

**RECORD OF DECISION (ROD)
FOR THE
INITIAL F-22 OPERATIONAL WING BEDDOWN**

This document records the decision of the United States Air Force (Air Force) with regard to the Initial F-22 Operational Wing beddown at Langley Air Force Base (AFB), Virginia. In making this decision, the information, analysis, and public comments contained in the Final Environmental Impact Statement (FEIS) for the Initial F-22 Operational Wing Beddown were considered, among other relevant factors.

This ROD has been drafted in accordance with the regulations implementing the National Environmental Policy Act (NEPA), specifically Title 40 Code of Federal Regulations, Part 1505.2, *Record of decision in cases requiring environmental impact statements* (40 CFR §1505.2). Specifically, this ROD:

- States the Air Force's decision, (See page 8)
- Identifies all alternatives considered by the Air Force in reaching the decision and specifies the environmentally preferable alternative, (See page 4)
- Identifies and discusses relevant factors including economic and technical considerations, the Air Force mission, and any essential considerations of national policy which were balanced by the Air Force in making its decision, and states how those considerations entered into this decision, (See pages 1-2 and 4-5) and
- States whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not, and summarizes any monitoring and enforcement programs adopted where applicable for any mitigation. (See pages 5-8)

Background

The United States Congress identified and approved the new F-22 fighter to replace and supplement the aging F-15C fighter aircraft fleet. The F-22 Raptor is designed to ensure that America's armed forces retain air dominance. Forces must have complete control of the airspace over an area of conflict, thereby allowing freedom to attack and freedom from attack at all times and places for the full spectrum of military operations. Air dominance provides the ability to defend our forces from enemy attack and to attack adversary forces without hindrance from enemy aircraft. The next-generation F-22 air dominance fighter possesses stealth technology, state-of-the art radar and electronics, increased maneuverability, and the capability to fly at supersonic speeds while minimizing fuel use. These characteristics make the F-22 a formidable deterrent to potential adversaries, enabling the United States to maintain and extend its combat superiority throughout the world. The Air Force priority is to be equipped, trained and ready to fulfill its combat missions as directed by the President and Secretary of Defense. These issues form the basis of the purpose and need for the F-22 aircraft and the origin of the Initial F-22 Operational Wing Beddown initiative.

A Draft and Final EIS were prepared to aid in determining whether to beddown the first operational wing of three squadrons of F-22 aircraft at one of five existing Air Force bases: Langley AFB, Virginia; Eglin AFB, Florida; Elmendorf AFB, Alaska; Mountain Home AFB, Idaho; or Tyndall AFB, Florida. The EIS also evaluated the no-action alternative of not making a beddown decision at this time. The proposal includes a number of elements common to each location that would occur at the selected base or in its associated training airspace, as follows:

- Establishing three squadrons with a total of 72 Primary Aircraft Inventory and 6 Backup Aircraft Inventory and replacing existing combat F-15C aircraft at the base over a period of approximately 5 years, with construction beginning in 2002,
- Conducting flying operations at the base for training and operational deployment;
- Constructing base facilities and infrastructure necessary to support the Initial F-22 Operational Wing;
- Implementing the personnel changes (increases or decreases) at the base to conform to the F-22 wing's requirements;
- Conducting F-22 training activities in existing training airspace, emphasizing air-to-air combat and supersonic flight (where authorized), including Military Operations Areas (MOAs), Air Traffic Control Assigned Airspace (ATCAA) and Warning Areas;
- Employing defensive countermeasures, such as chaff and flares, in airspace authorized for such use; and
- Accomplishing limited employment of ground attack training using Joint Direct Attack Munitions at approved military training ranges such as Nellis Range Complex, Nevada; Utah Test and Training Range, Utah; and Eglin AFB's ranges, Florida.

The Air Force defined six operational and physical characteristics required of an Air Force base to support the beddown: (1) an existing F-15C (air superiority) mission, (2) established organization, maintenance, and logistics support for fighter aircraft; (3) access to nearby airspace for military use; (4) support for a wide range of training opportunities; (5) available infrastructure (such as fueling and runways that are designed for fighter aircraft); and (6) existing and suitable communication links for a fighter wing. Based on the Air Force identification and evaluation process, six bases met the operational requirements: the five bases listed above and Nellis AFB, Nevada. Nellis AFB was excluded from further consideration because adding or allocating the necessary facilities, infrastructure, organizational structure, and airspace required to support the Initial F-22 Operational Wing of three squadrons would adversely affect Nellis AFB's ability to fulfill its unique and important functions to support Air Force weapons systems and tactics testing and training. Therefore, to maintain the existing missions at Nellis AFB and ensure combat readiness of the Initial Operational Wing, the Air Force eliminated Nellis AFB from further consideration as an alternative location.

