Identification Number: EAXX-021-12-ARP-1758268508

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Location

Manassas Regional Airport (HEF)
Prince William County, Virginia

Project Description

The Airport's existing Air Traffic Control Tower ATCT is owned and maintained by the City of Manassas. It is staffed and operated by Federal Aviation Administration (FAA) personnel. The ATCT was initially built in Centennial, Colorado, in the mid-1960s before being dismantled, transported to its current location at the Airport, and commissioned in 1991. The city proposes to construct a replacement ATCT at a new location on the Airport to improve the functional and operational capabilities of the service provided by the FAA ATCT personnel. A replacement ATCT with an appropriate height (i.e., up to 120 feet), improved line of sight, expanded cab space, upgraded heating ventilation and air conditioning (HVAC) systems, enhanced security, better facilities, and improved structural integrity would ensure the continued safe and efficient air traffic management at the Airport. The new ATCT facility would include a new tower, adjacent support building, parking lot, and replacement FAA Remote Transmitter/Receiver (RTR). After construction of the replacement ATCT is complete and the proper equipment is installed, tested, and operational, the existing ATCT would be demolished.

Proposed Federal Actions

The federal actions subject to the National Environmental Policy Act (NEPA) are the FAA's authority to approve or disapprove changes to the HEF Airport Layout Plan (ALP) to depict the proposed ATCT and associated improvements, and FAA approval authority for any eligible projects funded through the Airport Improvement Program (AIP) and any other FAA-administered grant assistance program.

Purpose and Need

The project's purpose is to improve the ATCT functional and operational capabilities provided to the Airport. The need to replace the ATCT is a combination of safety, operational, and infrastructure deficiencies. Below are the key reasons why the existing ATCT needs to be replaced.

» **Inadequate Height**: The ATCT's cab floor is 82 feet above ground level and is too low, which poses a safety concern. The current height affects the controllers' ability to maintain a proper line of sight with aircraft. As a result, aircraft may become difficult to spot in a timely manner, increasing the risk of incidents or incursions.

» **Obstructed Line of Sight**: The current ATCT has challenges for controllers due to obstructed lines of sight. Over the years, tall trees west of the ATCT partially obstruct the view of incoming aircraft, making it challenging to detect and manage incoming traffic until they are very close to the Airport.

» **Limited Space in the ATCT Cab**: The existing ATCT cab (approximately 189 square feet) is too small to accommodate the necessary equipment and personnel comfortably. The lack of space can hinder the controllers' ability to manage air traffic efficiently and lead to decreased operational effectiveness.
» **Escalating Maintenance Costs**: The current ATCT has reached a point where its maintenance costs are increasing significantly. Aging infrastructure, equipment, and systems require frequent repairs and updates.
» **Inadequate HVAC Systems**: The air conditioning units in the ATCT are undersized for the equipment load they need to support. This results in constant operation, which consumes excessive energy and strains the equipment. This results in repeated maintenance and uncomfortable working conditions for the FAA controllers.
» **Security Concerns**: The parking area around the ATCT is not adequately secured. This poses a security risk, as unauthorized individuals could gain access to the ATCT and compromise the safety of the airspace and FAA personnel within the facility.
» **Inadequate Facilities**: The break room is too small and lacks sufficient space to meet the existing ATCT staff's operational needs. The existing ATCT also has small conference rooms and a cramped training room.
» **Structural Issues**: The ATCT cab has numerous leaks and cracks that allow water to enter. Additionally, it has issues with pests like bees and wasps infiltrating the workspace, which can pose safety and health risks to the ATCT controllers.

Alternatives

A no action alternative and three action alternatives were considered in the Environmental Assessment (EA) and are described below. The replacement ATCT components (i.e., replacement ATCT, base building, and parking lot) are the same for each site and include the following:

» Clearing and grubbing of Airport property containing vegetation and trees for a replacement ATCT (including clearing and grubbing for line-of-sight purposes).
» Construction and operation of a minimum 2-acre site for replacement of 111- to 120-foot ATCT and support facilities (approximately 130 feet to the top of the antennas with 550 square feet of cab space).
» Construction of ATCT supporting facilities, including:
- a 0.28-acre parking lot for staff working at the replacement ATCT (estimated maximum 10 ATCT personnel (staff and trainees) on a weekday, daytime shift).
- an approximate 25-foot-long sidewalk to the replacement ATCT.
- a 100-square-foot utility pad (including a possible enclosure for an emergency generator).
- Connection to utilities (e.g., water, sewer, power, and communications) to service the replacement ATCT and link the replacement ATCT to the airfield lighting.
- Construction of a security fence (including a vehicle access gate) to secure and provide access to the replacement ATCT.
» Relocation of the rotating beacon to the top of the replacement ATCT.
» Demolition of the existing ATCT.

