

# CHAPTER FOUR

## EXISTING PLANS & PROGRAMS



*This chapter provides an overview of plans and programs that are currently used or applied in evaluating and addressing compatibility issues in the Hampton-Langley JLUS study area. This JLUS begins its examination of planning documents at a local level and expands to the Federal level.*

*This chapter starts with the review of documents created by the Federal government to aid in planning, conservation and public safety and welfare for communities in close proximity to a military installation. The next set of documents reviewed and analyzed are the plans and programs used by Langley AFB to direct their planning efforts. The next documents reviewed are utilized by the Commonwealth of Virginia, at both the regional level to state-wide initiatives. The final pertinent information includes plans and programs currently used by local jurisdictions and agencies to address compatibility issues. This review includes an overview of each jurisdiction's general plan and regulatory tools (i.e., tools codified through a formal action such as a zoning ordinance, subdivision ordinance, or building code).*

*This chapter concludes with an overview of other resources that can be consulted concerning compatibility planning.*

### 4.1 FEDERAL INITIATIVES

The Federal government has enacted several policies for Federally funded projects. These include the Noise Control Act, National Environmental Policy Act and Federal Aviation Act, as well as requirements from the U.S. Fish and Wildlife Services.

#### **The Noise Control Act**

The Noise Control Act of 1972 determined that noise not adequately controlled has the potential of endangering the health and welfare of people. It states that all Americans are entitled to an environment free from noise that can jeopardize their general health and quality of life. Along with state and local governments, actions from the Federal government were needed to ensure that the objectives of the Act were met.

Concurrently, military installations were experiencing the impacts related to encroaching urban development locating adjacent to the installation and then addressing complaints

regarding noise from military flight operations. In 1973, the Department of Defense (DOD) responded by establishing the AICUZ program.

The AICUZ program seeks to develop a cooperative relationship between communities and military installations and provides land use compatibility guidelines designed to protect public health and safety, as well as maintain military readiness. As designed, the AICUZ study evaluates three components: noise, vertical obstructions, and accident potential zones.

#### **National Environmental Policy Act**

The National Environmental Policy Act (NEPA) of 1969 requires Federal agencies to analyze and consider the potential environmental impact of their actions. For projects receiving federal funding, an environmental assessment (EA) and sometimes an environmental impact statement (EIS) must be completed. NEPA is applicable to all Federal agencies, including the military.

For local planning officials, an EIS or EA is a valuable planning document in determining the extent of impacts of changing military actions or operations on their municipal policies, plans and programs, if any, and on the surrounding community. Public hearings are required for all EIS documents released by the military under NEPA. An EA requires publishing the draft EA and Finding of No Significant Impact (FONSI) and also allowing public comment for a period of 30 days. An EA can either end in a FONSI, or a Record of Decision (ROD) that concludes there will be a significant impact. The information obtained by the EIS / EA is valuable in planning coordination and policy formation at the local government level.

NEPA mandates that the military analyze the impact of its actions and operations on the environment, including its surrounding civilian communities. Inherent in this analysis is an exploration of methods to reduce any adverse environmental impact. The EIS is a public process that welcomes participation by the community.

### **U.S. Fish and Wildlife Service**

The U.S. Fish and Wildlife Service (USFWS) has designated several species on the threatened species list within the study area. These include a bird called the Piping Plover, an insect called the Northeastern Beach Tiger Beetle and a plant called Small Whorled Pogonia. There are no species listed on the endangered species list inhabiting the study area.

The Plum Tree Island National Wildlife Refuge is located in the city of Poquoson. The Refuge is situated east of the City and is strategically located almost midpoint on the Atlantic Flyway. It consists of 3,501 acres of saltmarsh, shrub-scrub and wooded habitats that provide a haven for waterfowl, marsh-birds, and shorebirds. Previously owned by the US Department of Defense (and now administered by USFWS), the area was used as a bombing range. Much of the area contains unexploded ordnance. Due to this hazard, Plum Tree Island Refuge is closed to the

public for all purposes except permitted waterfowl hunting on the 200 acre Cow Island portion of the Refuge. Cow Island is adjacent to the main tract of the Refuge and was never used as a bombing range.

### **Recovery Credit System (RCS)**

The RCS, created and commissioned by the USFWS, is an optional tool available to Federal agencies to promote and enhance the recovery of listed species on non-Federal lands. Using RCSs, Federal agencies are able to demonstrate how benefits accrued on non-Federal lands offset unavoidable effects of Federal actions that occur on their lands elsewhere. However, in an RCS, the combined effects of both adverse and beneficial actions must achieve a net benefit to the recovery of the species.

A recovery credit is a unit of measurement established by an RCS that quantifies the contribution that an agency's action makes toward the recovery of a listed species. Credits are based on the implementation of specific conservation measures identified in a species' approved recovery plan. If there is no final approved recovery plan, an RCS may employ an equivalent service-approved document that describes specific measures that will contribute to the downlisting or delisting of endangered or threatened species.

The RCS program is a new program, which has thus far only been implemented at Fort Hood in central Texas. At Fort Hood, the RCS is comprised of leases for a term ranging from 5 to 25 years. Landowners are provided confidentiality and, therefore, no public comment is allowed on the merits of RCS credits for particular tracts. The leases may be organized in terms of repayment schedules and include a penalty clause. In a developed region, such as the area around Langley AFB, temporary leases may not be suitable if the intent is to execute conservation requirements. Traditional conservation easements (which are not revocable

and run in perpetuity) may be a more preferable approach.

### **Department of Defense Conservation Partnering Initiative**

In 2003, Congress amended Title 10 U.S.C. §2684a and §2692a (P.L. 107-314) of the National Defense Authorization Act, to add authority to the DOD to partner with other federal agencies, states, local governments, and conservation based Non-Governmental Organizations (NGOs). The intent is to set aside lands near military bases for conservation purposes and to prevent incompatible development from encroaching on, and interfering with, military missions. This law provides an additional tool to support mission sustainability, conservation, and environmental stewardship on and off military installations.

### **Department of Defense Readiness and Environmental Protection Initiative (REPI)**

To implement the authority provided by the Department of Defense Conservation Partnering Initiative, the DOD established the REPI. This initiative enables DOD to work with state and local governments, non-governmental organizations, and willing landowners to limit encroachment and incompatible land use.

