



Public Scoping

ENVIRONMENTAL IMPACT STATEMENT



Photo Credit: Boeing T-7A Red Hawk Website, September 2021, <https://www.boeing.com/defense/t-7a#/gallery>

T-7A RECAPITALIZATION AT COLUMBUS AIR FORCE BASE, MISSISSIPPI

OVERVIEW

- The National Environmental Policy Act
- Public Scoping
- Background & Purpose and Need
- Elements of Columbus AFB T-7A Recapitalization
- Construction and Personnel & Dependents
- Alternatives Selection Criteria
- Proposed Action, Alternative 1, Alternative 2, & No Action
- Topics for the EIS and Anticipated Impacts
- Comments Submission



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THE NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act (NEPA) of 1969 was enacted to address concerns about federal actions and their effects on the environment.

- Under NEPA, the analysis of environmental consequences is presented in an Environmental Impact Statement (EIS), which accomplishes the following objectives:
 - Identify and describe the affected environment.
 - Evaluate the potential environmental consequences of reasonable alternatives.
 - Identify environmental permits and specific mitigation measures to avoid, minimize, or reduce adverse environmental impacts, if required.
- The NEPA process concludes with a Record of Decision (ROD) that identifies which alternative is selected and outlines any mitigation measures that are required.
- The U.S. Department of the Air Force (DAF) has issued a Notice of Intent to prepare an EIS in accordance with NEPA.

Steps in the EIS Process



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WHAT IS PUBLIC SCOPING?

- An early and open process for identifying issues and alternatives to be addressed in an EIS.
- Conducted in compliance with NEPA.

Purpose of Public Scoping:

- Provide the public with information about a proposed action, alternatives, and topics that will be analyzed in the EIS.
- Conduct public outreach and receive public input on the information to be presented in the EIS.



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AFTER PUBLIC SCOPING

After the public scoping period has ended, DAF will:

- Incorporate public input into the proposal and develop the Draft EIS, which is expected to be completed in late 2022.
- Make the Draft EIS available to the public for review for a minimum of 45 days.
- Incorporate applicable input on the Draft EIS into the development of the Final EIS, which is anticipated in mid 2023; a Record of Decision could be signed no sooner than 30 days after the Final EIS is released.



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REMOTE PUBLIC SCOPING

For this EIS, public scoping is being accomplished remotely in accordance with the 2020 version of 40 Code of Federal Regulations Part 1506.6.

During remote scoping, all scoping materials will be available to the public for online browsing or download from the project website <https://columbus.t-7anepadocuments.com/> or as hardcopies at the Columbus-Lowndes Public Library (314 7th Street North, Columbus, Mississippi). To request hardcopies, please use one of the methods outlined below. For printed material requests, the standard U.S. Postal Service shipping timeline will apply. Please consider the environment before requesting printed material.

Scoping comments can be submitted in English using one of the following methods:

- **Postal Mail:**

Mr. Nolan Swick, AFCEC/CZN
Attn: Columbus AFB T-7A Recapitalization EIS
Headquarters Air Education and Training Command Public Affairs
100 H. East Street, Suite 4
Randolph AFB, TX 78150

- **Email:** nolan.swick@us.af.mil; Attn: Columbus AFB T-7A Recapitalization EIS

- **Project Website:** <https://columbus.t-7anepadocuments.com/>



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BACKGROUND

DAF proposes to recapitalize the T-38C Talon flight training program at Columbus Air Force Base (AFB) with T-7A Red Hawk aircraft because:

- The T-38C is expected to reach the end of its service life within the next decade.
- Training with the T-38C fails to prepare pilots for the technological advancements of modern fourth and fifth generation aircraft including nighttime flight training.
- The Secretary of the Air Force has made strategic basing decisions to recapitalize existing T-38C pilot training installations, and Columbus AFB would be the second of five T-38C installations to be environmentally analyzed for possible recapitalization.



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PURPOSE AND NEED

Purpose: The purpose of this proposal is to continue the T-7A recapitalization program by recapitalizing Columbus AFB to prepare pilots to operate the more technologically advanced T-7A aircraft.

Need: Recapitalization is needed because the current training practices with the older T-38C aircraft fail to prepare pilots for the technological advancements of fourth and fifth generation aircraft.



