ENVIRONMENTAL IMPACT STATEMENT (EIS) T-7A RECAPITALIZATION AT COLUMBUS AFB, MS

INTRODUCTION

The Department of the Air Force (DAF) will replace the existing T-38C aircraft with the new T-7A aircraft at Columbus Air Force Base (AFB), Mississippi. DAF considered the information, analyses, and public comments contained in the *Final Environmental Impact Statement (FEIS) for T-7A Recapitalization at Columbus Air Force Base, Mississippi* to make its decision.

This Record of Decision (ROD) is issued per the Council on Environmental Quality regulations that implement the National Environmental Policy Act at Title 40 Code of Federal Regulations Section 1505.2 (*Record of Decision in cases requiring Environmental Impact Statements*). DAF is the lead agency for this EIS.

This ROD documents:

- DAF's decision;
- The alternatives considered;
- The environmentally preferable alternative;
- Factors considered in the decision;
- Mitigations;
- Whether DAF adopts all practicable means to avoid or minimize environmental harm from the selected alternative, and if not, why not.

DECISION SYNOPSIS

Recapitalization entails replacement of all T-38C aircraft assigned to Columbus AFB with T-7A aircraft. The recapitalization program at Columbus AFB will involve a two-year transition period where two airframes (T-38C and T-7A) will be operated and maintained, continued use of associated special use airspace (SUA), introduction of nighttime T-7A operations between 10 p.m. and 7 a.m.; change to the number of personnel and dependents; and construction and upgrade of operations, support, and maintenance facilities.

BACKGROUND

The Department of Defense is manufacturing a new training aircraft, the T-7A "Red Hawk" to eventually replace existing T-38C "Talon" aircraft. Air Education and Training Command (AETC) operates the T-38C from five pilot training installations: Joint Base San Antonio (JBSA)-Randolph in Texas, Columbus AFB in Mississippi, Laughlin AFB in Texas, Vance AFB in Oklahoma, and Sheppard AFB in Texas. DAF expects to procure approximately 350 T-7A aircraft from Boeing and deliver these aircraft to the five T-38C pilot training installations.

The Secretary of the Air Force identified JBSA-Randolph and Columbus, Laughlin, Sheppard, and Vance AFBs for T-7A recapitalization in a strategic basing decision memorandum for record, dated February 16, 2018. The Acting Secretary of the Air Force approved the preferred alternative sequencing and locations for the four installations following JBSA-Randolph to possibly undergo T-7A recapitalization on January 29, 2021. Columbus AFB was selected second because it hosts an Introduction to Fighter Fundamentals curriculum, and recapitalizing Columbus AFB second would result in the least impact on the continuation of pilot training during the transition between aircraft types and align with AETC's student pipeline flow for the Undergraduate Pilot Training, Introduction to Fighter Fundamentals, and soon to be developed Fighter/Bomber Fundamentals curricula.

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ALTERNATIVES CONSIDERED

An EIS was prepared to support the Secretary of the Air Force strategic basing decisions to recapitalize Columbus AFB. The EIS considered three action alternatives (i.e., Alternatives 1, 2, and 3) and the No Action Alternative. The three action alternatives considered different numbers of T-7A aircraft and associated numbers of T-7A operations at Columbus AFB and associated SUA. These alternatives are described below.

Alternative 1. Columbus AFB would receive up to 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. T-7A aircraft would be delivered to Columbus AFB from the manufacturer beginning in 2028 and continuing through 2030. As T-7A aircraft are delivered and placed into service, T-38C aircraft would be withdrawn from service. The first T-38Cs would be withdrawn in 2028 and the last in 2030. In total, all 85 T-38C aircraft assigned to Columbus AFB would be withdrawn from service and considered for retirement or repurposed for use at other locations. Table 2-1 of the FEIS provides the annual number of T-38C and T-7A aircraft for Alternatives 1 and 2.

Evening operations include those from dusk until 10 p.m. and are already performed at Columbus AFB with the T-38C.

Nighttime operations, as defined for aircraft noise modeling, occur between 10 p.m. and 7 a.m. and are not currently performed at Columbus AFB with the T-38C. However, up to 474 annual nighttime T-7A operations would occur at Columbus AFB for Alternative 1, which is approximately 0.5 percent of annual T-7A operations.