REPI funds are used to support a variety of DOD partnerships that promote compatible land use. By relieving encroachment pressures, the military is able to operate in a more effective and efficient manner. By preserving land surrounding military installations, habitats for plant and animal species are conserved and protected.

### **Federal Aviation Act (Part 77)**

The Federal Aviation Act requires the Secretary of Transportation to make long-range plans which formulate policy for the orderly development and use of “navigable air space”. The intent is to serve the needs of both civilian aeronautics and national defense, but does not include the specific needs of military agencies. Military planning strives to work alongside local, state, and federal aviation law and policies but sometimes must supersede

these and other levels of government due to national security interests.

The 500-foot (ft) rule, promulgated by the FAA, states that every citizen of the United States has “a public right of freedom of transit in air commerce through the navigable air space of the United States”. The rule was formally announced in the 1963 Court of Claims ruling in *Aaron v. United States* and states that flights 500 feet or more above ground level (AGL) do not represent a compensable taking because flights 500 feet AGL enjoy a right of free passage without liability to the owners below. This is important to the City of Hampton and the surrounding communities when considering development rights.

Another important outcome of the Federal Aviation Act is known as FAA Part 77. The main focus of FAA Part 77 is to establish standards used to determine obstructions within navigable airspace, typically within a certain distance from an airport or airfield. It defines an obstruction to air navigation as an object that is of “greater height than any of the following heights or surfaces” in the following manner:

- A height of 500 feet AGL at the site of the object.
- A height that is 200 feet AGL or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional nautical mile of distance from the airport up to a maximum of 500 feet.
- A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude

within that area or segment to be less than the required clearance.

- A height within an en route obstacle clearance area, including turn and termination areas, of a Federal airway or approved off-airway route, that would increase the minimum obstacle clearance altitude.
- The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.25, 77.28, or 77.29. However, no part of the take-off or landing area itself will be considered an obstruction. (For additional information on FAA Part 77, please see Appendix E.)

## 4.2 LANGLEY AIR FORCE BASE PLANS

Langley AFB utilizes several types of plans to both mitigate compatibility issues as well as to create a well performing Base. The plans are intended to provide guidance for land use and safety, both on and off base.

### *Air Installation Compatible Use Zone (AICUZ)*

The purpose of the Department of Defense's (DOD) long-standing Air Installation Compatible Use Zone (AICUZ) program is to promote compatible land development in areas subject to increased noise exposure and accident potential due to aircraft operations. In addition, the AICUZ program's goal is to protect military airfields (and the navigable airspace leading to them) from encroachment by incompatible uses and structures.

The updated Langley AFB AICUZ addresses incompatibilities that might compromise the ability to fulfill mission requirements. The AICUZ states that, "Accident potential and aircraft noise in the vicinity of military airfields should be major considerations in any planning process that the local municipal authorities may wish to undertake." Important issues that are addressed include incompatible land uses, noise

complaints and ambient light impacts on base operations. The major recommendation from the study is to regulate land uses so that incompatible uses are not built near the Base.

The 2007 Langley AFB AICUZ study served to update and revise the noise and accident potential information from 1997. Differences between the 1997 AICUZ Study and the 2007 AICUZ Study are attributed to the following:

- Changes to the mix of aircraft using Langley (from the F-15 Eagle to the F-15 Eagle and the F-22 Raptor).
- Increased frequency of aircraft operations to support wartime mission and homeland security requirements, post September 11, 2001.
- Actual data to determine noise zones (NZs) based on aircraft activity from the newly commissioned F-22 Raptor, i.e. new noise contours.
- Integrating the Air National Guard into its active duty program resulting in more frequent operations on weekends.

Mitigating noise and potential accident injury are major components of compatibility planning. These two issues will be addressed in detail within this Joint Land Use Study (JLUS), as well as other issues pertaining to compatibility.

### *Noise Zone Profile*

Noise is the cornerstone of the AICUZ study. The noise generated by military aircraft operations and the effects of that noise on local communities are presented in a variety of ways in the study (i.e., written text, graphically, etc.). To fully appreciate the findings and recommendations presented in the AICUZ study, it is beneficial to provide an understanding of how military aircraft noise is measured, evaluated, and graphically illustrated. Information describing these characteristics is located in Chapter 3 under Compatibility Factor #7, Noise. The noise zone

profile will serve as a technical tool to address noise as a compatibility factor.

#### ***Vertical Obstructions***

Vertical obstructions are evaluated based on Federal Aviation Administration (FAA) Regulation Part 77, Subpart C. This regulation determines compatibility based on the height of proposed vertical structures or natural features in relation to their distance from the ends of the runway. Using a distance formula from this regulation, local jurisdictions can easily assess the height restrictions near airfields. Additional information on Part 77 is located in Chapter 3 under Compatibility Factor #3, Vertical Obstruction, or on the Federal Aviation Administration Internet site at <http://www.faa.gov/>.

#### ***Accident Potential Zones (APZ)***

As part of the AICUZ program, and to aid in land use planning surrounding military bases, the DOD established Accident Potential Zones (APZs). These are defined as Clear Zones (CZ), Accident Potential Zone I (APZ I), and Accident Potential Zone II (APZ II). These zones are determined using a statistical analysis of all DOD aircraft accidents. APZs follow departure, arrival, and pattern flight tracks and are based on historical data. The Clear Zone is a square area that extends directly beyond the end of the runway and outward along the extended runway center line. The CZ for the Langley AFB runway is 3,000 feet wide by 3,000 feet long. Required for all active runways, above ground structures are generally not permitted in these areas. The land within CZs should remain undeveloped. For this reason, acquiring sufficient real property interest in land within the CZ is critical.

At Langley AFB, the boundary of APZ I begins at the end of the CZ and extends out 5,000 feet. APZ II extends from the end of APZ I and continues an additional 7,000 feet. Both APZ I and APZ II maintain the CZ risk width of 3,000 feet. While aircraft accident potential in APZs I and II does not warrant acquisition by the USAF, land use

planning and controls are strongly encouraged for the protection of the public. Within APZ I and II a variety of land uses are compatible; however uses sensitive to noise, such as hospitals and schools, and uses that attract large numbers of people such as high density residential, should be restricted due to the higher potential for aviation related incidents in these areas. The current AICUZ safety zones and noise contours for Langley AFB are shown in Chapter 3.

