

A

Record of Air Analysis
and Record of
Conformity Analysis
Reports



AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB
State: Mississippi
County(s): Clay, MS; Lowndes, MS; Monroe, MS
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 1

c. Project Number/s (if applicable):

d. Projected Action Start Date: 8 / 2024

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein
Title: Contractor
Organization: HDR
Email:
Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

_____ applicable
__X__ not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

“Insignificance Indicators” were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are “Clearly Attainment” (i.e., not within 5% of any NAAQS) and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are “Near Nonattainment” (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action’s net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below.

Analysis Summary:

2024

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.205	250	No
NOx	1.005	250	No
CO	1.689	250	No
SOx	0.004	250	No
PM 10	0.284	250	No
PM 2.5	0.035	250	No
Pb	0.000	25	No
NH3	0.001	250	No
CO2e	397.5		

2025

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.069	250	No
NOx	4.712	250	No
CO	7.091	250	No
SOx	0.017	250	No
PM 10	8.445	250	No
PM 2.5	0.182	250	No
Pb	0.000	25	No
NH3	0.004	250	No
CO2e	1603.9		

2026

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.804	250	No

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

NOx	7.095	250	No
CO	10.840	250	No
SOx	0.024	250	No
PM 10	0.620	250	No
PM 2.5	0.240	250	No
Pb	0.000	25	No
NH3	0.010	250	No
CO2e	2363.7		

2027

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.009	250	No
NOx	2.459	250	No
CO	4.117	250	No
SOx	0.009	250	No
PM 10	0.086	250	No
PM 2.5	0.086	250	No
Pb	0.000	25	No
NH3	0.003	250	No
CO2e	886.1		

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	17.466	250	No
NOx	53.652	250	No
CO	-200.780	250	No
SOx	1.675	250	No
PM 10	-6.253	250	No
PM 2.5	-4.297	250	No
Pb	0.000	25	No
NH3	0.006	250	No
CO2e	6325.7		

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	30.134	250	No
NOx	129.447	250	No
CO	-637.064	250	No
SOx	2.783	250	No
PM 10	-18.912	250	No
PM 2.5	-13.078	250	No
Pb	0.000	25	No
NH3	0.006	250	No
CO2e	11635.4		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

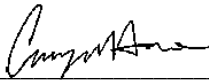
2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	29.647	250	No
NOx	150.497	250	No
CO	-815.025	250	No
SOx	2.619	250	No
PM 10	-23.807	250	No
PM 2.5	-16.495	250	No
Pb	0.000	25	No
NH3	-0.010	250	No
CO2e	11586.6		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	29.647	250	No
NOx	150.497	250	No
CO	-815.025	250	No
SOx	2.619	250	No
PM 10	-23.807	250	No
PM 2.5	-16.495	250	No
Pb	0.000	25	No
NH3	-0.010	250	No
CO2e	11586.6		

None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQSs. No further air assessment is needed.



Carolyn Hein, Contractor

2/17/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB
State: Mississippi
County(s): Clay, MS; Lowndes, MS; Monroe, MS
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 2

c. Project Number/s (if applicable):

d. Projected Action Start Date: 8 / 2024

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein
Title: Contractor
Organization: HDR
Email:
Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

_____ applicable
__X__ not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

“Insignificance Indicators” were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are “Clearly Attainment” (i.e., not within 5% of any NAAQS) and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are “Near Nonattainment” (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action’s net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below.

Analysis Summary:

2024

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.205	250	No
NOx	1.005	250	No
CO	1.689	250	No
SOx	0.004	250	No
PM 10	0.284	250	No
PM 2.5	0.035	250	No
Pb	0.000	25	No
NH3	0.001	250	No
CO2e	397.5		

2025

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.069	250	No
NOx	4.712	250	No
CO	7.091	250	No
SOx	0.017	250	No
PM 10	8.445	250	No
PM 2.5	0.182	250	No
Pb	0.000	25	No
NH3	0.004	250	No
CO2e	1603.9		

2026

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.804	250	No

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

NOx	7.095	250	No
CO	10.840	250	No
SOx	0.024	250	No
PM 10	0.620	250	No
PM 2.5	0.240	250	No
Pb	0.000	25	No
NH3	0.010	250	No
CO2e	2363.7		

2027

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.009	250	No
NOx	2.459	250	No
CO	4.117	250	No
SOx	0.009	250	No
PM 10	0.086	250	No
PM 2.5	0.086	250	No
Pb	0.000	25	No
NH3	0.003	250	No
CO2e	886.1		

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	27.562	250	No
NOx	67.791	250	No
CO	-181.515	250	No
SOx	2.782	250	No
PM 10	-6.070	250	No
PM 2.5	-4.137	250	No
Pb	0.000	25	No
NH3	0.006	250	No
CO2e	9688.1		

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	55.137	250	No
NOx	164.465	250	No
CO	-589.356	250	No
SOx	5.525	250	No
PM 10	-18.458	250	No
PM 2.5	-12.683	250	No
Pb	0.000	25	No
NH3	0.006	250	No
CO2e	19962.7		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)


2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	58.978	250	No
NOx	191.576	250	No
CO	-759.059	250	No
SOx	5.836	250	No
PM 10	-23.274	250	No
PM 2.5	-16.031	250	No
Pb	0.000	25	No
NH3	-0.010	250	No
CO2e	21355.0		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	58.978	250	No
NOx	191.576	250	No
CO	-759.059	250	No
SOx	5.836	250	No
PM 10	-23.274	250	No
PM 2.5	-16.031	250	No
Pb	0.000	25	No
NH3	-0.010	250	No
CO2e	21355.0		

None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQSs. No further air assessment is needed.



Carolyn Hein, Contractor

2/17/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB
State: Mississippi
County(s): Clay, MS; Lowndes, MS; Monroe, MS
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 3

c. Project Number/s (if applicable):

d. Projected Action Start Date: 8 / 2024

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein
Title: Contractor
Organization: HDR
Email:
Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

_____ applicable
__X__ not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

“Insignificance Indicators” were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are “Clearly Attainment” (i.e., not within 5% of any NAAQS) and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are “Near Nonattainment” (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action’s net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below.

Analysis Summary:

2024

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.205	250	No
NOx	1.005	250	No
CO	1.689	250	No
SOx	0.004	250	No
PM 10	0.284	250	No
PM 2.5	0.035	250	No
Pb	0.000	25	No
NH3	0.001	250	No
CO2e	397.5		

2025

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.069	250	No
NOx	4.712	250	No
CO	7.091	250	No
SOx	0.017	250	No
PM 10	8.445	250	No
PM 2.5	0.182	250	No
Pb	0.000	25	No
NH3	0.004	250	No
CO2e	1603.9		

2026

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.819	250	No

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

NOx	7.205	250	No
CO	10.925	250	No
SOx	0.025	250	No
PM 10	0.623	250	No
PM 2.5	0.244	250	No
Pb	0.000	25	No
NH3	0.010	250	No
CO2e	2403.3		

2027

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.009	250	No
NOx	2.459	250	No
CO	4.117	250	No
SOx	0.009	250	No
PM 10	0.086	250	No
PM 2.5	0.086	250	No
Pb	0.000	25	No
NH3	0.003	250	No
CO2e	886.1		

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	27.732	250	No
NOx	68.731	250	No
CO	-178.614	250	No
SOx	2.837	250	No
PM 10	-6.004	250	No
PM 2.5	-4.078	250	No
Pb	0.000	25	No
NH3	0.006	250	No
CO2e	9854.5		

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	55.307	250	No
NOx	165.405	250	No
CO	-586.455	250	No
SOx	5.580	250	No
PM 10	-18.392	250	No
PM 2.5	-12.624	250	No
Pb	0.000	25	No
NH3	0.006	250	No
CO2e	20129.2		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

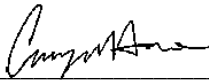
2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	59.147	250	No
NOx	192.516	250	No
CO	-756.158	250	No
SOx	5.891	250	No
PM 10	-23.208	250	No
PM 2.5	-15.972	250	No
Pb	0.000	25	No
NH3	-0.010	250	No
CO2e	21521.5		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	59.147	250	No
NOx	192.516	250	No
CO	-756.158	250	No
SOx	5.891	250	No
PM 10	-23.208	250	No
PM 2.5	-15.972	250	No
Pb	0.000	25	No
NH3	-0.010	250	No
CO2e	21521.5		

None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQSs. No further air assessment is needed.



Carolyn Hein, Contractor

2/17/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB

State: Alabama

County(s): Bibb, AL; Dallas, AL; Greene, AL; Hale, AL; Marengo, AL; Perry, AL; Sumter, AL

Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 1

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2028

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein

Title: Contractor

Organization: HDR

Email:

Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

_____ applicable
__X__ not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

“Insignificance Indicators” were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are “Clearly Attainment” (i.e., not within 5% of any NAAQS) and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are “Near Nonattainment” (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action’s net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below.

Analysis Summary:

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.517	250	No
NOx	25.205	250	No
CO	-9.093	250	No
SOx	0.483	250	No
PM 10	-0.262	250	No
PM 2.5	0.096	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	1461.6		

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.517	250	No
NOx	25.205	250	No
CO	-9.093	250	No
SOx	0.483	250	No
PM 10	-0.262	250	No
PM 2.5	0.096	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	1461.6		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)


2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	3.034	250	No
NOx	50.410	250	No
CO	-18.187	250	No
SOx	0.965	250	No
PM 10	-0.525	250	No
PM 2.5	0.191	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	2923.3		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	3.034	250	No
NOx	50.410	250	No
CO	-18.187	250	No
SOx	0.965	250	No
PM 10	-0.525	250	No
PM 2.5	0.191	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	2923.3		

None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQSs. No further air assessment is needed.



Carolyn Hein, Contractor

2/17/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB

State: Alabama

County(s): Bibb, AL; Dallas, AL; Greene, AL; Hale, AL; Marengo, AL; Perry, AL; Sumter, AL

Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 2

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2028

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein

Title: Contractor

Organization: HDR

Email:

Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

_____ applicable
__X__ not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

“Insignificance Indicators” were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are “Clearly Attainment” (i.e., not within 5% of any NAAQS) and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are “Near Nonattainment” (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action’s net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below.

Analysis Summary:

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.031	250	No
NOx	31.919	250	No
CO	-6.015	250	No
SOx	0.791	250	No
PM 10	-0.133	250	No
PM 2.5	0.127	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	2393.1		

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.031	250	No
NOx	31.919	250	No
CO	-6.015	250	No
SOx	0.791	250	No
PM 10	-0.133	250	No
PM 2.5	0.127	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	2393.1		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

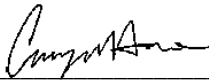
2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	3.932	250	No
NOx	63.505	250	No
CO	-17.411	250	No
SOx	1.396	250	No
PM 10	-0.462	250	No
PM 2.5	0.247	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	4224.8		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	3.932	250	No
NOx	63.505	250	No
CO	-17.411	250	No
SOx	1.396	250	No
PM 10	-0.462	250	No
PM 2.5	0.247	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	4224.8		

None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQSs. No further air assessment is needed.



Carolyn Hein, Contractor

2/17/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB

State: Alabama

County(s): Bibb, AL; Dallas, AL; Greene, AL; Hale, AL; Marengo, AL; Perry, AL; Sumter, AL

Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 3

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2028

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein

Title: Contractor

Organization: HDR

Email:

Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

_____ applicable
__X__ not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

“Insignificance Indicators” were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are “Clearly Attainment” (i.e., not within 5% of any NAAQS) and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are “Near Nonattainment” (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action’s net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below.

Analysis Summary:

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.031	250	No
NOx	31.919	250	No
CO	-6.015	250	No
SOx	0.791	250	No
PM 10	-0.133	250	No
PM 2.5	0.127	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	2393.1		

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.031	250	No
NOx	31.919	250	No
CO	-6.015	250	No
SOx	0.791	250	No
PM 10	-0.133	250	No
PM 2.5	0.127	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	2393.1		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)


2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	3.932	250	No
NOx	63.505	250	No
CO	-17.411	250	No
SOx	1.396	250	No
PM 10	-0.462	250	No
PM 2.5	0.247	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	4224.8		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	3.932	250	No
NOx	63.505	250	No
CO	-17.411	250	No
SOx	1.396	250	No
PM 10	-0.462	250	No
PM 2.5	0.247	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	4224.8		

None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQSs. No further air assessment is needed.



Carolyn Hein, Contractor

2/17/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB
State: Mississippi
County(s): Noxubee, MS
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 1

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2028

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein
Title: Contractor
Organization: HDR
Email:
Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

_____ applicable
__X__ not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

“Insignificance Indicators” were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are “Clearly Attainment” (i.e., not within 5% of any NAAQS) and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are “Near Nonattainment” (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action’s net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below.

Analysis Summary:

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.929	250	No
NOx	15.435	250	No
CO	-5.568	250	No
SOx	0.296	250	No
PM 10	-0.161	250	No
PM 2.5	0.059	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	895.1		

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.929	250	No
NOx	15.435	250	No
CO	-5.568	250	No
SOx	0.296	250	No
PM 10	-0.161	250	No
PM 2.5	0.059	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	895.1		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)


2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.858	250	No
NOx	30.869	250	No
CO	-11.136	250	No
SOx	0.591	250	No
PM 10	-0.321	250	No
PM 2.5	0.117	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	1790.2		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.858	250	No
NOx	30.869	250	No
CO	-11.136	250	No
SOx	0.591	250	No
PM 10	-0.321	250	No
PM 2.5	0.117	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	1790.2		

None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQSs. No further air assessment is needed.



Carolyn Hein, Contractor

2/17/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB
State: Mississippi
County(s): Noxubee, MS
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 2

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2028

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein
Title: Contractor
Organization: HDR
Email:
Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

_____ applicable
__X__ not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

“Insignificance Indicators” were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are “Clearly Attainment” (i.e., not within 5% of any NAAQS) and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are “Near Nonattainment” (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action’s net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below.

Analysis Summary:

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.237	250	No
NOx	19.453	250	No
CO	-3.726	250	No
SOx	0.480	250	No
PM 10	-0.083	250	No
PM 2.5	0.077	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	1452.6		

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.237	250	No
NOx	19.453	250	No
CO	-3.726	250	No
SOx	0.480	250	No
PM 10	-0.083	250	No
PM 2.5	0.077	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	1452.6		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

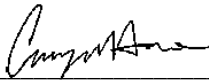
2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.395	250	No
NOx	38.706	250	No
CO	-10.672	250	No
SOx	0.849	250	No
PM 10	-0.284	250	No
PM 2.5	0.150	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	2569.1		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.395	250	No
NOx	38.706	250	No
CO	-10.672	250	No
SOx	0.849	250	No
PM 10	-0.284	250	No
PM 2.5	0.150	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	2569.1		

None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQSs. No further air assessment is needed.



Carolyn Hein, Contractor

2/17/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB
State: Mississippi
County(s): Noxubee, MS
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 3

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2028

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein
Title: Contractor
Organization: HDR
Email:
Phone Number:

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

_____ applicable
__X__ not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF AIR ANALYSIS (ROAA)

algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

“Insignificance Indicators” were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are “Clearly Attainment” (i.e., not within 5% of any NAAQS) and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are “Near Nonattainment” (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action’s net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below.

Analysis Summary:

2028

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.237	250	No
NOx	19.453	250	No
CO	-3.726	250	No
SOx	0.480	250	No
PM 10	-0.083	250	No
PM 2.5	0.077	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	1452.6		

2029

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.237	250	No
NOx	19.453	250	No
CO	-3.726	250	No
SOx	0.480	250	No
PM 10	-0.083	250	No
PM 2.5	0.077	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	1452.6		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF AIR ANALYSIS (ROAA)

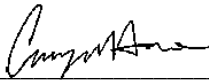
2030

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.395	250	No
NOx	38.706	250	No
CO	-10.672	250	No
SOx	0.849	250	No
PM 10	-0.284	250	No
PM 2.5	0.150	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	2569.1		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.395	250	No
NOx	38.706	250	No
CO	-10.672	250	No
SOx	0.849	250	No
PM 10	-0.284	250	No
PM 2.5	0.150	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	2569.1		

None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQSs. No further air assessment is needed.



Carolyn Hein, Contractor

2/21/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB

State (s): Alabama, Arkansas, Mississippi, Tennessee

County(s): Autauga, AL; Bibb, AL; Blount, AL; Chilton, AL; Choctaw, AL; Clarke, AL; Clay, AL; Colbert, AL; Coosa, AL; Cullman, AL; Dallas, AL; Elmore, AL; Franklin, AL; Greene, AL; Hale, AL; Jefferson, AL; Lauderdale, AL; Lawrence, AL; Marengo, AL; Marion, AL; Perry, AL; Pickens, AL; Shelby, AL; St. Clair, AL; Sumter, AL; Talladega, AL; Tallapoosa, AL; Tuscaloosa, AL; Walker, AL; Wilcox, AL; Winston, AL; Lee, AR; Phillips, AR; Alcorn, MS; Benton, MS; Bolivar, MS; Calhoun, MS; Carroll, MS; Chickasaw, MS; Clay, MS; Coahoma, MS; Grenada, MS; Itawamba, MS; Kemper, MS; Lafayette, MS; Lee, MS; Leflore, MS; Lowndes, MS; Marshall, MS; Monroe, MS; Montgomery, MS; Noxubee, MS; Panola, MS; Pontotoc, MS; Prentiss, MS; Quitman, MS; Sunflower, MS; Tallahatchie, MS; Tate, MS; Tippah, MS; Tishomingo, MS; Tunica, MS; Union, MS; Webster, MS; Yalobusha, MS; Chester, TN; Decatur, TN; Hardeman, TN; Hardin, TN; Lawrence, TN; McNairy, TN; Wayne, TN

Regulatory Area(s): NOT IN A REGULATORY AREA; Birmingham, AL

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 1

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2028

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein

Title: Contractor

Organization: HDR

Email:

Phone Number:

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

2. Analysis: Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the “worst-case” and “steady state” (net gain/loss upon action fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

Based on the analysis, the requirements of this rule are: _____ applicable
 ___X___ not applicable

Conformity Analysis Summary:

2028

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-4.540		
NOx	31.743		
CO	-94.308		
SOx	-0.526		
PM 10	-2.249		
PM 2.5	-0.916		
Pb	0.000		
NH3	0.000		
CO2e	-1585.8		
Birmingham, AL			
VOC	1.069	100	No
NOx	17.774	100	No
CO	-6.406		
SOx	0.341	100	No
PM 10	-0.185		
PM 2.5	0.067	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1033.6		
Birmingham, AL			
VOC	1.251	100	No
NOx	20.756	100	No
CO	-7.524		
SOx	0.393	100	No
PM 10	-0.216		
PM 2.5	0.079	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1188.7		

2029

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-4.540		
NOx	31.743		
CO	-94.308		
SOx	-0.526		
PM 10	-2.249		

**AIR CONFORMITY APPLICABILITY MODEL REPORT
RECORD OF CONFORMITY ANALYSIS (ROCA)**

PM 2.5	-0.916		
Pb	0.000		
NH3	0.000		
CO2e	-1585.8		
Birmingham, AL			
VOC	1.069	100	No
NOx	17.774	100	No
CO	-6.406		
SOx	0.341	100	No
PM 10	-0.185		
PM 2.5	0.067	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1033.6		
Birmingham, AL			
VOC	1.251	100	No
NOx	20.756	100	No
CO	-7.524		
SOx	0.393	100	No
PM 10	-0.216		
PM 2.5	0.079	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1188.7		

2030

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-2.453		
NOx	66.406		
CO	-106.827		
SOx	0.136		
PM 10	-2.610		
PM 2.5	-0.784		
Pb	0.000		
NH3	0.000		
CO2e	418.8		
Birmingham, AL			
VOC	2.139	100	No
NOx	35.549	100	No
CO	-12.811		
SOx	0.683	100	No
PM 10	-0.370		
PM 2.5	0.135	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	2067.2		
Birmingham, AL			
VOC	2.502	100	No
NOx	41.512	100	No
CO	-15.047		
SOx	0.786	100	No


AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

PM 10	-0.433		
PM 2.5	0.158	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	2377.4		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-2.453		
NOx	66.406		
CO	-106.827		
SOx	0.136		
PM 10	-2.610		
PM 2.5	-0.784		
Pb	0.000		
NH3	0.000		
CO2e	418.8		
Birmingham, AL			
VOC	2.139	100	No
NOx	35.549	100	No
CO	-12.811		
SOx	0.683	100	No
PM 10	-0.370		
PM 2.5	0.135	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	2067.2		
Birmingham, AL			
VOC	2.502	100	No
NOx	41.512	100	No
CO	-15.047		
SOx	0.786	100	No
PM 10	-0.433		
PM 2.5	0.158	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	2377.4		

None of estimated emissions associated with this action are above the conformity threshold values established at 40 CFR 93.153 (b); Therefore, the requirements of the General Conformity Rule are not applicable.



