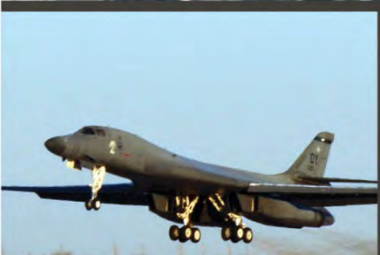
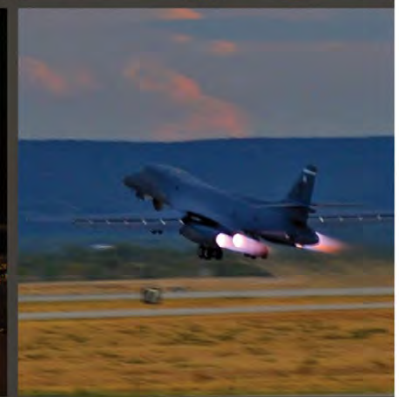
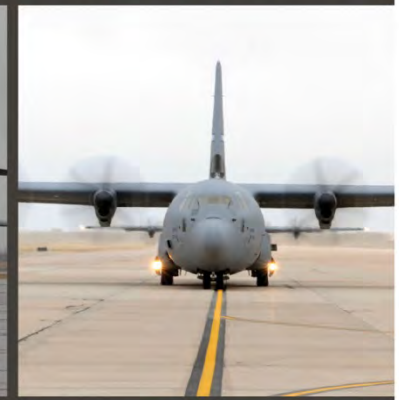


# ***Air Installation Compatible Use Zone Study Citizen's Brochure***

**Dyess Air Force Base, Texas**



**January 2015**

## WHAT IS AICUZ?

The Air Installation Compatible Use Zone (AICUZ) Program concerns people and their comfort, safety, and protection. This pamphlet briefly summarizes the 2015 Air Installation Compatible Use Zone Study for Dyess Air Force Base—an analysis of the effects of aircraft noise, accident potential, land use compatibility, and adjacent development for present and future neighbors of Dyess Air Force Base (AFB).

## IS THERE A PROBLEM?

Military airfields attract development to adjacent areas. In the absence of controls to ensure compatible land use, uses could be made of properties near or adjacent to an installation that might eventually cause conflicts between flight operations and surrounding landowners. Because land close to Dyess AFB is subject to noise from military aircraft and the potential for aircraft accidents, certain types of development are not suitable.

## WHAT HAS BEEN DONE?

Dyess AFB strives to be a good neighbor by not unnecessarily conducting flying activities during nighttime and over populated areas. For example: The majority of flying operations are conducted between the hours of 7:00 a.m. and 10:00 p.m. Aircraft assigned to Dyess will not fly over Dyess AFB housing areas or the city of Abilene below 5,000 feet Mean Sea Level (MSL)<sup>1</sup> without approval of the wing commander. Aircraft departing Runway 34 must delay all turns until north of Interstate 20 to avoid overflying residential areas of Tye. Also, Dyess AFB observes quiet hours between 10:00 p.m. and 6:00 a.m. During this period, the east flying pattern will only be used to deconflict B-1 operations from C-130 aircraft conducting drop zone or landing zone training. During quiet hours maintenance engine runs are only accomplished when necessary to achieve full mission capable aircraft. Continued cooperation between Dyess AFB, local governments, and the local populace will further reduce potential land use conflicts. The 2015 AICUZ Study provides detailed information to help ensure that future land use will be compatible and beneficial.

## WHAT ARE THE BENEFITS?

In addition to protecting public safety and health, primary benefits of incorporating AICUZ guidelines into local planning include protecting the taxpayer's investment in national defense and protecting economic benefits to the neighboring communities generated by Dyess AFB activities and employment. The local economy benefits from Dyess AFB expenditures for salaries, contracts, construction, retirement pay, tuition aid to schools, health insurance

payments, and off-installation accommodations for travelers. Dyess AFB employed 5,107 military, civilian, and other personnel in fiscal year 2013, with an annual payroll of approximately \$350 million. Through service and construction contracts, including primary and secondary employment and payrolls, it is estimated that the total economic impact of Dyess AFB on the City of Abilene and the local area amounts to approximately \$421 million annually.

## WHY AICUZ NOW?

The 2015 AICUZ Study addresses the changes that have occurred since the last AICUZ Study in 2008. Differences between these two studies are attributable to changes in aircraft operations, flight profiles for both aircraft assigned to the installation and transient aircraft, and Department of Defense (DoD) noise modeling.