No Action Alternative:

Under the No Action Alternative, the replacement ATCT and associated improvements would not be constructed. The Airport would continue to manage aircraft operations with the existing ATCT. The No Action Alternative would not satisfy the project's Purpose and Need by

providing improved functional and operational ATCT capabilities associated with the currently deficient ATCT. Under the No Action Alternative, the existing ATCT would continue to have an inadequate height with obstructions within the controller's line of sight, limited cab space, increased maintenance costs with potential incremental improvements based on available funding, inadequate HVAC, and security and structural concerns. These functional and operational issues could lead to the decommissioning of the existing ATCT if they are not addressed. Although this alternative does not meet the stated Purpose and Need, it was carried forward for analysis in accordance with FAA guidance in FAA Orders 1050.1F[1] and 5050.4B.

Site 1 (Alternative 1):
Site 1 is located behind the existing ATCT approximately 1,100 feet west of runway 16R-34L. Site 1 would include an approximate 120-foot access road connecting the parking lot to Observation Road. Site 1 has improved visibility over the existing ATCT, has established access and utilities, and has nearby parking; however, Site 1 is not centrally located on Airport property. The Site 1 location involves less tree clearing than both Alternative 2 and the Proposed Action. Trees located just off the Airport property would obscure the controller's view of the Runway 34R runup area, Taxiway K extension, and portions of the west side of Runway 34R. Also, Site 1 is located in an area where other potential future Airport development and construction is shown on the ALP. In addition, the maximum distance to the farthest point on all runways and taxiways is 4,556 feet (to Runway 34R end), which is longer than Site 3. The structure at Site 1 must be lighted in accordance with Advisory Circular 70/7460-1M, Obstruction Marking and Lighting; Site 1 was not carried forward for further analysis in the EA.

Site 2 (Alternative 2):
Site 2 is approximately 1,250 feet west of the Runway 16R-34L centerline. Site 2 includes an approximate 400-foot access road to connect the parking lot to Observation Road. During Site 2's assessment, FAA Air Traffic Management (FAA ATM) described that a portion of the Runway 34R runup area was blocked, a portion of Taxiway W and the west side of Taxiway K could not be seen, and there was also a distance issue (approximately 4,300 feet is the maximum distance to the farthest point on all runways and taxiways). A potential future runway extension, shown on the ALP, would be obstructed if the trees grow anymore, and the line of sight (LOS) would be unacceptable. FAA ATM also described that the Runway 34L runup block is not visible. FAA ATM concluded that Alternative 2 had too many LOS conflicts on the airfield and was deemed not viable; therefore, Site 2 was not carried forward for further analysis in the EA.

Site 3 (Proposed Action):
The Proposed Action is approximately 980 feet west of the Runway 16R-34L centerline. The Proposed Action is adjacent to the approach end of Runway 34L and is oriented to the LC position facing south. It is centrally located in the middle of the Airport and the middle of Runway 34R and Runway 16L. This site has an improved LOS to a potential future runway extension, as shown on the ALP, as well as Taxiway C and Taxiway Z on the north side, the terminal, and the ramp. Compared to Site 1, it is located further away from buildings and hangars, and its remote location adds extra security.

1 On July 3, 2025, FAA published a Notice in the Federal Register rescinding FAA Order 1050.1F and issuing FAA Order 1050.1G. FAA prepared the EA supporting this FONSI prior to the revocation of FAA Order 1050.1F and therefore prepared this FONSI in accordance with FAA Order 1050.1F.

The Proposed Action is located at the threshold of Runway 34L at the north third of the Airport. Staff would be able to see the lineup of aircraft clearly on the correct runway. The Proposed Action's location would require fewer trees to be removed compared with Site 2, but more than Site 1. In addition, no future development or construction is planned at this site. Utilities would need to be brought in from about 200 yards to existing connections. In addition, the maximum distance to the farthest point on all runways and taxiways is 3,746 feet (to Runway 16L end), which is shorter than Site 1 and Site 2. The structure at Site 3 must be lighted in accordance with Advisory Circular 70/7460-1M, Obstruction Marking and Lighting. Site 3 was carried forward for detailed analysis in the EA as the preferred alternative.

Due to the height of the proposed replacement ATCT, the FAA RTR equipment that is currently located on top of the existing ATCT, is unable to be located atop the proposed replacement ATCT because it would penetrate the Federal Aviation Regulation (FAR) Part 77 airspace for the safe movement of aircraft operations. Therefore, FAA RTR tower siting alternatives and evaluation were conducted. FAA RTR site locations were identified based on two criteria:

» Geographic: The site must be limited to existing Airport property.

