EXECUTIVE SUMMARY

Environmental Impact Statement

for T-7A Recapitalization at
Sheppard Air Force Base, Texas

EISX-007-57-UAF-1727441048

May
2026

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Cover Photo Credit: Boeing T-7A Red Hawk Website, July 2022.
https://www.boeing.com/defense/t-7a/#/gallery

Cover Photo Note: The aircraft in the foreground is a T-7A "Red Hawk" prototype, and the aircraft in the background is a restored P-51C "Mustang." The P-51C were flown by the Tuskegee Airmen during World War II and have been retired from service for many decades. The P-51C is not part of this project.

DEPARTMENT OF THE AIR FORCE
WASHINGTON DC

OFFICE OF THE ASSISTANT SECRETARY

Freedom 250

May 26, 2026

MEMORANDUM FOR WHOM IT MAY CONCERN

FROM: SAF/IE
1665 Air Force Pentagon
Washington, DC 20330-1665

SUBJECT: Environmental Impact Statement (EIS) for T-7A Recapitalization at Sheppard Air Force Base (AFB), Texas, Certification of Page Limits and Deadline

This memorandum pertains to the Sheppard AFB T-7A Recapitalization EIS. In accordance with the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, et seq., the Department of the Air Force (DAF) has considered the factors mandated by NEPA in the preparation of this EIS.

I certify that the analysis within the EIS has been tailored to comply with page limits and deadlines. The EIS represents DAF's good-faith effort to prioritize and document the most important considerations required by NEPA within the congressionally mandated page limits. This prioritization reflects DAF's expert judgment. Considerations addressed briefly or unaddressed were, in DAF's judgment, to be comparatively unimportant or frivolous. The resulting EIS represents DAF's good-faith effort to fulfill NEPA's requirements within the Congressional timeline and such effort is substantially complete.

In the DAF's expert opinion, it has thoroughly considered the factors mandated by NEPA. The analysis contained within the EIS is, in DAF's judgment, adequate to inform and reasonably explain the DAF's final decision regarding the proposed action for T-7A recapitalization at Sheppard AFB.

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MICHAEL E. SAUNDERS, P.E., SES, DAF
Principal Deputy Assistant Secretary of the
Air Force (Energy, Installations & Environment)

ABBREVIATIONS AND ACRONYMS

AETC	Air Education and Training Command
AFB	Air Force Base
APZ	accident potential zone
BASH	Bird/Wildlife Airstrike Hazard
CO	carbon monoxide
CZ	clear zone
DAF	Department of the Air Force
dB	decibels
DNL	Day-Night Average Sound Level
EIS	Environmental Impact Statement
GHG	greenhouse gas
MOA	Military Operating Area
MTR	Military Training Route
NAAQS	National Ambient Air Quality Standards
NO_X	nitrogen oxides
POI	Points of Interest
ROI	region of influence
SECAF	Secretary of the Air Force
SHPO	State Historic Preservation Officer
SUA	special use airspace
tpy	tons per year

Executive Summary

ENVIRONMENTAL IMPACT STATEMENT

FOR

T-7A RECAPITALIZATION

AT

SHEPPARD AIR FORCE BASE, TEXAS

AIR EDUCATION AND TRAINING COMMAND

MAY 2026

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Executive Summary

Introduction

The United States Department of the Air Force (DAF), Air Education and Training Command (AETC) proposes to recapitalize the T-38C Talon flight training program at Sheppard Air Force Base (AFB), Texas, with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Sheppard AFB and associated special use airspace (SUA) to replace all T-38C aircraft assigned to the installation; temporary changes to the number of personnel and dependents in the Sheppard AFB region; and construction and upgrade of operations, support, and maintenance facilities.

Background. The T-38C is a twin-engine, high-altitude, supersonic jet used by DAF and other nations for pilot training. As an older aircraft, training with the T-38C does not prepare pilots adequately for the technological advancements of modern fourth and fifth generation fighter aircraft.[1] The T-38C is expected to reach the end of its service life within the next decade.