Carolyn Hein, Contractor

2/17/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB

State: Alabama, Arkansas, Mississippi, Tennessee

County(s): Autauga, AL; Bibb, AL; Blount, AL; Chilton, AL; Choctaw, AL; Clarke, AL; Clay, AL; Colbert, AL; Coosa, AL; Cullman, AL; Dallas, AL; Elmore, AL; Franklin, AL; Greene, AL; Hale, AL; Jefferson, AL; Lauderdale, AL; Lawrence, AL; Marengo, AL; Marion, AL; Perry, AL; Pickens, AL; Shelby, AL; St. Clair, AL; Sumter, AL; Talladega, AL; Tallapoosa, AL; Tuscaloosa, AL; Walker, AL; Wilcox, AL; Winston, AL; Lee, AR; Phillips, AR; Alcorn, MS; Benton, MS; Bolivar, MS; Calhoun, MS; Carroll, MS; Chickasaw, MS; Clay, MS; Coahoma, MS; Grenada, MS; Itawamba, MS; Kemper, MS; Lafayette, MS; Lee, MS; Leflore, MS; Lowndes, MS; Marshall, MS; Monroe, MS; Montgomery, MS; Noxubee, MS; Panola, MS; Pontotoc, MS; Prentiss, MS; Quitman, MS; Sunflower, MS; Tallahatchie, MS; Tate, MS; Tippah, MS; Tishomingo, MS; Tunica, MS; Union, MS; Webster, MS; Yalobusha, MS; Chester, TN; Decatur, TN; Hardeman, TN; Hardin, TN; Lawrence, TN; McNairy, TN; Wayne, TN

Regulatory Area(s): NOT IN A REGULATORY AREA; Birmingham, AL

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 2

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2028

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein

Title: Contractor

Organization: HDR

Email:

Phone Number:

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

2. Analysis: Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the “worst-case” and “steady state” (net gain/loss upon action fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

Based on the analysis, the requirements of this rule are: _____ applicable
 ___X___ not applicable

Conformity Analysis Summary:

2028

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-3.833		
NOx	40.966		
CO	-90.081		
SOx	-0.103		
PM 10	-2.071		
PM 2.5	-0.873		
Pb	0.000		
NH3	0.000		
CO2e	-307.6		
Birmingham, AL			
VOC	1.414	100	No
NOx	22.279	100	No
CO	-4.340		
SOx	0.548	100	No
PM 10	-0.098		
PM 2.5	0.088	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1659.1		
Birmingham, AL			
VOC	1.678	100	No
NOx	26.329	100	No
CO	-4.972		
SOx	0.648	100	No
PM 10	-0.109		
PM 2.5	0.105	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1958.7		

2029

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-3.833		
NOx	40.966		
CO	-90.081		
SOx	-0.103		
PM 10	-2.071		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

PM 2.5	-0.873		
Pb	0.000		
NH3	0.000		
CO2e	-307.6		
Birmingham, AL			
VOC	1.414	100	No
NOx	22.279	100	No
CO	-4.340		
SOx	0.548	100	No
PM 10	-0.098		
PM 2.5	0.088	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1659.1		
Birmingham, AL			
VOC	1.678	100	No
NOx	26.329	100	No
CO	-4.972		
SOx	0.648	100	No
PM 10	-0.109		
PM 2.5	0.105	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1958.7		

2030

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-1.219		
NOx	84.394		
CO	-105.766		
SOx	0.726		
PM 10	-2.523		
PM 2.5	-0.708		
Pb	0.000		
NH3	0.000		
CO2e	2203.8		
Birmingham, AL			
VOC	2.741	100	No
NOx	44.333	100	No
CO	-12.289		
SOx	0.972	100	No
PM 10	-0.328		
PM 2.5	0.172	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	2941.7		
Birmingham, AL			
VOC	3.248	100	No
NOx	52.381	100	No
CO	-14.415		
SOx	1.141	100	No


AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

PM 10	-0.380		
PM 2.5	0.204	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	3450.7		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	-1.219		
NOx	84.394		
CO	-105.766		
SOx	0.726		
PM 10	-2.523		
PM 2.5	-0.708		
Pb	0.000		
NH3	0.000		
CO2e	2203.8		
Birmingham, AL			
VOC	2.741	100	No
NOx	44.333	100	No
CO	-12.289		
SOx	0.972	100	No
PM 10	-0.328		
PM 2.5	0.172	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	2941.7		
Birmingham, AL			
VOC	3.248	100	No
NOx	52.381	100	No
CO	-14.415		
SOx	1.141	100	No
PM 10	-0.380		
PM 2.5	0.204	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	3450.7		

None of estimated emissions associated with this action are above the conformity threshold values established at 40 CFR 93.153 (b); Therefore, the requirements of the General Conformity Rule are not applicable.



Carolyn Hein, Contractor

2/17/2023

DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: COLUMBUS AFB

State: Alabama, Arkansas, Mississippi, Tennessee

County(s): Autauga, AL; Bibb, AL; Blount, AL; Chilton, AL; Choctaw, AL; Clarke, AL; Clay, AL; Colbert, AL; Coosa, AL; Cullman, AL; Dallas, AL; Elmore, AL; Franklin, AL; Greene, AL; Hale, AL; Jefferson, AL; Lauderdale, AL; Lawrence, AL; Marengo, AL; Marion, AL; Perry, AL; Pickens, AL; Shelby, AL; St. Clair, AL; Sumter, AL; Talladega, AL; Tallapoosa, AL; Tuscaloosa, AL; Walker, AL; Wilcox, AL; Winston, AL; Lee, AR; Phillips, AR; Alcorn, MS; Benton, MS; Bolivar, MS; Calhoun, MS; Carroll, MS; Chickasaw, MS; Clay, MS; Coahoma, MS; Grenada, MS; Itawamba, MS; Kemper, MS; Lafayette, MS; Lee, MS; Leflore, MS; Lowndes, MS; Marshall, MS; Monroe, MS; Montgomery, MS; Noxubee, MS; Panola, MS; Pontotoc, MS; Prentiss, MS; Quitman, MS; Sunflower, MS; Tallahatchie, MS; Tate, MS; Tippah, MS; Tishomingo, MS; Tunica, MS; Union, MS; Webster, MS; Yalobusha, MS; Chester, TN; Decatur, TN; Hardeman, TN; Hardin, TN; Lawrence, TN; McNairy, TN; Wayne, TN

Regulatory Area(s): NOT IN A REGULATORY AREA; Birmingham, AL

b. Action Title: T-7A Recapitalization at Columbus AFB - Alternative 3

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2028

e. Action Description:

The Proposed Action is recapitalization of the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. Recapitalization would entail introduction of T-7A aircraft and flight operations at Columbus AFB and associated special use airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 a.m. and 7 a.m.) T-7A flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of operations, support, and maintenance facilities.

For Alternative 1, Columbus AFB would receive 61 T-7A aircraft and perform sufficient operations for sustaining pilot training while simultaneously phasing out the T-38C aircraft. Alternative 2 would also result in 61 T-7A aircraft being delivered to Columbus AFB; however, T-7A operations would be performed at an intensity approximately 25 percent greater than Alternative 1 to cover a scenario in which DAF requires a surge or increase in pilot training operations above the current plan. For Alternative 3, Columbus AFB would receive 77 T-7A aircraft and perform T-7A operations at an intensity identical to Alternative 2. Alternative 3 also incorporates a MILCON project alternative to construct 12 additional shelters for the T-7A aircraft. Alternative 3 is intended to provide DAF with operational flexibility, and inclusion of this alternative in the EIS provides analysis to evaluate future capacity needs. The No Action Alternative would not implement T-7A recapitalization at Columbus AFB.

f. Point of Contact:

Name: Carolyn Hein

Title: Contractor

Organization: HDR

Email:

Phone Number:

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

2. Analysis: Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the “worst-case” and “steady state” (net gain/loss upon action fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

Based on the analysis, the requirements of this rule are: _____ applicable
 ___X___ not applicable

Conformity Analysis Summary:

2028

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.793		
NOx	43.887		
CO	-8.292		
SOx	1.085		
PM 10	-0.183		
PM 2.5	0.174		
Pb	0.000		
NH3	0.000		
CO2e	3282.9		
Birmingham, AL			
VOC	1.414	100	No
NOx	22.279	100	No
CO	-4.340		
SOx	0.548	100	No
PM 10	-0.098		
PM 2.5	0.088	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1659.1		
Birmingham, AL			
VOC	1.678	100	No
NOx	26.329	100	No
CO	-4.972		
SOx	0.648	100	No
PM 10	-0.109		
PM 2.5	0.105	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1958.7		

2029

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	2.793		
NOx	43.887		
CO	-8.292		
SOx	1.085		
PM 10	-0.183		

AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

PM 2.5	0.174		
Pb	0.000		
NH3	0.000		
CO2e	3282.9		
Birmingham, AL			
VOC	1.414	100	No
NOx	22.279	100	No
CO	-4.340		
SOx	0.548	100	No
PM 10	-0.098		
PM 2.5	0.088	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1659.1		
Birmingham, AL			
VOC	1.678	100	No
NOx	26.329	100	No
CO	-4.972		
SOx	0.648	100	No
PM 10	-0.109		
PM 2.5	0.105	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	1958.7		

2030

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	5.408		
NOx	87.315		
CO	-23.977		
SOx	1.914		
PM 10	-0.635		
PM 2.5	0.339		
Pb	0.000		
NH3	0.000		
CO2e	5794.3		
Birmingham, AL			
VOC	2.741	100	No
NOx	44.333	100	No
CO	-12.289		
SOx	0.972	100	No
PM 10	-0.328		
PM 2.5	0.172	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	2941.7		
Birmingham, AL			
VOC	3.248	100	No
NOx	52.381	100	No
CO	-14.415		
SOx	1.141	100	No


AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

PM 10	-0.380		
PM 2.5	0.204	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	3450.7		

2031 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	5.408		
NOx	87.315		
CO	-23.977		
SOx	1.914		
PM 10	-0.635		
PM 2.5	0.339		
Pb	0.000		
NH3	0.000		
CO2e	5794.3		
Birmingham, AL			
VOC	2.741	100	No
NOx	44.333	100	No
CO	-12.289		
SOx	0.972	100	No
PM 10	-0.328		
PM 2.5	0.172	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	2941.7		
Birmingham, AL			
VOC	3.248	100	No
NOx	52.381	100	No
CO	-14.415		
SOx	1.141	100	No
PM 10	-0.380		
PM 2.5	0.204	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	3450.7		

None of estimated emissions associated with this action are above the conformity threshold values established at 40 CFR 93.153 (b); Therefore, the requirements of the General Conformity Rule are not applicable.



Carolyn Hein, Contractor

2/17/2023

DATE



B

Agency Consultation



Section 7 of the Endangered Species Act Consultation

The Department of the Air Force (DAF) consulted with the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act for the Proposed Action. **Section 3.4** contains further information regarding the outcome of the consultation with USFWS. A copy of the consultation letters and responses is on the following pages.

Consultation Letter sent to USFWS (October 2022)



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 14TH FLYING TRAINING WING
COLUMBUS AIR FORCE BASE MISSISSIPPI**

11 October 2022

Allen S. Reed, Chief
Installation Management Flight
14 CES/CEI
555 Simler Blvd., Ste. 108B
Columbus AFB, MS 39710

Ms. Kelly Morris
U.S. Fish and Wildlife Service
Mississippi Ecological Services Field Office
6578 Dogwood View Parkway, Suite A
Jackson, MS 39213-7856

Dear Ms. Morris:

The United States Department of the Air Force (DAF) is proposing to recapitalize its flight training program with newer and more capable T-7A Red Hawk aircraft at Columbus Air Force Base (AFB), Mississippi. Recapitalization is the phased acquisition of the new generation T-7A aircraft and construction and upgrade of specific facilities to support the training, operation, and maintenance of the T-7A aircraft. To consider various environmental concerns, DAF is engaging early with the appropriate resource and regulatory agencies as it formulates the undertaking. DAF is also preparing an Environmental Impact Statement under the National Environmental Policy Act to evaluate potential environmental impacts associated with the T-7A recapitalization at Columbus AFB. Pursuant to Section 7 of the Endangered Species Act (ESA) of 1973 (16 USC 1531–1544), DAF has determined that T-7A recapitalization at Columbus AFB *may affect*, but is *not likely to adversely affect* 8 federally listed/candidate species and *will have no effect on* 73 federally listed/candidate species (**Attachment 1**).

Proposed Action

The Proposed Action would entail the phased introduction of T-7A aircraft and phased reduction of the T-38C aircraft currently operating from Columbus AFB; new intensities of flight operations at Columbus AFB including nighttime operations; and changes to the number of personnel assigned to Columbus AFB. T-7A operations would occur within the same designated military airspace boundaries currently used for T-38C operations, and no changes to established Special Use Airspace configurations (i.e., size, shape, or location) would occur. Additionally, construction for six military construction (MILCON) projects and six facilities sustainment, restoration, and modernization (FSRM) projects would occur at Columbus AFB to provide modern facilities and infrastructure to support the T-7A aircraft's maintenance, training, and operational requirements. The MILCON and FSRM projects include new building construction and renovation of existing facilities on Columbus AFB. **Attachment 2** shows the locations of the MILCON and FSRM project areas and the airspace areas proposed for T-7A flight operations.

All terrestrial aspects of the Proposed Action would occur in or near previously disturbed or highly developed areas of Columbus AFB. Most vegetative cover in the areas of proposed construction consists of nonnative grass species including centipede grass (*Eremochloa ophiuroides*), bermudagrass (*Cynodon dactylon*), zoysia (*Zoysia* spp.), and annual ryegrass (*Lolium multiflorum*). No wetlands are within or near the MILCON and FSRM project locations. Avian and bat species that may fly within the airspace areas associated with the proposed flight operations were considered in the review for effects.

Threatened, Endangered, and Candidate Species and Critical Habitat

The Columbus AFB Integrated Natural Resources Management Plan (INRMP) and the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) System reports for Columbus AFB and the airspace areas where the T-7A would perform flight operations (i.e., 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; and Range R-4404 in northern Alabama, eastern Arkansas, northern Mississippi, and southern Tennessee) were reviewed to determine if any federally listed, proposed, or candidate species, or their habitats, could potentially occur in the vicinity of the Proposed Action (Attachments 3, 4, and 5). These reports indicated that 79 federally listed species and 2 candidate species that could be listed within the timeframe of the Proposed Action have the potential to occur on Columbus AFB and the airspace areas (Attachment 1).

Of the 81 species in Attachment 1, 12 have potential to occur on Columbus AFB and could potentially be impacted by the proposed activities at the installation such as the MILCON and FSRM projects, landings and takeoffs at the Columbus AFB airfield, and increased noise levels on and near the installation. These 12 species are the Northern Long-eared Bat (*Myotis septentrionalis*), the Wood Stork (*Mycteria americana*), Monarch Butterfly (*Danaus plexippus*) (which is a candidate species), eight clams (i.e., Alabama Moccasinshell [*Medionidus acutissimus*], Black Clubshell [*Pleurobema curtum*], Heavy Pigtoe [*Pleurobema taitianum*], Inflated Heelsplitter [*Potamilus inflatus*], Orangenacre Mucket [*Lampsilis perovalis*], Ovate Clubshell [*Pleurobema perovatum*], Southern Clubshell [*Pleurobema decisum*], and Southern Combshell [*Epioblasma penita*]), and the White Fringeless Orchid (*Platanthera integrilabia*).

The Northern Long-eared Bat dwells and forages in forested areas beneath the canopy, and the Wood Stork is a marsh bird that typically occurs in freshwater wetlands and water features. No suitable habitat for the Northern Long-eared Bat or Wood Stork occurs at the MILCON and FSRM project areas or at the ends of the airfield; therefore, it is unlikely that these species would be in those areas and be affected by construction or aircraft noise. The Monarch Butterfly is found in fields, roadside areas, open areas, wet areas, and urban gardens, and milkweed and flowering plants are needed for monarch habitat. Suitable habitat is located near the proposed MILCON and FSRM projects and near the airfield at Columbus AFB; therefore, it is possible this candidate species could be affected by construction or aircraft noise.