» Line of Sight: Each potential location must ensure an unobstructed line of sight to the proposed replacement ATCT site.

The Proposed Action FAA RTR site and five alternative FAA RTR sites were identified based on safety, compliance with the ALP and future growth, and avoiding the 100-year floodplain.

FAA RTR Proposed Action

The Proposed FAA RTR site location is within the northeast corner of the airport, adjacent to Observation Road. The site meets all site selection criteria, including being fully compatible with the FAA ALP and avoiding the 100-year floodplain. From a safety perspective, the site is appropriately situated away from the jet blast area.

FAA RTR Alternative 1

Alternative 1 is located in the western portion of the airport between existing T-hangars. FAA RTR Alternative 1 avoids the 100-year floodplain. However, it presents operational and long-term challenges: it is incompatible with the ALP because it restricts future development, and it poses safety risks from jet engine blast. Compared to the Proposed Action FAA RTR site, FAA RTR Alternative 1 was not considered further.

FAA RTR Alternative 2

Alternative 2 is located in the eastern portion of the airport, adjacent to Taxiway B. FAA RTR Alternative 2 is compatible with future development, as shown on the ALP. Additionally, the location is not near a jet engine blast area. However, Site 2 does not avoid the 100-year floodplain. Compared to the Proposed Action FAA RTR site, FAA RTR Alternative 2 was not considered further.

FAA RTR Alternative 3

Alternative 3 is located in the southeastern portion of the airport, southeast of Taxiway B. While FAA RTR Alternative 3 is favorable by providing ALP compliance and jet engine blast avoidance, it does not avoid the 100-year floodplain. Compared to the Proposed Action FAA RTR site, FAA RTR Alternative 3 was not considered further.

FAA RTR Alternative 4
Alternative 4 is located in the northwestern portion of the airport, adjacent to the west ramp. FAA RTR Alternative 4 avoids affecting the 100-year floodplain; however, it is incompatible with future development on the ALP and is near a jet engine blast area. Compared to the Proposed Action FAA RTR site, FAA RTR Alternative 4 was not considered further.

FAA RTR Alternative 5
Alternative 5 is located in the norther portion of the airport, adjacent to existing box hangars. Although FAA RTR Alternative 5 avoids the 100-year floodplain, it presents safety and planning concerns. The location is not safely situated for aircraft operations due to jet engine blast generated by aircraft turning north and south from Taxilanes C and D. Furthermore, FAA RTR Alternative 5 is incompatible with the ALP because its placement could restrict future airport development. Compared to the Proposed Action FAA RTR site, Site 5 was not considered further.

Discussion
The EA assessed the effects of the Proposed Action on the quality of the human and natural environment and is incorporated into this Finding. The following impact analysis highlights the more thorough analysis presented in the document.

Air Quality
The Project Study Areas are located entirely within Prince William County, which is classified as "attainment" for all criteria pollutants excluding 8-Hour Ozone (2015) and (2008). Prince William County and the City of Manassas are in "Moderate - Nonattainment" for 8-Hour Ozone (2015) and in "Marginal - Maintenance" for 8-Hour Ozone (2008), which is comprised of Nitrogen Oxide (NOx) and volatile organic compounds (VOCs). Prince William County and the City of Manassas reside in the Ozone Transportation Region (OTR).

A Construction Emissions Inventory (CEI) of the Proposed Action was conducted through the US Environmental Protection Agency's (USEPA) MOtor Vehicle Emission Simulator (MOVES) program. For construction years 2026 and 2027, the CEI results concluded that no National Ambient Air Quality Standards (NAAQS) emissions category would approach or surpass any established *de minimis* thresholds. The Proposed Action would not increase aircraft operations at the Airport. The Proposed Action would not result in any change to aircraft operational emissions or affect the region's NAAQS status. Air quality impacts associated with construction and operations, combined with the reasonably foreseeable future projects, would not have a significant environmental impact compared to the No Action Alternative.

Biological Resources
The U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) website identified the proposed endangered Tricolored Bat (*Primyotis subflavus)*, endangered Dwarf Wedgemussel (*Alasmidonta heterodon)*, and proposed threatened Monarch Butterfly (*Danaus Plexippus)* as federally listed species that may be located in the project study area. The USFWS also identified eight (8) migratory bird species. The Virginia Fish and Wildlife Information Service (VaFWIS) identified eleven (11) federal and/or state listed species as potentially occurring within a 2-mile radius of the project study area.