T-7A pilot training would use the same SUA used currently by the T-38C. This SUA is Military Operations Areas Columbus 1, Columbus 2, Columbus 3, Birmingham, and Birmingham 2; Range R-4404; and Military Training Routes IR-066, IR-068, IR-091, VR-1014, and VR-1031 (*FEIS, Section 3.1*). No changes to SUA configurations (i.e., size, shape, or location) are required for T-7A recapitalization. The T-7A would be limited to sub-sonic speeds in all phases of pilot training. Table 2-2 of the FEIS provides the annual T-38C and T-7A aircraft operation numbers for Alternative 1.

An increase of approximately 43 personnel is projected at Columbus AFB during the aircraft transition period (i.e., 2028 and 2029). During this transition period, DAF would be operating and maintaining two types of aircraft, resulting in a temporary increase in workforce requirements for operations, civilian simulator instructors, and maintenance. The initial increase in workforce would subside as T-38C aircraft are removed from Columbus AFB. The steady state personnel requirement at Columbus AFB is projected to be approximately 31 persons fewer than the current baseline staffing levels and 74 persons fewer than peak staffing levels.

Associated with the workforce change is a corresponding change in the number of dependents (e.g., spouses, children, other family members) who would accompany the personnel. DAF estimates 82 dependents would accompany the 43 additional personnel during the aircraft transition period, for a total of 125 additional people in the Columbus AFB vicinity during 2028 and 2029. After the aircraft transition period, the loss of 31 personnel and their associated 59 dependents would remove a total of 90 people from the Columbus AFB vicinity, as compared to current baseline staffing levels.

Five military construction (MILCON) and unspecified minor military construction (UMMC) projects and six facilities sustainment, restoration, and modernization (FSRM) projects are planned for completion at Columbus AFB to provide modern facilities and infrastructure to support T-7A aircraft maintenance, training, and operational requirements (*FEIS, Section 2.2.2.1*). These projects are as follows:

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- Construct a ground-based training system facility.
- Construct a unit maintenance training facility.
- Construct a new hush house.
- Construct up to 46 T-7A shelters.
- Construct an egress shop.
- Renovate Building 452 (Hangar 3).
- Renovate Building 454 (Hangar 4).
- Construct an antenna farm on top of the ground-based training system facility.
- Renovate the interior of the squadron operations buildings (Buildings 216 and 234).
- Improve the airfield by remarking the T-38C ramp to the width of the T-7A. Install new moorings and anchor rods for T-7A aircraft. Replace aircraft arresting system. Remove above ground Centralized Aircraft Support System service modules.
- Construct a new trim pad across from the hush house on the engine run-up apron.

Alternative 2. Columbus AFB would receive up to 61 T-7A aircraft but would perform T-7A operations at a level that is approximately 25 percent greater than Alternative 1. Alternative 2 is intended to cover a scenario in which, for either broad strategic or tactical operational reasons, DAF requires a surge or increase in pilot training operations above current plan. T-7A nighttime operations would occur with up to 595 annual nighttime operations at Columbus AFB. All other aspects of Alternative 2, including the number of personnel and dependents and the MILCON/UMMC and FSRM projects, would be identical to those described for Alternative 1 (*FEIS, Section 2.2.2.2*).

Table 2-1 of the FEIS provides the annual number of T-38C and T-7A aircraft on station for Alternatives 1 and 2. Table 2-5 of the FEIS provides the annual number of T-38C and T-7A aircraft operations for Alternatives 2 and 3.

Alternative 3. Columbus AFB would receive up to 77 T-7A aircraft and maintain the operations tempo described for Alternative 1. The receipt of 77 T-7A aircraft would be a 25 percent increase in the number of aircraft over Alternatives 1 and 2; however, by maintaining the operations tempo described for Alternative 1, Alternative 3 would result in a 25 percent increase in annual operations compared to Alternative 1 and no increase in annual operations compared to Alternative 2. Alternative 3 provides sufficient operational capacity for DAF to sustain pilot training and add a Fighter/Bomber Fundamentals curriculum to the installation. Alternative 3 also incorporates an expanded UMMC project alternative to install up to 58 shelters to accommodate the additional T-7A aircraft. All other aspects of Alternative 3 would be identical to those described for Alternative 1 (*FEIS, Section 2.2.2.3*).

Table 2-6 of the FEIS provides the annual number of T-38C and T-7A aircraft for Alternative 3. Table 2-5 of the FEIS provides the annual number of T-38C and T-7A aircraft operations for Alternatives 2 and 3.