Public Involvement

The public involvement process used by the Air Force for the EIS included the following steps:

- (1) Issuing a Notice of Intent to prepare the EIS in the Federal Register on March 3, 2000;
- (2) Performing public and agency scoping from March through November 2000. Thirty-three scoping meetings were held to actively solicit input from the public, local governments, federal and state agencies, Native Americans, Alaska Natives, and environmental groups;
- (3) Conducting Interagency and Intergovernmental Coordination for Environmental Planning (IICEP) and Agency consultation;
- (4) Issuing a Notice of Availability on April 27, 2001 in the Federal Register; initiating the public comment period of the Draft EIS; and
- (5) Providing 23 public hearings, and a 45-day public comment period that was extended for an additional 15 days and that ended on June 25, 2001.

Approximately 800 copies of the Draft EIS were sent to federal, state, and local agencies, Alaska Native and Native American organizations, interest groups, those members of the public who requested a copy, and local libraries. In total, more than 170 IICEP letters were sent to appropriate federal, state, and local agencies. During the public comment period, public hearings were held in 23 locations in five states to provide an opportunity for the public to evaluate the proposal and analysis contained in the Draft EIS. There were 253 people who attended the hearings, with 106 people providing oral or written comments during that time. The Air Force received 74 additional written comments during the 60-day public comment period.

Comments received during the public review period were considered in the preparation of the Final EIS, which was issued on 9 November 2001 (Vol. 66, *Fed. Reg.*, No. 218, pg. 56674). The Final EIS contains identification of the preferred and environmentally preferred alternative, mitigation measures to reduce environmental consequences, errata, public and agency comments, and responses to comments.

Agency Consultation and Coordination

The Air Force consulted and coordinated with Federal and State agencies regarding the Proposed Action at Langley AFB throughout the Environmental Impact Analysis Process. Agencies reviewing biological and cultural resources were contacted early in the environmental planning process and received IICEP notification in June 2000. Informal Section 7 consultation, in compliance with the Endangered Species Act, was initiated with the U.S. Fish and Wildlife Service (USFWS) in June 2000. The USFWS issued a letter indicating a finding of no impacts to federally listed or proposed species, or critical habitat for the Proposed Action in September 2001. Contact with the Virginia State Historic Preservation Office (SHPO) was initiated in April 2000. The SHPO and the Bureau of Indian Affairs (Washington, DC) received IICEP notification and requests for information in May and June 2000. Section 106 consultation was

initiated in June 2000, pursuant to the National Historic Preservation Act. Project review meetings resulted in a Memorandum of Agreement, signed in September 28, 2001, completing the Section 106 consultation. The Advisory Council on Historic Preservation (ACHP) was provided a review copy of the Memorandum of Agreement and chose not to participate in Section 106 consultation.

Alternatives Analyzed

The EIS analyzed six alternatives: the proposed action, which is to beddown the Initial F-22 Operational Wing at Langley AFB, four alternative locations for the beddown (Eglin AFB, Florida; Elmendorf AFB, Alaska; Mountain Home AFB, Idaho; and Tyndall AFB, Florida), and a no-action alternative. For each alternative other than the no-action alternative, facilities would be constructed, modified, and/or demolished to accommodate the Initial F-22 Operational Wing. F-22 aircraft would conduct training flights (sorties) from the base, training flights in associated airspace (sortie-operations), and operational deployments as required. Under the no-action alternative, no base for the Initial F-22 Operational Wing would be selected at this time.

Langley AFB, the proposed action, was identified as the Preferred Alternative in the Draft EIS and Final EIS. Of all the alternatives analyzed, the No Action alternative is the alternative that is environmentally preferable, in that it has the least potential for adverse environmental consequences. However, Langley AFB is the environmentally preferable of all the five potential beddown locations (*i.e.*, of the action alternatives).

Consequences

Environmental consequences among the alternatives were evaluated in five consolidated environmental resource areas that reflected public and agency interests: Aircraft Operations; Natural Resources; Cultural, Traditional and Visual Resources; Human Resources; and Community and Infrastructure. Review of the environmental technical results, comments from the public, input from agencies, and information provided by American Indian and Alaska Native tribes were among the matters considered to determine environmental consequences of each alternative. In all cases, each basing alternative was compared with the baseline or no-action conditions.

At Langley AFB, Aircraft Operations would increase by 7 percent, or 1,251 sorties per year. This would include an increase of 62 nighttime sorties. Off-base areas subject to noise levels of 65 decibel Day-Night Average Sound Level (DNL) or greater would decrease by 521 acres; exposed areas would shift, with some decreases and some increases in the affected area. Average sortie-operations would increase by seven per day in Warning Area 386, by four per day in Warning Area 72, and by less than one per day in all other Warning Areas. Subsonic noise levels in all primary airspace units, including the Farmville MOA, would not change perceptibly, and would remain below 45 DNL.