A biological site survey confirmed that the Direct Study Area does not contain suitable habitat for the Dwarf Wedgemussel, Monarch Butterfly, or Bald Eagle. As suitable habitat is not present, a USFWS Self-Certification Letter determined that there will be no effect to these species by the Proposed Action. A determination of not likely to adversely affect was reached for the Tricolored Bat. Tree clearing and grubbing for construction of the Proposed Action is limited to two (2) acres immediately adjacent to airport infrastructure and more suitable habitat is also located adjacent to the Direct Study Area.

To ensure no take of migratory birds, tree removal under the Proposed Action occured between September 11 and March 30, which is outside of the breeding and nesting season for identified migratory bird species (April 1 to September 10). In addition, tree removal from September 11 to March 30 also avoids the tri-colored bat pup season (May 1 through July 15), when pups are non-volant and cannot escape the disturbance.

Operation of the Proposed Action would not increase aircraft operations, change the aircraft fleet mix, or affect landside or airside operations. The Proposed Action's ATCT must be lighted in accordance with Advisory Circular 70/7460-1M, Obstruction Marking and Lighting (e.g., small red light atop the structure or its antennas). The change in lighting is not anticipated to increase the overall effect of lighting on wildlife at the Airport.

Based on the results of consultation, and implementation of a time-of-year restrictions as well as BMPs, the Proposed Action, combined with the reasonably foreseeable future projects, would not have significant impacts to biological resources compared to the No Action Alternative.

Department of Transportation Section 4(f)

There are no Section 4(f) resources within the Direct Study Area. The Indirect Study Area contains Bristoe Station Battlefield Heritage Park, commemorating the Battle of Kettle Run, which is a 140-acre county-owned park preserving a portion of the Bristoe Station Battlefield, located about 1 mile west of the Direct Study Area. Additionally, adjacent to the Direct Study Area is the Virginia Department of Historic Resources (DHR) identified boundary for the Bristoe Station Battlefield (DHR ID 076-0024 and 076-5036). Valley View Park is about 1 mile southwest of the Indirect Study Area. The nearest 6(f) resource is Marstellar Park, located about 2.5 miles northeast of the Indirect Study Area.

Construction of the Proposed Action would not physically use (directly impact) any Section 4(f) or Section 6(f) resources. In addition, construction of the Proposed Action would not affect environmental resources (e.g., air quality, noise, etc.) in a manner that would constructively use (indirectly impact) any Section 4(f) or 6(f) resource. Evaluations of the project area resulted in determinations that the project would not have any impact on historic, architectural, archaeological, or cultural resources listed in or eligible for the National Register of Historic Places (NRHP).

Following construction, the proposed ATCT would be 120 tall and produce light emissions. Operation of the Proposed Action would not physically use (directly impact) any Section 4(f) or Section 6(f) resources. A Visual Effects Study found that the proposed ATCT would not be visible from Bristoe Station Battlefield Heritage Park. Additionally, the operation of the ATCT, as well as relocation of the FAA RTR, would not affect environmental resources (e.g., air

quality, noise, etc.) in a manner that would indirectly affect (constructively use) Section 4(f) and 6(f) resources. Consultation with the DHR for both the replacement ATCT and FAA RTR relocation resulted in concurrence with *No Adverse Effect* and *No Historic Properties Affected* determinations; therefore, compared to the No Action Alternative, construction and operation of the Proposed Action, combined with the reasonably foreseeable future projects, would not result in significant impacts Section 4(f) or 6(f) resources compared to the No Action Alternative.

Hazardous Materials, Solid Waste, and Pollution Prevention

No hazardous waste facilities are within the Direct Study Area. There are no superfund sites on the National Priorities List (NPL) within the Direct Study Area. The closest superfund site is Fairfax Mercury (Site ID: 0305614), located approximately 17 miles northeast of the Direct Study Area. American Disposal Services, Inc. manages the solid waste at the Airport. The closest landfill to the Airport is the Prince William County Landfill, located about 7.5 miles southeast of the Airport. The City has developed a combined Stormwater Pollution and Prevention Plan (SWPPP) and Spill Prevention, Control, and Countermeasure (SPCC) Plan for the Airport, which complies with the Virginia Pollutant Discharge Elimination System Permit (VPDES) General Permit (VAR050985) issued to the City. The SPCC Plan establishes policies and procedures for handling, storing, disposing of, and cleaning up hazardous materials, including jet fuel, and identifies roles and responsibilities for spill response on Airport property.

The selected contractor would use and manage construction-related hazardous materials in accordance with the Airport's SPCC and the amended SWPPP (including the Proposed Action) and store hazardous materials at the construction staging areas. The selected contractor would be responsible for disposing of hazardous waste in accordance with all federal, state, and local rules and regulations. Hazardous waste is accepted for disposal at the following facilities in Prince William County and Spotsylvania County: Safety-Kleen Systems and Veolia Environmental Services. When the ATCT was relocated from its original location in Colorado to the Airport in 1991, the presence of any hazardous materials would have been remediated prior to transport; therefore, demolition of the current ATCT would not contain asbestos-containing material, lead-based paint, or other hazardous materials.