Each AICUZ Study contains general land use guidelines related to safety and noise associated with aircraft operations. The Langley AICUZ Study lists the USAF recommended land use compatibility guidelines in relation to noise zones and APZs. The information presented in the table is essentially the same as the information published in the June 1980 publication by the Federal Interagency Committee on Urban Noise (FICUN) entitled *Guidelines for Considering Noise in Land Use Planning Control* (FICUN 1980) and in the *Standard Land Use Coding Manual* (USURA 1965) published by the U.S. Urban Renewal Administration (USURA).

#### ***Bird Wildlife Aircraft Strike Hazard (BASH)***

In July of 2005, Langley AFB adopted the current Bird Wildlife Aircraft Strike Hazard (BASH) plan, an update to the March 2003 and original July 2000 BASH plans. A BASH plan is designed to control birds, alert aircrew and operations personnel and provide increased levels of flight safety, especially during the critical phases of flight, take-off and landing operations. Specifically, the plan is designed to:

- Designate a Bird Hazard Warning Group (BHWG) and outline the members' responsibilities.
- Establish procedures to identify high hazard situations and establish aircraft and airfield operating procedures to avoid these situations.

- Ensure that all permanent and transient aircrews are aware of bird hazards and the procedures for avoidance.
- Develop guidelines to decrease the attractiveness of the airfield to birds and disperse the number of birds on the airfield.

The Langley AFB BASH plan outlined seven on-going or completed projects to help address the problems indicated in the plan.

1. The U.S. Department of Agriculture / Wildlife Services (USDA / WS) conducted a year-long assessment to determine the wildlife risks at Langley AFB. The survey provided detailed information on Langley AFB's extensive BASH risk. Included was a comprehensive plan for mitigating / eliminating the abundant wildlife hazards at Langley AFB. Subsequently, a quarterly report and annual update is provided to 1<sup>st</sup> Fighter Wing leadership and the BHWG for review.
2. A wildlife biologist, who specializes in BASH, was hired to provide technical expertise and direction to address the diverse habitat and wildlife challenges at Langley AFB. A wildlife technician was also hired to provide full time wildlife control services during flight operations.
3. Wildlife hazard monitoring is completed to determine and detect changes in wildlife population or habitat use that may pose a threat to flight operations.
4. A Wildlife Dispersal Team was created. The team uses various methods to discourage wildlife from crossing or inhabiting the flight zone such as: pyrotechnics, bio-acoustics, propane cannons and lethal reinforcement shooting.
5. The Airfield Deer Control Program. The USDA / WS recommends a "zero-tolerance" policy of deer on the runway

because of the risk of catastrophic damage to aircraft.

6. The Integrated Osprey Management Program. Langley AFB is the site of nearly two dozen nesting pairs of Osprey who typically raise between two to four offspring per year. With the abundance of Osprey and their behavioral predisposition to strikes with aircraft, this situation creates one of the greatest challenges for Langley AFB. The management program uses several methods to alleviate this problem with special emphasis on fledgling translocation, modifying channel markers to discourage nesting near the runway, and satellite tracking adult Osprey to determine their airspace usage.
7. Bethel Landfill Integrated Wildlife Management Program. Bethel Landfill and the bird problems associated with it, specifically gulls and vultures, have been a significant BASH issue for the past several years. The program relies on constant communication between the Landfill and Langley AFB. The Landfill monitors bird behavior and population and notifies the tower at Langley AFB when potential risks to flight operations may occur.
8. Habitat Modification and Prevention. Removing or modifying existing wildlife attractants that lure hazardous species to the airfield is the most effective long-term measure for reducing BASH on or near airfields. Completed habitat modification projects and prevention programs include overhead grid-wire exclusion of golf course ponds; bird perch inhibitors on airfield sign and lighting structures; perch exclusion; practicing tall grass management on the airfield; controlling vegetation growth along airfield ditches; seeding areas of bare ground; ensuring proper water drainage; the selective fill and level of airfield water collecting areas;

and practicing detention storm water management, and off-site wetland mitigation. In addition, base development and land-use practices are continuously evaluated to identify potential BASH impacts.

9. Resident Canada Geese Management. In 2006, the U.S. Fish and Wildlife Service (USFWS) adopted an Airport Control Order (CFR 50.21.49) authorizing military air operation facilities to take Canada geese (including nests and eggs) on or within 3 miles of airfield boundaries, without a federal permit from March 1<sup>st</sup> to September 15<sup>th</sup>. Acting under authority of 50 CFR 21.49, the United States Department of Agriculture / Wildlife Service developed several cooperative partnerships to mitigate current and potential aircraft strike hazards from resident Canada Geese.

### **Langley AFB General Plan**

The Langley AFB General Plan is designed to assist Base personnel understand existing conditions, documents, existing needs and future expectations, and provide programs and projects that can help the Base respond to an ever-changing world. Last updated in 2007, the General Plan provides Air Force decision makers, as well as local governments, with essential information on the plans to ensure Langley AFB can fulfill its existing and future mission. The General Plan supports the vision of Langley AFB and is the culmination of existing component plans and special plans and studies. It draws on existing information to create a cohesive plan for physical development of the installation.

The Langley AFB General Plan was created to assist the Air Combat Command's (ACC) commitment to manage Air Force resources effectively and to protect the environment. The General Plan was written to meet the requirements of Air Force Instruction (AFI) 32-7062, Air Force Comprehensive Planning. The plan discusses the vision, goals and objectives for

Langley AFB. The goals include: improving infrastructure to current standards; ensuring the highest and best use of scarce developable land on site; providing a secure and pleasant living environment for Langley AFB personnel and families; exercising responsible stewardship of valuable Federal lands and facilities; and reinforcing Langley AFB's position as the U.S. Air Force's premier fighter base. The plan identifies several areas of concern, as well as including on-base and off-base issues. The plan discusses concerns about off-base development and encroachment, which could interfere with flight operations and impact noise and accident potential zones. The plan recommends that Langley AFB purchase land in the accident potential zones to help alleviate this concern. Another major concern, both on-base and off, was the need to use sound attenuation in new construction and retrofitting older buildings when needed.

