

This Brochure Summarizes the 2007 AICUZ Study for Langley AFB

What is AICUZ?

The Air Installation Compatible Use Zone (AICUZ) program is an effort by the Department of Defense to promote compatible development in the vicinity of its airfields. This brochure briefly summarizes the AICUZ study – an extensive analysis of the effects of noise, aircraft accident potential, land use, and development, upon present and future neighbors of Langley 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 immediate 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 Langley AFB is subject to high noise levels and aircraft accident potential, certain types of development are not suitable.

What has been done?

Langley AFB has attempted to be a good neighbor by restricting flying activities that could adversely affect its neighbors. For example, practice approach and departure operations are normally conducted between the hours of 6:00 AM and 10:30 PM; however, Air Force contingency training may be accomplished at other hours to meet readiness requirements. Flight pattern altitudes and runway approach angles have been adjusted over the years in an effort to reduce noise impacts while maintaining safe operations. The base has demonstrated a spirit of cooperation by participating with communities in the area-wide planning process. Continued cooperation by Langley AFB, local governments, and the local populace will further reduce potential land use conflicts. This action will help ensure that future land use is compatible and beneficial.

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 Langley AFB and protecting economic benefits to the surrounding communities generated by base activities and employment. The local economy is enhanced by the base's expenditures for salaries, contracts, construction, retirement pay, tuition aid to schools, health insurance payments, and off-base accommodations for travelers. Langley AFB employed 11,200 people in fiscal year 2005 with an annual payroll of approximately \$726,398,126. Furthermore, the total economic impact of Langley AFB on the local economy was \$1.61 billion. While shrinking budgets challenge the leadership at Langley AFB, the base continues to be a strong partner in the economic future of the Commonwealth of Virginia and particularly the areas around Langley in the cities of Hampton, Poquoson, Newport News, and in lower York County.

Why AICUZ now?

There is always the potential for land development in the vicinity of Langley AFB. Modifications to flight operations at Langley AFB have resulted in changes to the noise contours outlined in the 1997 AICUZ study and may continue to change as they have in the past. Since the 1997 study, the mix of aircraft models stationed at Langley AFB has changed with the placing into service of the F-22 *Raptor*. Information provided in the AICUZ report is intended to offer assistance to those planning the future of the lower Peninsula region of Hampton Roads. 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 which are compatible with the mission at Langley AFB, yet able to accommodate 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: day-night average noise levels, accident potential, and aircraft flight paths and altitudes. The noise and accident potential zones have been combined and displayed on the AICUZ map inside this brochure. The number 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 (CZs) 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. 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 a lower, but still significant, potential for 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 areas which the Federal Aviation Administration (FAA) and DoD have identified for height limitations. Air Force obstruction criteria are based upon those contained in the FAA Regulation Part 77, Subpart C. The generalized land use charts and AICUZ map, on the reverse, provide a quick reference to the various noise and accident potential zones around the base. More detailed information can be found in the Langley AFB AICUZ study.

How can I help?

Historically, the citizens of Hampton, Poquoson, Newport News, York County and the people of Langley 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 the base while minimizing annoyances. If the future of Langley AFB is to be as bright as its past, you, the citizens of Hampton, Poquoson, Newport News and York County 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 Langley AFB AICUZ report.



Who prepared the AICUZ Study?

This Air Installation Compatible Use Zone (AICUZ) report was developed by a team of individuals from Geo-Marine, Inc., and Langley AFB under the supervision of Headquarters United States Air Force and Air Combat Command. The complete report is available for review at Langley AFB in the Public Affairs Office and copies have been distributed to local public libraries and are on file with the cities of Hampton, Poquoson and Newport News City Clerk's office, and the York County Clerk's office. This brochure briefly describes the major topics of the AICUZ report.

The Air Force Commitment

In an effort to reduce the impact of its flying activities on the community, the Air Force has and continues to implement the following procedures:

Implementing Quiet Hours with primary operating hours between 6:00 AM. and 10:30 PM.