Demolition of the existing ATCT would occur after the Proposed Action is fully operational. The Prince William County Landfill accepts limited construction and demolition debris. In addition, the following facilities accept concrete, cleared vegetation (e.g., brush and woody debris), and/or general construction debris in Prince William County: Rainwater Topsoil & Recycles Concrete; Commonwealth Recycled Aggregate and Materials, Inc.; Waste Management Manassas Transfer Station; C&D Recovery LLC. Combined, these facilities have the capacity to accept solid waste from the demolition of the existing ATCT and the construction of the Proposed Action. The selected contractor would be responsible for disposing of solid waste in accordance with all federal, state, and local rules and regulations. Tree clearing conducted on March 24 and March 29, 2025, left tree stumps and mulched branches and logs in place; no vegetation debris or solid waste was disposed of off-site.

Following construction, the replacement ATCT would not result in a greater increase in solid waste compared to the No Action Alternative because the replacement ATCT would operate similarly to the existing ATCT. Solid waste would continue to be handled and disposed of in accordance with federal, state, and local rules and regulations. The Proposed Action's construction and operation, combined with the reasonably foreseeable future projects, would not

have a significant impact on Hazardous Materials, Solid Waste, and Pollution Prevention compared to the No Action Alternative.

Historic, Architectural, Archeological, and Cultural Resources

A portion of the Direct Area of Potential Effects (APE) (Replacement ATCT) (1.6 acres) overlaps with a Phase I archaeological resources survey previously completed in 2017. The 2017 Phase I archaeological resources survey did not identify any cultural resources within the portion of the previously tested APE. A Phase I archaeological survey was conducted on the remaining 2.4 acres of the Direct APE (Replacement ATCT). No cultural material or evidence for subsurface cultural features were identified. The Direct Study Area (FAA RTR), is comprised of disturbed ground and soils. Fill material was used in the FAA RTR relocation area when the Airport was initially constructed, then graded during the construction of Observation Road and the interior service road, which included stormwater ditches and fencing. The Indirect APE is the approximate 1,690-acre Indirect Study Area. Bristoe Station Battlefield (DHR Resource 076-0024 and 076-5036) is located within the project's Direct and Indirect APEs. The DHR has identified the resource as potentially eligible for listing in the NRHP.

Based on the results of archaeological surveys, and a viewshed assessment, construction and operations of the replacement ATCT and FAA RTR relocation would not have any impact on historic, architectural, archaeological, or cultural resources listed in or eligible for listing in the NRHP. DHR concurred with a determination of *No Adverse Effect* associated with the replacement ATCT and a finding of *No Historic Properties Affected* for the FAA RTR relocation. The Proposed Action's construction and operation, combined with the reasonably foreseeable future projects, would not have a significant impact on Historical, Architectural, Archaeological, and Cultural Resources compared to the No Action Alternative.

Natural Resources and Energy Supply

Consumable materials are regularly used to maintain the Airport's various airside and landside facilities and services. These materials include asphalt, concrete, aggregate for sub-base materials, various metals associated with Airport maintenance, and fuels associated with the operation of aircraft and vehicles. Electrical power is provided by Northern Virginia Electric Cooperative (NOVEC) to the Airport (Northern Virginia Electric Cooperative, 2024). Water and sewer services are provided by the Prince William County Service Authority (Prince William County Service Authority , 2024). Water is drawn from the Potomac River and Lake Manassas and is treated at either Fairfax Water's James J. Corbalis, Jr. Water Treatment Plant or the City of Manassas' water treatment plant.

Construction activities associated with the Proposed Action include using aggregate, sub-base materials, paving materials, building materials, ATCT materials, and utility connection materials. The replacement ATCT tower would be built to the FAA's new Sustainable Tower Design Initiative. This initiative solicited a sustainable and adaptable design for air traffic control towers to be used at municipal and smaller airports across the country in order to meet key sustainability requirements. The ATCT's sustainability measures include materials and products free from chemicals known to pose health risks and high-recycled steel and metal products. Resources required for the construction of the Proposed Action are not rare or in short supply, and the quantity required for development of this size would not place an undue strain on supplies within the Manassas region. The increase would be temporary and minor and be within the capacities of

NOVEC. Trucks and construction equipment would consume fuel as needed during construction. Demolition of the existing ATCT would require the consumption of some natural resources to fuel and power the machinery. These energy supplies are not rare or in short supply in the Manassas region.