The eight clam species are found exclusively in aquatic habitat, and no activities are proposed that would affect aquatic resources. The White Fringeless Orchid grows in the wet soils of bogs, marshes, fens, swamps, heads of streams, and on sloping areas kept moist by groundwater seeping to the surface. The proposed MILCON and FSRM projects occur on either impervious cover, existing structures, or maintained, non-native grasslands/lawns that do not provide suitable habitat for the eight clam species or the White Fringeless Orchid. Therefore, T-7A recapitalization at Columbus AFB will have no effect on these 9 federally listed species.

The remaining 69 species were identified for having potential to occur in the airspace areas proposed for flight operations. The only potential for effect on the species with potential to occur in the airspace areas would be from aircraft strikes; therefore, T-7A recapitalization at Columbus AFB will have no effect on all non-flying species with potential to occur in the airspace areas. The flying species with potential to occur in the airspace areas are the Gray Bat (*Myotis grisescens*), Indiana Bat (*Myotis sodalists*), Eastern Black Rail (*Laterallus jamaicensis* spp. *Jamaicensis*), Ivory-billed Woodpecker (*Campephilus principalis*), Piping Plover (*Charadrius melodus*), Red Knot (*Calidris canutus rufa*), Red-cockaded Woodpecker (*Picoides borealis*), and Mitchell's Satyr Butterfly (*Neonympha mitchellii mitchellii*) as well as the Northern Long-eared Bat, Wood Stork, and Monarch Butterfly mentioned for Columbus AFB itself.

While the proposed T-7A flight operations would occur within the same designated military airspace boundaries currently used for T-38C operations, the addition of nighttime T-7A operations may slightly increase the potential for an incidental strike with certain flying species compared to the current potential. Incidental strikes with the Northern Long-eared Bat, Wood Stork, and Monarch Butterfly could occur during takeoffs, landings, and touch-and-goes at the Columbus AFB airfield and during high-altitude operations in the airspace areas, and incidental strikes with the Gray Bat, Indiana Bat, Eastern Black Rail, Piping Plover, and Red Knot could occur during high-altitude operations in the airspace areas. The Federal Aviation Administration estimates that approximately 97 percent of bird/wildlife aircraft strikes occur at the takeoff and landing stages of flight at or near an airfield; the remaining approximately 3 percent occur in the cruise phase of flight. With the Proposed Action, operations are expected to occur as low as 500 feet above ground level (AGL) within certain airspace areas. Continued adherence of the Columbus AFB Bird Aircraft Strike Hazard (BASH) Plan would help avoid and minimize the potential for avian or bat strikes in the event of an incidental occurrence of a federally listed/candidate species. If determined to be necessary, additional mitigation would be implemented or new measures developed to reduce the potential for impacts to occur and the BASH Plan would be updated accordingly. Therefore, T-7A recapitalization at Columbus AFB *may affect, but is not likely to adversely affect* the Northern Long-eared Bat, Wood Stork, Monarch Butterfly, Gray Bat, Indiana Bat, Eastern Black Rail, Piping Plover, and Red Knot. *No effect* on the Ivory-billed Woodpecker, Red-cockaded Woodpecker, and Mitchell's Satyr Butterfly is expected to occur as a result of the T-7A recapitalization at Columbus AFB because these species do not fly at a high enough altitude to be affected by aircraft operations.

We request written concurrence with our determination as part of the informal consultation process. If you have any questions or concerns, please contact Mr. Nolan Swick via email at nolan.swick@us.af.mil or mail at AFCEC/CZN, Attn: Columbus AFB T-7A Recapitalization EIS, 2261 Hughes Ave., Suite 155, JBSA-Lackland, TX 78236-9853. Thank you in advance for your assistance in this effort.

Sincerely,



ALLEN S. REED, Chief
Installation Management Flight

Attachments:

1. Federally Listed/Candidate Species with Potential to Occur on Columbus AFB and the Airspace Areas and Effects Determination
2. Proposed Action Area Maps
3. Official Columbus AFB IPaC Report (Project Code: 2022-0031970)
4. Official Columbus AFB Airspace Areas IPaC Report (Project Code: 2022-0032713)
5. Official Columbus AFB Training Routes IPaC Report (Project Code: 2022-0032733)

This page intentionally left blank.

Attachment 1: Federally Listed/Candidate Species with the Potential to Occur on Columbus AFB and the Airspace Areas and Effects Determination

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Mammals					
Gray Bat	<i>Myotis grisescens</i>	E	Airspace Areas	Roosts in caves during the summer and winter. Caves used during hibernation are usually deep, vertical pits that act as cold-air traps. Summer caves used by females usually have dome-shaped ceilings that act as warm-air traps. Gray bats are known to forage at heights of up to 15 meters (50 feet) above rivers or reservoirs in the vicinity of their summer caves. Migrations for this species occur at night between September and November (winter) and March to May (spring) likely following the migratory patterns of flying prey insects at night. Although data about the migration height for this species is not published, bats have been recorded at altitudes up to 2,600 feet.	May affect, but is not likely to adversely affect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Incidental strikes could occur from high-altitude operations. Strikes would be minimized by following Columbus AFB's BASH plan.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Indiana Bat	<i>Myotis sodalist</i>	E	Airspace Areas	Indiana bats hibernate in limestone caves during the winter, but roost under bridges in the summer. Maternity colonies have been found in hollow trees and under bark during the summer. Foraging occurs above the trees along rivers and streams. Creeks are apparently not used if riparian trees have been removed. Migrations for this species occur at night, between August and October (winter) and April and June (spring). Although data about the migration height for this species is not published, bats have been recorded at altitudes up to 2,600 feet.	May affect, but is not likely to adversely affect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Incidental strikes could occur from high-altitude operations. Strikes would be minimized by following Columbus AFB's BASH plan.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Northern Long-eared Bat	<i>Myotis septentrionalis</i>	T	Columbus AFB and Airspace Areas	During summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. Males and non-reproductive females may also roost in cooler places, like caves and mines. This bat seems opportunistic in selecting roosts, using tree species based on suitability to retain bark or provide cavities or crevices. It has also been found, rarely, roosting in structures like barns and sheds. Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They typically use large caves or mines with large passages and entrances; constant temperatures; and high humidity with no air currents. Within hibernacula, surveyors find them in small crevices or cracks, often with only the nose and ears visible. This species typically forages in the early morning (3 a.m. to dawn) and late evening (dusk to midnight) within forest habitats and under the tree canopy between 1 and 3 meters above ground. Northern long-eared bats migrate distances ranging between 35 and 55 miles to and from their summer and winter habitats. Spring migration is usually between mid-March and mid-May. Fall migration is usually between mid-August and mid-October. Although data about the migration height for this species is not published, bats have been recorded at altitudes up to 2,600 feet.	May affect, but is not likely to adversely affect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. An acoustic bat survey was conducted on Columbus AFB in 2017 and the northern long-eared bat was not detected. Suitable habitat is not located on or near the proposed MILCON and FSRM projects or near the airfield at Columbus AFB; therefore, it is unlikely this species would be affected by construction or aircraft noise. Incidental strikes could occur during takeoffs, landings, touch-and-goes, and high-altitude operations. Strikes would be minimized by following Columbus AFB's BASH plan.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Birds					
Eastern Black Rail	<i>Laterallus jamaicensis spp. jamaicensis</i>	T	Airspace Areas	Black Rails nest in marshes and wet meadows across North America, including riparian marshes, coastal prairies, saltmarshes, and impounded wetlands. All of its habitats have stable shallow water, usually just 1 to 2 inches deep at most. On the Atlantic and Gulf coasts, Black Rails nest in the higher, drier parts of marshes, where tidal activity is least and where different types of grasses, sedges, and rushes occur in mosaic-like patches. Juveniles and adults of this species have a propensity to walk and run rather than fly, and chicks are unable to fly. This species does migrate in the spring between mid-March through early May and again in the fall between early September to early November, typically at night. There are no apparent concentrated routes for either migration season. Migration height for this species is unpublished. According to the Federal Aviation Administration, over 90 percent of the reported bird strikes occur at or below 3,000 feet AGL, strikes occurring at higher altitudes are common during migration. Ducks and geese are frequently observed up to 7,000 feet AGL.	May affect, but is not likely to adversely affect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Incidental strikes could occur from high-altitude operations. Strikes would be minimized by following Columbus AFB's BASH plan.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Ivory-billed Woodpecker	<i>Campephilus principalis</i>	E	Airspace Areas	The Ivory-billed Woodpecker is (or was) an inhabitant of old growth forests in swamps and bottomlands along large rivers throughout most of its range. These sorts of habitats in Mississippi were dominated by forests of sweetgum, Nuttall oak, and green ash, and with lesser numbers of various species of oaks and elms, hackberry, water hickory, and pecan. In Florida, it also occurred in large cypress swamps not associated with rivers. This species has been reported to fly above treetops, and typically stays within a few hundred meters of previous nests. This species does not migrate. Woodpeckers' flying habit is low and typically from tree to tree. Woodpecker's flight is undulating where the bird launches off the side of a tree, pumps its wings four or five strokes, and folds them against its body. During this short pause, the bird loses a few feet of altitude.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect this species as it does not fly at the same altitude as the aircraft and this species prefers terrestrial habitats. DAF would follow BASH protocols to avoid potential strikes.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Piping Plover	<i>Charadrius melodus</i>	T	Airspace Areas	Piping Plover's preferred habitats include tidally-exposed sand and mud flats with no or very sparse vegetation for foraging on invertebrates at or just below the soil surface. Other important habitats include adjacent sandy beaches and washover areas with little to no vegetation for roosting. Migration for this species is between July and September (winter) and February and April (spring). During offshore migratory flights, this species was recorded flying at heights of altitudes as high as 918 feet (280 meters).	May affect, but is not likely to adversely affect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Incidental strikes could occur from high-altitude operations. Strikes would be minimized by following Columbus AFB's BASH plan.
Red Knot	<i>Calidris canutus rufa</i>	T	Airspace Areas	Sandy beaches and mudflats along the coasts during migration and winter. Migration for this species is during the spring and autumn. This species has been observed flying at heights as high as 935 feet (285 meters).	May affect, but is not likely to adversely affect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Incidental strikes could occur from high-altitude operations. Strikes would be minimized by following Columbus AFB's BASH plan.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Red-cockaded Woodpecker	<i>Picoides borealis</i>	E	Airspace Areas	The Red-cockaded Woodpecker is a species of southern pine forests. The preferred nesting habitat is open, park-like, mature pine woodlands with few or no hardwood trees present. Preferred feeding habitats are pine stands with trees 23 centimeters (9 inches) and greater in diameter. These may or may not include a significant hardwood component. This species does not migrate. Woodpeckers' flying habit is low and typically from tree to tree. Woodpecker's flight is undulating where the bird launches off the side of a tree, pumps its wings four or five strokes, and folds them against its body. During this short pause, the bird loses a few feet of altitude.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect this species as it does not fly at the same altitude as the aircraft and this species prefers terrestrial habitats. DAF would follow BASH protocols to avoid potential strikes.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Wood Stork	<i>Mycteria americana</i>	T	Columbus AFB and Airspace Areas	Occurs primarily in freshwater wetlands, including ponds, bayheads, flooded pastures, oxbow lakes, and ditches. Nesting usually occurs in bald cypress trees in swamps, although breeding has also been observed in mangroves. Depending upon proximity of the roosting or nesting habitat to suitable feeding habitats, wood storks may fly for distances up to 40 miles to feed. Because wood storks are large, heavy-bodied birds, they prefer to fly up into the airspace and follow convective currents or thermal pockets (between 1,000 and 3,000 ft AGL) where they are able to soar and conserve energy.	May affect, but is not likely to adversely affect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. Suitable habitat is not located on or near the proposed MILCON and FSRM projects or near the airfield at Columbus AFB; therefore, it is unlikely this species would be affected by construction or aircraft noise. Incidental strikes could occur during takeoffs, landings, touch-and-goes, and high-altitude operations. Strikes would be minimized by following Columbus AFB's BASH plan.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Reptiles					
Black Pinesnake	<i>Pituophis melanoleucus lodingi</i>	T	Airspace Areas	Prefer mature longleaf pine forest with sandy soil, an open canopy, moderately fire-suppressed midstory, and thick, grassy understory.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.
Flattened Musk Turtle	<i>Sternotherus depressus</i>	T	Airspace Areas	Known to occur in the Black Warrior River system upstream from Bankhead Dam.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Gopher Tortoise	<i>Gopherus polyphemus</i>	C	Airspace Areas	Generally inhabit well-drained to excessively well-drained upland soils. Tortoises require soils that are sandy enough to permit construction of burrows and open canopies that allow sufficient herbaceous plant growth and sunny areas in which to nest.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.
Amphibians					
Black Warrior Waterdog	<i>Necturus alabamensis</i>	E	Airspace Areas	Black Warrior waterdogs depend on specific stream substrates for normal and robust life processes such as breeding, rearing, protection of young, protection of adults when threatened, foraging, and feeding. Preferred substrates are dominated by clay or bedrock with little sand, also containing abundant rock crevices and rock slabs for retreats, or shelter, and areas for egg laying.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Fish					
Alabama Sturgeon	<i>Scaphirhynchus suttkusi</i>	E	Airspace Areas	The species prefers relatively stable substrates of gravel and sand in river channels with swift currents. Primarily occurred in large channels of big rivers; in moderate to swift current at depths of 6 to 14 meters.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Blue Shiner	<i>Cyprinella caerulea</i>	T	Airspace Areas	The preferred habitat of blue shiners consists of small to medium streams that include rocky substrates. Fish are found in riffles and runs, as well as pools with moderate to swift current, over gravel to cobble or boulder substrate.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Boulder Darter	<i>Etheostoma wapiti</i>	E	Airspace Areas	Prefer boulders in flowing water with a velocity of about 1 to 2 feet per second; only found in the Elk River.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Cahaba Shiner	<i>Notropis cahabae</i>	E	Airspace Areas	The preferred habitat of the Cahaba shiner is the main channel of the Cahaba River, in areas of shallow shoals up to 5 feet deep and downstream of riffles composed of clean sand or a sand-gravel mix.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Goldline Darter	<i>Percina aurolineata</i>	T	Airspace Areas	Is found over sand or gravel substrate interspersed among cobble and small boulders.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Pallid Sturgeon	<i>Scaphirhynchus albus</i>	E	Airspace Areas	Prefers turbid, large rivers with strong current over sandy or rocky bottom.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Rush Darter	<i>Etheostoma phytophilum</i>	E	Airspace Areas	The rush darter lives in the reeds and rushes on the edges of small freshwater streams. It needs clear, cool water to survive.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Slackwater Darter	<i>Etheostoma boschungii</i>	T	Airspace Areas	Individuals typically inhabit pool areas of small streams that contain organic debris. As streams swell from late winter and early spring rains, slackwater darters migrate into adjacent flooded lowland areas with spring seepage to spawn. Breeding populations have also been found in thick vegetation along the main channel of Swan Creek and Brier Fork of the Flint River.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Snail Darter	<i>Percina tanasi</i>	T	Airspace Areas	Inhabits larger creeks and small rivers, where it occurs in areas with moderate to swift flow over mixed sand and gravel. Young-of-year snail darters were found to heavily use rooted aquatic vegetation (water willow).	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Spotfin Chub	<i>Erimonax monachus</i>	T	Airspace Areas	Prefers moderate to large streams with a good current. These streams typically have clear water, and cool to warm temperatures. The fish generally occupies areas with swift current with a variety of substrates although rarely over silt. During the spawning season, adults tend to occupy bedrock and boulder substrates in faster currents; however, juveniles are typically observed over much smaller substrates and in much slower currents.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Clams					
Alabama Lammussel	<i>Lamtilis virescens</i>	E	Airspace Areas	Prefers shoals in small to medium rivers. However, its presence at Muscle Shoals, prior to impoundment, indicates ability to exist in larger rivers under some conditions.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Alabama Moccasinshell	<i>Medionidus acutissimus</i>	T	Columbus AFB and Airspace Areas	Is known at three waterways in Mississippi: Buttahatchee River, Luxapallila Creek, and a tributary of Luxapallila Creek. In Alabama, it occurs in the Sipsey River, one tributary of the Sipsey Fork of the Black Warrior River, and the Conasauga River.	No effect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. No activities are proposed to occur within aquatic resources at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Black Clubshell	<i>Pleurobema curtum</i>	E	Columbus AFB and Airspace Areas	Occurs only in a segment of the East Fork Tombigbee River in Mississippi.	No effect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. No activities are proposed to occur within aquatic resources at Columbus AFB. Airspace activities would not affect aquatic species.
Clubshell	<i>Pleurobema curum</i>	E	Airspace Areas	The Clubshell is found in small to medium streams with gravel/sand substrate and relatively little silt. It occurs most often in runs with laminar flow (0.06 to 0.25 meters per second).	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Coosa Moccasinshell	<i>Medionidus parvulus</i>	E	Airspace Areas	Prefers free flowing water, gravel, sandy bottoms. Coosa River Endemic.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Cracking Pearlymussel	<i>Hemistena lata</i>	E	Airspace Areas	The cracking pearlymussel inhabits medium sized streams where it buries itself in gravel riffles.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Cumberlandian Combshell	<i>Epioblasma brevidens</i>	E	Airspace Areas	Occurs in the Cumberland and Tennessee River drainages, and in Mississippi is known only from Bear and Cedar creeks, Tishomingo County. It may no longer occur in Cedar Creek.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Dark Pigtoe	<i>Pleurobema furvum</i>	E	Airspace Areas	Inhabits high-quality lotic habitats with stable gravel and sandy-gravel substrates.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Dromedary Pearlymussel	<i>Dromus dromas</i>	E	Airspace Areas	Inhabits small to medium, low turbidity, high to moderate gradient streams. The species is commonly found near riffles on sand and gravel substrates with stable rubble.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Fanshell	<i>Cyprogenia stegaria</i>	E	Airspace Areas	The fanshell inhabits medium to large rivers. It has been reported primarily from relatively deep water in gravelly substrate with moderate current.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Fat Pocketbook	<i>Potamilus capax</i>	E	Airspace Areas	Generally found in larger rivers in a broad range of habitat and substrate types. It seems to prefer a stable mixture of silt, mud and sand, or sticky mud substrates and flowing water.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Finelined Pocketbook	<i>Lampsilis altilis</i>	T	Airspace Areas	The fine-lined pocketbook inhabits high-quality lotic habitats with stable gravel and sandy-gravel substrates. This species is generally found in small river and creek habitats.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Georgia Pigtoe	<i>Pleurobema hanleyianum</i>	E	Airspace Areas	It is found in shallow runs and riffles with strong to moderate current and coarse sand-gravel-cobble bottoms.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Heavy Pigtoe	<i>Pleurobema taitianum</i>	E	Columbus AFB and Airspace Areas	Only four sites with suitable habitat remain: these consist of localities in a bend way of the Tombigbee River, Sumter County, Alabama; the East Fork Tombigbee River, Mississippi; the Buttahatchie River, Mississippi; and the Sipsey River, Pickens and Greene Counties, Alabama.	No effect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. No activities are proposed to occur within aquatic resources at Columbus AFB. Airspace activities would not affect aquatic species.
Inflated Heelsplitter	<i>Potamilus inflatus</i>	T	Columbus AFB and Airspace Areas	Has been collected at two localities on the Pearl River in Mississippi, and in the West Pearl in Louisiana. It still occurs in the Amite River in Louisiana and parts of the Tombigbee River drainage in Mississippi and Alabama.	No effect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. No activities are proposed to occur within aquatic resources at Columbus AFB. Airspace activities would not affect aquatic species.
Orangefoot Pimpleback (pearlymussel)	<i>Plethobasus cooperianus</i>	E	Airspace Areas	The orangefoot pimpleback is found in medium to large rivers in depths of 12 to 29 feet.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Orangenacre Mucket	<i>Lampsilis perovalis</i>	T	Columbus AFB and Airspace Areas	Occurs in the Buttahatchee River, Yellow Creek (Lowndes County) in Mississippi, and a small segment of the East Fork Tombigbee River in Mississippi and in the Sipsey and Little Cahaba rivers in Alabama.	No effect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. No activities are proposed to occur within aquatic resources at Columbus AFB. Airspace activities would not affect aquatic species.
Ovate Clubshell	<i>Pleurobema perovatum</i>	E	Columbus AFB and Airspace Areas	Occurs in the Buttahatchee River and Yellow Creek (Lowndes County) in Mississippi, the Sipsey River in Alabama, a few tributaries of the Black Warrior River in Alabama, and in one tributary of the Tallapoosa River in Alabama.	No effect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. No activities are proposed to occur within aquatic resources at Columbus AFB. Airspace activities would not affect aquatic species.
Oyster Mussel	<i>Epioblasma capsaeformis</i>	E	Airspace Areas	Inhabits medium-size streams to large rivers on shoals and riffles in coarse sand/gravel/cobble substrate. It is not associated with small stream habitats and does not extend far upstream in tributaries. It prefers water depths of less than 3 feet and is sometimes found associated with water-willow.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Pale Lilliput	<i>Toxolasma cylindrellus</i>	E	Airspace Areas	Large creek and small rivers, typically found in gravel in moderate current.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Pink Mucket (peralymussel)	<i>Lampsilis abrupta</i>	E	Airspace Areas	Will use a range of substrates, but generally prefers sand, gravel, and cobble. It is typically found in standing to moderately flowing water as shallow as 1 inch and as deep as 5 feet.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Rabbitsfoot	<i>Quadrula cylindrica</i>	T	Airspace Areas	The rabbitsfoot has been collected at several localities in the Big Black and Big Sunflower rivers and in Bear Creek in Tishomingo County, Mississippi.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Ring Pink (mussel)	<i>Obovaria retusa</i>	E	Airspace Areas	This mussel inhabits the sandy but silt-free bottoms of large rivers.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Rough Pigtoe	<i>Pleurobema plenum</i>	E	Airspace Areas	This species is found in medium to large rivers in sand, gravel, and cobble substrates in shoals. It is occasionally found on flats and muddy sand.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Sheepnose Mussel	<i>Plethobasus cyphus</i>	E	Airspace Areas	Occurs in the Ohio, Cumberland, Tennessee, and upper Mississippi river systems from Minnesota southward. In Mississippi, it is known only from a few localities in the Big Sunflower River.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Slabside Pearlymussel	<i>Pleuonaita dolabelloides</i>	E	Airspace Areas	Occurs and limited to the Tennessee River drainage in Mississippi, as it is known only from Bear Creek in Tishomingo County, Mississippi.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Snuffbox Mussel	<i>Epioblasma triquetra</i>	E	Airspace Areas	The snuffbox has been collected only once in Mississippi, in Bear Creek at Tishomingo State Park.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Southern Acornshell	<i>Epioblasma othcaloogensis</i>	E	Airspace Areas	The southern acornshell inhabits high quality lotic habitats with stable gravel and sandy-gravel substrates.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Southern Clubshell	<i>Pleurobema decisum</i>	E	Columbus AFB and Airspace Areas	Occurs in a few localities on the Buttahatchee River and Yellow Creek in Mississippi and Alabama, the East Fork of the Tombigbee River in Mississippi, the Sipsey and Cahaba Rivers in Alabama, and in a few tributaries of the Alabama and Tallapoosa Rivers in Alabama.	No effect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. No activities are proposed to occur within aquatic resources at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Southern Combshell	<i>Epioblasma penita</i>	E	Columbus AFB and Airspace Areas	Is only known to occur in parts of the Buttahatchee River in Mississippi and Alabama.	No effect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. No activities are proposed to occur within aquatic resources at Columbus AFB. Airspace activities would not affect aquatic species.
Southern Pigtoe	<i>Pleurobema georgianum</i>	E	Airspace Areas	Inhabits high-quality lotic habitats with stable gravel and sandy-gravel substrates.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Spectaclecase (mussel)	<i>Cumberlandia monodonta</i>	E	Airspace Areas	It inhabits large rivers with moderate to swift currents and appears to often colonize microhabitats that are sheltered from the main force of the current. Within these microhabitats, the spectaclecase is often found among patches of boulders that are intermixed with mud, sand, and gravel substrates.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Triangular Kidneyshell	<i>Ptychobranchus greenii</i>	E	Airspace Areas	Usually found in small to medium rivers, in areas with fairly good flow. Generally, substrates it inhabits include sand and/or gravel.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Upland Combshell	<i>Epioblasma metastrata</i>	E	Airspace Areas	Gravel riffles in streams.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
White Wartyback (pearly mussel)	<i>Plethobasus cicatricosus</i>	E	Airspace Areas	The white wartyback buries itself in sand and gravel substrates in shallow stretches of large rivers with slow to moderate currents.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Snails					
Cylindrical Lioplax	<i>Lioplax cyclostomaformis</i>	E	Airspace Areas	It lives in mud under large rocks in rapid currents over stream and river shoals.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Flat Pebblesnail	<i>Lepyrium showalteri</i>	E	Airspace Areas	Is found attached to clean, smooth stones in rapid currents of river shoals.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Lacy Elimia (snail)	<i>Elimia crenatella</i>	T	Airspace Areas	Usually found in tight clusters or colonies on larger rocks within a shoal.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Painted Rocksnail	<i>Leptoxis taeniata</i>	T	Airspace Areas	Painted snails are found attached to cobble, gravel, or other hard substrates in the strong currents of riffles and shoals of rivers and streams.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Plicate Rocksnail	<i>Leptoxis plicata</i>	E	Airspace Areas	Hard substrates in strong currents of riffles and shoals of rivers and streams.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Rough Hornsnail	<i>Pleurocera foreman</i>	E	Airspace Areas	Primarily on clean gravel and cobble in moderate currents at depths of approximately 1 meter. However, has been collected from silty bedrock at 3-meter depth just downstream of shoals on Coosa River at Wetumpka.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Round Rocksnail	<i>Leptoxis ampla</i>	T	Airspace Areas	Round rocksnails inhabit riffles and shoals over gravel, cobble, or other rocky substrates.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.
Tulotoma Snail	<i>Tulotoma magnifica</i>	T	Airspace Areas	Occurs in cool, well-oxygenated, clean, free-flowing waters, with the habitat including both the mainstem river and the lower portions of large tributaries. This species is found in riffles and shoals with strong currents.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect aquatic species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Insects					
Mitchell's Satyr Butterfly	<i>Neonympha mitchellii mitchellii</i>	E	Airspace Areas	In Mississippi, this species has only been found at a few locations in the northeastern counties of Alcorn, Prentiss, Tishomingo, Monroe, and Itawamba. Flight lasts only about 10 days in late June to early July. Adults fly in sunlight with a slow, bobbing flight about a foot above the grass.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect this species as it does not fly at the same altitude as the aircraft. DAF would follow BASH protocols to avoid potential strikes.
Monarch Butterfly	<i>Danaus plexippus</i>	C	Columbus AFB and Airspace Areas	Found in fields, roadside area, open area, wet area, or urban garden; milkweed and flowering plants are needed for monarch habitat. Adult monarchs feed on the nectar of many flowers, but they breed only where milkweeds are found. Migrations for this species occur in October and in February or March. Monarch butterflies have been observed flying at heights as high as 11,000 feet.	May affect, but is not likely to adversely affect – This candidate species was identified for its potential to occur at Columbus AFB and in the airspace areas. Suitable habitat is located near the proposed MILCON and FSRM projects and near the airfield at Columbus AFB; therefore, it is possible this species could be affected by construction or aircraft noise. Incidental strikes could occur during takeoffs, landings, touch-and-goes, and high-altitude operations. Strikes would be minimized by following Columbus AFB's BASH plan.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Flowering Plants					
Alabama Canebrake Pitcher-plant	<i>Sarracenia rubra</i> <i>ssp. Alabamensis</i>	E	Airspace Areas	Alabama canebrake pitcher plants grow in wet sandy clay soils of seepage bogs. These bogs form over a shallow impervious layer of rock that forces water percolating down hillsides to the surface and holds it there.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.
Gentian Pinkroot	<i>Spigelia</i> <i>gentianoides</i>	E	Airspace Areas	Is found in both sunny and shaded areas of upland pine and mixed oak-pine forests.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.
Georgia Rockcress	<i>Aravis georgiana</i>	T	Airspace Areas	Georgia rockcress generally occurs on rocky slopes with shallow soils above streams and rivers and underlain or influenced by granite, sandstone, or limestone. Also inhabits loamy sandy soils, particularly in association with large waterways in the southern part of its range.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.
Kral's Water-plantain	<i>Sagittaria</i> <i>secundifolia</i>	T	Airspace Areas	Can only be found in rocky creek beds in Alabama's Cherokee, Coosa, DeKalb, and Winston counties.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Leafy Prairie-clover	<i>Dalea foliosa</i>	E	Airspace Areas	Leafy prairie-clover is found only in open limestone cedar glades, limestone barrens, and dolomite prairies that have shallow, silt to silty clay loam soils over flat and often highly fractured, horizontally bedded limestone or dolomite with frequent expanses of exposed bedrock at surface elevations typically between 550 to 700 feet (168 to 213 meters). These habitats experience high surface and soil temperatures, generally have low soil moisture but are wet in the spring and fall and experience some drought in summer and have a seasonal aspect to the flora. The distribution of glade, barren, and dry to wet dolomite prairie at any particular site is determined by subtle, local variations in soil and bedrock depths and topographic position.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.
Lyrate Bladderpod	<i>Lesquerella lyrata</i>	T	Airspace Areas	A component of glade flora and occurs in association with limestone outcroppings. The terms "glade" and "cedar glade" refer to shallow-soiled, open areas that are sometimes surrounded by cedar woods. <i>L. lyrata</i> often occurs without associates; however, it may occur with Alabama gladecress, sandwort, stonecrop, and weedy species such as chickweed and false dandelion.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
Mohr's Barbara's Buttons	<i>Marshallia mohrii</i>	T	Airspace Areas	Found in moist, grassy openings in mature woodlands and beside shale-bedded streams. Soils are typically alkaline clays with a high admixture of organic matter.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.
Pondberry	<i>Lindera melissifolia</i>	E	Airspace Areas	Pondberry is associated with wetland habitats such as bottomland hardwoods in the interior areas and the margins of sinks, ponds, and other depressions in the more coastal sites. The plants generally grow in shaded areas.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.
Prices Potato-bean	<i>Apios priceana</i>	T	Airspace Areas	Populations occur in open woods and along woodland edges in limestone areas, often where bluffs grade into creek or river bottoms. Several populations extend onto roadside or powerline rights-of-way. The soils are described as well-drained loams on old alluvium or over limestone.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.
Tennessee Yellow-eyed Grass	<i>Xyris tennesseensis</i>	E	Airspace Areas	Sunny, wet habitats over calcareous bedrock such as spring runs, edges of shallow streams and ponds, seeps, wet meadows, and swales.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.