Installing Hush Houses to suppress engine test noise.

Minimizing Impacts by changing the preferred runway wind limitation from 5-10 knots to allow more departures over water.

Continuing Negotiations with the FAA to standardize procedures to let the F-22 climb higher faster, minimizing noise.

The AICUZ report is prepared to educate communities and their governments on the planning challenges posed by the flying mission of Langley AFB. To promote compatible land use around Langley AFB, that is to protect the populace from aircraft noise and protect the US Air Force flying mission, the AICUZ study encourages the following:

Adopting zoning ordinances reflecting compatible land uses and height control of structures near flight paths.

Adopting fair disclosure ordinances to specify disclosure to the public of AICUZ issues.

Incorporating AICUZ study recommendations in city and county comprehensive plans.

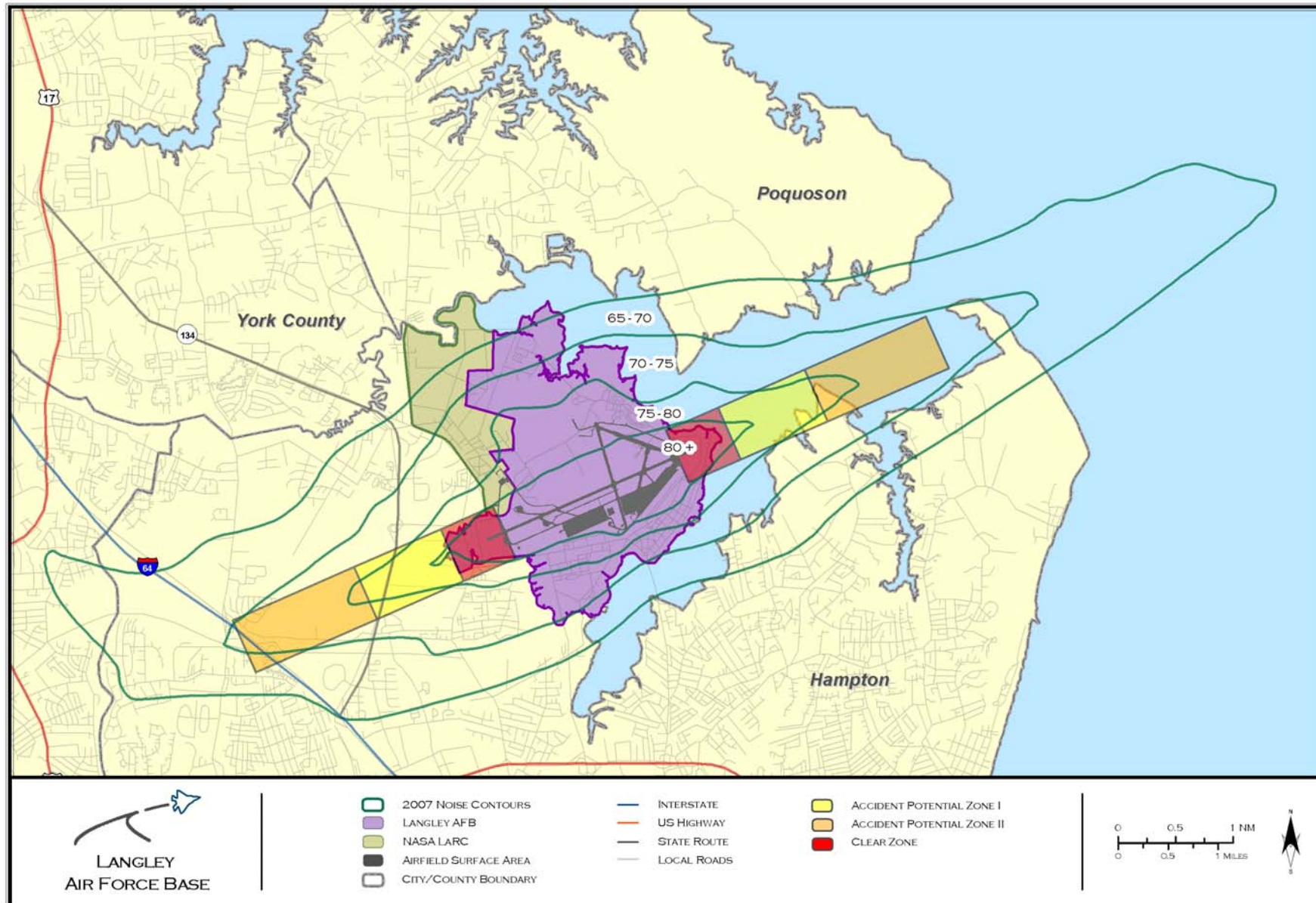
Adopting subdivision regulations that promote compatibility with the Langley AFB mission.