No Action Alternative. With the No Action Alternative (*FEIS, Section 2.3*), DAF would not implement T-7A recapitalization at Columbus AFB. T-7A aircraft manufacturing has been contracted; therefore, if the No Action Alternative were implemented, the T-7A aircraft disposition would be determined separately. Columbus AFB's existing fleet of T-38C aircraft would continue to be used in their current capacity and they will reach the end of their service lives within the next decade. Maintenance

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requirements for these aircraft would continue to increase. No changes to current flight operations would likely occur until the end of the T-38Cs' service life. The retention and continued use of the T-38C aircraft would not change the number of personnel on Columbus AFB. The SUA for T-38C operations would continue to be used at the same tempo and in a similar manner. No MILCON/UMMC or FSRM projects would be undertaken to support the T-7A program at Columbus AFB.

Baseline conditions, described as the affected environment (*FEIS, Chapter 3*) for each resource area, would continue under the No Action Alternative. The No Action Alternative analysis in the EIS provides a benchmark for comparing the potential environmental effects of the action alternatives.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

Even though Alternative 1 has the fewest aircraft of the four alternatives considered by DAF, the No Action Alternative is the environmentally preferred alternative due to the lowest potential for adverse environmental impacts on air quality, the noise environment, land use compatibility, and environmental justice and sensitive receptor populations. The environmental analysis contained in the FEIS evaluated the number, type, time of day, and power settings of the proposed aircraft operations as well as the inherent air emission and noise characteristics of both aircraft and their engines to conclude that each of the three action alternatives would have a net increase in air pollution and noise on the affected population when compared with existing conditions. This conclusion demonstrates that taking no action would have fewer adverse environmental impacts and therefore is environmentally preferable to any of the three action alternatives.

COORDINATION AND CONSULTATION

As described more completely in the FEIS (*Sections 3.4 and 3.5; Appendix B*), DAF coordinated and consulted with federal and state agencies and federally recognized tribes throughout the EIS process.

Government-to-Government Consultation

In accordance with the National Historic Preservation Act (NHPA), Executive Order 13175, U.S. Department of Defense Instruction 4710.02, and Department of Air Force Instruction 90-2002, DAF completed government-to-government consultations with 18 potentially affected tribes. The Choctaw Nation of Oklahoma requested to become a consulting party and DAF perform an archaeological survey on the Area of Potential Effects (APE) because the installation lies within the tribe's Trail of Tears Removal Corridor. DAF performed the requested archaeological survey of the project sites with ground disturbance, and the findings were negative for cultural resources resulting in a recommendation of no effect on archaeological resources. The survey report was provided to the Choctaw Nation of Oklahoma and Mississippi Band of Choctaw Indians as well as the Mississippi State Historic Preservation Officer (SHPO), and each of those parties concurred with the results. Three other tribes responded they were unaware of any specific historic properties in the APE or the APE was outside of their tribal area of interest. The FEIS describes this consultation more completely in Section 3.5.2.1 and Appendix B.

Agency Consultation

NHPA Consultation with State Historic Preservation Officers

In compliance with Section 106 of the NHPA, DAF consulted with the Mississippi SHPO for a determination of effects to historic properties (*FEIS, Appendix B*). T-7A recapitalization would entail alterations to three historic-age buildings (i.e., Building 216, Building 452, and Building 454). DAF determined Building 216 was not eligible for listing in the National Register of Historic Places (NRHP), and while Buildings 452 and 454 were eligible for listing in the NRHP, no adverse effect would occur for

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both buildings from the proposed alterations. The Mississippi SHPO concurred with these findings and provided the following two conditions:

- 1. The proposed installation of the new vertical lift doors must occur within the existing openings for both buildings.
- 2. The application of a brick veneer to the exterior of both buildings must be eliminated. New exterior wall cladding must consist of metal panels similar in appearance as the existing exterior wall cladding.

DAF agreed to both conditions, and the Mississippi SHPO concurred with DAF's determination of no adverse effect to historic properties.

Section 7 Consultation with the U.S. Fish and Wildlife Service

In compliance with Section 7 of the Endangered Species Act, DAF informally consulted with the U.S. Fish and Wildlife Service (USFWS) regarding impacts to federally listed threatened and endangered species. In an informal consultation letter dated February 15, 2023, the Mississippi Field Office concurred with DAF's determination that the T-7A recapitalization at Columbus AFB may affect, but is not likely to adversely affect, eight federally listed or candidate species and would have no effect on the remaining 73 federally listed or candidate species with potential to occur on Columbus AFB or within or underlying the SUA proposed for flight operations (*FEIS, Appendix B*).