The operation of the Proposed Action could increase electricity and water use at the Airport. The replacement ATCT tower would be built according to the FAA's new Sustainable Tower Design Initiative, leading to the replacement ATCT being more energy efficient than the existing ATCT. the Proposed Action would have similar staffing (approximately 3-4 persons per shift – daytime and nighttime). Fluctuations in ATCT staff would occur each year due to trainees. Qualitatively, the Proposed Action has the potential for a few additional staff/trainees (an additional 3-4 staff personnel/trainees). Therefore, the operation of the Proposed Action would increase fuel use at the Airport compared to the No Action Alternative. However, the Proposed Action would not increase the aviation fuel use at the Airport. In comparison to the No Action Alternative, construction and operation, combined with the reasonably foreseeable future projects, would not have a significant impact to Natural Resources and Energy Supply.

Noise and Noise-Compatible Land Use

Most of the development around the Airport is industrial and commercial. Designated noise-sensitive area east and south of the Airport is not within the existing DNL 65 dBA noise contour. The Proposed Action's construction involves temporarily using heavy machinery, equipment, and construction activities that would generate noise. The nearest noise-sensitive area is a residential area about 0.25-mile south of the Replacement ATCT. It is buffered by approximately 1,300 feet of dense vegetative growth. Construction of the Proposed Action would involve the use of equipment that would generate temporary construction-related noise for the duration of construction. The loudest noise from construction equipment would include the use of front loaders, backhoes, and dozers. The maximum sound level at 50 feet away from the construction equipment would be 80 dB from front loaders, 80 dB from backhoes, and 85 dB from dozers. Using a standard noise drop-off rate of 6 dB per doubling of distance, temporary construction noise levels calculated at the closest residential area would be 52 dB from front loaders, 52 dB from backhoes, and 57 dB from dozers. Normal background sound levels in residential/suburban areas range from 45-55 dB.

Operation of the Proposed Action would not change the Airport's current noise DNL 65dB noise contour. The operation of the Proposed Action would not change the Airport's current operations, aircraft fleet mix, or runway use percentages. When considering projects planned to occur in the reasonably foreseeable future, construction and operation of the Proposed Action would not cause significant impact to noise and noise compatible land use compared to the No Antion Alternative.

Socioeconomics and Children's Health and Safety Risks

The Proposed Action would positively affect employment by creating a temporary demand for construction employees. Existing residents in the greater Manassas area would likely fill temporary employment positions. Construction would cause a minor temporary increase in surface vehicles using area roadways to access the construction site (i.e., approximately 8 construction-related vehicles (e.g., cement mixers, dump trucks, and tractor-trailers) and 45 construction employee-related vehicles) duration construction from 2026 to 2027. The percentage increase in average daily traffic (ADT) would be 0.73% and 1.1%, along Piper Lane

and Harry J Parrish Blvd. This temporary increase in construction-related vehicles would not affect the level of service for these roadways. Construction noise levels calculated at the Nanda Learning Day Care Center and Cannon Branch Fort Park would temporarily be 39 dB from front loaders, 39 dB from backhoes, and 44 dB from dozer operations.

Fluctuations in ATCT staff, the Proposed Action could result in the potential for a minimal 3-4 additional staff personnel/trainees to operate the ATCT. The Proposed Action would not cause shifts in the projected population growth, change population movement, or result in the need for extensive relocations or increase the demand for fire, police, and life safety services. The Proposed Action's construction and operation, combined with the reasonably foreseeable future projects, would not result in significant impacts compared to the No Action Alternative.

Visual Effects

A Viewshed Analysis was conducted for the Proposed Action. Four locations were selected for the analysis, which were: Bristoe Station Battlefield Heritage Park (highest point); Bristow Rd/Meadow Lane; Split Oak Lane (worst case); and, Bristow Road/Centerville Sod.

Construction of the Proposed Action would involve the use of cranes and other construction equipment that could be seen by the surrounding community; however, using construction equipment would be temporary and only last for the duration of construction. Changes to visual resources and visual character from the construction of the replacement ATCT and removal of the existing ATCT would not affect or obstruct visually important resources. Due to the small scale of the FAA RTR towers and electrical support building, existing terrain, and the height of trees in view, the construction of the Proposed Action FAA RTR towers would not be visible from the four locations selected for the visual effects analysis.

Operation of the Proposed Action would change the viewshed of the local area due to the new location of the replacement ATCT and FAA RTR towers, which would be 120 feet tall and 70 feet tall, respectively, and produce light emissions. The clearing and grubbing of trees under the Proposed Action would not be visible from the south, west, and northwest viewpoints because the surrounding forest blocks the view. From the north, east, and southeast, the cleared area may be only slightly noticeable against the forest backdrop and obstructed by existing airside development (GA hangars).