While the F-22 beddown would not result in exceedences of regulatory air quality thresholds at any of the bases, the emissions of criteria pollutants at Langley AFB would contribute the least to regional emissions. In terms of air safety, Langley AFB has the potential for slightly greater,

but still minor, impacts compared to the other action alternatives because private development has encroached into safety zones around Langley AFB.

In terms of airspace management and air quality, no substantive differences exist for the training airspace associated with the locations assessed for the beddown of the Initial F-22 Operational Wing. Subsonic noise levels in the training airspace associated with the Proposed Action and four alternative locations would not change perceptibly from baseline conditions. Supersonic activity would increase sonic booms in the over-water airspace associated with Langley AFB, but all supersonic impacts would remain minimal.

For Natural Resources, no impacts to wetlands or other waters of the United States would be expected to occur at Langley AFB as a result of implementing the proposed F-22 beddown. Potential ground disturbance is more limited at Langley AFB than at the other bases and Langley AFB areas were previously developed or landscaped with non-native terrestrial habitat. Minimal soil erosion is anticipated due to the relatively small area disturbed. Langley AFB has the lowest potential for adverse consequences to special status species. Also, proposed differences in subsonic or supersonic noise levels under the training airspace are not expected to be biologically significant when compared to current conditions.

For Cultural, Traditional, and Visual Resources, effects are not expected at Langley AFB for archaeological resources. Construction on Langley AFB would affect (but not significantly) visual and architectural resources. These effects are greater than the other action alternatives because of the proposed demolition and construction within a historic district (see mitigation measures below).

For Human Resources, Langley AFB is the only base where there would be a decrease in project-related population and housing demand; this would result from a decrease in direct and secondary employment during operations. However, the Langley AFB region would experience approximately 1,025 new jobs and \$30 million of earnings in peak construction years. Land use impacts from on-base construction would be minimal at any of the bases. There is also a low potential for disproportionate airfield noise impacts to minority and low-income populations at any of the bases.

For Community and Infrastructure, Langley AFB is the only location where the three-squadron wing would decrease the off-base demand for utilities such as water, sewer, and schools. The F-22 beddown at Langley would create the smallest increase in hazardous waste generation and have a decrease in vehicle traffic volumes compared to the four alternative locations.

Mitigation Measures and Management Actions

Measures to avoid or minimize environmental harm from the F-22 Initial Operational Wing Beddown at Langley AFB were incorporated into the basic proposed action as noted in 40 CFR § 1502.14. These include actions, described below, designed to achieve reductions in the effect the action has on the community and continue working relationships with groups and members of the community to address environmental issues.

Hazardous Material/Waste Management Program Update: The Air Force will use the existing HAZMART for handling hazardous materials. It will update hazardous waste management plans

to reflect changes in hazardous waste generation and will add hazardous waste accumulation sites, as necessary, in waste generation locations. It will also implement hazardous waste control procedures to minimize all potential risks generated by any F-22 maintenance activities that present any unique hazards.

Air Installation Compatible Use Zone (AICUZ) Program Update: This program was developed by the Air Force to make recommendations to communities on land use compatibility with military aircraft operations. The AICUZ program provides recommendations to local governments on land uses compatible with exposure to aircraft noise and safety considerations. Langley AFB and the community have worked with the AICUZ program for decades. Langley AFB personnel would continue to work with the City of Hampton to ensure compatible land use development based on the established land use recommendations contained in the AICUZ program. Once flying operations have commenced, the Air Force will conduct a detailed noise study and land use analysis based on actual flight parameters in the vicinity of Langley AFB.

Pollution Prevention and Stormwater Plans: Pollution prevention and stormwater prevention programs and plans currently in existence at Langley AFB will be applied to the F-22 maintenance and operational activities and will be updated as appropriate to address any unique F-22 characteristics.

Air Traffic Safety Measures: The Air Force will continue close coordination of Langley AFB air traffic with the Federal Aviation Administration (FAA) to prevent conflicts with other air traffic. It will continue to employ existing arrival and departure routes that have proven effective for air traffic control and for avoiding conflicts, and to adhere to FAA rules for avoiding airports. The base Bird Aircraft Strike Hazard program will apply to the F-22.