DAF plans to recapitalize the T-38C fleet with T-7A aircraft to provide a training environment suitable for modern aircraft. Program-wide, DAF expects to procure approximately 350 T-7A aircraft from Boeing and deliver these aircraft to the five T-38C pilot training installations using a geographically phased replacement plan.

In a strategic basing decision memorandum for record, dated February 16, 2018, the Secretary of the Air Force (SECAF) identified Joint Base San Antonio-Randolph as the preferred alternative and Columbus, Laughlin, Vance, and Sheppard AFBs as reasonable alternatives for T-7A recapitalization. DAF evaluated each of the five installations using criteria that included mission factors (e.g., weather, ability to meet syllabus requirements), infrastructure capacity, and potential environmental constraints and costs.

On January 29, 2021, the Acting SECAF approved the preferred sequencing and locations for the installations to possibly undergo T-7A recapitalization. Following AETC recommendations, the Acting SECAF selected Sheppard AFB to be the fifth of five installations to be analyzed environmentally for possible recapitalization. The focus of this Environmental Impact Statement (EIS) is the T-7A recapitalization at Sheppard AFB.

Purpose of and Need for Action

Purpose. The purpose of the Proposed Action addressed in this EIS is to continue the T-7A recapitalization program to prepare pilots to operate modern fourth and fifth generation aircraft.

Need. The Proposed Action is needed to provide infrastructure and training systems to support the newer T-7A aircraft, allow for enhanced and improved flight and simulator

[1] "Fourth generation" refers to those fighter aircraft developed or manufactured with updated variants in the later part of the 20th century, such as the F-15E or the F-16. "Fifth generation" refers to modern fighter aircraft with advanced avionics developed in the early part of the 21st century, such as the F-22 and F-35.

training, and ensure DAF pilot training requirements are met. By 2031, more than 60 percent of the Combat Air Force will be comprised of fifth generation aircraft, requiring a modern, capable training platform with capabilities beyond those available with the T-38C. Additionally, training systems provided with the newer T-7A aircraft allow for enhanced and improved flight and simulator training. The T-7A recapitalization program will allow DAF to provide more efficient and effective instructor and pilot training for operating fourth and fifth generation aircraft. T-7A recapitalization at Sheppard AFB would allow DAF to continue the geographically phased T-7A recapitalization sequence, ensuring DAF pilot training requirements are met.

Description of the Proposed Action and Alternatives

The Proposed Action is recapitalization of the T-38C flight training program at Sheppard AFB with T-7A aircraft. As noted previously, this is the fifth location of the T-7A recapitalization program. Recapitalization entails the following elements:

- Replacement of all T-38C aircraft assigned to Sheppard AFB with T-7A aircraft.
- Transition of aircraft operations at Sheppard AFB and associated SUA from the T-38C to the T-7A.
- Temporary changes to the number of personnel and dependents in the Sheppard AFB region.
- Construction of and upgrades to operations, support, and maintenance facilities to support pilot training and aircraft operations and maintenance.

DAF is considering three alternative ways to implement T-7A recapitalization at Sheppard AFB (i.e., Alternatives 1, 2, and 3). These alternatives have different numbers of T-7A aircraft that would be stationed at Sheppard AFB and different numbers of T-7A operations at Sheppard AFB and associated SUA.

Proposed Elements Common to All Action Alternatives

Personnel and Dependents. During the aircraft transition period (i.e., 2034 through 2036), a temporary increase of approximately 100 personnel is projected at Sheppard AFB. This increase would occur during the transition period because DAF would be training pilots with 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 service. After the aircraft transition period, the workforce associated with the T-7A flight training program would be approximately the same as that for the current T-38C flight training program and identical across all action alternatives because of physical space limitations to support additional maintenance and training staff.

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 190 dependents would accompany the 100 additional personnel during the aircraft transition period, for a total of 290 additional people in the Sheppard AFB vicinity from 2034 through 2036. After the aircraft transition period, the dependent population would be approximately the same as current levels and identical across all action alternatives.

dependent population would be approximately the same as current levels and identical across all action alternatives.

