



**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 Joint Base McGuire-Dix-Lakehurst, N.J. 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 McGuire Airfield. This study seeks a cooperative understanding and a reasonable solution to this intricate issue.

**Is there an issue?**

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. Land close to McGuire Airfield is subject to high noise levels and potential aircraft accidents, certain types of development are not compatible. There are 3,661 acres of incompatible residential, commercial, industrial, and public/quasi-public land development within the Clear Zones (CZs), Accident Potential Zones (APZs), and four noise zones at McGuire Airfield.

**What has been done?**

McGuire Airfield placed restrictions on flying activities that could adversely affect its neighbors in an effort to reduce noise impacts while maintaining safe operations. JB MDL has demonstrated a spirit of cooperation by consulting with local communities in the area-wide planning process relating to land use near the base. The joint base has partnered with Burlington County through the preservation of farmland in the two mile buffer zone surrounding the installation. Permanent easements restricting the development of farmland in this area have been granted. This initiative benefits the environment and surrounding community while minimizing noise concerns by limiting incompatible development. Burlington and Ocean Counties have also played a major role by supporting the joint base's AICUZ Program in its ongoing planning and zoning decisions. Continued cooperation between JB MDL, the local authorities, and community will further reduce potential land use conflicts. This action will also help to ensure future land uses are compatible and beneficial.

**What are the benefits?**

In addition to protecting the public safety and health, other benefits provided by the joint base include

protecting the taxpayer’s investment in national defense and protecting the economic benefits for surrounding communities generated by JB MDL. The local economy is enhanced by JB MDL’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, prior to joint basing McGuire employed more than 8,000 people and generated more than \$508 million in annual payroll and approximately \$220 million in expenditures, which is spent in the local community. Indirect employment produces another \$233 million. JB MDL 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 McGuire Airfield. Information provided in this Brochure is intended to offer assistance to those planning the future of Burlington County. By using the updated 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 McGuire Airfield and JB MDL, while accommodating growth and economic development.

The 2009 AICUZ Study provides an update to the previous 1999 AICUZ Study, and documents changes to the AICUZ for the period 1999-2009 based on current

and projected operations at JB MDL. This AICUZ Study documents changes in flight operations since the last study and provides noise contours and compatible use guidelines for land areas surrounding McGuire Airfield.

**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 following 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 p.m. to 7 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.

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 McGuire Airfield. More detailed information can be found in the 2009 JB MDL Study.

**How can I help?**

Historically, citizens of Burlington and Ocean Counties and personnel from JB MDL have cooperated to better serve the needs and desires of the community. The Air Force has developed strategies intended to maximize the

benefits of JB MDL while minimizing annoyances. If the future of JB MDL 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 review of the recommendations contained in the JB MDL AICUZ Study. Copies of the AICUZ Study are on file with the Burlington County Planning Department and have been provided to the Burlington County Library.

**Who prepared the AICUZ Study?**

The AICUZ Study was prepared jointly by personnel from JB MDL, with assistance from Air Mobility Command and the AF Center for Engineering and the Environment. (NOTE: This study was conducted in August 2009 before the stand-up of JB MDL. All references to McGuire AFB now reflect the installation's new name.)

**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 Joint Base McGuire-Dix-Lakehurst Public Affairs Office at (609) 754-2104.**

**Contact the JB MDL Community Planner (609) 754-6520 for detailed information concerning this Study or the AICUZ program.**

**Summary**

The AICUZ Study includes the following recommendations:

- Incorporate AICUZ policies and guidelines into the comprehensive plans of Burlington County. Use overlay maps of the AICUZ noise contours and Air Force Land Use Compatibility Guidelines to evaluate existing and future land use proposals.
- Modify existing zoning ordinances and subdivision regulations to support the compatible land uses outlined in this study through implementation of a zoning overlay district based on noise contours and accident potential zones.
- Real Estate disclosure of noise impact to all prospective property buyers of properties exposed to noise levels greater than DNL 65 dB.
- 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 JB MDL 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.
- Support the on-going Joint Land Use Study Program for the JB MDL area to protect the area from encroachment.

Land Use Compatibility							
Generalized Land Use	Clear Zones and Accidental Potential Zones			DNL Noise Contours			
	Clear Zones	APZ I	APZ II	65-69 dB	70-74 dB	75-79 dB	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>3</sup>	Yes <sup>3</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 – 1-2 dwelling units per acre.

<sup>2</sup> Only limited agricultural uses are permitted.

<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.