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ELEMENTS OF COLUMBUS AFB T-7A RECAPITALIZATION

- Acquisition of T-7A aircraft to replace all T-38C aircraft assigned to Columbus AFB.
- Transition of operations at Columbus AFB and associated airspace from the T-38C to T-7A.
- Introduction of nighttime (between 10 p.m. and 7 a.m.) T-7A flight operations.
- Changes to the number of personnel and dependents in the Columbus AFB region.
- Construction and upgrade of specific facilities to support the pilot training and operations and maintenance of aircraft.

Number of aircraft, aircraft operations, and nighttime operations are evaluated as part of the Proposed Action and alternatives.



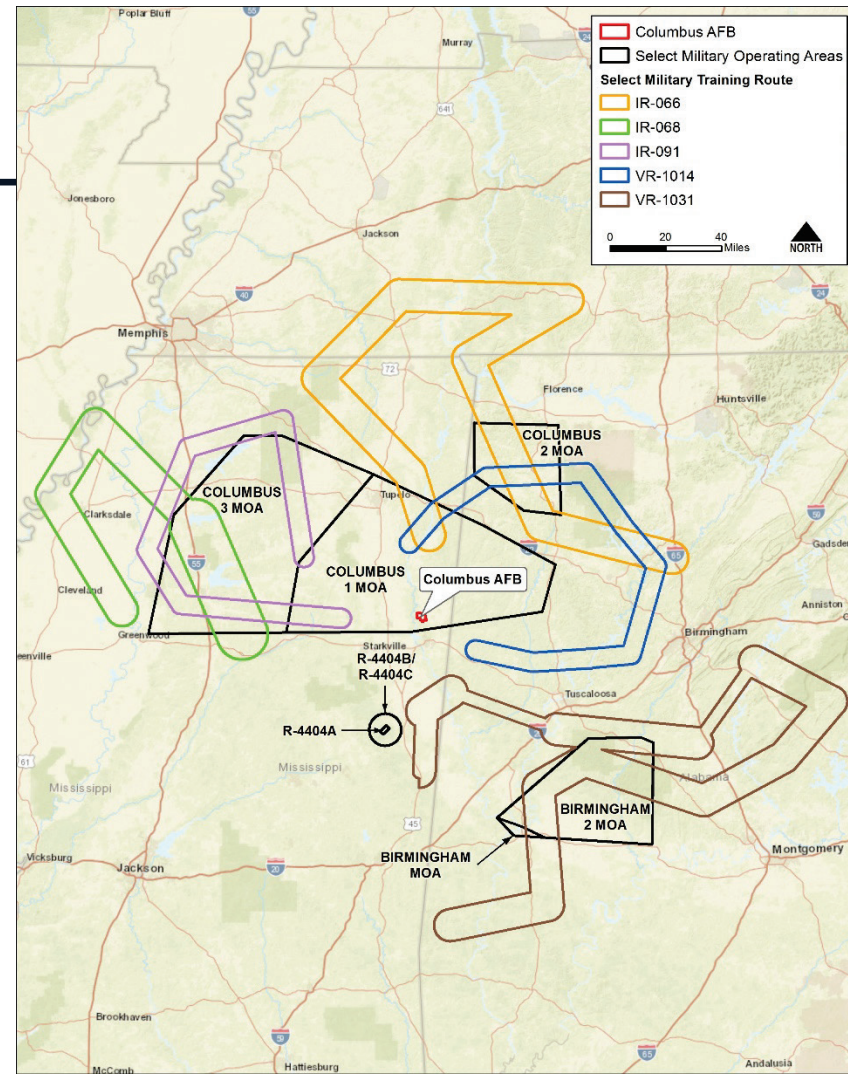
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REGION OF IMPACT

- Columbus AFB.
- Existing military training airspace areas:
 - Military Operating Areas: Columbus 1, Columbus 2, Columbus 3, Birmingham, and Birmingham 2.
 - Military Training Routes: IR-066, IR-068, IR-091, VR-1014, and VR-1031.
 - Range: R-4404.