Common Name	Scientific Name	Federal Status	Location Relative to the Proposed Action	Habitat Description and Distribution	Effect Determination and Justification
White Fringeless Orchid	<i>Platanthera integrilabia</i>	T	Columbus AFB and Airspace Areas	This orchid grows in the wet soils of bogs, marshes, fens, swamps, heads of streams, and on sloping areas kept moist by groundwater seeping to the surface. It is often associated with sphagnum in partially shaded areas.	No effect – This species was identified for its potential to occur at Columbus AFB and in the airspace areas. No suitable habitat for this species occurs at the MILCON and FSRM areas at Columbus AFB. Airspace activities would not affect terrestrial species.
Whorled Sunflower	<i>Helianthus verticillatus</i>	E	Airspace Areas	Is found in moist-soiled sites where little to no overstory canopy is present. Habitat quality ranges from remnant prairie or woodland sites to degraded sites along roadsides, railroad tracks, and agricultural fields.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.
Ferns and Allies					
Alabama Streak-sorus Fern	<i>Thelypteris Pilosa var. alabamensis</i>	T	Airspace Areas	Plants take root in crevices and on rough rock surfaces of Pottsville sandstones on bluffs along the river. Plants typically occur on ceilings of sandstone overhangs, on ledges beneath overhangs, and on exposed cliff faces.	No effect – This species was identified for its potential to occur in the airspace areas rather than at Columbus AFB. Airspace activities would not affect terrestrial species.

Key: C = Candidate; E = Endangered; T = Threatened.

Sources of Species List: Attachments 3, 4, and 5.

Note: The species in this table have the potential to occur at the locations noted in that column based on the IPaC reports generated for this project.

Attachment 2: Proposed Action Area Maps



Figure 1. MILCON Project Locations

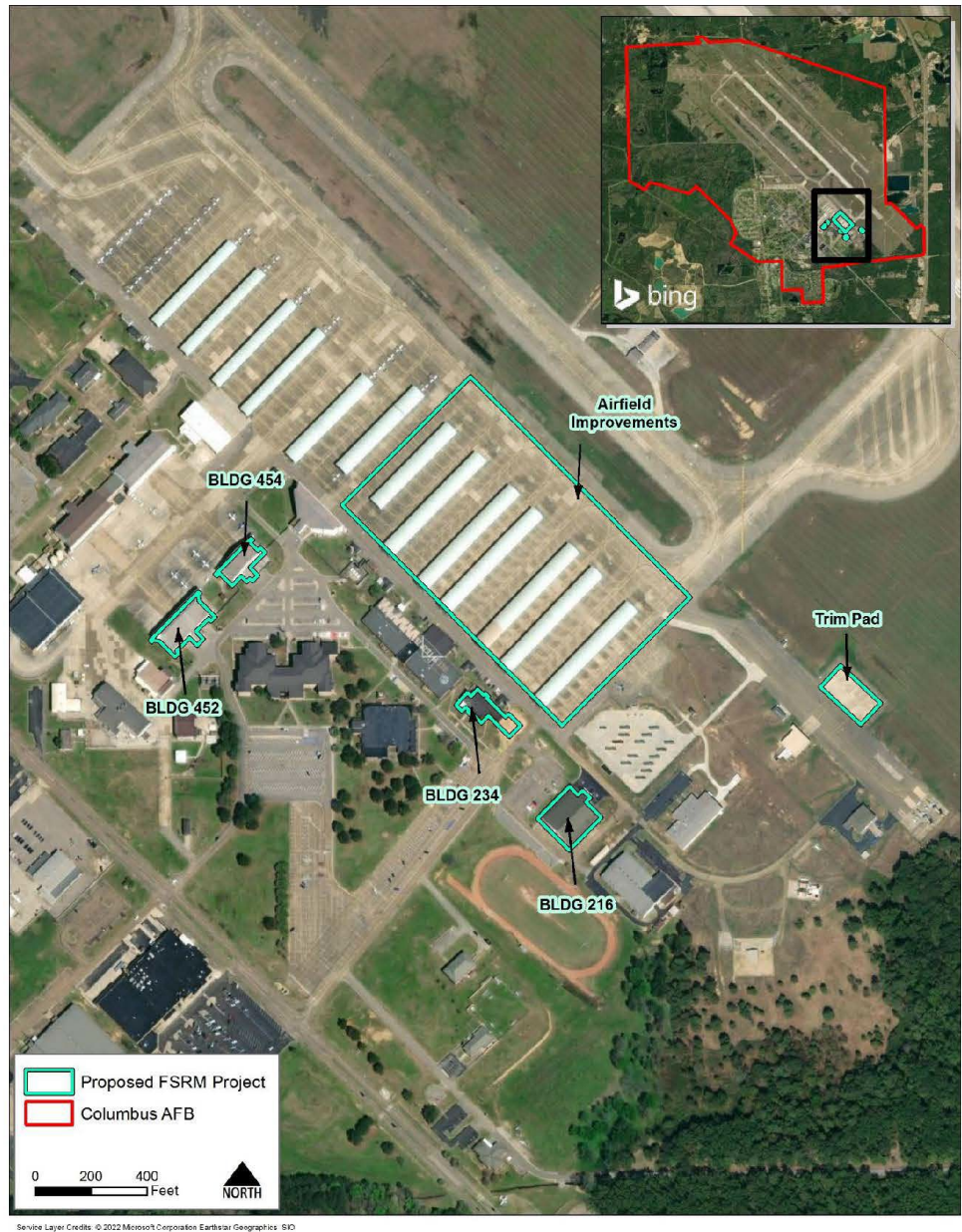


Figure 2. FSRM Project Locations

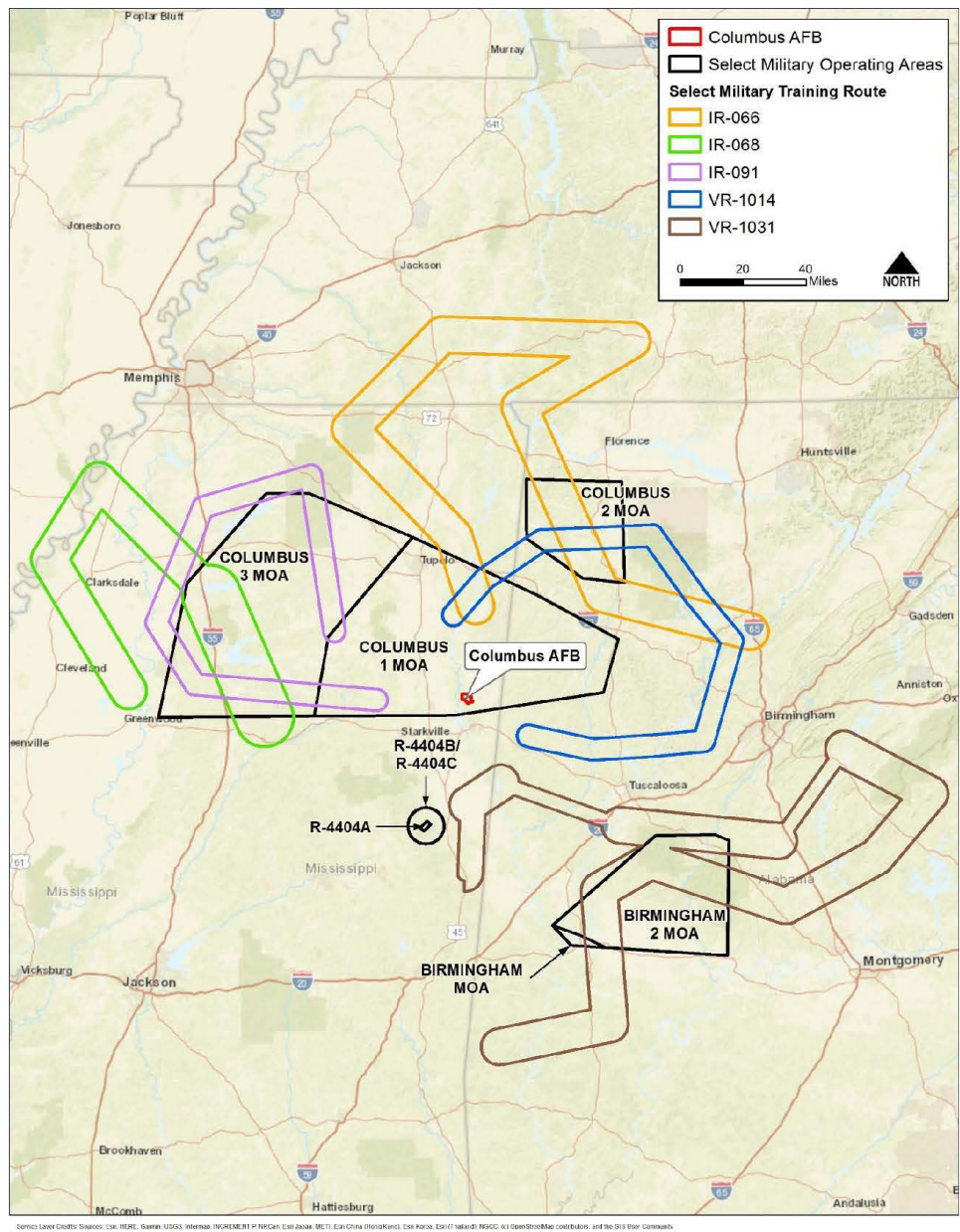


Figure 3. Columbus AFB Airspace Areas

This page intentionally left blank.