The area surrounding Dyess AFB continues to experience growth. Information provided in the 2015 AICUZ Study is intended to offer assistance to those planning the future of the neighboring communities. By using the information provided in the AICUZ Study, neighboring communities are better equipped to make land use decisions and adopt land use controls that are compatible with the missions at Dyess AFB.

## WHAT DOES AICUZ MEAN TO ME?

The purpose of the AICUZ Program is to protect public safety and health, as well as the installation's ability to meet its national defense mission. The AICUZ Program provides information on many important community issues, including day–night average sound levels, aircraft flight paths, and Accident Potential Zones (APZs). Noise Zones and APZs reflecting current conditions are displayed in Figure 1.

The AICUZ Program uses a day–night average sound level (DNL) metric developed and approved in the early 1970s by the U.S. Environmental Protection Agency to describe the noise environment. The 2015 AICUZ Study displays noise zones plotted in increments of 5 decibels (dB), ranging from a DNL of 65 dB up to 80+ dB.

The APZs are based upon statistical analyses of past DoD aircraft accidents. APZs consist of a Clear Zone (CZ), APZ I, and APZ II. Statistically, the CZ, the area closest to the runway end, is the most likely site for an aircraft mishap. The overall risk is high enough that DoD generally acquires the land through purchase or easement to prevent development. 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. While the aircraft accident potential in APZs I and II does not warrant land acquisition by the U.S. Air Force (USAF), land use planning and controls are strongly

<sup>1</sup> Mean Sea Level is a vertical measurement based with zero as the average level of the ocean.



