

Naval Air Station Patuxent River Air Installations Compatible Use Zones Frequently Asked Questions

Air Installations Compatible Use Zones (AICUZ) Program and Overview

What is an AICUZ?

Recognizing the need to foster compatible land and air use, the Department of Defense established the AICUZ Program in 1973. The objective of the AICUZ Program is to protect public health, safety, and welfare while preserving the operational capabilities of military air installations. Through detailed analysis of aircraft operations, noise exposure, and accident potential, the AICUZ Program provides a technical and policy framework for coordinating land use decisions between military installations and surrounding communities.

The purpose of the AICUZ Program is to achieve long-term compatibility between air installations and neighboring communities. AICUZ policy is governed by Department of Defense Instruction 4165.57 and Chief of Naval Operations Instruction 11010.36D, which defines the guiding standards, analytical procedures, and implementation responsibilities for the Navy.

Since the establishment of the AICUZ Program, the Patuxent River Complex has undergone multiple studies to address evolving missions, aircraft types, and operational requirements. Earlier studies include the 1979 AICUZ Study for both Naval Air Station Patuxent River and Webster Outlying Field, the 2006 Webster Outlying Field AICUZ, 2009 Naval Air Station Patuxent River AICUZ, and the 2017 Webster Outlying Field AICUZ Addendum. The 2026 Naval Air Station Patuxent River AICUZ Study is the most recent approved document. These documents collectively establish noise zones, Accident Potential Zones, and compatible land use planning standards that have guided regional land use coordination.

Why is an AICUZ Study important to homeowners and landowners?

An AICUZ study promotes public health, safety and welfare for the surrounding communities. The 2026 AICUZ supports compatible land use planning and protects the long-term mission of Naval Air Station Patuxent River and Webster Outlying Field.

Who is responsible for the current AICUZ study?

The Naval Air Station Patuxent River Commanding Officer is responsible for preparing an AICUZ study. The 2026 study was completed with assistance by Naval Facilities Engineering Command Atlantic. The study received final approval on 31 July 2026.

Why did Naval Air Station Patuxent River's AICUZ study change?

Earlier AICUZ studies identified noise exposure contours, Accident Potential Zones, and compatible land use expectations based on the operations and aircraft mix of the time. This AICUZ update is required due to changes in aircraft mix, flight operations, and mission requirements at Naval Air Station Patuxent River and Webster Outlying Field. The introduction of new aircraft and unmanned aircraft systems has reshaped noise exposure patterns and operational intensities. Updated information on aircraft operations and noise exposure provides a

current representation of existing and projected conditions to support compatible land use planning and long-term mission sustainment.

This 2026 AICUZ is an update to previous 2009 and 2017 AICUZ studies. In 2019 a noise study was conducted for the Patuxent River Complex which became the source of noise data for a 2022 Final Environmental Impact Statement for Testing and Training Activities in the Patuxent River Complex. The noise contours for Alternative 2 of the Environmental Impact Statement are utilized in the 2026 AICUZ update.

Supporting Studies and Data

Was an Environmental Impact Statement completed to support the new AICUZ?

Several environmental and planning documents inform this study. These include Environmental Assessments and Environmental Impact Statements for evolving aircraft programs, such as the F-35 Joint Strike Fighter; local comprehensive plans; zoning ordinances; and regional military land use compatibility studies.

Specifically, in 2019, a noise study was conducted for the Patuxent Range Complex, which became the source of the noise data for the *2022 Final Environmental Impact Statement for Testing and Training Activities in the Patuxent River Complex*. The noise study was presented as Appendix D in the 2022 Environmental Impact Statement and developed updated noise contours for Naval Air Station Patuxent River and Webster Outlying Field.

A copy of the 2022 Environmental Impact Statement is available online at [HERE](#).

Aircraft Noise

What does the AICUZ study mean for noise?

The AICUZ study evaluates the cumulative aircraft noise exposure sound levels associated with annual military flight operations. The AICUZ Study includes a map of noise contours to help local governments, planners, and residents understand where aircraft noise is expected and to guide future land use decisions.

What is DNL?

The Day-Night Average Sound Level (DNL) metric is the federal standard used by the Department of War and the Federal Aviation Administration to evaluate aircraft noise exposure and land use compatibility. The DNL represents the average sound energy from aircraft operations at a location over a 24-hour period.

What is a noise contour?

An AICUZ study provides air stations, local planning organizations, the public, and other stakeholders with maps of the modeled noise-related exposure from aircraft operations. Noise contours, when overlaid with local land uses, can help identify areas of incompatible land uses and can assist in planning for future development. Every AICUZ study contains a map that depicts the noise exposure contours. The noise exposure contour figure shows the 60-, 65-, 70-, 75-, and 80-dB DNL contours.

My property is in a noise contour. What does that mean?

Noise contours represent the cumulative annual aircraft noise exposure sound levels surrounding military airfields. The noise exposure is measured using the day-night average sound level (DNL) metric. The DNL represents the average sound energy from aircraft operations at a location over a 24-hour period. Noise contours, when overlaid with local land uses, can assist in planning for future compatible development and avoidance of noise-sensitive land uses in areas of higher noise exposure.

What is the purpose of the noise complaint line?

Noise abatement procedures for Naval Air Station Patuxent River are outlined in the installation's Air Operations Manual (Instruction NASPAXRIVINST 3710.5Z [7 October 2025]). Naval Air Station Patuxent River is proactive with respect to noise abatement and is committed to minimizing noise exposure without compromising operational and safety requirements. The guidance is applicable to Naval Air Station Patuxent River, including Webster Outlying Field and the Atlantic Test Range Inner Range and tenant activities.