Region of Impact

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CONSTRUCTION

- Ground Based Training System (GBTS) Facility
- Unit Maintenance Trainer (UMT) Facility
- Hush House
- 61 T-7A Shelters
- Addition to Egress Shop
- Jet Blast Deflectors
- Nine facilities sustainment, restoration, and modernization projects.



Locations of Major Construction Projects



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PERSONNEL AND DEPENDENTS

- Increase of 43 personnel and 82 dependents for 125 additional persons during the aircraft transition (2028 and 2029).
- Decrease of 31 personnel and 59 dependents for 90 fewer persons after 2029 (compared to current levels).



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ALTERNATIVES SELECTION CRITERIA

The Secretary's preference for Columbus AFB to be the second installation to undergo possible T-7A recapitalization was based on factors such as least impact on continued pilot production during the transition of aircraft types, most efficient cost and student production/management plan, and alignment with AETC's student pipeline flow for curricula.

Alternatives for T-7A recapitalization at Columbus AFB have been evaluated against the following selection standards:

1. An alternative must not result in major operational constraints to existing missions. Operational constraints would occur if a currently ongoing operation, activity, or mission were limited by proposed activities.
2. An alternative must be adaptable and compatible with current infrastructure capabilities.
3. An alternative should minimize the need for new construction and land disturbance versus renovation or reuse of existing facilities.

DAF is considering the alternatives the Proposed Action, two reasonable action alternatives (Alternatives 1 and 2), and No Action. The Proposed Action and both action alternatives meet the selection standards and will be analyzed in the Draft EIS.



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PROPOSED ACTION

61 T-7A Aircraft and T-7A Operations at Level Sustaining Pilot Training while Simultaneously Phasing Out the T-38C and Phasing In the T-7A

- 3-year aircraft delivery/withdrawal period between 2028 and 2030 (see next slide).
- Pilot training operations performed at level to meet anticipated training needs.
- Operations are takeoffs, landings, the approach phase of a “touch-and-go”, and the takeoff phase of a “touch-and-go”.
- Up to 474 annual nighttime (10 p.m. to 7 a.m.) T-7A operations (see slide after next).
- Use existing T-38C military training airspace areas.
- No changes to airspace configurations.
- Sub-sonic operations only.



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T-38C AND T-7A AIRCRAFT CHANGES FOR THE PROPOSED ACTION AND ALTERNATIVE 1

Aircraft Type	2021 Baseline	2028	2029	2030	2031 and Later
Annual Aircraft Withdrawn from/ Delivered to Columbus AFB					
T-38C (withdrawn)	N/A	25	45	17	0
T-7A (delivered)	N/A	21	31	9	0
Total T-38C/T-7A Aircraft at Columbus AFB					
T-38C	85	62	17	0	0
T-7A	0	21	52	61	61
Total Aircraft	85	83	69	61	61

Key: N/A = not applicable



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T-38C AND T-7A AIRCRAFT OPERATIONS FOR THE PROPOSED ACTION

Aircraft Type	2021 Baseline	2028	2029	2030 and Later
Operations at Columbus AFB				
Annual Aircraft Operations (Daytime)				
T-38C	138,006	98,349	26,967	0
T-7A	0	32,497	80,469	94,395
Total	138,006	130,846	107,436	94,395
Annual Aircraft Operations (Nighttime) ¹				
T-38C	0	0	0	0
T-7A	0	163	404	474
Total	0	163	404	474
Operations within Airspace Training Areas (MOAs, Ranges, and MTRs)				
Annual Aircraft Operations within the Training Airspace ²				
T-38C	7,133	5,083	1,394	0
T-7A	0	1,722	4,263	5,001
Total	7,133	6,805	5,657	5,001

Notes:

¹ Denotes number of operations between 10 p.m. and 7 a.m.

² Denotes total aircraft operations within all MOAs, Range R-4404, and MTRs. Each MOA, Range R-4404, and MTR will experience varying levels of aircraft operations within the total shown.



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ALTERNATIVE 1

61 T-7A Aircraft and T-7A Operations 25 Percent Greater than the Proposed Action

- Covers potential scenario in which DAF requires a surge or increase in pilot training operations above current plan.
- Identical to Proposed Action except:
 - Operations are 25 percent greater with up to 593 annual nighttime (10 p.m. to 7 a.m.) T-7A operations (see next slide).