A site analysis of the Base revealed three main concerns: maintaining the clear zone, buildings located within the 65 dBA noise contour and the explosive safety arcs. The clear zones have been maintained, except for one building which minimally encroaches into the clear zone. The entire campus is located within the 70 dBA and 85 dBA noise contours. This will require noise attenuation for all future buildings and retrofitting for existing buildings. The general plan states that there are not any buildings located within the explosive safety arcs.

The installation's general plan identifies Base constraints and opportunities, develops recommendations for improvements to infrastructure, and identifies potential land use changes and capital improvements. Although this document focuses on development within the installation boundaries, it is an important reference for all study area jurisdictions when conducting planning activities. Information and plans detailed in the General Plan can have both direct and indirect impacts upon all surrounding study area jurisdictions. The general plan will aid in the creation of policies in this study by

providing information on the land use, capital improvements, and future development plans on the Base. These developments will be critical in assessing existing and future compatibility between the installation and the community.

### **Langley AFB Integrated Natural Resource Management Plan (INRMP)**

In February of 2007, Langley AFB adopted an Integrated Natural Resource Management Plan (INRMP), which supports the management of natural resources as described in the plan document. The purpose of the plan is to enable Langley AFB to effectively manage the use and condition of natural resources on the installation to primarily protect the natural setting of the Base for training purposes. The plan supports the continuing need to ensure the safety and efficiency of the Bases' mission while practicing sound resource stewardship and complying with environmental policies and regulations.

The INRMP provides Langley AFB with a description of the installation and its surrounding environments, and presents various management practices designed to mitigate negative impacts and enhance the positive effects of the installation's mission on regional ecosystems. These recommendations are balanced against the requirements of Langley AFB to accomplish their mission at the highest possible level of efficiency. The primary goal of the Langley AFB INRMP is to provide a sustainable natural resource base to support the Air Force mission. The INRMP identifies the following objectives to accomplish this goal:

- Support the First Fighter Wing (1 FW) Bird / Aircraft Strike Hazard (BASH) program.
- Identify and characterize the installation's natural resources.
- Protect and maintain the installation's resources.
- Develop and enhance the installation's resources.

- Create opportunities for beneficial use and enjoyment of installation resources by the public and installation personnel.
- Ensure 1 CES / CEV Natural Resources Personnel are adequately trained in the principles and practices of natural resources management on Air Force installations.

The INRMP was a joint effort between the Air Mobility Command (AMC), the U.S. Fish and Wildlife Service, and the Virginia Department of Fish and Wildlife, and was conducted pursuant to the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] Parts 1500–1508) for implementing the procedural provisions of the National Environmental Policy Act (NEPA) (42 United States Code [U.S.C.] 4321 et seq.), and the Air Force Environmental Impact Analysis Process (EIAP) (32 CFR Part 989). The INRMP was prepared in accordance with the provisions of the Sikes Act (16 U.S.C. 670a et seq.) and AFI 32-7064 (Integrated Natural Resources Management). Compatibility between the installation and the community includes the management of natural resources which are not bound by jurisdictional boundaries. Information obtained and measures taken in the creation of the INRMP may pertain to the community. The information and measures can be adopted by the community to continue the practice of natural resource stewardship across the installation boundary.

### 4.3 STATE PLANNING TOOLS

The Commonwealth of Virginia has several laws that assist its cities and counties to regulate land uses and plan for their future. The body responsible for creating, drafting and enacting legislation to assist in governing the Commonwealth of Virginia, is called the General Assembly. The General Assembly is comprised of two bodies, the Senate and House of Delegates. The Senate consists of 40 members, each serving four year terms. The House of Delegates has 100 members, whose members serve two year terms. The General Assembly meets for its regular session annually on the second Wednesday in January. Their session lasts for 60 days in even-numbered years and 30 days in odd-numbered years. The governor may also call a special session when deemed necessary or when petitioned by two-thirds of the General Assembly. The General Assembly also holds a reconvened session on the sixth Wednesday after adjournment of each regular or special session. The purpose is to review and consider the governor's recommendations and vetoed legislation.

The State of Virginia is a "Dillon Rule" state. This means the municipal governments only have the powers that are expressly granted to them by the state legislature; those that are necessarily implied from that grant of power and those that are essential and indispensable to the municipality's existence and functioning.

The Code of Virginia specifically addresses planning and zoning for cities and counties. Title 15 – Counties, Cities and Towns contains numerous sections including provisions for comprehensive plans, zoning ordinances, subdivision ordinances and the State of Virginia Unified Building Code. Two additional sections from the Code of Virginia that relate to this JLUS are summarized below.

Source: <http://leg1.state.va.us/000/src.htm>

#### Airport Related Legislation

Virginia has several existing laws pertaining to airports, including military installations, and land use. The first is Virginia Code Section 15.2-2294, which states that every jurisdiction shall regulate building height and natural growth, based on Federal Aviation Act Part 77, for the purpose of protecting the safety of air navigation and the public investment in air navigation facilities. The second is Code Section 15.2-2295 which permits localities to require sound attenuation for buildings within noise overlay zones. The jurisdiction must be adjacent to the installation and can only require certain uses to have sound attenuation, including residential, retail, assembly, institutional and office uses. It requires that sound attenuation occur during the building process and identifies that future tenants / landowners be notified when real property lies within the noise overlay zone.

#### Real Estate Disclosures

Real estate disclosures are used in Virginia to notify potential property owners of conditions affecting the property that should be made available prior to purchase. Section 55-519.1 of the Virginia Code requires sellers to notify potential buyers if the real property for sale lies within 65 dBA or higher noise contours or an accident potential zone. Renters are also protected under Virginia State law (Section 55-248.12:1) which requires landlords to disclose that the rental property lies within a noise contour 65 dBA or higher or an accident potential zone.