As detailed in the Naval Air Station Patuxent River Operations Manual, the installation established a Noise Disturbance Response System. The Naval Air Systems Command Ranges Sustainability Office maintains a noise disturbance hotline for the local community to report aircraft noise complaints. The Noise Disturbance Response System at the installation follows specific procedures and protocols for noise complaints.

For additional information on the noise complaint process click [HERE](#).

Aircraft Safety Zones

What is an Accident Potential Zone?

Accident Potential Zones follow arrival, departure, and pattern flight tracks and are based on an analysis of operational data. Accident Potential Zones are areas where an aircraft accident is most likely to occur. They do not reflect the probability of an accident.

What is a Clear Zone?

A Clear Zone is the area immediately beyond the end of a military runway where the potential for an aircraft accident is considered the highest during takeoff and landing operations. It is established as a land use planning tool to protect public safety and preserve airfield operations. Clear Zones are the most restrictive of the Air Installations Compatible Use Zones safety zones and should remain "clear" and void of any obstructions or structures.

My home is now in an Accident Potential Zone. What does that mean?

An Accident Potential Zone is a compatible land use planning area designated along major arrival and departure routes off the ends of military runways. Accident Potential Zones are areas where an aircraft accident is most likely to occur, **IF** one occurs. The methodology and geometry for an Accident Potential Zone is based on studies of historical military airfield mishap data. It is primarily a land-use planning tool for development or land use changes proposed in these areas.

The AICUZ study includes the addition of a new Accident Potential Zone over Drum Point in Calvert County, Maryland. What does that mean for residents?

Analysis of the operations showed that there are a significant number of departures in the Runway 32 direction with right turnouts in addition to a significant number of closed patterns on Runway 32 with a right traffic pattern, creating a regular use of the flight tracks that cross the southern extremity of Drum Point. For this reason, there is a new set of curved Accident Potential Zones in the area under those tracks.

The new Accident Potential Zone designation over Drum Point is a recommended compatible land use planning area for future proposed development or land use changes.

Compatible Land Use and Local Planning

What is Compatible Land Use?

In context of the AICUZ Program, the primary compatible land use objectives are to avoid noise-sensitive land uses in higher noise exposure areas and minimize density (residential) and intensity (commercial) of land uses that support high concentrations of people in the vicinity of the airfield. The Department of War and Navy AICUZ policies include detailed tables of land use categories and compatibility recommendations for areas within noise exposure contours and Accident Potential Zones.

Ensuring compatible land use around military air installations is a shared responsibility among the Navy, local governments, state agencies, planners, developers, and community stakeholders. While the Navy develops and updates AICUZ studies, local governments maintain the authority to adopt zoning regulations, development regulations, and implement planning policies that protect public safety and minimize incompatible development. Cooperative engagement between installations and communities is essential to sustaining operational readiness while supporting compatible local development.

Does the AICUZ Study change zoning on my property?

The Air Installations Compatible Use Zones Study is an advisory document and not a regulatory document. Local governments have land use and zoning authority.

What is the Military Airfield Compatibility Review Area?

The Military Airfield Compatibility Review Area is a geographic area surrounding Naval Air Station Patuxent River, beyond the AICUZ footprint, where proposed land uses and development activities are evaluated for compatibility with military aviation operations. This area was identified to protect public safety, minimize noise impacts, reduce potential conflicts between development and aircraft operations, and preserve the long-term viability of the military installation and their mission. Development proposals within this compatibility area may be subject to additional review or coordination with the military installation.

Compatibility areas are common tools used by local governments, planning agencies, developers, and military installations to balance community growth with military operational requirements.

By incorporating compatibility considerations into local land use decisions, communities can protect both public interests and the long-term mission of nearby military airfields.

Encroachment Management and Community Coordination

What is encroachment?

Encroachment occurs when incompatible development or activities near a military installation create conflicts with military operations, between the installation and surrounding community.

What is the role of the Community Planning and Liaison Officer at NAS Patuxent River?

The Community Planning and Liaison Officer supports Naval Air Station Patuxent River's mission by promoting compatible land use strategies through effective community outreach, coordination, and education. These efforts ensure the installation continues to provide high-quality facilities and services to the naval aviation community while maintaining positive relationships with surrounding jurisdictions and stakeholders.

The Community Planning and Liaison Officer serves as a liaison between the installation and local governments, community organizations, developers, and private stakeholders regarding land use compatibility issues and proposed development projects. In this role, the liaison officer represents the installation's commanding officer and regularly coordinates with elected officials, regional and community planners, zoning and code enforcement personnel, school board representatives, utility district managers, chambers of commerce, and environmental, conservation, and natural resource organizations.

The Community Planning and Liaison Officer oversees the Encroachment Management Program, which includes the AICUZ program. This program is designed to protect the health, safety, and welfare of the surrounding community while preserving the operational capabilities and long-term mission of Naval Air Station Patuxent River, Webster Outlying Field, and other associated military installations.

For more information, contact the Naval Air Station Patuxent River Community Planning Liaison Officer at NASPAXCPLO@us.navy.mil

Who do I send questions to regarding the AICUZ?

Community Planning Liaison Officer
Naval Air Station Patuxent River
NASPAXCPLO@us.navy.mil