Based on the visual effects analysis, the Proposed Action (Replacement ATCT and FAA RTR) would not be seen from the Bristoe Station Battlefield Heritage Park; however, the Proposed Action (Replacement ATCT) could potentially introduce a new visual element that may not seamlessly blend with the No Action Alternative's visual character of the surrounding areas, particularly those west of the Airport. This contrast would arise from factors such as the Proposed Action's height, design, and lighting, which might change the backdrop of the surrounding landscape. The Proposed Action would be designed to be visually compatible with the existing Airport facilities. The Airport's existing rotating beacon, located on the opposite side of the airfield and across Wakeman Drive from corporate hangar development, will be relocated to the top of the replacement ATCT. Red obstruction lighting system for aircraft operations would be located atop the replacement ATCT and FAA RTR towers and would be designed to meet FAA standards

The relocated rotating beacon would not result in excessive light pollution or create a negative impact on the visual character of the area. While red obstruction lighting, designed to meet FAA standards, is a distinguishing marker, it does not illuminate objects on the ground. Replacement ATCT lighting designs could include shielding outdoor lighting fixtures to focus light emission on specific areas, using light-colored exteriors to reduce the amount of artificial light needed outdoors, or using light-emitting diode (LED) lights or lower color temperature interior lighting (i.e., warmer light). The changes in lighting are not anticipated to affect the visual nature of the existing developed area and the existing lighting present. Although the proposed replacement ATCT would be taller than the existing ATCT, it would change the viewshed but would not affect the nature of the area's visual character due to the study area being an existing and active airport. In addition, the existing ATCT would be decommissioned and demolished. During this time, the visual character of the Airport may experience a change with the removal of the existing ATCT and associated structures, resulting in minor effects on the visual landscape. Impacts from the removal of an existing ATCT to the visual landscape from changes to lighting would be minimal due to the insignificant change in ambient light. When compared to the No Action Alternative, the construction and operation of the Proposed Action (including the demolition of the existing ATCT) would not significantly affect light emissions or visual resources and/or visual character within the Indirect Study Area.

Water Resources (Including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)

Floodplains

The majority of the Direct Study Area (Replacement ATCT) is located within Zone AE of the 100-year floodplain (approximately 2.9 acres). The Direct Study Area (FAA RTR) is not located in a 100-year floodplain (i.e., Zone X). Existing floodplain conditions were updated to reflect the construction of the Proposed Action to quantify the impact on the 100-year floodplain and base flood elevations (BFE) without mitigation measures. The Proposed Action would result in 3,900 cubic yards of fill within 0.71 acre of the 100-year floodplain and a BFE increase of 0.04 feet. The Proposed Action's floodplain compensation was evaluated within the Direct Study Area (Replacement ATCT) to determine if a no-rise condition could be achieved. To minimize the impacts on the floodplain, the area between the Proposed Action fill platform and the Direct Study Area (Replacement ATCT) boundary was graded at approximately 0.5% to promote drainage while maximizing cut volume to the extent practical. The analysis resulted in approximately 4,600 cubic yards of floodplain compensation, exceeding the 3,900 cubic yards of fill placed for the Proposed Action. There will be no increases in BFE and a maximum decrease of 0.02 feet, which meets the requirements of a no-rise condition.

Prior to construction, a Flood Hazard Use Permit would be obtained from Prince William County that would demonstrate no-net-rise to the floodplain. To comply with minimum floodplain standards required by the National Flood Insurance Program (NFIP) for new buildings in a Zone AE floodplain, new structures must be elevated to or above the base flood elevation (BFE). In addition, construction Best Management Practices (BMPs) would help reduce construction runoff and pollutant transport. Silt fences and inlet filters would help reduce sediment transport to the surrounding floodplains. To ensure the inlet filters perform as intended, any sediment accumulated during construction should be removed to ensure proper capacity. During construction, the selected contractor would comply with the Flood Hazard Use Permit, VPDES General Permit (VAR050985), the Airport's amended SWPPP, which would include the Proposed Action, and SPCC Plan to minimize or prevent impacts to the floodplain.

Through compliance with applicable permits and compensatory storage and conveyance, the natural and beneficial floodplain values would be maintained following the construction of the Proposed Action, resulting in no significant effect on floodplains compared to the No Action Alternative. The Proposed Action's effect on the 100-year flood elevation would not result in a high probability of loss of life, substantial costs or damages (including the interruption of aircraft service or loss of a vital transportation facility), or cause adverse impacts on natural and beneficial floodplain values.