#### Joint Exercise of Powers

Section 15.2-1300.A of the Code of Virginia grants powers to any political subdivision to exercise jointly any power with another political subdivision that has a similar power. This is intended to foster cooperation between cities, towns and counties facing common issues. This power could be used by any of the municipalities or county to impose a zoning overlay relating to Langley AFB, which would assist in addressing the land use and other compatibility issues.

## 4.4 LEGISLATION AND OTHER REGULATIONS

The Commonwealth of Virginia has created several councils that assist its cities and counties work with the military. These councils are to help facilitate communication between the different jurisdictions and the military.

### Virginia Military Advisory Council

The Virginia Military Advisory Council (VMAC), formed by Section 2.2-2666.1 of the Code of Virginia, was created to be an advisory council to maintain a cooperative and constructive relationship between the Commonwealth and the leadership of the Armed Forces stationed in the Commonwealth. It is comprised of 27 members, specifically identified in the Code. The goal of VMAC is to encourage regular communication on continued military facility viability, the exploration of privatization opportunities and issues affecting preparedness, public safety and security. The VMAC is exempt from the requirement to disclose its records to the public per Section 2.2-3705.2. It is also allowed to hold closed door meetings, as stated in Section 2.2-3711 of the Code of Virginia. Its duties include:

- Oversight, coordination, and review of all disaster, emergency management, and terrorism management plans for the state and its agencies;
- Service as the Governor’s representative on regional efforts to develop a coordinated security and preparedness strategy, including the National Capital Region security group organized as part of the federal Urban Areas Security Initiative;
- Service as a direct liaison between the Governor and local governments and first responders on issues of emergency prevention, preparedness, response, and recovery;
- Educating the public on homeland security and overall preparedness issues.

### Oceana / Fentress Military Advisory Council

Section 2.2-2666.3 of the Code of Virginia created the Oceana / Fentress Military Advisory Council as a subunit to the Virginia Military Advisory Council. This sub committee provides advice and comments to the VMAC on issues of mutual concern to Virginia and the Navy regarding Naval Air Station Oceana and Naval Auxiliary Landing Field Fentress. This approach may be a useful strategy for Langley AFB and will be addressed in Chapter 5 of this document.

### Virginia National Defense Industrial Authority (VNDIA)

On March 26, 2005, the Virginia General Assembly approved the Virginia National Defense Industrial Authority Act (HB 2925). It is part of the Code of Virginia, Section 2.2-2328 through 2.2-2335. This action created the Virginia National Defense Industrial Authority (VNDIA). VNDIA was created to foster and promote business, technology, transportation, education, economic development and other efforts in support of the mission, execution, and transformation of the United States government military and national defense activities located in the Commonwealth of Virginia. VNDIA membership is made up of 18 non-legislative members appointed by the Speaker of the House of Delegates, the Senate Committee on Rules and the Governor.

## 4.5 REGIONAL PLANNING TOOLS

This section will discuss regional organizations and tools that assist jurisdictions with planning. One of these tools is the regional planning district. The Commonwealth of Virginia created planning districts to assist regions of the State with planning activities and to create a cohesive vision for the future. There are 21 planning districts within Virginia.

### Hampton Roads Planning District Commission

The Hampton Roads Planning District Commission (HRPDC) is comprised of a

collection of 16 cities and counties located near Chesapeake Bay. The HRPDC is a regional organization representing this area's sixteen local governments, including York County and the cities of Hampton, Poquoson and Newport News. Planning District Commissions are voluntary associations and were created in 1969 pursuant to the *Virginia Area Development Act* and a regionally executed Charter Agreement. The HRPDC was formed in 1990 by the merger of the Southeastern Virginia Planning District Commission and the Peninsula Planning District Commission. The HRPDC is solely an advisory body and serves three main functions:

- serve as a forum for local and elected officials and chief administrators to deliberate and decide issues of regional importance;
- provide the local governments and citizens of Hampton Roads with credible and timely planning, research and analysis on matters of mutual concern; and
- offer leadership, strategies and support services to other public and private, local and regional agencies, in their efforts to improve the region's quality of life.

#### 4.6 LOCAL JURISDICTIONAL PLANNING TOOLS

The planning tools used by the study area jurisdictions include comprehensive (or community) plans, zoning ordinances, building codes, subdivision and other pertinent ordinances. It is important to note that unlike other states, the Commonwealth of Virginia includes jurisdictions known as independent cities. These independent cities are not politically part of a county. This means that each entity operates independently of each other, including the court system, police departments, and planning and zoning departments. The cities included in the JLUS study area are all independent cities. Title 15.2 of the Code of Virginia allows its cities, counties and towns the

right to plan and zone land, regulate uses and administer the subdivision of land.

**Table 4-1. City Planning Tools**

Jurisdiction	Planning Tools							
	Comprehensive Plan	Zoning Code - Height Restrictions	Zoning Code - Dark Sky	Zoning Code - Sound Attenuation	Airport Hazard Zoning Regulations	Subdivision Regulations	Building Code	Acquisition
City of Hampton	Y	Y	N	Y	Y	Y	Y	U
City of Poquoson	Y	Y	N	N	N	Y	Y	U
City of Newport News	Y	Y	N	N	N	Y	Y	U
York County	Y	Y	N	N	N	Y	Y	U

Legend: ■ = Deficient as a compatibility tool  
 Y= Yes the jurisdiction utilizes this tool  
■ = Not deficient as a compatibility tool  
 N= No, the jurisdiction does not utilize this tool  
 U= Unknown whether the jurisdiction uses this tool

#### City of Hampton

The City of Hampton is located on the southern portion of the Peninsula. As the municipality most affected by Langley AFB, the City of Hampton has taken a proactive approach in working and collaborating with their neighbor. Some areas within the City are impacted by the flight operations of Langley AFB, due to the noise created by the aircraft and the accident potential of operations. The following is a review of the existing planning tools utilized by the City of Hampton, along with a brief analysis identifying their efficiency in addressing land use and military compatibility. Deficiencies within programs and potential improvements which can be made to address encroachment issues are also discussed. The City of Hampton planning tools that have been evaluated are listed below:

- Hampton Community Plan
- Zoning Ordinance
- Building and Development Regulations
- Subdivision Ordinance
- Noise Ordinance

### *Hampton Community Plan*

Section 15.2-2223 of the Code of Virginia (the Code) requires that all jurisdictions create a comprehensive (or community) plan. The plan is expected to meet the projected growth of residential and commercial uses for at least 10 years, but no more than 20 years. Each jurisdiction is expected to review, and if necessary revise, its comprehensive plan every five years to ensure it is still meeting its goals. The Code sets the requirements for advertisement of plans and ordinances (Section 15.2-2204.D). In the aforementioned section, it states that any jurisdiction making changes to the comprehensive plan (located within 3,000 feet of a military installation), must notify the commander of the military installation with a written notice of the change at least 10 days prior to the hearing.