Construction and Renovation Projects. Several construction and renovation projects potentially would occur at Sheppard AFB to provide modern facilities and infrastructure to support T-7A aircraft maintenance, training, and operational requirements. These projects are as follows:

- Construct a Ground-Based Training System (GBTS) facility.
- Construct a Unit Maintenance Training (UMT) facility/maintenance hangar.
- Construct ramp extension.
- Construct new hush house pad adjacent to the existing hush house.
- Demolish existing T-38C shelters and construct new T-7A shelters. Taxi lines would be removed and repainted and electrical utilities, proper lighting, and tie-downs/grounding points would be installed for each shelter.
- Construct addition to Building 2521, Egress Shop.
- Install jet blast deflectors on the airfield.
- Improve airfield by remarking the T-38C ramp to the width of the T-7A. Install new moorings and anchor rods for T-7A aircraft.
- Renovate interior of Squadron Operations Building 2320.
- Modify interior components of an existing hangar. Hangars being considered for modification include Buildings 2404, 2406, 2408, and 2410.
- Remove T-38C Centralized Aircraft Support System modules where T-7A aircraft would be located.
- Repair/prepare existing aircraft pavement for a compass rose and trim pad.
- Construct a concrete pad to store T-7A ejection system explosive components.
- Expand existing hammerhead paved area to fit the width of the T-7A.
- Renovate interior and modify electrical in Building 2518 to store and maintain night vision goggles.

The construction and renovation projects are expected to begin in 2031 and 2032 and be completed prior to the arrival of the first T-7A aircraft in 2034. The exact projects selected for implementation and their timetable for execution will depend on funding levels and priorities in the overall T-7A program. In total, the proposed construction and renovation projects would disturb approximately 3.79 acres.

Alternative 1

Alternative 1 addresses DAF's anticipated training needs. Sheppard AFB would receive up to 108 T-7A aircraft and phase in T-7A operations at a level sustaining pilot training while simultaneously phasing out the T-38C.

Aircraft. T-7A aircraft would be delivered to Sheppard AFB from the manufacturer (Boeing) beginning in 2034 and continuing through 2036. When all T-7A deliveries are complete at the end of 2036, up to 108 T-7A aircraft would be assigned to Sheppard AFB. As T-7A aircraft are placed into service, T-38C aircraft would be withdrawn from service. The first T-38Cs would be withdrawn in 2034 and the last in 2036. In total, all

131 T-38C aircraft assigned to Sheppard AFB would be withdrawn from service and considered for retirement or repurposed for use at other locations.

Aircraft Operations. Aircraft operations at Sheppard AFB and its associated SUA (i.e., Military Operating Areas [MOAs], Restricted Area, and Military Training Routes [MTRs]) would transition from the T-38C to the T-7A over the 3-year aircraft delivery and withdrawal period. T-7A operations would begin in 2034 and increase to steady state in 2037. T-38C operations would begin to decrease in 2034 and conclude by the end of 2036. No further T-38C operations would occur in 2037 or thereafter.

On a per aircraft basis, the T-7A would perform the same number of operations as the current T-38C, but on an installation-wide basis, total annual T-7A operations in 2037 and later would be approximately 31,400 fewer than current T-38C operations (i.e., 147,300 versus 178,700) because 23 fewer aircraft would be assigned to the installation.

The Proposed Action includes daytime, evening, and nighttime T-7A operations at the Sheppard AFB airfield. Evening operations are performed from dusk until 10 p.m., and nighttime operations, as defined for aircraft noise modeling, occur between 10 p.m. and 7 a.m. At full implementation, up to 1,214 annual nighttime T-7A operations would occur at Sheppard AFB for Alternative 1, which is less than 1 percent of the total annual T-7A operations. All operations within the SUA would occur during authorized active times during daytime and evening hours (7 a.m. to 10 p.m.), and no nighttime (between 10 p.m. and 7 a.m.) operations would occur.