Attachment 3: Official Columbus AFB IPaC Report (Project Code: 2022-0031970)



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Mississippi Ecological Services Field Office
6578 Dogwood View Parkway, Suite A
Jackson, MS 39213-7856
Phone: (601) 965-4900 Fax: (601) 965-4340



In Reply Refer To: August 31, 2022
Project Code: 2022-0031970
Project Name: Environmental Impact Statement for T-7A Recapitalization at Columbus Air Force Base, Mississippi

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(e). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. Please email consultation requests to MSFOSection7Consultation@fws.gov.

08/31/2022

3

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Mississippi Ecological Services Field Office
6578 Dogwood View Parkway, Suite A
Jackson, MS 39213-7856
(601) 965-4900

Project Summary

Project Code: 2022-0031970

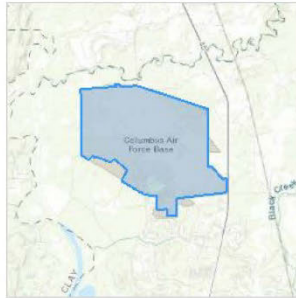
Project Name: Environmental Impact Statement for T-7A Recapitalization at Columbus Air Force Base, Mississippi

Project Type: Military Development

Project Description: Please refer to project description and alternatives in the EIS.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.6384928,-88.4537047,54937,14z>



Counties: Lowndes County, Mississippi

Endangered Species Act Species

There is a total of 12 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477	Threatened

Clams

NAME	STATUS
Alabama Moccasinshell <i>Medionidus acutissimus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7287	Threatened
Black Clubshell <i>Pleurobema curtum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5429	Endangered
Heavy Pigtoe <i>Pleurobema taitianum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/298	Endangered
Inflated Heelsplitter <i>Potamilus inflatus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7286	Threatened
Orangenacre Mucket <i>Hamiota perovalis</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1980	Threatened
Ovate Clubshell <i>Pleurobema perovatium</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5430	Endangered
Southern Clubshell <i>Pleurobema decisum</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6113	Endangered
Southern Combshell <i>Epioblasma penita</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7285	Endangered

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
White Fringeless Orchid <i>Platanthera integrilabia</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1889	Threatened

08/31/2022

5

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the [FAQ below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Brown-headed Nuthatch <i>Sitta pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jul 15
Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 26 to Jul 20
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25

NAME	BREEDING SEASON
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

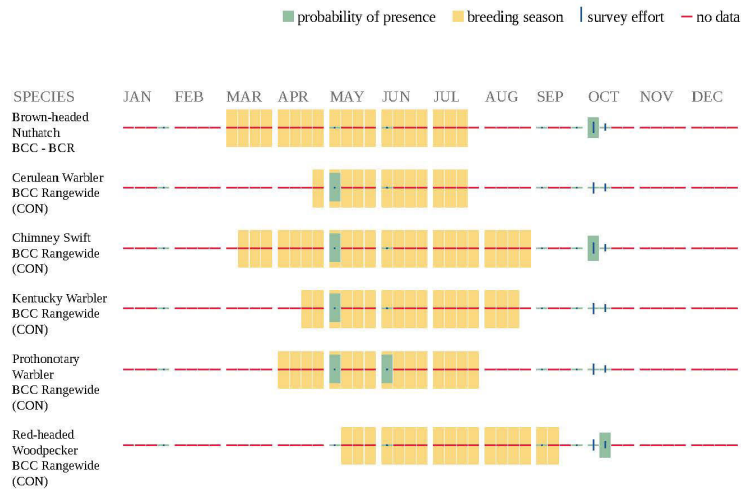
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>

- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look

at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be

aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPaC User Contact Information

Agency: AmaTerra Environmental, Inc.
Name: Joshua Zatopek
Address: 11842 Rim Rock Trail
City: Austin
State: TX
Zip: 78737
Email: jzatopek@amaterra.com
Phone: 5123290031

Lead Agency Contact Information

Lead Agency: Department of Defense

This page intentionally left blank.

Attachment 4: Official Columbus AFB Airspace Areas IPaC Report (Project Code: 2022-0032713)



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Mississippi Ecological Services Field Office
6578 Dogwood View Parkway, Suite A
Jackson, MS 39213-7856
Phone: (601) 965-4900 Fax: (601) 965-4340



In Reply Refer To:
Project Code: 2022-0032713
Project Name: Official Report for Columbus AFB Airspace Areas

August 31, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office. Please email consultation requests to MSFOSection7Consultation@fws.gov.

Note: IPaC has provided all available attachments because this project is in multiple field office jurisdictions.

08/31/2022

3

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Mississippi Ecological Services Field Office

6578 Dogwood View Parkway, Suite A
Jackson, MS 39213-7856
(601) 965-4900

This project's location is within the jurisdiction of multiple offices. However, only one species list document will be provided for all offices. The species and critical habitats in this document reflect the aggregation of those that fall in each of the affiliated office's jurisdiction. Other offices affiliated with the project:

Alabama Ecological Services Field Office

1208 B Main Street
Daphne, AL 36526-4419
(251) 441-5181

Project Summary

Project Code: 2022-0032713
Project Name: Official Report for Columbus AFB Airspace Areas
Project Type: Military Operations
Project Description: Please refer to project description and alternatives in the EIS.
Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.064589600000005,-88.9889001377581,14z>



Counties: Alabama and Mississippi

Endangered Species Act Species

There is a total of 45 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	Endangered
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477	Threatened

Reptiles

NAME	STATUS
Flattened Musk Turtle <i>Sternotherus depressus</i> Population: Black Warrior R. system upstream from Bankhead Dam No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6961	Threatened

Amphibians

NAME	STATUS
Black Warrior (=sipsev Fork) Waterdog <i>Necturus alabamensis</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5426	Endangered

Fishes

NAME	STATUS
Alabama Sturgeon <i>Scaphirhynchus sutkusi</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2552	Endangered
Cahaba Shiner <i>Notropis cahabae</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/650	Endangered
Goldline Darter <i>Percina aurolineata</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7005	Threatened
Rush Darter <i>Etheostoma phytophilum</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2779	Endangered
Snail Darter <i>Percina tanasi</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5603	Threatened

Clams

NAME	STATUS
Alabama Lampmussel <i>Lampsilis virescens</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/916	Endangered
Alabama Moccasinshell <i>Medionidus acutissimus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7287	Threatened
Black Clubshell <i>Pleurobema curtum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5429	Endangered
Cumberlandian Combshell <i>Epioblasma brevidens</i> Population: Wherever found; Except where listed as Experimental Populations There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3119	Endangered
Dark Pigtoe <i>Pleurobema furvum</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1519	Endangered
Dromedary Pearlymussel <i>Dromus dromas</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6377	Endangered
Finelined Pocketbook <i>Hamiota altilis</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1393	Threatened
Heavy Pigtoe <i>Pleurobema taitianum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/298	Endangered
Inflated Heelsplitter <i>Potamilus inflatus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7286	Threatened
Orangenacre Mucket <i>Hamiota perovalis</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1980	Threatened
Ovate Clubshell <i>Pleurobema perovatium</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5430	Endangered
Pink Mucket (pearlymussel) <i>Lampsilis abrupta</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7829	Endangered
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i>	Threatened

NAME	STATUS
There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5165	
Rough Pigtoe <i>Pleurobema plenum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6894	Endangered
Slabside Pearlymussel <i>Pleuroaia dolabelloides</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1518	Endangered
Southern Acomshell <i>Epioblasma othcaloogensis</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8469	Endangered
Southern Clubshell <i>Pleurobema decisum</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6113	Endangered
Southern Combshell <i>Epioblasma penita</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7285	Endangered
Triangular Kidneyshell <i>Ptychobranthus greenii</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4396	Endangered
Upland Combshell <i>Epioblasma metastrata</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/317	Endangered

Snails

NAME	STATUS
Cylindrical Lioplax (snail) <i>Lioplax cyclostomaformis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2337	Endangered
Round Rocksnail <i>Leptoxis ampla</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/470	Threatened

Insects

NAME	STATUS
Mitchell's Satyr Butterfly <i>Neonympha mitchellii mitchellii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8062	Endangered
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Georgia Rockcress <i>Arabis georgiana</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4535	Threatened
Leafy Prairie-clover <i>Dalea foliosa</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5498	Endangered
Lyrate Bladderpod <i>Lesquerella lyrata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4654	Threatened
Mohr's Barbara's Buttons <i>Marshallia mohrii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7610	Threatened
Pondberry <i>Lindera melissifolia</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1279	Endangered
Price's Potato-bean <i>Apios priceana</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7422	Threatened
Tennessee Yellow-eyed Grass <i>Xyris tennesseensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6010	Endangered
White Fringeless Orchid <i>Platanthera integrilabia</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1889	Threatened

Ferns and Allies

NAME	STATUS
Alabama Streak-sorus Fern <i>Thelypteris pilosa</i> var. <i>alabamensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3604	Threatened

Critical habitats

There are 10 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Alabama Moccasinshell <i>Medionidus acutissimus</i> https://ecos.fws.gov/ecp/species/7287#crithab	Final
Alabama Sturgeon <i>Scaphirhynchus suttkusi</i> https://ecos.fws.gov/ecp/species/2552#crithab	Final
Finelined Pocketbook <i>Hamiota altilis</i> https://ecos.fws.gov/ecp/species/1393#crithab	Final
Georgia Rockcress <i>Arabis georgiana</i> https://ecos.fws.gov/ecp/species/4535#crithab	Final
Orangenacre Mucket <i>Hamiota perovalis</i> https://ecos.fws.gov/ecp/species/1980#crithab	Final
Ovate Clubshell <i>Pleurobema perovatum</i> https://ecos.fws.gov/ecp/species/5430#crithab	Final
Southern Acornshell <i>Epioblasma othcaloogensis</i> https://ecos.fws.gov/ecp/species/8469#crithab	Final
Southern Clubshell <i>Pleurobema decisum</i> https://ecos.fws.gov/ecp/species/6113#crithab	Final
Triangular Kidneyshell <i>Ptychobranchus greenii</i> https://ecos.fws.gov/ecp/species/4396#crithab	Final
Upland Combshell <i>Epioblasma metastrata</i> https://ecos.fws.gov/ecp/species/317#crithab	Final

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

The following FWS National Wildlife Refuge Lands and Fish Hatcheries lie fully or partially within your project area:

<u>FACILITY NAME</u>	<u>ACRES</u>
FARM SERVICE AGENCY INTEREST OF AL https://www.fws.gov/refuges/profiles/index.cfm?id=43660	20.429
FARM SERVICE AGENCY INTEREST OF MS https://www.fws.gov/refuges/profiles/index.cfm?id=43676	963.023
FARM SERVICE AGENCY INTEREST OF MS https://www.fws.gov/refuges/profiles/index.cfm?id=43620	81.541
TALLAHATCHIE NATIONAL WILDLIFE REFUGE https://www.fws.gov/refuges/profiles/index.cfm?id=43645	5,850.029

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31

NAME	BREEDING SEASON
Bachman's Sparrow <i>Aimophila aestivalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6177	Breeds May 1 to Sep 30
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Brown-headed Nuthatch <i>Sitta pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jul 15
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 23 to Jul 20
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Field Sparrow <i>Spizella pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Aug 15
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1690	Breeds elsewhere

NAME	BREEDING SEASON
Golden-winged Warbler <i>Vermivora chrysoptera</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745	Breeds May 1 to Jul 20
Henslow's Sparrow <i>Ammodramus henslowii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
King Rail <i>Rallus elegans</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8936	Breeds May 1 to Sep 5
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Little Blue Heron <i>Egretta caerulea</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 10 to Oct 15
Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Painted Bunting <i>Passerina ciris</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 15
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere

NAME	BREEDING SEASON
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Swallow-tailed Kite <i>Elanoides forficatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence

in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

- The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

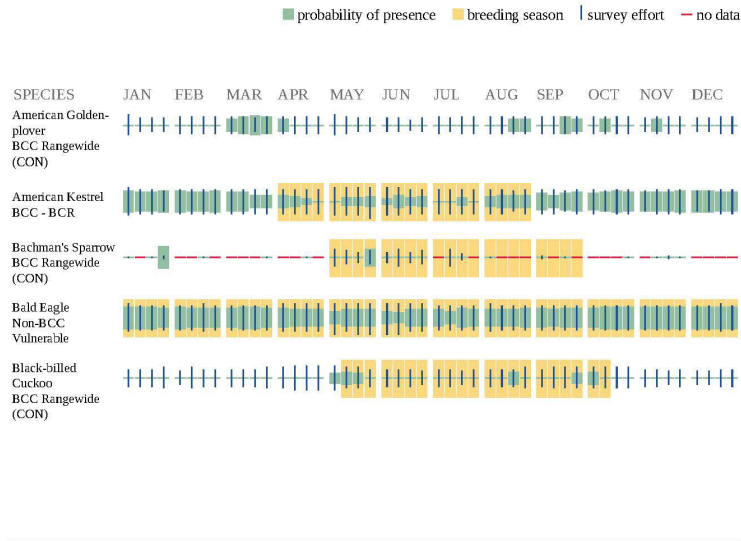
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

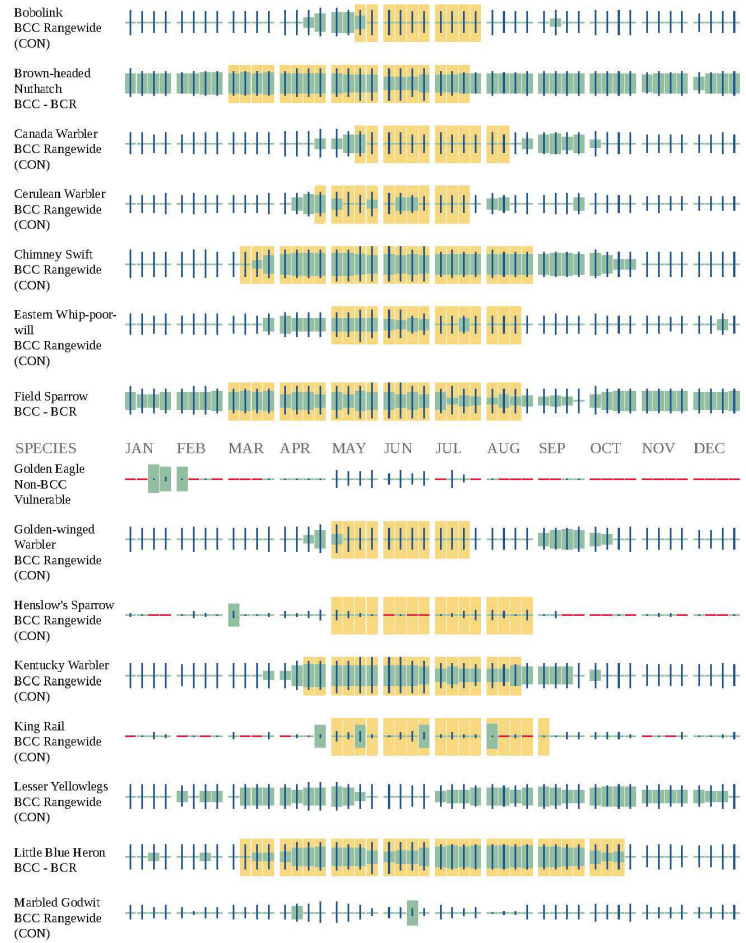
No Data (—)

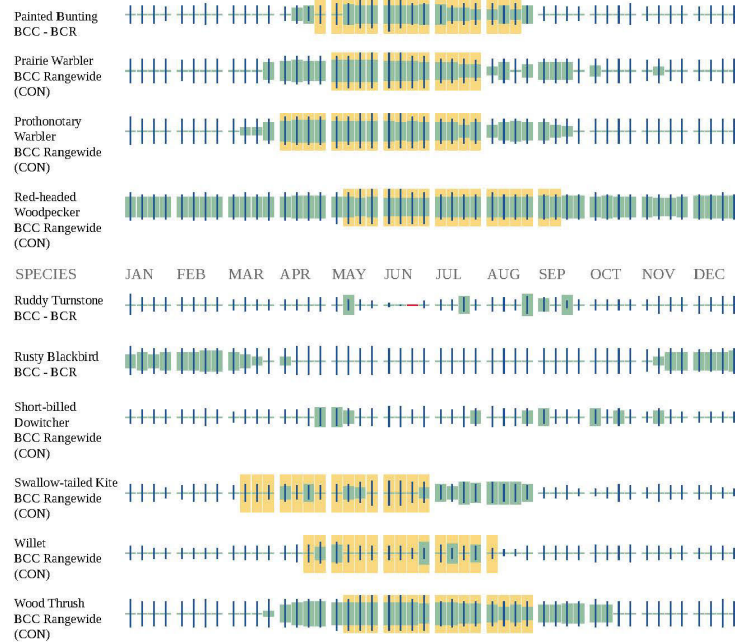
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in

the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

08/31/2022

2

IPaC User Contact Information

Agency: AmaTerra Environmental, Inc.
Name: Joshua Zatopek
Address: 11842 Rim Rock Trail
City: Austin
State: TX
Zip: 78737
Email: jzatopek@amaterra.com
Phone: 5123290031

Lead Agency Contact Information

Lead Agency: Department of Defense

Attachment 5: Official Columbus AFB Training Routes IPaC Report (Project Code: 2022-0032733)



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Alabama Ecological Services Field Office
1208 B Main Street
Daphne, AL 36526-4419
Phone: (251) 441-5181 Fax: (251) 441-6222



In Reply Refer To:
Project Code: 2022-0032733
Project Name: Official Report for Columbus AFB Training Routes

August 31, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Project consultation requests may be submitted by mail or email (Alabama@fws.gov). **Ensure that the Project Code in the header of this letter is clearly referenced in any request for consultation or correspondence submitted to our office.**

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(e)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/eo-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Ensure that the Project Code in the header of this**

08/31/2022

3

letter is clearly referenced with any request for consultation or correspondence about your project that you submit to our office.