The City of Hampton adopted the Hampton Community Plan on February 8, 2006, which serves as its comprehensive plan. The Community Plan is an update of the 1998 Hampton Strategic Plan and the 2010 Comprehensive Plan (adopted by City Council in 1989). The Community Plan integrated the City's Strategic Plan and Comprehensive Plan and incorporated planning for Hampton City Schools. The City has taken a progressive approach in planning for its future by including provisions for Langley AFB in the Community Plan. It references the adoption of the Air Installation Compatible Use Zone (AICUZ) in 2007. The AICUZ is intended to protect the health, safety and welfare of those living near military airfields while preserving the mission of the F-15 Eagle and F-22 Raptor airframes by balancing the need for frequent aircraft operations as well as quality of life in the community. Hampton has created six master plans for different areas of the City,

none of which are located within the 65 Ldn or higher noise contours. Each of these plans, including the Community Plan, guides appropriate land uses and zoning districts. The Community Plan has two specific strategies that focus on strengthening the City's relationship with both Langley AFB and NASA:

Excerpt from City of Hampton Community Plan, Section IX: Community Plan Strategies

- Strategy PE-12: Explore opportunities to develop formalized on-going partnerships and cooperation agreements with key institutions within the City such as Hampton University, Thomas Nelson Community College, NASA, Langley AFB and Fort Monroe. Its goals are to promote a healthy business climate, healthy neighborhoods and a healthy region.
- Strategy PE-14: Continue to work closely with Langley Air Force Base to study the impacts of the F-22 Raptors on the City and to maximize the compatibility between aircraft operation and the surrounding community. Its goals are to promote healthy neighborhoods.

### *Zoning Ordinance*

The Commonwealth of Virginia authorizes cities, towns and counties to adopt and enforce a zoning ordinance in Section 15.2-2280 of the Code. Considered one of the key tools in the implementation of a comprehensive plan, the zoning ordinance is the primary mechanism whereby local governments can regulate the direction, type, use, density, and location of development. The primary purpose of zoning is to protect the public health, safety and welfare as well as guard against physical danger. This includes physical safety for properties in proximity to military ranges or within aviation routes and corridors. Additionally, zoning can address glare, lighting, noise, dust, vibration.

The Zoning ordinance enumerates uses permitted by right or by special exception within specified

zoning districts. Most ordinances allow for the ability to grant special exceptions, provided certain conditions are met. These exceptions are often referred to as conditional privileges, use permits, special exemptions or variances. In addition to land uses, the zoning ordinances also set the standard for permitted densities, location of structures, building heights, setbacks, acreage requirements, and other development parameters.

The City of Hampton's Zoning Ordinance is organized into 25 zoning districts. The last district is called the Special Public Interest Districts and has 14 overlay districts including the Aircraft Approach District. Hampton directly addresses Langley AFB with two zoning districts and one overlay district. The first is the M-4 District, Langley Flight Approach – Land Intensive Manufacturing. This district has dual purposes, it provides reasonable land use regulations for uses which require large amounts of land but are lightly populated, while providing significant protection to the flight operations at Langley. The second district is the M-5 District, Langley Flight Approach – Mixed Use District. The M-5 District provides regulations that limit the intensity of development, specifically the concentration of people living and working in the area within the flight approach. The intent of this district is to minimize negative impact on the flight operations at Langley AFB, yet provide for a wide range of commercial and industrial activities. The A-A Aircraft Approach District is an overlay district created to protect life and property in specified areas at the ends of Langley AFB runways. Land use and building height restrictions have been developed for the overlays to achieve this goal.

#### ***Building and Development Regulations (Chapter 9 of the Hampton Code of Ordinances)***

The City of Hampton uses the Virginia Uniform Statewide Building Code (USBC) to regulate building construction, alteration and occupancy to ensure health, safety and welfare. The building code regulates building construction such that it is compatible with military installations,

including sound attenuation for residences within applicable noise zones. The USBC requires all residential buildings that are located within noise contour lines exceeding 65 dBA are required to include noise attenuation measures to reduce interior noise levels to 45 dBA.

Chapter 9 of the Hampton Code of Ordinances includes provisions for site plans, which are required prior to the construction of a building or structure within the City limits. Site plans are required for the enlargement of existing buildings, any grade alterations in excess of three feet. The director of public works can require evidence that the appropriate federal and state agencies have been notified of the submission of a preliminary site plan. Single-family dwellings, two-family dwellings, accessory buildings, and subdivisions developed under the guidance of Chapter 35 of the Hampton Code of Ordinances are exempt from the site plan requirements.

#### ***Subdivision Ordinance (Chapter 35 of the Hampton Code of Ordinances)***

The Code of Virginia, in Section 15.2-2240, allows cities, towns and counties the right to prepare and adopt a subdivision ordinance. The Subdivision Ordinance was adopted in 1956 and has been subsequently updated, and comprises Chapter 35 of the Hampton Code of Ordinances. The Subdivision Ordinance is strictly a design manual, although it extends the City's jurisdiction three miles into any adjacent county. It is not intended, nor is it able, to restrict development other than to prohibit the unauthorized subdivision of lots.

#### ***Noise Ordinance (Chapter 22 of the Hampton Code of Ordinances)***

The City of Hampton has taken a proactive approach in working with Langley AFB to address noise abatement issues. The Noise Ordinance was adopted in 1956 and has since been updated to identify criteria for residential ("Use Group R" in the International Building Code) building construction for those areas of Hampton that are likely to be impacted by aircraft noise associated with Langley AFB. The

Ordinance requires residential properties located within the 65 dBA or higher contours to make the adequate provision for sound reduction in exterior walls, doors, windows, etc. This is to minimize the impact of such noise on occupants, and to ensure that buyers of property within this zone are aware of its associated noise levels. The district regulations not only identify noise attenuation in all buildings and structures classified as "Use Group R" of the International Building Code, as amended, but also provide disclosure to potential buyers of the existence of the associated noise.