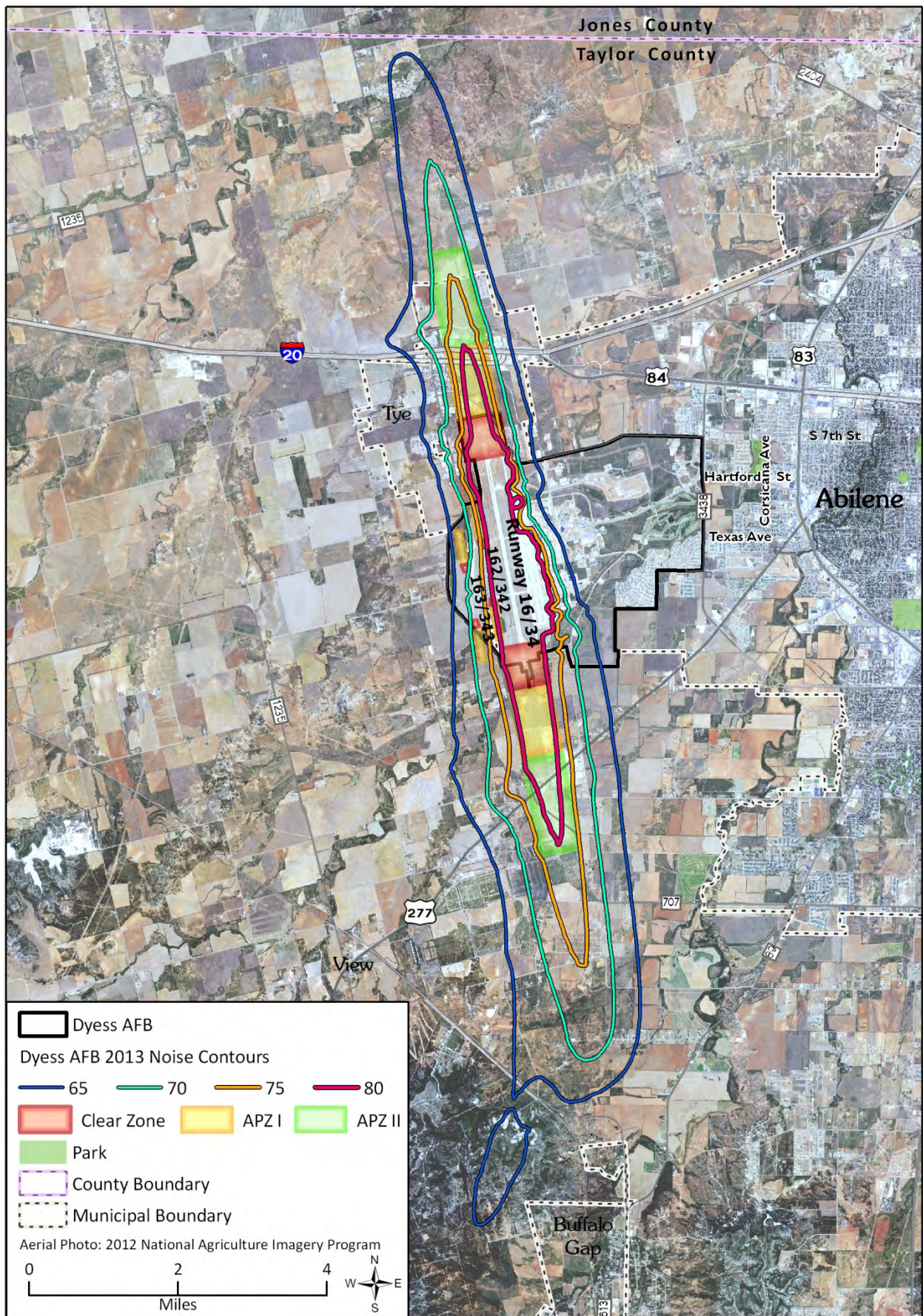


Figure 1. Dyess AFB Accident Potential Zones and 2013 DNL Noise Zones



encouraged in these areas for the protection of the public. An additional constraint involves areas that the Federal Aviation Administration and DoD have identified for height limitations for structures. USAF obstruction criteria are based upon those contained in Federal Aviation Regulation Part 77, Subpart C, amended April 1971.

Table 1 provides a quick reference of compatible land uses within the various noise zones and APZs around Dyess AFB. More detailed information can be found in Section 4 of the 2015 AICUZ Study.

### HOW CAN I HELP?

If the future of Dyess AFB is to be as bright as the past, continued involvement by citizens from the surrounding communities is needed to ensure future planning best addresses our mutual concerns. We request your careful and considered review of recommendations contained in the 2015 AICUZ Study, which are summarized below:

- (a) Recommend community planners and city leaders continue to use the recommendations of the AICUZ Study to inform their land use plans and zoning ordinances.
- (b) Recommend local governments implement and enforce height and obstruction ordinances that reflect current USAF and Title 14 of the *Code of Federal Regulations* (CFR) Part 77 requirements.

- (c) Recommend fair disclosure ordinances be enacted to specify disclosure to the public those AICUZ items directly related to aircraft operations at Dyess AFB.
- (d) Recommend local municipalities ensure new construction of noise-sensitive facilities within the Dyess AFB noise zones are built with the incorporation of appropriate noise reduction measures.
- (e) Recommend capital improvement programs not encourage incompatible land use patterns with particular emphasis on utility extension planning.
- (f) Recommend proposals for wind turbine construction in areas proximate to the installation should be monitored to ensure that new construction does not pose a hazard to navigable airspace at Dyess AFB. Potential developers should adhere to local regulations regarding proposed structures in the vicinity of Dyess AFB.

### WHO PREPARED THE AICUZ STUDY?

The AICUZ Study was developed by many concerned people at Dyess AFB under the guidance of Headquarters USAF and Air Combat Command within the USAF. The complete AICUZ Study is available at the Dyess AFB Public Affairs Office (325) 696-2863, the Abilene Public Library, or online at [www.dyess.af.mil](http://www.dyess.af.mil).

**Table 1. Land Use Compatibility Guidelines**

General Land Use	Accident Potential Zones			DNL Noise Zones			
	CZ	APZ I	APZ II	65–69 dB	70–74 dB	75–79 dB	80+ dB
Residential	No	No	Yes <sup>1</sup>	No <sup>8</sup>	No <sup>8</sup>	No	No
Industrial	No	No <sup>2</sup>	Yes <sup>2</sup>	Yes	Yes <sup>9</sup>	Yes <sup>9</sup>	Yes <sup>9</sup>
Commercial	No	Yes <sup>4</sup>	Yes <sup>4</sup>	Yes	Yes <sup>9</sup>	Yes <sup>9</sup>	No
Public/Semi-Public Services	No	No	Yes <sup>3</sup>	Yes <sup>9</sup>	Yes <sup>9</sup>	Yes <sup>9</sup>	No
Recreational	No	Yes <sup>4,5,6</sup>	Yes	Yes	Yes <sup>9</sup>	Yes <sup>9</sup>	No
Open Space/Low-Density	Yes <sup>7</sup>	Yes	Yes	Yes	Yes	Yes	Yes

For additional details on the land use compatibility guidelines presented in this table, please refer to the 2015 AICUZ Study for Dyess AFB, which includes a more comprehensive summary of land use compatibility with respect to aircraft noise and accident potential.

- 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. Low-intensity office uses only. Meeting places, auditoriums, and the like are not recommended.
4. Facilities must be low-intensity.
5. Clubhouse not recommended.
6. Areas for gatherings of people are not recommended.
7. Factors to be considered: labor intensity, structural coverage, explosive characteristics, and air pollution.
8. Unless sound attenuation materials are installed.
9. Measures to achieve noise-level reduction need to be incorporated into the construction of the portions of these buildings where there are public facilities, office areas, or noise-sensitive areas.