

**OEA Compatible Use
Case Study
Naval Air Station Patuxent River**

I. Background

The Naval Air Station Patuxent River (NAS PAX River) Joint Land Use Study (JLUS) encompasses parts of two states – Maryland and Virginia – and the NAS PAX complex including the Main Station, Webster Outlying Landing Field and the Atlantic Test Range (ATR) Inner Test Range. The surrounding area includes parts of the Chesapeake Bay, Potomac River and the Patuxent River, as well as multiple counties and cities in both Virginia and Maryland.

The JLUS was undertaken in an effort to develop a set of recommendations that will promote compatible community development in the areas surrounding the NAS PAX complex.

A. JLUS Nomination Reference

The NAS PAX JLUS was designed to provide stakeholders with:

- A detailed land use assessment for surrounding areas.
- A baseline of existing incompatible land uses around the installation.
- An assessment of regional growth trends along designated transportation corridors.
- Resources that will assist surrounding communities with the information needed to support future decision-making.
- Recommendations and strategies to promote compatible land use planning in surrounding communities.

B. Community/Installation Situation and Description and Military Mission

The NAS Patuxent River Complex includes the NAS PAX Main Station, Webster Field, Naval Recreation Center Solomons (excluded from the JLUS due to low impact operations), and the ATR Inner Test Range which includes the Bloodsworth Island Range.

NAS PAX is the largest regional employer either creating or supporting over 41,000 jobs and contributing over \$8 billion annually in Maryland. NAS PAX serves as the Navy's Center for Aviation Excellence providing services in support of Naval Air Systems Command.

Naval Air Warfare Center Aircraft Division Station occupies approximately 6,500 acres, and contains three runways and various support facilities such as hangars to accommodate the variety of aircraft. Webster Field occupies approximately 900 acres of land 10 miles south of the Main Station. Activities include helicopter, glider,

unmanned aerial systems, and limited fixed wing operations. The ATR Inner Test Range is an instrumented Navy range operating area overlying an area of land, airspace, and surface water in the middle of the Chesapeake Bay.

The Naval Air Systems Command Range Department controls and manages airspace aircraft operations, and the target areas within the ATR Inner Test Range. Activities within the range include radar tracking, aerial firing, air-to-surface target firing, and weapons separation testing. Both subsonic and supersonic flight is conducted. A line-of-sight is required for the clear transmission of radar communications. In order to avoid adverse impacts to systems, the JLUS includes designation of a High Risk of Adverse Impact Zone for the region surrounding NAS PAX.

Various types of military testing and training take place at NAS PAX and include both rotary-wing (helicopters) and fixed wing aircraft. As a test and training facility, NAS PAX supports over 35 independent aircraft types and models ranging from modern fighter aircraft to World War II vintage aircraft, to unmanned aerial systems.

Surrounding NAS PAX is a complex airspace environment to accommodate aviation testing and training needs. To safely conduct missions, several areas of restricted airspace have been established. Military testing and training is also conducted along military training route corridors to practice low-altitude, high speed, terrain-following training missions. Other areas have been designated for low-level helicopter and low performance fixed wing aircraft, unmanned aerial systems flight operations, and supersonic flight operations in designated restricted areas.

II. Compatibility Challenges

The compatibility challenges facing NAS PAX and the surrounding civilian communities include man-made factors, natural resource factors, and competition for resources. The compatibility challenges are:

- Interagency Coordination/Communication
- Land Use
- Safety Zones
- Vertical Obstruction
- Local Housing Availability
- Infrastructure Extensions
- Anti-Terrorism/Force Protection
- Noise
- Vibration
- Dust/Smoke/Steam
- Light and Glare
- Energy Development
- Air Quality
- Frequency Spectrum Impedance/Interference
- Public Trespassing

- Cultural Sites
- Legislative Initiatives
- Water Quality/Quantity
- Threatened and Endangered Species
- Marine Environments
- Scarcity Natural Resources
- Land, Air and Sea Spaces
- Frequency Spectrum Capacity
- Roadway Capacity

III. Description JLUS Sponsor Organization and Approach

The Tri-County Council for Southern Maryland conducted the JLUS as a collaborative planning effort that included the following project partners and stakeholders:

Maryland

- Calvert County
- Caroline County
- Charles County
- Dorchester County
- St. Mary's County
- Talbot County
- Wicomico County
- City of Cambridge
- City of Crisfield
- Town of Leonardtown
- NAS PAX
- Naval District Washington
- Naval Support Activity South Potomac
- Naval Facility Engineering Command Washington
- Naval Air Systems Command
- Southern Maryland Navy Alliance
- County and Regional Councils
- Land Conservancies and Land Trusts
- State Agencies
- Community organizations
- Property owners

Virginia

- Northumberland County
- Westmoreland County
- Northern Neck Planning District
- Community organizations
- Property owners

Other

- US Navy
- Federal agencies

The intent of the planning effort was to establish and foster an on-going working relationship among NAS PAX and communities throughout the region. The JLUS was developed under the guidance of three main objectives:

UNDERSTANDING. Increase communication between the military, local jurisdictions, and stakeholders to promote an understanding of the strong economic and physical relationship between NAS PAX and their neighbors.

COLLABORATION. Promote collaborative planning between the military, local jurisdictions, and stakeholders in order to ensure a consistent approach in addressing compatibility issues.

ACTIONS. Develop and implement strategies for reducing the impacts of incompatible activities on the community and military operations. Design tools to support compatibility in the future.

IV. Findings and Recommendations

A set of 79 recommended strategies are included in the NAS PAX River JLUS that address compatibility issues throughout the study area. As a result of a collaborative planning process, the strategies represent a true consensus plan; a realistic and coordinated approach to compatibility planning developed with the support of stakeholders involved throughout the process.

Because of the breadth of the area, the recommendations were broken up geographically into two areas.

Maryland Eastern Shore (includes Caroline County, Dorchester County, Talbot County, Wicomico County and the City of Cambridge) recommendations addressed the following areas:

- Biological Resources
- Communications
- Energy Development
- Land Use
- Legislative Initiatives
- Vertical Obstructions

West of the Chesapeake Bay (includes Calvert County, Charles County, Northumberland County, St. Mary's County, Westmoreland County and the Town of Leonardtown) recommendations addressed:

- Anti-Terrorism and Force Protection

- Biological Resources
- Communications
- Energy Development
- Land Use
- Light and Glare
- Noise
- Roadway Capacity
- Safety
- Vertical Obstructions
- Water Quality/Quantity

<link to Exec Summary and full JLUS>

V. Implementation Strategy

The key to successful implementation of the JLUS strategies is establishing a JLUS Implementation Coordinating Committee to oversee the JLUS execution and coordinate strategies

with multiple partners. Each Study Area jurisdiction is responsible for establishing their own course of action to execute strategies unique to them through collaboration of planners, leadership, and the public. Since the Implementation Plan is intended to be a living document, each jurisdiction has the flexibility to revise and refine the Plan for their unique circumstances and use for tracking implementation actions and progress

A key strategy to guide compatible development without overregulation is a zoning overlay district, titled Military Compatibility Area (MCA) Overlay District. An MCA delineates a geographic area where strategies are recommended to support compatibility planning and JLUS goal and objectives. To better reflect the area of interest and focus implementation, several MCAs are further divided into subareas. The Military Compatibility Area Overlay District (MCAOD) is a zoning approach that ensures the JLUS strategies are applied to the appropriate areas, and that locations deemed not subject to a specific compatibility issue are not adversely impacted by regulations or policies inappropriate for their location or circumstance.