Exact T-7A flight parameters, such as flight tracks, patterns, and altitudes, have not yet been developed and will not be known until DAF begins flying the T-7A for pilot training. Therefore, at this stage of the proposal, T-7A flight parameters are assumed to be similar to those flown by the T-38C for the No Action Alternative. All routine T-38C and T-7A traffic would use runways in the manner currently used.

T-7A pilot training would use the same SUA currently used by the T-38C. No changes to SUA configurations (i.e., size, shape, or location) or their active times are proposed for T-7A recapitalization. This SUA consists of MOAs Hollis, Washita, Westover 1, and Westover 2; Restricted Area R-5601 (Falcon Range); and MTRs IR-103, VR-158, VR-159, VR-1139, VR-1140, VR-1141, VR-1142, VR-1143, and VR-1146. T-7A aircraft would be limited to sub-sonic speeds in all phases of pilot training.

Alternative 2

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. Sheppard AFB would receive up to 108 T-7A aircraft and perform operations at a level that is approximately 25 percent greater than Alternative 1. The number of T-7A aircraft delivered to Sheppard AFB, timeline for aircraft operations, construction and renovation projects, and personnel changes would be the same as described for Alternative 1. The difference from Alternative 1 is that beginning in 2034, T-7A and T-38C aircraft would perform annual operations at Sheppard AFB and associated SUA at an operational tempo that is 25 percent greater than Alternative 1. Total annual T-7A operations in 2037 and later at the installation would be approximately 5,400 greater than current T-38C operations (i.e., 184,100

versus 178,700). T-7A nighttime operations would occur with up to 1,518 annual nighttime operations at Sheppard AFB.

Alternative 3

Alternative 3 is intended to provide DAF with flexibility for future capacity needs. Sheppard AFB would receive up to 131 T-7A aircraft. On a per aircraft basis, the T-7A would perform the same number of operations as the current T-38C, and because the end state number of T-7A aircraft would be identical to the current number of T-38C aircraft, total annual T-7A operations in 2037 and later would be equal to the current number of T-38C operations (approximately 178,700). Compared to Alternative 1, total annual T-7A operations would be approximately 21 percent greater than Alternative 1. T-7A nighttime operations would occur with up to 1,473 annual nighttime operations at Sheppard AFB.

Alternative 3 also includes construction of additional shelters on existing pavement of the aircraft parking ramp to accommodate the 23 additional T-7A aircraft, compared to Alternative 1. All other aspects for Alternative 3 would be identical to those described for Alternative 1.

If Alternative 3 were selected for implementation, the SECAF may later authorize a modification to the number of aircraft at Sheppard AFB.

No Action Alternative

The No Action Alternative assesses environmental consequences that may occur if the Proposed Action is not implemented. The No Action Alternative serves as a baseline against which the impacts of the Proposed Action and other potential action alternatives can be evaluated.

For the No Action Alternative, DAF would not implement T-7A recapitalization at Sheppard AFB. Sheppard AFB's existing fleet of T-38C aircraft would continue to be used in their current capacity. No changes to current flight operations would occur even though T-38C aircraft will reach the end of their service lives within the next decade. Maintenance requirements for these aircraft would continue to increase. The retention and continued use of the T-38C aircraft would not change the number of personnel on Sheppard AFB. The number and types of T-38C aircraft operations would remain the same, consistent with the current training curriculum. The SUA (MOAs, Falcon Range, and MTRs) for T-38C operations would continue to be used at the same tempo and in a similar manner. No construction or renovation projects would be undertaken to support the T-7A program at Sheppard AFB.

T-7A aircraft manufacturing has been contracted. If the No Action Alternative were selected, DAF would re-evaluate their T-7A strategic basing decisions and may implement all or a portion of the basing requirements proposed for Sheppard AFB at an undetermined installation.

Identification of the Preferred Alternative

Following the Draft EIS public comment period, DAF selected Alternative 3 as its preferred alternative because Alternative 3 provides sufficient T-7A aircraft to facilitate Sheppard AFB's projected pilot training requirement.