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T-38C AND T-7A AIRCRAFT OPERATIONS FOR ALTERNATIVES 1 AND 2

Aircraft Type	2021 Baseline	2028	2029	2030 and Later
Operations at Columbus AFB				
Annual Aircraft Operations (Daytime)				
T-38C	138,006	98,349	26,967	0
T-7A	0	40,621	100,586	117,994
Total	138,006	138,970	127,553	117,994
Annual Aircraft Operations (Nighttime) ¹				
T-38C	0	0	0	0
T-7A	0	204	505	593
Total	0	204	505	593
Operations within Airspace Training Areas (MOAs, Ranges, and MTRs)				
Annual Aircraft Operations within the Training Airspace ²				
T-38C	7,133	5,083	1,394	0
T-7A	0	2,153	5,329	6,251
Total	7,133	7,236	6,723	6,251

Notes:

¹ Denotes number of operations between 10 p.m. and 7 a.m.

² Denotes total aircraft operations within all MOAs, Range R-4404, and MTRs. Each MOA, Range R-4404, and MTR will experience varying levels of aircraft operations within the total shown.



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ALTERNATIVE 2

77 T-7A Aircraft and T-7A Operations 25 Percent Greater than the Proposed Action

- Covers potential scenario in which another military installation is unable to accept delivery of all their T-7A aircraft and some of those aircraft need to be reassigned to Columbus AFB.
- Identical to Proposed Action and Alternative 1 except:
 - 16 additional T-7A aircraft are delivered in 2028.
 - 77 T-7A shelters are installed.
- Operations are identical to Alternative 1.



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No ACTION ALTERNATIVE

Does Not Implement T-7A Recapitalization at Columbus AFB

- Assess environmental consequences from taking no action.
- Serves as baseline.
- T-38Cs remain in service with no changes to operations at Columbus AFB or airspace areas even though they will reach the end of their service lives within the next decade.
- No changes to the number of personnel and dependents.
- No construction undertaken.



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TOPICS TO BE ANALYZED IN THE EIS

Air Quality

- Air emissions
- Climate change

Biological Resources

- Vegetation and wildlife
- Threatened and endangered species

Cultural Resources

- Archaeological resources
- Architectural & visual resources
- Native American resources

Noise

- Aircraft noise
- Construction noise

Social Resources

- Environmental justice
- Land use
- Safety
- Socioeconomics

Water Resources

- Water quality (surface water, groundwater, & stormwater)
- Wetlands and floodplains

Other Considerations

- Airspace
- Geology and soils
- Hazardous materials and waste
- Infrastructure and transportation

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SUMMARY OF ANTICIPATED IMPACTS

DAF has identified potential for the following notable environmental impacts from the Proposed Action and action alternatives:

- Increased air emissions, particularly nitrogen oxides.
- Increased noise from aircraft operations because the T-7A is inherently louder than the T-38C and the addition of nighttime (10 p.m. to 7 a.m.) operations may be bothersome to some residents. Increased noise could have a disproportionate impact on certain populations and impact off-installation land use compatibility.
- Increased potential for bird/wildlife aircraft strike hazards.
- Construction may have a minor impact on downstream water quality.

The EIS will model air emissions, noise levels, and the number of sleep and school disturbance events and compare to current conditions. DAF will also consult with appropriate resource agencies and Native American tribes to determine the potential for significant impacts. Additional analysis will be provided in the Draft EIS.



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COMMENT SUBMISSION

Comments, suggestions, and relevant information are welcomed on the Columbus AFB T-7A Recapitalization proposal. Please submit comments in English using one of the following methods:

- **Postal Mail:** Mr. Nolan Swick, AFCEC/CZN; Attn: Columbus AFB T-7A Recapitalization EIS; Headquarters Air Education and Training Command Public Affairs; 100 H. East Street, Suite 4; Randolph AFB, TX 78150
- **Email:** nolan.swick@us.af.mil; Attn: Columbus AFB T-7A Recapitalization EIS
- **Project Website:** <https://columbus.t-7anepadocuments.com/>

To ensure DAF has sufficient time to consider public input, please submit all comments by May 2, 2022.



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Thank you for your participation!