Note: IPaC has provided all available attachments because this project is in multiple field office jurisdictions.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Alabama Ecological Services Field Office

1208 B Main Street
Daphne, AL 36526-4419
(251) 441-5181

This project's location is within the jurisdiction of multiple offices. However, only one species list document will be provided for all offices. The species and critical habitats in this document reflect the aggregation of those that fall in each of the affiliated office's jurisdiction. Other offices affiliated with the project:

Arkansas Ecological Services Field Office

110 South Amity Suite 300
Conway, AR 72032-8975
(501) 513-4470

Mississippi Ecological Services Field Office

6578 Dogwood View Parkway, Suite A
Jackson, MS 39213-7856
(601) 965-4900

Tennessee Ecological Services Field Office

446 Neal Street
Cookeville, TN 38501-4027
(931) 528-6481

Project Summary

Project Code: 2022-0032733
Project Name: Official Report for Columbus AFB Training Routes
Project Type: Military Operations
Project Description: Please refer to project description and alternatives in the EIS.
Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.375032399999995,-87.99176001953882,14z>



Counties: Alabama, Arkansas, Mississippi, and Tennessee

Endangered Species Act Species

There is a total of 83 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Birds

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10477	Threatened
Ivory-billed Woodpecker <i>Campephilus principalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8230	Endangered
Piping Plover <i>Charadrius melodus</i> Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot <i>Calidris canutus rufa</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1864	Threatened
Red-cockaded Woodpecker <i>Picoides borealis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7614	Endangered
Wood Stork <i>Mycteria americana</i> Population: AL, FL, GA, MS, NC, SC No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8477	Threatened

Reptiles

NAME	STATUS
Black Pinesnake <i>Pituophis melanoleucus lodingi</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/452	Threatened
Flattened Musk Turtle <i>Sternotherus depressus</i> Population: Black Warrior R. system upstream from Bankhead Dam No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6961	Threatened
Gopher Tortoise <i>Gopherus polyphemus</i> Population: eastern No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6994	Candidate
Gopher Tortoise <i>Gopherus polyphemus</i> Population: West of Mobile and Tombigbee Rivers No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6994	Threatened

08/31/2022

5

Amphibians

NAME

STATUS

Black Warrior (=sipsey Fork) Waterdog *Necturus alabamensis*

Endangered

There is **final** critical habitat for this species. Your location overlaps the critical habitat.

Species profile: <https://ecos.fws.gov/ecp/species/5426>

Fishes

NAME	STATUS
Alabama Sturgeon <i>Scaphirhynchus suttkusi</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2552	Endangered
Blue Shiner <i>Cyprinella caerulea</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/463	Threatened
Boulder Darter <i>Etheostoma wapiti</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5398	Endangered
Cahaba Shiner <i>Notropis cahabae</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/650	Endangered
Goldline Darter <i>Percina aurolineata</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7005	Threatened
Pallid Sturgeon <i>Scaphirhynchus albus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7162	Endangered
Rush Darter <i>Etheostoma phytophilum</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2779	Endangered
Slackwater Darter <i>Etheostoma boschungii</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8058	Threatened
Snail Darter <i>Percina tanasi</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5603	Threatened
Spotfin Chub <i>Erimonax monachus</i> Population: U.S.A. (AL, TN-specified portions of Shoal Creek; see 17.84(m)(1)(ii)) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1521	Experimental Population, Non- Essential
Spotfin Chub <i>Erimonax monachus</i> Population: Wherever found, except where listed as an experimental population There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1521	Threatened

Clams

NAME	STATUS
Alabama Lampmussel <i>Lampsilis virescens</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/916	Endangered
Alabama Moccasinshell <i>Medionidus acutissimus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7287	Threatened
Black Clubshell <i>Pleurobema curtum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5429	Endangered
Clubshell <i>Pleurobema clava</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3789	Endangered
Coosa Moccasinshell <i>Medionidus parvulus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2575	Endangered
Cracking Pearlymussel <i>Hemistena lata</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4130	Endangered
Cumberlandian Combshell <i>Epioblasma brevidens</i> Population: Wherever found; Except where listed as Experimental Populations There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3119	Endangered
Dark Pigtoe <i>Pleurobema furvum</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1519	Endangered
Dromedary Pearlymussel <i>Dromus dromas</i> Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6377	Endangered
Fanshell <i>Cyprogenia stegaria</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4822	Endangered
Fat Pocketbook <i>Potamilus capax</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2780	Endangered
Finelined Pocketbook <i>Hamiota altis</i> There is final critical habitat for this species. Your location overlaps the critical habitat.	Threatened

NAME	STATUS
Species profile: https://ecos.fws.gov/ecp/species/1393	
Georgia Pigtoe <i>Pleurobema hanleyianum</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6494	Endangered
Heavy Pigtoe <i>Pleurobema taitianum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/298	Endangered
Inflated Heelsplitter <i>Potamilus inflatus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7286	Threatened
Orangefoot Pimpleback (pearlymussel) <i>Plethobasus cooperianus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1132	Endangered
Orangenacre Mucket <i>Hamiota perovalis</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1980	Threatened
Ovate Clubshell <i>Pleurobema perovatum</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5430	Endangered
Oyster Mussel <i>Epioblasma capsaeformis</i> Population: Wherever found; Except where listed as Experimental Populations There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2099	Endangered
Pale Lilliput (pearlymussel) <i>Toxolasma cylindrellus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3118	Endangered
Pink Mucket (pearlymussel) <i>Lampsilis abrupta</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7829	Endangered
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5165	Threatened
Ring Pink (mussel) <i>Obovaria retusa</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4128	Endangered
Rough Pigtoe <i>Pleurobema plenum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6894	Endangered
Sheepnose Mussel <i>Plethobasus cyphus</i> No critical habitat has been designated for this species.	Endangered

NAME	STATUS
Species profile: https://ecos.fws.gov/ecp/species/6903	
Slabside Pearlmussel <i>Pleuonaia dotabelloides</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1518	Endangered
Snuffbox Mussel <i>Epioblasma triquetra</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4135	Endangered
Southern Acornshell <i>Epioblasma othcaloogensis</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8469	Endangered
Southern Clubshell <i>Pleurobema decisum</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6113	Endangered
Southern Combshell <i>Epioblasma penita</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7285	Endangered
Southern Pigtoe <i>Pleurobema georgianum</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1520	Endangered
Spectaclecase (mussel) <i>Cumberlandia monodonta</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7867	Endangered
Triangular Kidneyshell <i>Ptychobranthus greenii</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4396	Endangered
Upland Combshell <i>Epioblasma metastrata</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/317	Endangered
White Wartback (pearlmussel) <i>Plethobasus cicatricosus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2549	Endangered

Snails

NAME	STATUS
Cylindrical Lioplax (snail) <i>Lioplax cyclostomaformis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2337	Endangered
Flat Pebblesnail <i>Lepyrium showalteri</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2338	Endangered
Lacy Elimia (snail) <i>Elimia crenatella</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5052	Threatened
Painted Rocksnail <i>Leptoxis taeniata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2999	Threatened
Plicate Rocksnail <i>Leptoxis plicata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5614	Endangered
Rough Hornsnail <i>Pleurocera foremani</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/924	Endangered
Round Rocksnail <i>Leptoxis ampla</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/470	Threatened
Tulotoma Snail <i>Tulotoma magnifica</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2103	Threatened

Insects

NAME	STATUS
Mitchell's Satyr Butterfly <i>Neonympha mitchellii mitchellii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8062	Endangered
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Alabama Canebrake Pitcher-plant <i>Sarracenia rubra</i> ssp. <i>alabamensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1846	Endangered
Gentian Pinkroot <i>Spigelia gentianoides</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4583	Endangered
Georgia Rockcress <i>Arabis georgiana</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4535	Threatened
Kral's Water-plantain <i>Sagittaria secundifolia</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8235	Threatened
Leafy Prairie-clover <i>Dalea foliosa</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5498	Endangered
Lyrate Bladderpod <i>Lesquerella lyrata</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4654	Threatened
Mohr's Barbara's Buttons <i>Marshallia mohrii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7610	Threatened
Pondberry <i>Lindera melissifolia</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1279	Endangered
Price's Potato-bean <i>Apios priceana</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7422	Threatened
Tennessee Yellow-eyed Grass <i>Xyris tennesseensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6010	Endangered
White Fringeless Orchid <i>Platanthera integrilabia</i> Population: No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1889	Threatened
Whorled Sunflower <i>Helianthus verticillatus</i> Population: There is final critical habitat for this species. Your location overlaps the critical habitat.	Endangered

08/31/2022

12

NAME	STATUS
Species profile: https://ecos.fws.gov/ecp/species/3375	

Ferns and Allies

NAME	STATUS
Alabama Streak-sorus Fern <i>Thelypteris pilosa</i> var. <i>alabamensis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3604	Threatened

Critical habitats

There are 23 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Alabama Moccasinshell <i>Medionidus acutissimus</i> https://ecos.fws.gov/ecp/species/7287#crihab	Final
Alabama Sturgeon <i>Scaphirhynchus suttkusi</i> https://ecos.fws.gov/ecp/species/2552#crihab	Final
Black Warrior (=sipsey Fork) Waterdog <i>Necturus alabamensis</i> https://ecos.fws.gov/ecp/species/5426#crihab	Final
Coosa Moccasinshell <i>Medionidus parvulus</i> https://ecos.fws.gov/ecp/species/2575#crihab	Final
Cumberlandian Combshell <i>Epioblasma brevidens</i> https://ecos.fws.gov/ecp/species/3119#crihab	Final
Dark Pigtoe <i>Pleurobema furvum</i> https://ecos.fws.gov/ecp/species/1519#crihab	Final
Finelined Pocketbook <i>Hamiota altilis</i> https://ecos.fws.gov/ecp/species/1393#crihab	Final
Georgia Pigtoe <i>Pleurobema hanleyianum</i> https://ecos.fws.gov/ecp/species/6494#crihab	Final
Georgia Rockcress <i>Arabis georgiana</i> https://ecos.fws.gov/ecp/species/4535#crihab	Final
Orangenacre Mucket <i>Hamiota perovalis</i> https://ecos.fws.gov/ecp/species/1980#crihab	Final
Ovate Clubshell <i>Pleurobema perovatum</i> https://ecos.fws.gov/ecp/species/5430#crihab	Final
Oyster Mussel <i>Epioblasma capsaeformis</i> https://ecos.fws.gov/ecp/species/2099#crihab	Final
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i>	Final

08/31/2022

13

NAME	STATUS
https://ecos.fws.gov/ecp/species/5165#crithab	
Rough Hornsnail <i>Pleurocera foremani</i> https://ecos.fws.gov/ecp/species/924#crithab	Final
Rush Darter <i>Etheostoma phytophilum</i> https://ecos.fws.gov/ecp/species/2779#crithab	Final
Slabside Pearlmussel <i>Pleuonaia dolabelloides</i> https://ecos.fws.gov/ecp/species/1518#crithab	Final
Slackwater Darter <i>Etheostoma boschungii</i> https://ecos.fws.gov/ecp/species/8058#crithab	Final
Southern Acornshell <i>Epioblasma othcaloogensis</i> https://ecos.fws.gov/ecp/species/8469#crithab	Final
Southern Clubshell <i>Pleurobema decisum</i> https://ecos.fws.gov/ecp/species/6113#crithab	Final
Southern Pigtoe <i>Pleurobema georgianum</i> https://ecos.fws.gov/ecp/species/1520#crithab	Final
Triangular Kidneyshell <i>Ptychobranchus greenii</i> https://ecos.fws.gov/ecp/species/4396#crithab	Final
Upland Combshell <i>Epioblasma metastrata</i> https://ecos.fws.gov/ecp/species/317#crithab	Final
Whorled Sunflower <i>Helianthus verticillatus</i> https://ecos.fws.gov/ecp/species/3375#crithab	Final

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

The following FWS National Wildlife Refuge Lands and Fish Hatcheries lie fully or partially within your project area:

<u>FACILITY NAME</u>	<u>ACRES</u>
CAHABA RIVER NATIONAL WILDLIFE REFUGE https://www.fws.gov/refuges/profiles/index.cfm?id=43665	4,765.794
FARM SERVICE AGENCY INTEREST OF MS https://www.fws.gov/refuges/profiles/index.cfm?id=43645	6,942.403
FARM SERVICE AGENCY INTEREST OF MS https://www.fws.gov/refuges/profiles/index.cfm?id=43676	5,739.063
FARM SERVICE AGENCY INTEREST OF MS https://www.fws.gov/refuges/profiles/index.cfm?id=43635	2,498.039
THEODORE ROOSEVELT NATIONAL WILDLIFE REFUGE https://www.fws.gov/refuges/profiles/index.cfm?id=43683	4,510.296

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

-
1. The [Migratory Birds Treaty Act](#) of 1918.
 2. The [Bald and Golden Eagle Protection Act](#) of 1940.
 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\) list](#) or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
American Kestrel <i>Falco sparverius paulus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9587	Breeds Apr 1 to Aug 31

NAME	BREEDING SEASON
Bachman's Sparrow <i>Aimophila aestivalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6177	Breeds May 1 to Sep 30
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31
Black Skimmer <i>Rynchops niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Brown-headed Nuthatch <i>Sitta pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jul 15
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 23 to Jul 20
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Field Sparrow <i>Spizella pusilla</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Aug 15

NAME	BREEDING SEASON
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Golden-winged Warbler <i>Vermivora chrysoptera</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8745	Breeds May 1 to Jul 20
Kentucky Warbler <i>Oporornis formosus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
King Rail <i>Rallus elegans</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8936	Breeds May 1 to Sep 5
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Little Blue Heron <i>Egretta caerulea</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 10 to Oct 15
Marbled Godwit <i>Limosa fedoa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Painted Bunting <i>Passerina ciris</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 15
Prairie Warbler <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

NAME	BREEDING SEASON
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Swallow-tailed Kite <i>Elanoides forficatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8938	Breeds Mar 10 to Jun 30
Willet <i>Tringa semipalmata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 5
Wood Thrush <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

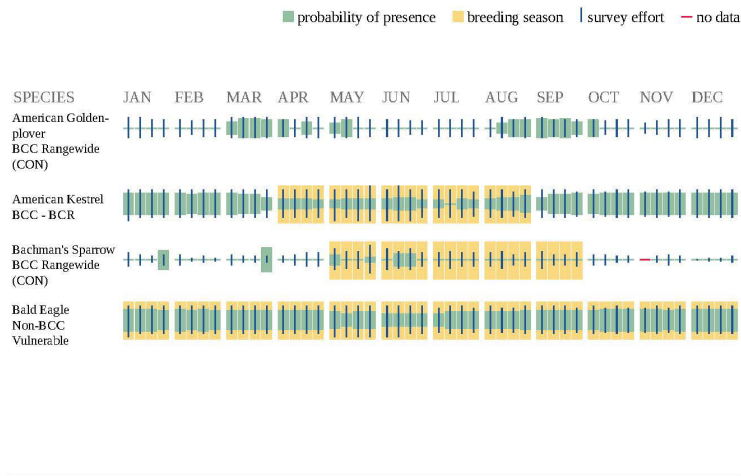
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

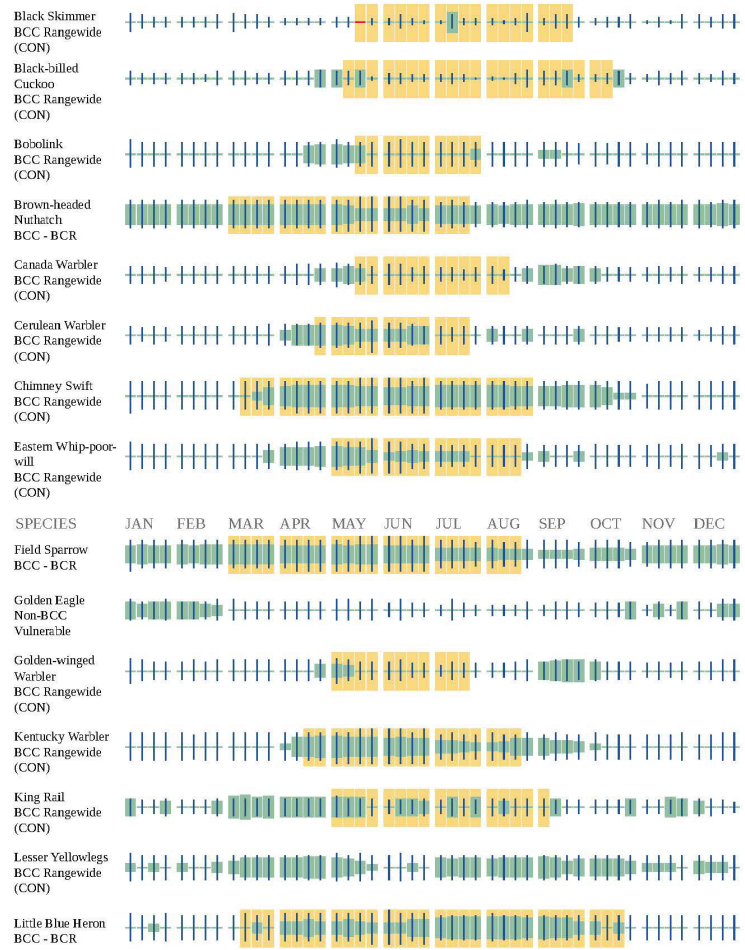
No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of

certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT [HTTPS://WWW.FWS.GOV/WETLANDS/DATA/MAPPER.HTML](https://www.fws.gov/wetlands/data/mapper.html) OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

08/31/2022

2

IPaC User Contact Information

Agency: AmaTerra Environmental, Inc.
Name: Joshua Zatopek
Address: 11842 Rim Rock Trail
City: Austin
State: TX
Zip: 78737
Email: jzatopek@amaterra.com
Phone: 5123290031

Lead Agency Contact Information

Lead Agency: Department of Defense

This page intentionally left blank.