A review of the planning tools for the City of Hampton has identified the following deficiencies:

1. A Dark Sky Ordinance for the City or in association with Langley AFB has not been prepared or adopted.
2. No mention of assisting Langley AFB in implementing BASH Plan regarding height of structures and incompatible land uses, such as golf courses or other uses that attract birds.
3. No plan of action for addressing development in the safety zones.
4. No plan of action for addressing development, especially residential, within the clear zone.
5. No plan of action for limiting the height of the Bethel Landfill, the auto salvage yard, or the junk yard within the safety zones.

### **City of Newport News**

Newport News is located on the west side of the Peninsula. It is a narrow linear city, with a length of approximately 20 miles and a width that ranges between six miles and one-half mile. Although Newport News is minimally affected by Langley AFB, its connection to the military in the region and its own international airport require Newport News to maintain a regional view. Due to its proximity to Langley AFB (a distance of less than four miles) the City and its residents may be

affected by operations at the Base. The City may also have an impact on the installation operations due to the presence of glare and vertical obstructions. The Newport News planning tools evaluated are listed below:

- Framework for the Future 2030 (Comprehensive Plan)
- Zoning Ordinance
- Building Code
- Subdivision Ordinance
- Noise Ordinance

### ***Framework for the Future 2030***

Newport News recently updated and adopted their comprehensive plan, *Framework for the Future 2030*, on November 6, 2008. The plan addresses noise, discussing the sources of noise problems, those being Williamsburg / Newport News International Airport and transportation noise (e.g. cars and trains). It states that the City's noise abatement policy requires dense landscaping or sound walls. The plan includes discussion of the airport expansion, including a new runway and new gates. It discourages future residential development proximate to the airport.

### ***Zoning Ordinance (Chapter 45 of the Newport News Code of Ordinances)***

The Newport News Zoning Ordinance divides the City into 20 distinct districts. These include 9 residential districts (ranging from rural residential to mixed use and multifamily residential), one park district and 10 commercial districts (which provides districts for office, commercial and industrial). The City of Newport News has taken a proactive approach with its zoning ordinance in managing Williamsburg / Newport News International Airport. The City created an Airport Overlay District in 1997 to both assist the Airport in maintaining its operations and helping the City to protect the health, safety and welfare of its citizens. The Overlay District regulates the height of structures and trees. It restricts uses within the District such that no use shall cause electrical interference, impair visibility in any way, create

bird strike hazards or otherwise interfere with the landing, takeoff or maneuvering of aircraft.

***Building Code (Chapter 13 of the Newport News Code of Ordinances)***

The City of Newport News uses the Virginia USBC to regulate building construction, alteration and occupancy to ensure health, safety and welfare of its citizens and visitors. The building code regulates construction such that it is compatible with military installations, including sound attenuation for residences within 65 dBA or greater noise contours. The USBC regulates all residential buildings that occur within 65 dBA or higher noise contours are required to include noise attenuation to reduce interior noise to 45 dBA.

***Subdivision Ordinance (Appendix B of the Newport News Code of Ordinances)***

The City of Newport News subdivision ordinance is intended to control the design of subdivisions within City limits. The ordinance regulates design, requirements, submittal procedures and the approval process. The ordinance includes a section pertaining to noise, but is intended only to regulate the noise associated with construction, not sound attenuation of structures.

***Noise Ordinance (Chapter 26.1 of the Newport News Code of Ordinances)***

The City of Newport News regulates noises that are considered a nuisance to the general public. Aircraft and traffic noise generally is not considered a nuisance because they are an integral part of the City and its economy.

A review of the planning tools for Newport News has identified the following deficiencies:

1. A Dark Sky Ordinance for the City or in association with Langley AFB has not been prepared or adopted.
2. No mention of either the NASA facility or Langley AFB

**City of Poquoson**

Poquoson is located on the east side of the Peninsula, north of the City of Hampton and Langley AFB. Due to its proximity to Langley AFB and NASA Langley Research Center, the City and its residents may be affected by operations at the Base. The City may have an impact on the installation operations due to the presence of glare and vertical obstructions. The City of Poquoson planning tools evaluated are listed below:

- City of Poquoson Comprehensive Plan 2008 - 2028
- Zoning Ordinance
- Building Code
- Subdivision Ordinance
- Noise Ordinance

***City of Poquoson Comprehensive Plan 2008 – 2028***

The City of Poquoson adopted its comprehensive plan in September 2009. The Comprehensive Plan addresses Langley AFB and NASA Langley Research Center through several policies. It references the adoption of the Air Installation Compatible Use Zone (AICUZ) in 2007. The Plan references and includes information on both Langley AFB as well as NASA Langley Research Center. The Plan mentions that the City reviewed maps of the noise contour lines created by Langley AFB and determined that a minimal amount of real property was impacted, approximately 336 acres. All of the property within the 70 dBA contour, 46 acres, is part of the Plum Tree Island National Wildlife Refuge, which is currently closed to the public. The majority of property within the 65 dBA was part of the conservation area or commercially zoned, with a small part zoned for single-family residential. This area totaled 290 acres. While the plan identifies the need for a Dark Sky Ordinance, it is only to be implemented in the Zoning Ordinance for site planning purposes. The Plan expresses the need to attenuate residences in the Amory's

Wharf and Messick Point areas of the City from aircraft noise generated within the region.

***Zoning Ordinance (Appendix A of the Poquoson Code of Ordinances)***

The City of Poquoson adopted its zoning ordinance on September 14, 1981. The City utilizes 11 zoning districts to regulate land uses within City limits. While the City acknowledges the importance of Langley AFB and its impact on the region, its zoning ordinance does not contain the regulatory capacity to implement the Comprehensive Plan policies. The Ordinance does not include regulations pertaining to lighting, generally or specifically related to Langley AFB. The ordinance however addresses wireless communication facilities. It limits the height of any tower to 199 feet, but does not include any regulations regarding locating such towers out of the flight path.