Surface Waters

Broad Run, a perennial stream, flows southward through the Indirect Study Area and is approximately 270 feet southwest of the Direct Study Area (Replacement ATCT) at its nearest point. Broad Run is a 38.0-mile-long tributary of the Occoquan River. The City operates under a VDEPS General Permit (VAR050985) for stormwater discharge associated with industrial activity, effective June 1, 2024, to June 30, 2029. To comply with the VPDES General Permit, the City maintains an SPCC Plan and SWPPP for the Airport.

Prior to construction, the City would provide notice to the Virginia Department of Environmental Quality (VDEQ) of the Proposed Action and amend the Airport's existing SWPPP to include the measures and controls employed to meet the no net increase of stormwater nutrient and sediment load resulting from the Proposed Action. During construction, the selected contractor would implement stormwater, erosion, and sediment control BMPs in compliance with the Airport's amended SWPPP to minimize or prevent pollutants from entering surface waters.

Following construction, impervious surfaces would be less than 0.5 acre. The increase in the amount and rate of stormwater would be accommodated by BMPs to accomplish water quality and quantity goals due to the increase in impervious area. Additionally, all disturbed areas would be seeded with a seed mix containing species appropriate for the region. Implementing the Proposed Action would not exceed the water quality standards established by Federal, state, or local regulatory agencies, nor contaminate public drinking water supply such that public health would be adversely affected. Through compliance with the VPDES General Permit (VAR050985), amended SWPPP, and SPCC Plan, and stormwater management improvements, the Proposed Action, when compared to the No Action Alternative, would not significantly affect surface waters.

Other Impact Categories

Additional categories addressed in the attached EA include, but are not limited to, coastal resources, farmlands, land use, floodplains, groundwater, and wild and scenic rivers. It is the FAA's finding that the Proposed Action will not have any significant impacts on any of the above noted categories.

Mitigation Measures/Best Management Practices (BMPs

The Sponsor must adhere to applicable BMPs specified in FAA AC 150/5370-10, *Standards for Specifying Construction of Airports*, Item C-102, "Temporary Air and Water Pollution, Soil Erosion, and Siltation Control."

Fugitive dust must be kept to a minimum by using control methods outlined in 9VAC5-50-60 *et seq*. of the *Regulations for the Control and Abatement of Air Pollution*.

Comply with time-of-year restrictions for use of any asphalt emulsifying agents from April through October.

If required, obtain an air permit before starting actual construction of, or operation of, any new stationary source in accordance with 9 VAC5-50, Article 6.

Limit tree removal to September 11 to March 30 to avoid migratory bird breeding and nesting and also avoiding the tri-colored bat pup season (May 1 through July 15).

Any soil that is suspected of contamination or wastes that are generated during the action must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations.

If required, obtain a VPDES General Permit for Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests (VAG83) for any hydrostatics tests on any new piping installed, or for any potential dewatering during construction if petroleum contamination is encountered.

All construction and demolition debris must be characterized in accordance with the *Virginia Hazardous Waste Management Regulations* prior to disposal at an appropriate facility.

Comply with the City's VPDES General Permit (VAR050985) and amend the SWPPP to include the Proposed Action and SPCC Plan.

Prepare and submit and project-specific erosion and sediment control (ESC) plan and stormwater management (SMP) plan with the City of Manassas, if required.

Obtain a Flood Hazard Use Permit from Prince William County.

All required permits and approvals for the Proposed Action must be obtained prior to construction.

Public Involvement

A public notice was published in the Prince William Times on February 19, 2026. Copies of the EA were made available for the public to review electronically on the Airport's website https://flyhef.com/about/plans-projects/plans-studies and in hardcopy at the HEF administrative office, 10600 Harry J. Parish Blvd. Manassas, VA 20110, and the Central Community Library, 8601 Mathis Ave. Manassas, VA 20110. The City also held the Public Meeting on March 10, 2026, from 5 pm to 7 pm at HEF. The thirty (30) day review period ended on March 21, 2026. No public comments were received at the Public Meeting or during public review.

Comments were received from the Virginia Department of Environmental Quality Office of Environmental Impact Review, the U.S. Department of Agriculture, and the U.S. Environmental Protection Agency. Comments are included in the EA as Appendix H and are incorporated into the EA as applicable.

Conclusion and Approval

I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, I find the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and other applicable environmental requirements. I also find the proposed Federal action will not significantly affect the quality of the human environment or include any condition requiring any consultation pursuant to Section 102(2)(C) of NEPA. As a result, FAA will not prepare an EIS for this action.

Recommended: _____ 4/15/2026

Susan Stafford — Date

Environmental Specialist, Beckley AFO

Approved: _____ 4/15/2026

Matthew DiGiulian — Date

Manager, Beckley AFO

Disapproved: _____ _____

Matthew DiGiulian — Date

Manager, Beckley AFO