Response from USFWS (February 2023)



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Mississippi Ecological Services Field Office
6578 Dogwood View Parkway, Suite A
Jackson, Mississippi 39213
Phone: (601)965-4900 Fax: (601)965-4340

15 February 2023

IN REPLY REFER TO:
2023-0031970

Allen S. Reed
Installation Management Flight
14 CES/CEI
555 Simler Boulevard
Suite 108B
Columbus AFB, Mississippi 39710

Dear Mr. Reed:

The Fish and Wildlife Service (Service) has reviewed your correspondence received January 25, 2023 regarding the proposed T-7A Recapitalization Project located at Columbus Air Force Base in Lowndes County, Mississippi. Our comments are submitted in accordance with the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.).

Based on the information provided in your letter, the Service has determined that the proposed project is "Not Likely to Adversely Affect" species protected under the ESA. No further coordination is required with this office unless there are changes in scope or location of the proposed project.

If you have any questions, please contact Ashley Seagroves Ruppel in our office, telephone: (601) 321-1126, email: Ashley_S_Ruppel@fws.gov or visit our website at <https://www.fws.gov/office/mississippi-ecological-services>.

Sincerely,
**JAMES
AUSTIN**
James A. Austin
Field Supervisor
Mississippi Field Office

Digitally signed
by JAMES AUSTIN
Date: 2023.02.16
16:10:41 -06'00'

Section 106 of the National Historic Preservation Act Consultation

DAF consulted under Section 106 of the National Historic Preservation Act with the Mississippi State Historical Preservation Officer (SHPO) for the Proposed Action. **Section 3.5** contains further information regarding the outcome of the consultation with the Mississippi SHPO. A copy of the consultation letters and responses is on the following pages.

Consultation Letter sent to the Mississippi SHPO (October 2022)



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 14TH FLYING TRAINING WING
COLUMBUS AIR FORCE BASE MISSISSIPPI**

11 Oct 2022

Allen S. Reed, Chief
Installation Management Flight
14 CES/CEI
555 Simler Blvd., Ste. 108B
Columbus AFB, MS 39710

Ms. Katie Blount
Mississippi SHPO
Mississippi Department of Archives & History
P.O. Box 571
Jackson, MS 39205-0571

Dear Ms. Blount:

The United States Department of the Air Force (DAF) is proposing to recapitalize its flight training program with newer and more capable T-7A Red Hawk aircraft at Columbus Air Force Base (AFB), Mississippi. Recapitalization is the phased acquisition of the new generation T-7A aircraft and construction and upgrade of specific facilities to support the training, operation, and maintenance of the T-7A aircraft. To consider various environmental concerns, DAF is engaging early with the appropriate resource and regulatory agencies as it formulates the undertaking. DAF is also preparing an Environmental Impact Statement under the National Environmental Policy Act to evaluate potential environmental impacts associated with the T-7A recapitalization at Columbus AFB.

Per 54 U.S.C. 306108 and Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR Part 800, DAF is initiating consultation and advising you of a proposed undertaking that has the potential to affect historic properties.

The undertaking will entail the phased introduction of T-7A aircraft and phased reduction of the T-38C aircraft currently operating from Columbus AFB; new intensities of flight operations at Columbus AFB including nighttime operations; and changes to the number of personnel assigned to Columbus AFB. T-7A operations would occur within the same designated military airspace boundaries currently used for T-38C operations, and no changes to established Special Use Airspace configurations (i.e., size, shape, or location) would occur. Additionally, construction for six military construction (MILCON) projects and six facilities sustainment, restoration, and modernization (FSRM) projects would occur at Columbus AFB to provide modern facilities and infrastructure to support the T-7A aircraft's maintenance, training, and operational requirements. The MILCON and FSRM projects include new building construction and renovation of existing facilities. This undertaking's potential to impact historic properties is from the MILCON and FSRM projects, and details on the MILCON and FSRM projects and their individual assessment of effect can be found in **Attachment 1**.

1

The Area of Potential Effect (APE) for this undertaking is defined as the potential impact area from all activities. The APE includes all areas of potential direct and indirect effects. Direct effects include, but are not limited to, ground disturbance, vibration, building modification and new construction, and staging and equipment storage. Indirect effects include noise and aesthetic interference. For this undertaking, the APE is defined as the footprint of all buildings proposed for interior and exterior alteration, all areas of new construction and additions, all landscape features (such as airfield markings) that are proposed for alteration, and a 50-foot buffer around these areas to account for construction staging and temporary physical impacts from ground disturbing activity (see **Attachment 2** for the boundaries of the APE). The APE captures all anticipated direct and indirect effects as all new construction is anticipated to be one-story in height and is not anticipated to exceed 40 feet in total building height, and there are no National Register of Historic Places (NRHP)-listed or eligible historic districts, sites, buildings, structures, or objects that would be visually or audibly affected by the proposed undertaking. The only vertical incursions planned are the antennas that would be located atop the proposed Ground Based Training System (GBTS) facility, which would project approximately 15 to 20 feet above the one-story building. The total vertical projection of the proposed GBTS facility and antennas combined is approximately 55 to 60 feet. The APE totals approximately 32 acres. The APE for this undertaking does not include areas within the airspace where the T-7A would perform operations because T-7A flight training would occur at a relatively high altitude (e.g., greater than 500 feet above ground level) in previously defined military airspace and would have no potential to impact historic properties.

Five MILCON and FSRM projects would entail alterations to three historic-age buildings. These projects are interior renovation of a squadron operations building, Building 216 (built 1961); an addition and renovation/conversion (which includes two projects) to the Egress Shop, Building 452 (Hangar 3, built 1958); and relocation of the wash rack from Building 452 to Building 454 (Hangar 4, built 1959). Building 216 (built 1961) is partially within the APE of the proposed GBTS facility, but would not be physically altered by the construction of the proposed GBTS facility. Those three resources of the built environment that would be impacted (Building 216, Building 452, and Building 454) are now over 50 years old and require determination of eligibility for listing in the NRHP. No other historic-age buildings would be impacted by the proposed MILCON and FSRM projects.

Columbus AFB prepared a built environment inventory in December 2003 to assess buildings, structures, and objects related to the Cold War-Era (**Attachment 3**). The 2003 inventory recommended Buildings 216, 452, and 454 as not eligible for inclusion in the NRHP based on a lack of integrity and failure to meet the exceptional significance threshold required under Criterion Consideration G. The 2003 inventory document was reviewed by the Mississippi Department of Archives and History, but no formal determination was made. Buildings 216, 452, and 454 now meet the 50-year minimum threshold for NRHP assessment. To date, no additional information regarding the significance of Cold War-Era associations has come to light that would change the previous recommendation of not eligible under Criteria A and B. Due to alterations and common construction method and materials, all three buildings are recommended not eligible for listing in the NRHP under Criterion C or D (**Attachment 4**).

Five MILCON and FSRM projects (GBTS facility, UMT facility, Hush House, Egress Shop Addition, and Trim Pad) would require ground disturbance. The ground disturbance areas

for these projects are in previously developed portions of the installation, and no historic sites or artifacts have ever been identified during past construction and infrastructure sustainment and repair on Columbus AFB. Therefore, there is little to no potential for archaeological resources within the construction areas. Additionally, the Mississippi Department of Archives and History conducted a cultural resource survey of Columbus AFB in 1986, and no archaeological sites were documented on Columbus AFB. The survey concluded it was highly unlikely that any significant resources would be discovered in the immediate future. As such, no archaeological surveys are recommended for these project sites.

The remaining MILCON and FSRM projects would have no potential to impact cultural resources because they would entail no ground disturbance or modification of historic-age buildings. The proposed T-7A shelters, jet blast deflectors, and airfield improvements would occur on the existing concrete of the aircraft parking ramp or apron, which is non-historic. The construction of the T-7A shelters also would require the removal of the existing prefabricated T-38C shelters, which are non-historic and were installed in 2012. The Compass Rose was painted in 2015 and is not historic. Additionally, the proposed interior renovation of squadron operations Building 234 would have no effect on historic resources as it was constructed in 2008. Furthermore, the modules of the Centralized Aircraft Support System are not of historic age (built in 1985) and do not meet Criteria Consideration G for exceptional significance. Finally, the proposed antenna farm would be located on the roof of the proposed GBTS facility, which has not yet been constructed, and the total vertical projection of the one-story building and antennas is not anticipated to exceed 60 feet.

Pursuant to 36 CFR § 800.4(d), DAF has determined that no historic properties would be affected by T-7A Recapitalization at Columbus AFB. Attached for your review are copies of relevant documents supporting DAF's findings and determinations. We request your comment or concurrence on the finding of *No Historic Properties Affected*. If we do not receive your comments or concurrence within the required 30 days, we will assume concurrence and proceed with the undertaking as described. Please contact Mr. Nolan Swick via email at nolan.swick@us.af.mil or mail at AFCEC/CZN, Attn: Columbus AFB T-7A Recapitalization EIS, 2261 Hughes Ave., Suite 155, JBSA-Lackland, TX 78236-9853 if you have any questions.

Sincerely,



ALLEN S. REED, Chief
Installation Management Flight

Attachments:

1. Table of Proposed MILCON and FSRM Projects and Impact on Historic Properties
2. Area of Potential Effect
3. *Columbus Air Force Base, Cold War-Era Buildings and Structures Inventory and Assessment*, December 2003
4. Buildings 216, 452, and 454 Documentation Forms

Attachment 1: Table of Proposed MILCON and FSRM Projects and Impact on Historic Properties

Building Name/Number	Project Component	NRHP Status	Date Constructed	Assessment of Effect
MILCON Projects				
Ground Based Training System (GBTS) Facility	Construct an approximately 33,000 square-foot (ft ²) facility on a parking lot adjacent to Building 216 (built 1961). Proposed one-story building, approximately 40-feet-tall, with concrete floor slab. Existing adjacent parking lot would be expanded by approximately 176 spaces.	Recommend not eligible.	N/A – Non-historic parking lot. Building 216 (built 1961), partially within the APE, would not be altered from construction of the proposed GBTS facility.	Recommend no effect to historic properties.
Unit Maintenance Trainer (UMT) Facility	Construct an approximately 12,000 ft ² facility on an undeveloped field behind Building 440. Proposed one-story building with concrete floor slab. No additional parking needed.	N/A – New construction.	N/A – Vacant field.	Recommend no effect to historic properties.
Hush House	Construct a new, one-story facility adjacent to existing hush house (Building 227, built 1992).	N/A – New construction.	N/A – Non-historic apron.	Recommend no effect to historic properties.
T-7A Shelters	Construct 46 shelters (sunshades) on existing aircraft parking ramp and remove existing non-historic T-38C prefabricated shelters (installed in 2012).	N/A – New construction. Existing shelters non-historic.	N/A – Non-historic ramp. Existing T-38C shelters installed in 2012.	Recommend no effect to historic properties.
Addition to Egress Shop	Construct an addition to Building 452 (Hangar 3, built 1958). Conversion/renovation into a four-bay T-7A hangar is an FSRM project.	Recommend not eligible.	1958.	Recommend no effect to historic properties.
Jet Blast Deflectors	Install jet blast deflectors on airfield. Exact location unknown but would likely be between aircraft parking rows on the apron.	N/A – New construction.	N/A – Non-historic apron.	Recommend no effect to historic properties.
FSRM Projects				
Renovate Building 452 (Hangar 3)	Convert building to a four-bay T-7A hangar. (Hangar 3, built 1958).	Recommend not eligible.	1958.	Recommend no effect to historic properties.
Wash Rack Renovation	Construct a wash rack at Building 454 (Hangar 4, built 1959).	Recommend not eligible.	1959.	Recommend no effect to historic properties.

Building Name/Number	Project Component	NRHP Status	Date Constructed	Assessment of Effect
Antenna Farm	Incorporate an antenna farm into the design of the GBTS facility. Antenna to be located atop the roof, projecting approximately 15 to 20 feet above the approximately 40-foot-tall building.	N/A – New construction.	N/A – Non-historic parking lot.	Recommend no effect to historic properties.
Squadron Operations Buildings Renovations	Renovate the interior of the Squadron Operations Buildings 216 (built 1961) and 234 (built 2008).	Recommend not eligible for Building 216. Building 234 is non-historic.	1961 and 2008.	Recommend no effect to historic properties.
Airfield Improvements	Remark the T-38C ramp to the width of the T-7A.	N/A – Signage markings on non-historic ramp.	N/A – Non-historic ramp.	Recommend no effect to historic properties.
	Install new moorings and anchor rods for T-7A aircraft.	N/A – Attached to non-historic ramp.	N/A – Non-historic ramp.	Recommend no effect to historic properties.
	Replace existing aircraft arresting system.	N/A – Attached to non-historic ramp.	N/A – Non-historic ramp.	Recommend no effect to historic properties.
	Remove aboveground service modules of the Centralized Aircraft Support System.	Modules are not of historic age and do not meet Criteria Consideration G.	1985.	Recommend no effect to historic properties.
Trim Pad	Construct a new trim pad across from the hush house on the engine run-up apron. Relocate the Compass Rose to another magnetically quiet site.	N/A – Trim pad because it is new construction. Compass rose non-historic.	N/A – Trim Pad on vacant site. Compass Rose painted in 2015.	Recommend no effect to historic properties.

Key: N/A = not applicable

Attachment 2: Area of Potential Effect



Attachment 3: *Columbus Air Force Base, Cold War-Era Buildings and Structures Inventory and Assessment, December 2003*

Attachment 4: Buildings 216, 452, and 454 Documentation Forms

Response from Mississippi SHPO (November 2022)



P.O. Box 571
Jackson, MS 39205-0571
601-576-6850
mdah.ms.gov

November 17, 2022

Mr. Nolan Swick
USAF
2261 Hughes Avenue, Suite 155
JBSA-Lakeland, Texas 78236

RE: Proposed Recapitalization of Flight Training Program and Construction/Upgrade of Facilities, Columbus Air Force Base, (USAF) MDAH Project Log #10-095-22, Lowndes County

Dear Mr. Swick:

We have reviewed your October 19, 2022, request for a cultural resources assessment for the above referenced project, in accordance with our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800.

Based on the information provided, MDAH (SHPO) archaeologists have identified some inconsistencies in reference to the 1986 archaeological survey and offer the following comments:

- The 1986 archaeological survey by Wilfred Husted of the National Park Service, located two archaeological sites, neither of which were adequately tested to determine eligibility.
- The 1986 survey does not meet current standards of archaeological survey, as only "select" portions of the base were examined, and only a few of those locations were subjected to subsurface investigations.
- The proposed APE was not included in the Husted survey at all per maps on file at MDAH.

However, given the proposed undertaking will occur on existing facilities, no additional archaeological survey is requested at this time. As the project moves forward, should any cultural materials including artifacts associated with prior military use of the facility be uncovered during the undertaking, all ground disturbance should cease and MDAH be contacted to determine a path forward.

Regarding the architectural resources identified in this project, MDAH concurs that Building #216 (Squadron Operations) is not NR-eligible due to lack of architectural or historical significance. However, we do not concur that Buildings 452 and 454 are ineligible. Our interpretation of the 2003 "Cold War-era Buildings and Structures Inventory and Assessment" (p. 34), is that these two hangars possess Cold War significance because they were "associated with the SAC bomber base (1959-1966)" and that the only reason they were not eligible at that time was that they were not 50 years old in 2003 and did not meet the higher standard of "extraordinary significance"

Board of Trustees: Spence Flatgard, *president* | Hilda Cope Povall, *vice president* | Carter Burns | Kimberly L. Campbell | Nancy Carpenter | Betsy Hamilton | Web Heidelberg | Edmond E. Hughes, Jr. | Mark E. Keenum

set out in NRHP Criteria Consideration G. Since both #452 and #454 are now over 50 years old, MDAH believes they are eligible for the NRHP in the area of Military for their Cold War significance.

MDAH appreciates the Columbus Air Force Base's proactive approach to identify and evaluate its cultural resources ahead of project specific Section 106 reviews, and we encourage an update to the 2003 Cold War survey to provide more clarity about what sites or structures are National Register eligible. The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to Section 110 (110) of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470h-2).Q02 provide that

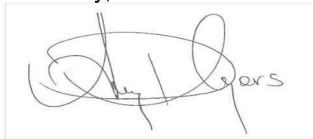
identification of historic properties is an ongoing process. As time passes, events occur, or scholarly and public thinking about historical significance changes. Therefore, even when an area has been completely surveyed for historic properties of all types it may require re-investigation if many years have passed since the survey was completed. Such follow-up studies should be based upon previously obtained information, may focus upon filling information gaps, and should consider re-evaluation of properties based upon new information.

Additionally, the *Air Force Manual 32-7003, Environmental Conservation* supports a program of ongoing or periodic surveys, where long-range planning is considered so that high priority development areas are surveyed. Appropriate intensive methods to identify sites before construction could be cost-effective and efficient. By using the results of surveys, determinations of NRHP eligibility, and concurrences from SHPOs for project planning, they can reduce the time needed for these individual reviews.

MDAH's advisory position is that the Cold War-era survey, while very valuable in the last two decades, should be updated and expanded with additional investigations of structures that have reached the 50-year threshold of consideration for historic significance since the 2003 assessment. Similarly, the 1986 archeological survey does not meet current archaeological survey standards, which states that new survey be conducted every 15 years.