***Building Code (Chapter 18 of the Poquoson Code of Ordinances)***

The City of Poquoson uses the Virginia USBC to regulate building construction, alteration and occupancy to ensure health, safety and welfare. The building code regulates building construction such that it is compatible with military installations, including sound attenuation for residences within applicable noise zones. The USBC states that all residential construction occurring within the 65 dBA contour is required to include noise attenuation measures to reduce interior noise to 45 dBA.

***Subdivision Ordinance (Appendix B of the Poquoson Code of Ordinances)***

The City of Poquoson subdivision ordinance was adopted on October 12, 1981 and is intended to control the design of subdivisions within City limits. The ordinance regulates design, requirements, submittal procedures and the approval process. The subsection regarding noise is intended to only regulate construction generated noise.

***Noise Ordinance (Chapter 34, Article 2 of the Poquoson Code of Ordinances)***

The City of Poquoson regulates noise that is considered a nuisance to the general public. Such noise is: loud music, a loud car or any sound that is excessive, disturbing, unreasonable or unusually loud.

A review of the planning tools for the City of Poquoson identified the following deficiencies:

1. No clear direction on the preparation of a Dark Sky Ordinance for the City or in association with Langley AFB or NASA.
2. No clear direction for the development standards for the Messick Point redevelopment site or Armory's Wharf.

**York County**

York County is located on the north side of the Peninsula. The majority of development in York County has occurred near the cities of Poquoson, Newport News and Hampton. Two military installations, Camp Peary and the Yorktown Naval Weapons Station, occupy much of the land in the central and northern portions of the County. The planning tools currently utilized in York County are evaluated and listed below:

- Charting the Course to 2025 (York County Comprehensive Plan)
- Zoning Ordinance
- Building Code
- Subdivision Ordinance
- Noise Ordinance

***Charting the Course to 2025***

York County adopted its Comprehensive Plan in December 6, 2005. It references the Air Installation Compatible Use Zone (AICUZ) in 1997, but only states that no property in York County lies within the 65 dBA or greater noise contours created by Langley AFB. The Plan did discuss the residential subdivisions located within the 65 dBA and 70 dBA contours of

Williamsburg/ Newport News International Airport. In addition to addressing the residential subdivision within the noise contours, all vacant land within the contours was changed to an industrial designation and it was expected that those contours would be reduced in the future due to two factors: (1) older, louder jets are expected to be phased out and replaced and (2) a shift in the aircraft mix from the louder military to the quieter commercial jets.

#### ***Zoning Ordinance (Chapter 24.1 of the Code of York County)***

The York County Zoning Ordinance was prepared and adopted on June 29, 1995. The Ordinance is organized into 15 zoning districts. It regulates the airports in, or near, the County limits with overlay zoning districts and appropriate zoning on nearby properties. The County uses the Airport Safety Management Overlay District (ASM) to regulate land uses and building height within the vertical obstruction zones as defined by Federal Aviation Administration (FAA) Regulation Part 77. The District requires that development cannot interfere with civil or military air traffic and specifically identifies Williamsburg, Camp Peary and Langley AFB. The County will also maintain the clear zones (CZ) for each of those airports. Although the County does not have a separate Dark Sky Ordinance, it requires that all light fixtures are full cutoff, so that light does not spill into unwanted areas, causing glare (Section 24.1-260).

#### ***Building Code (Chapter 7.1 of the Code of York County)***

York County uses the Virginia USBC to regulate building construction, alteration and occupancy to ensure health, safety and welfare. The building code regulates building construction practices such that they are compatible with military installations, including sound attenuation for residences within applicable noise zones. The USBC states that all residential construction occurring within the 65 dBA contour are required

to include noise attenuation requirements to reduce interior noise to 45 dBA.

#### ***Subdivision Ordinance (Chapter 20.5 of the Code of York County)***

The York County subdivision ordinance was adopted on December 1, 1991 and is intended to control the design of subdivisions within County limits. The ordinance regulates design, submittal procedures and describes the development approval process. The subdivision ordinance defers to the zoning ordinance for density, setbacks and other land use issues.

#### ***Noise Ordinance (Chapter 16, Section 19 of the Code of York County)***

York County only regulates noise that is considered a nuisance to the general public. This includes, but is not limited to: horns, radios, animals, loud cars and yelling by peddlers.

A review of the current planning tools for York County identified the following deficiency:

1. No clear direction for the preparation of a Dark Sky Ordinance in association with Langley AFB.

## **4.7 OTHER RESOURCES**

In the interest of preventing land use compatibility issues between the military and the local community, the DOD Office of Economic Adjustment (OEA) and other public interest groups, such as the National Association of Counties (NACO), have prepared educational documents and videos to inform the public on encroachment issues and methods that can be used to address existing or reduce/avoid future compatibility concerns. Below are five resources that have been published to inform the public on land use compatibility.

#### **Documents**

***The Practical Guide to Compatible Civilian Development near Military Installations (July 2007), OEA.*** This guide offers general information on community development and

civilian encroachment issues. The guide can be found at: <http://www.oea.gov/>.

***Joint Land Use Study Program Guidance Manual (November 2006)***. This manual provides guidance on the JLUS program, process, and efforts to support compatible development. This manual can be obtained on the OEA internet site at the following address: <http://www.oea.gov/>.

***Encouraging Compatible Land Use between Local Governments and Military Installations: A Best Practices Guide (April 2007), NACO***. This guidebook presents case studies of best practices between the military and communities through communication, regulatory approaches, and Joint Land Use Studies. The guide can be accessed on the NACO internet site at the following address: <http://www.naco.org/>.

### **Videos**

***The Base Next Door: Community Planning and the Joint Land Use Study Program, OEA***. This informative video discusses the issue of encroachment on military installations as urban development occurs within its vicinity.

***Managing Growth, Communities Respond, OEA***. This video highlights the lessons learned from three successful communities (Kitsap Naval Base in Bangor, Washington, Fort Drum in Jefferson County, New York and Fort Leonard Wood in Pulaski County, Missouri) managing growth near their respective military installation.