at Randolph AFB (210-652-4407).

#### Summary

The report of the AICUZ Study includes the following recommendations:

- Incorporate AICUZ policies and guidelines into the comprehensive plans of Converse, Live Oak, San Antonio, and Selma. Use overlay maps of the AICUZ noise contours and Air Force Land Use Compatibility Guidelines to evaluate existing and future land use proposals.
- Continue to incorporate AICUZ policies and guidelines into the comprehensive plans and ordinances of Universal City and Schertz.
- Modify existing zoning ordinances and subdivision regulations to support the compatible land uses outlined in this study.
- Implement height and obstruction ordinances to reflect current Air Force and FAR Part 77 requirements.
- Modify building codes to ensure new construction within the AICUZ area of influence has the recommended noise level reductions incorporated into design and construction codes.
- Continue to inform Randolph AFB of planning and zoning actions that have the potential of affecting base operations. Develop a working group representing city planners, county planners, and base planners to meet at least quarterly to discuss AICUZ concerns and major development proposals that could affect airfield operations.

Land Use Compatibility							
Generalized Land Use	Clear Zones and Accident Potential Zones			DNL Noise Contours			
	Clear Zones	APZ I	APZ II	65-69 dB	70-74 dB	75-79dB	80+ dB
Residential	No	No	Yes <sup>1</sup>	No <sup>4</sup>	No <sup>4</sup>	No	No
Manufacturing	No	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes	Yes	Yes	Yes
Transportation, Communications, and Utilities	No	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes	Yes	Yes	No
Trade, Business, and Offices	No	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes	Yes	Yes	No
Shopping Districts	No	No	Yes <sup>2</sup>	Yes	Yes	Yes	No
Public and Quasi-Public Service	No	No	Yes <sup>2</sup>	Yes	No <sup>4</sup>	No <sup>4</sup>	No
Recreation	No	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes	Yes	No	No
Public Assembly	No	No	No	Yes	No	No	No
Agriculture and Mining	No <sup>3</sup>	Yes <sup>2</sup>	Yes <sup>2</sup>	Yes	Yes	Yes	Yes

<sup>1</sup> Suggested maximum density of 1-2 dwelling units per acre.  
<sup>2</sup> Only limited low-density, low-intensity, uses recommended.  
<sup>3</sup> Except limited agricultural uses are permitted.  
<sup>4</sup> Unless sound attenuation materials are installed.

This chart is for general information. See Table 4.3 in the AICUZ Study for more detailed information.