Construction-Related Measures: Approximately 16 acres of previously disturbed land will be impacted by construction of facilities on Langley AFB. Construction of these facilities will take place at existing buildings and within paved and landscaped areas. No native terrestrial or wetland habitat will be disturbed by construction. Moreover, no critical or potential habitat for federal, state, or other special status species will be disturbed. Therefore, the impact from facility construction on Langley AFB on native habitats and wildlife will be negligible. Construction will be phased in a manner to reduce total noise generation and construction will occur during normal work days/working hours to reduce temporary effects of construction noise on off-base communities. The Air Force will employ standard best management practices such as watering of graded areas, covering of soil stockpiles, and contour grading (if necessary), to minimize temporary generation of dust and particulate matter. The Air Force will also employ standard construction practices such as erosion control measures and sediment retention measures to minimize soil erosion and sediment transport into bodies of water. Engineering controls may be used at Environmental Restoration Program Sites ST-27 and ST-26 to minimize potential of diffused hydrocarbon gases to enter the workspace. Construction activities are not expected to affect Chesapeake Bay Preservation Areas (including Resource Protection Areas and Resource Management Areas).

Noise Management: Langley AFB's noise abatement program focuses on reducing noise over residential areas near the base or areas affected by base aircraft. By continuing to employ this program, Langley AFB will minimize, where feasible, the potential for noise impacts on

populations and resources. Langley AFB operates under a program designed to reduce noise, particularly at night. A local quiet-hours program is employed to limit disturbance. Air Force requirements for flying at night (i.e., after dark) are normally met during seasons (like winter) with early sunsets. This practice limits the amount of late night flight operations to the maximum extent possible. Langley-based aircraft are authorized for supersonic activity only in over-water Warning Areas. Aircrews and mission planners follow procedures that avoid or minimize supersonic activity in offshore areas that could result in sonic booms reaching the shore. The Air Force will continue to restrict supersonic flight to 15 nautical miles from shore and above 10,000 feet mean sea level. This restriction will prevent potential impacts from sonic booms to sensitive species along and near the coastline. Wildlife species inhabiting the area near the base have likely habituated to aircraft noise and the proposed changes in noise levels are not expected to affect these species. The Air Force will not impact the active bald eagle nest 3 miles east of the runway. The impacts of noise on wildlife under the overland MOAs will likely not differ, biologically, from existing baseline conditions because (1) there will be no perceptible change in subsonic noise levels, (2) the number of low-level flights below 5,000 feet above ground level attributable to the F-22 will be reduced compared to baseline conditions, (3) existing airspace restrictions over sensitive areas will remain, and (4) the prohibition of supersonic flight will continue in the overland MOA.

To mitigate impacts to historic properties at Langley AFB as a result of the Initial F-22 Operational Wing beddown, the Air Force will implement stipulations contained in a Memorandum of Agreement between the Air Force and the Virginia Department of Historic Resources, in compliance with Section 106 of the National Historic Preservation Act (NHPA) and 36 Code of Federal Regulations (CFR) 800.

According to the Memorandum of Agreement, the Air Force will ensure that the following measures are carried out in consultation with the SHPO:

Facility recording:

- photograph buildings 754, 755, and 756 and complete a site plan drawing prior to demolition
- prepare a description and statement of significance for each building
- complete an Intensive Level Survey Field Form, including floor plan drawings
- provide draft documents to the SHPO for review and approval prior to demolition and
- provide final documents to the SHPO and explore other repository options

Salvage of architectural elements:

- survey buildings 754, 755, and 756 for character-defining architectural elements;
- salvage appropriate elements for reuse in replacement buildings or for curation; and
- select architectural elements and plan for their reuse in consultation with SHPO.

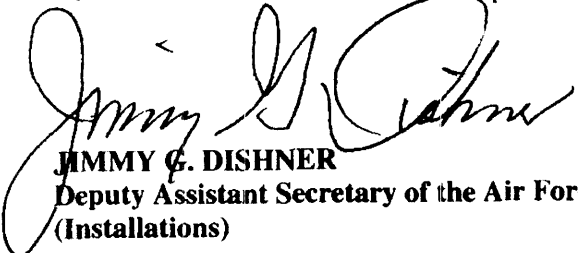
Mitigation:

- prepare a NRHP nomination form for the Langley Field Historic District and submit it to the Keeper of the National Register within 18 months of executing the Memorandum of Agreement
- rehabilitate Facility 442 in consultation with the SHPO
- develop a historic resources training video regarding the significance of historic resources on Langley AFB for installation personnel and
- develop photographic displays depicting the historic nature of the buildings that preceded the new hangars on the same site

If the Air Force encounters unanticipated historic properties or effects, reasonable efforts will be made to avoid, minimize, or mitigate adverse effects pursuant to 36 CFR 800.13(b).

Decision

After consideration of the matters discussed in this Record of Decision, the FEIS, inputs from the public, regulatory agencies and other relevant factors, the Air Force will implement the Proposed Action to beddown the Initial F-22 Operational Wing at Langley AFB, Virginia.


JIMMY G. DISHNER
Deputy Assistant Secretary of the Air Force
(Installations)

1/15/2002
Date