ENVIRONMENTAL CONSEQUENCES

T-7A recapitalization at Columbus AFB could impact several resource areas, but not significantly. DAF would minimize typical short-term impacts associated with construction and demolition projects by complying with environmental regulations (e.g., permitting) in all aspects. Long-term operational impacts would be minimized with continued implementation of existing noise abatement procedures and strategies. Notable environmental impacts from Alternative 3 are bulleted as follows:

- Short- and long-term, not significant, adverse impacts on the noise environment would occur. Short-term impacts would be from noise generated by heavy equipment during construction, and long-term impacts would be from the introduction of the noisier T-7A aircraft and the inclusion of night operations in the training program. Operational noise would increase areas of incompatible land use on and adjacent to Columbus AFB (*FEIS, Sections 3.3.2 and 3.6.2*).
- Short- and long-term, not significant, adverse impacts on air quality would occur. Short-term impacts would be from the use of heavy equipment during construction, and long-term impacts would be from operation of new facilities and flight operations. Criteria pollutant emissions would not exceed the *de minimis* level threshold or insignificance indicators. No future climate scenario or potential climate stressor would have significant effects on any element of T-7A recapitalization at Columbus AFB (*FEIS, Section 3.2.2*).
- Long-term, disproportionately high and adverse impacts on environmental justice and sensitive receptor populations would occur from increased noise and air emissions within four of the six Census Block Groups that coincide with the 65 A-weighted decibels noise zone for Alternative 3. Aircraft noise would result in a higher number of classroom learning interference events and an increase in the time above metric at two schools creating a disproportionate, adverse impact on children (*FEIS, Section 3.11.2*).
- No significant impacts would occur on biological resources and cultural resources (*FEIS, Sections 3.4.2 and 3.5.2*). As noted in the Coordination and Consultation section, DAF consulted

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with the USFWS, Mississippi SHPO, and potentially affected tribes to obtain concurrence with this impact determination.

- No significant impacts would occur on all other resource areas, which are geological resources, hazardous materials and wastes, infrastructure and transportation, safety, and water resources (*FEIS, Sections 3.7.2, 3.8.2, 3.9.2, and 3.10.2*).
- DAF received correspondence during the 30-day waiting period from the U.S. Department of the Interior (DOI) that raised concerns about noise impacts at National Park Service-managed properties beneath the SUA. Tables 3-43 and Table 3-60 of the FEIS provide the noise exposure levels which are much less than 65 dB DNL; they are less than 51 dB DNL for Alternative 1 and less than 52 dB DNL for Alternatives 2 and 3. The FEIS also contains analysis demonstrating noise levels from individual low-level events are similar for the T-7A and T-38C. The FEIS further concludes that visitors to the five NPS-managed properties would not experience a noticeable change in noise levels from flight operations compared to the baseline of current operations.

MITIGATION

Mitigation measures are actions that serve to avoid, minimize, or compensate for effects caused by a proposed action. Best management practices and environmental protection measures would be developed and employed to the greatest extent practicable to reduce the potential for and intensity of adverse impacts. Mitigations, BMPs, and environmental protections measures being adopted largely consist of complying with the Stormwater Pollution Prevention Plan; Spill Prevention, Control, and Countermeasure Plan; Hazardous waste Management Plan; the NPDES Construction General Permit; and updates to and compliance with Bird/Wildlife Aircraft Strike Hazard Plan.

DECISION

After considering the potential environmental consequences of T-7A recapitalization at Columbus AFB, comments, and concerns of the public and other key stakeholders, as well as other factors related to national defense, including current military operational needs and costs, DAF will implement Alternative 3, and Columbus AFB will receive up to 77 T- 7A aircraft. Alternative 3 is selected to provide sufficient operational capacity for DAF to sustain pilot training and add a Fighter/Bomber Fundamentals curriculum to the installation. DAF has adopted all practicable means to avoid or minimize environmental harm.

DAF will, by this decision, replace all T-38C aircraft at Columbus AFB with up to 77 T-7A aircraft. DAF will execute all portions of T-7A recapitalization at Columbus AFB including the operations, changes to the number of personnel and dependents, and construction and upgrade of facilities as defined for Alternative 3 as discussed above and in the FEIS.

ROBERT E. MORIARTY, P.E., SES Deputy Assistant Secretary of the Air Force (Installations) Date: 19 August 2024