Environmental Consequences

DAF used the scoping process to identify environmental issues to be carried forward for analysis and de-emphasize insignificant issues. The environmental resources analyzed in detail in the EIS are air quality, noise, land use, biological resources, cultural resources, hazardous materials and wastes, safety, and water resources. **Table ES-1** provides a summary of the environmental impacts associated with each alternative.

Mitigation Measures

Land Use. Alternatives 1, 2, and 3 would expand noise contours and increase existing land uses subject to noise levels that may be deemed incompatible, but impacts would not be considered significant because the majority of land uses that would be impacted by the noise contours would be the Open/Recreation/Agriculture/Low-Density Residential land use category. The mitigation measures discussed below would be implemented between DAF and/or the local municipalities to further enhance compatible development around Sheppard AFB.

DAF is committed to working with Wichita County and the city of Wichita Falls, Texas, as well as the North Texas Regional Planning Commission, the city of Burkburnett, and others to analyze compatible land use surrounding Sheppard AFB under T-7A operating conditions. Additionally, this working relationship would extend to the municipalities surrounding Fort Sill and Falcon Range, including the city of Lawton. As part of that commitment, DAF would partner with local governments to perform the following tasks:

- Prepare an Air Installations Compatible Use Zones Study update at an appropriate time to be determined to address any changes in land area within the greater than 65 dB DNL noise contours for Sheppard AFB and potentially with Falcon Range, as appropriate.
- Coordinate with state and local agencies on recommendations regarding compatible land use and potential encroachment concerns inside and outside of the DNL footprint, as applicable (i.e., large-scale developments, transportation projects that could encourage development, or tall structures such as cell towers that could penetrate airfield imaginary surfaces).
- Encourage municipalities to promote the most compatible land use by updating local zoning ordinances and building construction standards, especially for high-noise areas.

Floodplains. Because all the proposed construction and renovation projects, except the GBTS facility, would be constructed within a floodplain, each project would be designed to avoid and minimize floodplain impacts and flood damage to facilities to the extent possible. For the proposed maintenance hangar/UMT facility, the floor and any associated flood-susceptible utilities would be constructed a minimum of 3 feet above the 100-year flood elevation. Doing so would require an earthen rise to be placed beneath the facility measuring approximately 3 to 5 feet above the site's current elevation and approximately 3 feet above the eastern taxiway elevation. Similar floodplain mitigation measures would be developed for the other proposed projects as their designs advance.

Table ES-1. Summary of Environmental Impacts

Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Brief Description of the Alternatives			
T-7A recapitalization at Sheppard AFB would occur with up to 108 T-7A aircraft and phase in T-7A operations at a level sustaining pilot training while simultaneously phasing out the T-38C.	T-7A recapitalization at Sheppard AFB would occur with up to 108 T-7A aircraft and T-7A operations at a level 25 percent greater than Alternative 1.	T-7A recapitalization at Sheppard AFB would occur with up to 131 T-7A aircraft and T-7A operations at a level approximately 21 percent greater than Alternative 1.	T-7A recapitalization at Sheppard AFB would not occur. T-38C training would continue in its current capacity.
Air Quality			
Short-term, not significant, adverse impacts would occur in the Sheppard AFB region of influence (ROI) from construction and temporary increases in personnel during the aircraft transition period, and long-term, not significant, adverse and beneficial impacts would occur in the Sheppard AFB and SUA ROIs from operation of expanded facilities and aircraft flight and maintenance operations. The proposed aircraft operations would result in annual net increases and decreases in criteria pollutants and greenhouse gases (GHGs) depending on the location, year, and pollutant in question. Starting in 2036, net annual nitrogen oxides (NO_X) emissions in the Sheppard AFB ROI would exceed the insignificance indicator; however, considering the type and context of such emissions, an exceedance of National Ambient Air Quality Standards (NAAQS) would not occur. Air emissions within the counties subject to the General Conformity Rule would not exceed the applicable *de minimis* level threshold. Net GHG emissions would not be significant.	Impacts from construction, operation of expanded facilities, and temporary increases in personnel would be identical to Alternative 1. Long-term, adverse and beneficial impacts would occur in the Sheppard AFB and SUA ROIs from aircraft operations and be greater than those from Alternative 1 but remain not significant. Although carbon monoxide (CO) emissions within the Sheppard AFB ROI would exceed the insignificance indicator in 2034 due to increased T-38C operations, the steady state (i.e., 2037 and later) annual net CO emissions would decrease by more than 1,000 tons per year (tpy) demonstrating a long-term, beneficial impact. Like Alternative 1, net annual NO_X emissions in the Sheppard AFB ROI would exceed the insignificance indicator starting in 2036 but would not contribute to an exceedance of NAAQS. Air emissions within the counties subject to the General Conformity Rule would not exceed the applicable *de minimis* level threshold. Although net GHG emissions would be greater than Alternative 1, they would remain not significant.	Construction air emissions would be slightly greater than Alternative 1 due to the additional shelters but would still have a not significant impact. Impacts from operation of expanded facilities and temporary increases in personnel would be identical to Alternative 1. Long-term, not significant adverse and beneficial impacts from aircraft operations would occur in the Sheppard AFB and SUA ROIs and be greater than those from Alternative 1 but slightly less than Alternative 2. Like Alternatives 1 and 2, net annual NO_X emissions in the Sheppard AFB ROI would exceed the insignificance indicator starting in 2036 but would not contribute to an exceedance of NAAQS. Air emissions within the counties subject to the General Conformity Rule would not exceed the applicable *de minimis* level threshold. Net GHG emissions would not be significant.	No impacts would occur.

Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Noise			
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. All construction would be within the Sheppard AFB boundary, be collocated with other existing noise-compatible activities, and end with the facility construction phase. No construction-related noise impacts to on- or off-installation residences are anticipated. Long-term impacts are from the introduction of T-7A aircraft. The estimated on- and off-installation land area within the 65 decibels (dB) or greater Day-Night Average Sound Level (DNL) would increase by 1,831 acres from existing conditions. The estimated on- and off-installation population within the 65 or greater DNL would increase by 556 from existing conditions. These newly exposed areas encompass numerous land uses, including residential, commercial, undeveloped, and agricultural. Alternative 1 would result in up to 8.6 additional speech-interfering events per daytime hour at four Points of Interest (POIs) and a decrease of up to 2.4 events at five POIs as compared to existing conditions. No on- or off-installation populations would be exposed to a DNL of at least 80 dB; therefore, the potential for hearing loss (PHL) is not anticipated. Any increases in noise associated with SUA sorties, including at Falcon Range, would not be significant.	Construction-related noise levels would be the same as those described for Alternative 1. The estimated on- and off-installation land area within the 65 dB or greater DNL would increase by 2,990 acres from existing conditions. The estimated on- and off-installation population within the 65 or greater DNL would increase by 1,787 from existing conditions. These newly exposed areas encompass numerous land uses, including residential, commercial, undeveloped, and agricultural. Alternative 2 would result in between 0.1 and 11.3 additional speech-interfering events per daytime hour across relevant POI as compared to existing conditions. No on- or off-installation populations would be exposed to a DNL of at least 80 dB; therefore, the PHL is not anticipated. Any increases in noise associated with SUA sorties, including at Falcon Range, would not be significant.	Construction-related noise levels would be the same as those described for Alternative 1; however, construction noise could last slightly longer due to the construction of the additional T-7A shelters to accommodate the greater number of aircraft. The estimated on- and off-installation land area within the 65 dB or greater DNL would increase by 2,830 acres from existing conditions. The estimated on- and off-installation population within the 65 or greater DNL would increase by 1,543 from existing conditions. These newly exposed areas encompass numerous land uses, including residential, commercial, undeveloped, and agricultural. Alternative 3 would result in between 0 and 10.9 additional speech-interfering events per daytime hour across relevant POI as compared to existing conditions. No on- or off-installation populations would be exposed to a DNL of at least 80 dB; therefore, the PHL is not anticipated. Any increases in noise associated with SUA sorties, including at Falcon Range, would not be significant.	No impacts would occur.

Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Land Use			
No significant impacts would occur from construction and renovation projects. Projects would be compatible with land use areas and sited, designed, and constructed consistent with the Sheppard AFB Installation Development Plan (IDP). Noise from aircraft operations would result in no significant impacts on land use and land use compatibility. An increase of approximately 1,471 acres of off-installation land would fall within the 65 dB or greater DNL noise zone when compared to existing conditions resulting in a slight increase in incompatible land uses and the number of individuals living within the noise zones. Off-installation areas where noise zones would occur are similar to existing conditions and the increase in off-installation acreage is associated with Open/Recreation/ Agriculture/Low-Density Residential. Therefore, although there may be an increase in what could potentially be considered incompatible land uses, it would not be considered a significant impact. Aircraft operations at Falcon Range would result in an increase of approximately 523 off-range acres within the 65 dB or greater DNL noise zone. Because all areas within the noise zones are considered Open/Recreation/Agriculture/Low-Density Residential, which are compatible with these noise levels, this change would not be a significant impact on land use compatibility.	Construction-related land use impacts would be the same as Alternative 1. Noise generated from aircraft operations would be slightly greater than those described for Alternative 1. An increase of approximately 2,470 acres of off-installation land would fall within the 65 dB or greater DNL noise zone when compared to existing conditions resulting in an increase in incompatible land uses and the number of individuals living within the noise zones. Off-installation areas where noise zones would occur are similar to existing conditions and the increase in off-installation acreage is associated with Open/Recreation/ Agriculture/Low-Density Residential. Therefore, although there may be an increase in what could potentially be considered incompatible land uses, it would not be considered a significant impact. Aircraft operations at Falcon Range would result in an increase of approximately 1,067 off-range acres within the 65 dB or greater DNL noise zone. Because all areas within the noise zones are considered Open/Recreation/ Agriculture/Low-Density Residential, which are compatible with these noise levels, this change would not be a significant impact on land use compatibility.	Construction-related land use impacts would be the same as Alternative 1. Noise generated from aircraft operations would be slightly greater than those described for Alternative 1. An increase of approximately 2,331 acres of off-installation land would fall within the 65 dB or greater DNL noise zone when compared to existing conditions resulting in an increase in incompatible land uses and the number of individuals living within the noise zones. Off-installation areas where noise zones would occur are similar to existing conditions and the increase in off-installation acreage is associated with Open/Recreation/Agriculture/Low-Density Residential. Therefore, although there may be an increase in what could potentially be considered incompatible land uses, it would not be considered a significant impact. Aircraft operations at Falcon Range would result in an increase of approximately 988 off-range acres within the 65 dB or greater DNL noise zone. Because all areas within the noise zones are considered Open/Recreation/Agriculture/Low-Density Residential, which are compatible with these noise levels, this change would not be a significant impact on land use compatibility.	No impacts would occur.

Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Biological Resources			
Short- and long-term, not significant, adverse impacts on vegetation and wildlife would occur at Sheppard AFB from the construction projects. Long-term, not significant, adverse impacts on wildlife may occur from Bird/Wildlife Aircraft Strike Hazard (BASH) incidents and noise from the proposed aircraft operations. Alternative 1 would have no effect on the 10 special status species with the potential to occur on Sheppard AFB or with potential for flight at the same altitude as the proposed T-7A operations within the SUA.	Short- and long-term impacts would be the same as those described for Alternative 1. The increase in operations would slightly raise the potential for BASH incidents but result in similar overall impacts.	Short- and long-term impacts would be the same as those described for Alternative 1. The increase in operations would slightly raise the potential for BASH incidents but result in similar overall impacts and be identical to baseline conditions.	No impacts would occur.
Cultural Resources			
The only aspects of the Proposed Action with potential to effect historic properties are the construction and renovation projects. DAF determined that these projects would have no effect on historic properties and consulted with the Texas State Historic Preservation Officer (SHPO). The SHPO concurred with this determination on January 3, 2025.	Impacts would be the same as those described for Alternative 1.	Impacts would be the same as those described for Alternative 1.	No impacts would occur

Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Hazardous Materials and Wastes			
The additional quantities of hazardous materials, wastes, and petroleum products required for construction and aircraft maintenance during the aircraft transition period would result in short-term, not significant, adverse impacts. Their quantities would return to current levels by 2037, resulting in no long-term impacts. Short-term, not significant, adverse impacts could occur from the renovation of Buildings 2320, 2404, 2406, 2408, and 2410 because these buildings potentially contain toxic substances in building materials. Long-term, not significant, beneficial impacts would occur from renovation of these buildings by reducing the potential for future human exposure to toxic substances. No impacts on or from legacy environmental contamination, per- and polyfluoroalkyl substances, or radon would occur.	Impacts would remain not significant but be slightly greater than those described for Alternative 1, because the 25 percent increase in aircraft operations would require additional quantities of hazardous materials, wastes, and petroleum products (most notably jet fuel) to be delivered, stored, used, and disposed of appropriately at Sheppard AFB.	Impacts would remain not significant but be slightly greater than those described for Alternative 1 and identical to baseline levels. Compared to Alternative 1, the approximately 21 percent increase in operations and up to 23 additional aircraft to maintain would require additional quantities of hazardous materials, wastes, and petroleum products (most notably jet fuel) to be delivered, stored, used, and disposed of appropriately at Sheppard AFB. However, the number of T-7A aircraft and flight operations would be the same as baseline levels.	No impacts would occur.
Safety			
Short-term, not significant, adverse impacts on contractor safety would occur during construction and renovation. No adverse impacts on the safety of military personnel or civilians would occur. Environmental health and safety risks would not disproportionately impact children. No adverse impacts on flight safety would occur. Annual flight operations at Sheppard AFB would decrease by approximately 31,000 operations at full implementation, resulting in a slightly lower potential for aircraft mishaps compared to existing conditions. All aircraft operations would continue to be performed in accordance with standard flight rules and local operating procedures and policies. The clear zones (CZs) and accident potential zones (APZs) would remain unchanged.	Impacts on contractor and mission safety would be the same as those described for Alternative 1. Long-term, not significant, adverse impacts on flight safety would occur from 25 percent increased aircraft operations compared to Alternative 1, which would result in an increased potential for BASH incidents and other mishaps. The CZs and APZs would remain unchanged.	Impacts on contractor and mission safety would be the same as those described for Alternative 1. Impacts on flight safety would be greater than those described for Alternative 1, but identical to current conditions. Alternative 3 would not increase the potential for mishaps, and individuals living within APZs I and II would not be at an additional risk. The CZs and APZs would remain unchanged.	No impacts would occur.

Alternative 1	Alternative 2	Alternative 3	No Action Alternative
Water Resources			
Short- and long-term, not significant, indirect, adverse impacts on groundwater and surface water could occur. Construction would increase impervious surface area by approximately 165,300 ft^2 (3.79 acres), which could potentially decrease groundwater recharge and increase stormwater runoff. Temporary increases in hazardous materials and petroleum product use would negligibly increase the potential for an accidental release to occur and for the contamination to reach nearby groundwater aquifers and surface water features. No direct impacts on wetlands would occur. With exception of the proposed GBTS facility, all the proposed construction and renovation projects would occur within a floodplain. Construction within a floodplain is unavoidable, and there are no practicable alternatives for the proposed projects outside of a floodplain.	Impacts would be similar to those described for Alternative 1. Increased aircraft operations would slightly increase the potential for an accidental release of hazardous materials or petroleum products to contaminate groundwater aquifers and surface water.	Impacts would be similar to those described for Alternative 2. Compared to Alternatives 1 and 2, the 23 additional aircraft to maintain would slightly increase the potential for an accidental release of hazardous materials or petroleum products to contaminate groundwater aquifers and surface water. The project to install sufficient shelters for all T-7A aircraft would occur on the Sheppard AFB aircraft parking ramp, which is an entirely existing impervious surface, and would result in no additional impervious surface area or impacts on water resources.	No impacts would occur.