Incorporating building codes requiring noise level reduction in areas regularly impacted by aircraft noise.

Reviewing capital improvement programs to ensure they don't encourage incompatible growth.

For more information, call Langley AFB Public Affairs at 757-764-2018

Langley Air Force Base Air Installation Compatible Use Zone AICUZ



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 1ST FIGHTER WING
LANGLEY AIR FORCE BASE VA

18 MAY 2007

OFFICE OF THE COMMANDER
159 SWEENEY BLVD SUITE 200
LANGLEY AFB VA 23665-2291

MEMORANDUM FOR AREA GOVERNMENTS AND PROPERTY OWNERS

SUBJECT: 2007 Langley AFB Air Installation Compatible Use Zone (AICUZ) Study

- Langley AFB recently completed an update of the last AICUZ study dated January 1997. The revision was initiated because of the recent beddown of the F-22A fighter at Langley AFB as well as advances in noise analysis software technology.
- The purpose of the AICUZ program is to examine and evaluate aircraft noise and accident potential associated with the base's flying mission. The resulting data is then used to develop local planning guidance that will ensure public safety and well-being, as well as preserve the operational capabilities of Langley AFB. In more specific terms, the report contains a description of the affected local area and discusses the locations and definitions of runway Clear Zones, aircraft Accident Potential Zones, and noise contours. For property located in these areas, it also provides a list of land uses deemed compatible with airfield operations.
- We greatly value the positive relationship Langley AFB has experienced with its neighbors over the years. As a partner with the community, we have attempted to minimize noise disturbances by minimizing night flying, avoiding flights over heavily populated areas, and installing jet engine noise suppressors for maintenance activities. It is our hope that, in return, you will consider incorporating our recommendations into your community's land use plans, zoning ordinances, subdivision regulations, codes, and other related documents.

Mark A Barrett
MARK A. BARRETT, Colonel, USAF
Commander

Noise and Accident Potential Zones

General Land Use	Accident Potential Zone			DNL Noise Contours (dB)			
	Clear Zone	APZ I	APZ II	65-70	70-75	75-80	80+
Residential	No	No	Yes ¹	No ⁴	No ⁴	No	No
Manufacturing	No	Yes ²	Yes ²	Yes	Yes	Yes	Yes
Transportation, Communications, and Utilities	No	Yes ²	Yes ²	Yes	Yes	Yes	No
Trade, Business, and Offices	No	Yes ²	Yes ²	Yes	Yes	Yes	No
Shopping Districts	No	No	Yes ²	Yes	Yes	Yes	No
Public and Quasi-Public Service	No	No	Yes ²	Yes	No ⁴	No ⁴	No
Recreation	No	Yes ²	Yes ²	Yes	Yes	No	No
Public Assembly	No	No	No	Yes	No	No	No
Agricultural and Mining	No ³	Yes ²	Yes ²	Yes	Yes	Yes	Yes

¹This chart is for general information. Refer to Volume I, Table 3-4 for specific land uses and guidelines.

²Suggested maximum density 1 dwelling unit per acre.

³Only limited low-density, low-intensity uses recommended.

⁴Limited agricultural uses are permitted.

⁵Unless sound attenuation materials are installed.

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AICUZ STUDY