Should you have any questions about the information provided in this letter, please contact section106@mdah.ms.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Amy D. Myers", enclosed in a rectangular box.

Amy D. Myers
Review and Compliance Assistant

FOR: Katie Blount
State Historic Preservation Officer

Consultation Letter sent to the Mississippi SHPO (February 2023)



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 14TH FLYING TRAINING WING
COLUMBUS AIR FORCE BASE MISSISSIPPI**

21 Feb 2023

Allen S. Reed, Chief
Installation Management Flight
14 CES/CEI
555 Simler Blvd., Ste. 108B
Columbus AFB MS 39710

Ms. Katie Blount
Mississippi SHPO
Mississippi Department of Archives & History
P.O. Box 571
Jackson, MS 39205-0571

RE: Proposed Recapitalization of Flight Training Program and Construction/Upgrade of Facilities,
Columbus Air Force Base, (USAF) MDAH Project Log #10-095-22, Lowndes County

Dear Ms. Blount:

The United States Department of the Air Force (DAF) is proposing to recapitalize its flight training program with newer and more capable T-7A Red Hawk aircraft at Columbus Air Force Base (AFB), Mississippi. Recapitalization is the phased acquisition of the new generation T-7A aircraft and construction and upgrade of specific facilities to support the training, operation, and maintenance of the T-7A aircraft. To consider various environmental concerns, DAF is engaging early with the appropriate resource and regulatory agencies as it formulates the undertaking. DAF is also preparing an Environmental Impact Statement under the National Environmental Policy Act to evaluate potential environmental impacts associated with the T-7A recapitalization at Columbus AFB.

Per 54 U.S.C. 306108 and Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR Part 800, DAF is continuing consultation of a proposed undertaking that has the potential to affect historic properties.

DAF initiated consultation on October 18, 2022, and received a response from Mississippi Department of Archives & History (MDAH) on November 18, 2022. MDAH's response provided no comments regarding the proposed undertaking's area of potential effect (APE), which DAF will continue to utilize for assessment of potential effects (**Attachment 1**). In addition, MDAH's response stated that it did not request additional archaeological survey at that time.

On January 17, 2023, Lindsey D. Bilyeu, Program Coordinator with the Choctaw Nation of Oklahoma, responded to DAF over email and requested that a survey be conducted within the APE for potential cultural resources not previously documented. As a result, DAF is currently satisfying the necessary requirements to initiate an archaeological survey of the APE. Once DAF has completed the archaeological survey, an additional letter will be sent to MDAH to request further comments on the undertaking and its potential to affect historic properties (both archaeological and built environment).

1

MDAH's response also stated that it did not concur with DAF's findings of National Register of Historic Places (NRHP) eligibility for Buildings 452 and 454, which are two Cold War-era hangars located at Columbus AFB. DAF acknowledges that, according to 2003 documentation, the two historic-age hangar buildings have significance for their association with the SAC bomber base (**Attachment 2**) and, based on their age, no longer need to demonstrate "exceptional importance" under Criterion Consideration G in order to be eligible for listing in the NRHP. Following MDAH's response and additional evaluation, DAF revised the site forms for both buildings to incorporate additional information regarding extensive building alterations not previously identified. DAF has determined that both buildings are not eligible for listing in the NRHP due to a lack of historic integrity (**Attachment 3**).

The revised site forms note that both buildings have two ca. 1980 additions, non-historic replacement siding, and no original windows. In addition, most of the buildings' original pedestrian doors have been replaced, and all historic lighting and signage was removed when the buildings were re-clad within the past 50 years. Alterations have also occurred within the setting of both buildings since ca. 1980 (see **Attachment 3** for full NRHP evaluations, including form preparer credentials).

Pursuant to 36 CFR Part 800.4(c), DAF has determined that Buildings 452 and 454 are not eligible for listing in the NRHP due to a lack of integrity. Attached for your review are copies of documents supporting DAF's findings and determinations.

We request your comment or agreement on the findings of not eligible for Buildings 452 and 454, and kindly request response within 30 days.

Please contact Mr. Nolan Swick via email at nolan.swick@us.af.mil or mail at AFCEC/CZN, Attn: Columbus AFB T-7A Recapitalization EIS, 2261 Hughes Ave., Suite 155, JBSA-Lackland, TX 78236-9853 if you have any questions.

Sincerely,



ALLEN S. REED, Chief
Installation Management Flight

Attachments:

1. Area of Potential Effect
2. *Columbus Air Force Base, Cold War-Era Buildings and Structures Inventory and Assessment*, December 2003
3. Buildings 452 and 454 Revised Documentation Forms

Attachment 1: Area of Potential Effect



Attachment 2: *Columbus Air Force Base, Cold War-Era Buildings and Structures Inventory and Assessment, December 2003*

Attachment 3: Buildings 452 and 454 Revised Documentation Forms

Responses from Mississippi SHPO (March 2023)



P.O. Box 571
Jackson, MS 39205-0571
601-576-6850
mdah.ms.gov

March 23, 2023

Mr. Nolan Swick
USAF
2261 Hughes Avenue, Suite 155
JBSA-Lakeland, Texas 78236

RE: Additional Information for the Proposed Recapitalization of Flight Training Program and Construction/Upgrade of Facilities, Columbus Air Force Base, (USAF) MDAH Project Log#02-179-23 (10-095-22), Lowndes County

Dear Mr. Swick:

We have reviewed the February 21, 2023, request for a cultural resources assessment for the above referenced project, from Allen S. Reed, in accordance with our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After reviewing the information provided, MDAH does not concur that there is no effect to historic properties for Buildings #452 & #454. They are eligible for NRHP-listing under Criterion A. Though there has been some loss of integrity, the buildings still retain a recognizable building form associated with the period of significance.

If you have any questions, please do not hesitate to contact us at (601) 576-6940.

Sincerely,

A handwritten signature in black ink that reads "Hal Bell".

Hal Bell
Review and Compliance Officer

FOR: Katie Blount
State Historic Preservation Officer

Board of Trustees: Spence Flatgard, *president* | Hilda Cope Prvall, *vice president* | Carter Burns | Kimberly L. Campbell | Nancy Carpenter | Betsy Hamilton | Web Heidelberg | Edmond E. Hughes Jr. | Mark E. Keenum

March 28, 2023

Mr. Allen Reed
USAF
555 Simler Blvd
Columbus AFB, Mississippi 39710

RE: Request for Reconsideration for the Proposed Recapitalization of Flight Training Program and Construction/Upgrade of Facilities, Columbus Air Force Base, (USAF) MDAH Project Log #03-168-23 (10-095-22) (02-179-23), Lowndes County

Dear Mr. Reed:

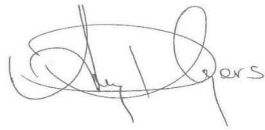
We have reviewed the additional information, received on March 28, 2023, for the above referenced project, in accordance with our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800.

After reviewing the information provided, MDAH does not concur that Buildings #452 and #454 are ineligible for listing in the National Register of Historic Places and has determined them to be eligible under Criterion A. Though there has been some loss of integrity, the structures still retain a recognizable building form associated with the period of significance.

Therefore, as designs for the hangar alterations are developed, please submit plans to MDAH so that we can evaluate the potential effect to the structures.

If you have any questions, please do not hesitate to call us at (601) 576-6940.

Sincerely,



Amy D. Myers
Review and Compliance Assistant

FOR: Katie Blount
State Historic Preservation Officer

Finding of Effect for Buildings 452 and 454 sent to the Mississippi SHPO (May 2023)



DEPARTMENT OF THE AIR FORCE
14TH FLYING TRAINING WING (AETC)
COLUMBUS AIR FORCE BASE MISSISSIPPI

23 May 2023

Allen S. Reed, Chief
Installation Management Flight
14 CES/CEI
555 Simler Blvd., Ste. 108B
Columbus AFB MS 39710

Ms. Katie Blount
Mississippi Department of Archives & History
P.O. Box 571
Jackson MS 39205-0571

RE: Request for Reconsideration for the Proposed Recapitalization of Flight Training Program and Construction/Upgrade of Facilities, Columbus Air Force Base, (USAF) Mississippi Department of Archives & History (MDAH) Project Log #03-168-23 (10-095-22) (02-179-23), Lowndes County

Dear Ms. Blount:

The United States Department of the Air Force (DAF) is proposing to recapitalize its flight training program with newer and more capable T-7A Red Hawk aircraft at Columbus Air Force Base (AFB), Mississippi. Recapitalization is the phased acquisition of the new generation T-7A aircraft and construction and upgrade of specific facilities to support the training, operation, and maintenance of the T-7A aircraft. To consider various environmental concerns, DAF is engaging early with the appropriate resource and regulatory agencies as it formulates the undertaking. DAF is also preparing an Environmental Impact Statement under the National Environmental Policy Act to evaluate potential environmental impacts associated with the T-7A recapitalization at Columbus AFB.

Per 54 U.S.C. 306108 and Section 106 of the National Historic Preservation Act and its implementing regulations at 36 CFR Part 800, DAF is continuing consultation for the proposed undertaking, which has the potential to effect two historic properties – Buildings No. 452 and 454.

On March 28, 2023, DAF received a letter response from MDAH stating that both buildings (No. 452 and 454) are eligible for listing in the National Register of Historic Places (NRHP) under Criterion A for their association with the Cold War mission. MDAH further indicated that, as a result of their eligibility, DAF would need to continue consultation regarding evaluation of potential effects to both buildings to support the proposed undertaking.

As a result of the proposed undertaking, alterations would occur to both buildings, which are described in detail in **Attachment 1, Analysis of Effects for Proposed Undertaking Activities at Buildings No. 452 and 454**. DAF is seeking response from MDAH on the design of the proposed undertaking.

TRAIN WORLD CLASS PILOTS

Though both buildings had been altered over time (including the removal of all original windows, multiple building additions, and replacement doors), MDAH indicated that the overall form of both buildings remained, which was associated with the period of significance of the base (1958-66). Both buildings retain roughly their original forms – with non-historic additions on both rear elevations and on the side elevation of Building No. 454 – and exterior metal cladding – though cladding has been periodically replaced in-kind over time.

The character-defining features of both buildings are recommended to be their location, overall form (except for the non-historic additions), the use of exterior metal cladding, and the location and scale of the hangar doors on the façades (northwest elevations). As most of the pedestrian doors have been replaced and are located on secondary and rear elevations, none are recommended to be character defining. All windows were previously removed from both buildings. The two ca. 1980 additions on the rear of Building No. 452, and the two ca. 1980 additions on Building No. 454 (one rear and one side), are not considered character-defining features. Lastly, the immediate setting is not character defining as it contains non-historic pavement and three adjacent non-historic outbuildings, which would be relocated to support the proposed undertaking.

Project activities within the APE would not cause physical destruction or damage to any part of either property. In addition, no alterations would occur to either property that would be inconsistent with SOI standards for the treatment of historic properties (36 CFR part 68) and applicable guidelines (see detailed discussion in **Attachment 1**). Neither property would be removed from its current location and no changes would occur to the character of either building's use or to physical features within either property's setting that contribute to its historic significance. No visual, atmospheric, or audible elements would be introduced that would diminish the integrity of either building's significant historic features. No neglect would occur to either property and no changes would occur to either property's ownership.

Project-related construction activities within the APE could result in temporary increases in noise and vibration, as well as truck traffic, traffic congestion, temporary changes to access, and increased dust. The presence of project-related construction equipment within the APE could result in short-term, minor, visual changes to the setting.

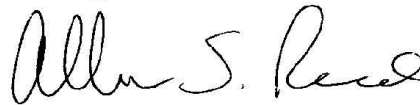
None of the activities proposed as part of the undertaking would have the potential to affect the character-defining features of either property. In addition, all effects related to construction activity would be temporary and minimal. Therefore, pursuant to 36 CFR 800.4(d), DAF is recommending that Buildings No. 452 and 454 would not be adversely affected by T-7A Recapitalization at Columbus AFB. Attached for your review is a copy of the relevant finding of effect document supporting DAF's findings and determinations. Additional consultation will occur following the completion of the upcoming archaeological survey to support the proposed undertaking, which will request concurrence for the undertaking as a whole.

TRAIN WORLD CLASS PILOTS

We request your comment on the design and your concurrence on the finding of *No Adverse Effect* for Buildings No. 452 and 454. If we do not receive your comments or concurrence within the required 30 days, we will assume concurrence for those two buildings.

Please contact me via email at allen.reed@us.af.mil or mail at Attn: Columbus AFB T-7A Recapitalization EIS, 2261 Hughes Ave., Suite 155, JBSA-Lackland, TX 78236-9853 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Allen S. Reed". The signature is written in a cursive style with a large initial "A".

ALLEN S. REED, Chief
Installation Management Flight

Attachments:

1. Analysis of Effects for Proposed Undertaking Activities at Buildings No. 452 and 454

TRAIN WORLD CLASS PILOTS

**Attachment 1: Analysis of Effects for Proposed Undertaking Activities at
Buildings No. 452 and 454**

TRAIN WORLD CLASS PILOTS

Attachment 1: Analysis of Effects for Proposed Undertaking Activities at Buildings No. 452 and 454

Summary

As a result of the proposed undertaking, alterations would occur to the exterior of Building Nos. 452 and 454, as well as to the adjacent setting; however, none of the setting elements that would be removed or moved are historic. The following documentation provides a definition of Adverse Effect, a summary of the components of the proposed undertaking that have the potential to affect historic properties, and an analysis of effects for both historic properties.

Definition of Adverse Effect

According to 36 CFR 800.5(a)(1), an Adverse Effect is found when a proposed undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Examples of adverse effects on historic properties include, but are not limited to (36 CFR 800.5[a][2][i through vii]):

- i. Physical destruction of or damage to all or part of the property;
- ii. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;
- iii. Removal of property from its historic location;
- iv. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- v. Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- vi. Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- vii. Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance

Building No. 452

Project Components

Setting and adjacent infrastructure

The proposed plan would include demolition of existing electrical service, gas meters, a sewer inlet, and sewer and waterline connections. It would include the installation of new utility connections, as well as new site and building sewer drainage. Pavement located behind the building to the southeast, which is non-historic, would be removed and replaced in-kind within

the same location. In addition, two nearby sections of concrete curb would be replaced in-kind, and a crosswalk would be striped within an adjacent roadway to improve safety (see Figure 1).

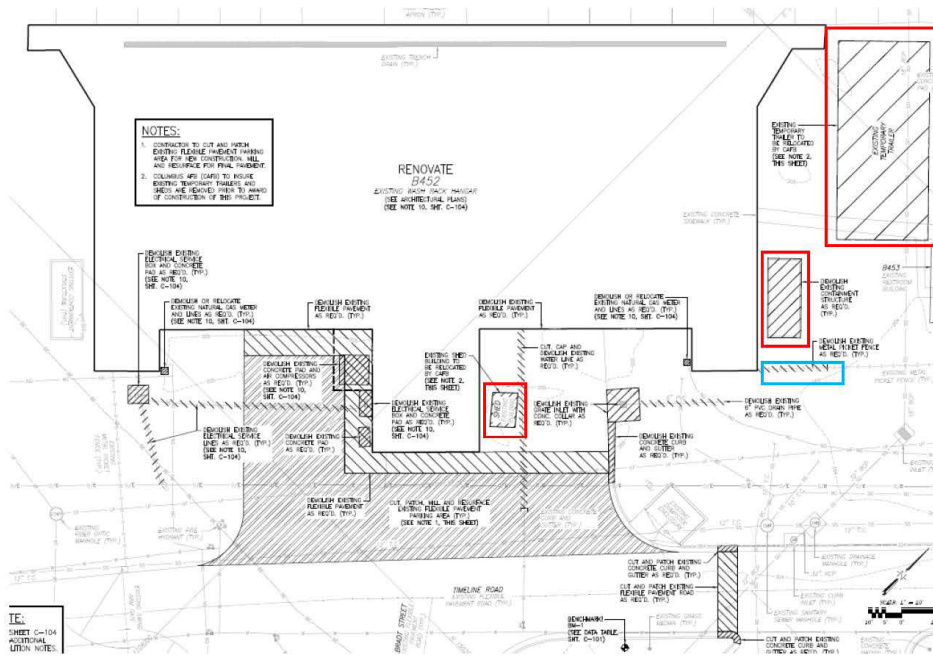


Figure 1. Image showing the planned changes within the setting of Building No. 452. The non-historic setting elements that would be relocated are noted in red. The fencing that would be replaced in-kind is noted in blue.

Three small, non-historic structures located adjacent to Building No. 452 would be relocated and removed to complete the proposed work. A small, prefabricated shed located adjacent to the nose dock on the southeast elevation would be relocated. A temporary storage trailer located adjacent to the northeast elevation would be relocated. Lastly, a small, concrete containment structure located adjacent to the northeast elevation south of the storage trailer would be removed. A section of chain-link metal fencing would be removed for construction and replaced in-kind (see Figure 1).

Exterior

The exterior building design will generally follow the architectural style and use of materials established by the Columbus AFB IFS standards for group III facilities and similar recently renovated structures in the adjacent flight apron area.

The building would receive updated wall insulation throughout, which would be covered with prefinished composite metal wall panels appearing similar to the existing exterior metal wall panels. DAF drawings at 35 percent design had originally planned for a faux-brick veneer to be

applied to the exterior for easier maintenance from the foundation extending the first 10 feet of the exterior elevation. However, to minimize impacts to the eligible property, that design element was adjusted, and the entire exterior will now be re-clad in prefinished composite metal wall panels. Thus, the exterior siding replacement would be considered in-kind, and similar in appearance to the current cladding.

The roofing material would also be replaced in-kind with standing seam metal panels, following the removal of the existing roofing and installation of insulation.

An addition would be added on the rear (southeast) elevation where the in-filled nose dock is currently located, expanding the projection on the rear elevation. Two small, ca. 1980 mechanical room additions currently installed on the rear elevation would be removed, which would partially restore the original building form.

Northwest Elevation (Façade)

On the façade, the overall form would remain unchanged, and the cladding would be replaced in-kind. The hangar doors located on the façade would be replaced as the current doors have been reconstructed numerous times, continue to fail, and have caused bodily harm to multiple individuals in recent years. The large sliding doors must be manually retracted, creating unnecessary risk. In addition, the current design does not allow for individual doors to be opened to access individual aircraft. There are currently 10 sliding door panels, which would be replaced with 4 vertical lift fabric doors, thus retaining an articulated appearance (see Figures 2 and 3).

The vertical lift panels would be the same height as the current sliding doors and would be an off-white color to match as closely as possible with the color of the current hangar doors (see Figures 4 and 5). The new hangar doors would appear similar, but would be composed of new materials; thus, appearing compatible but discernably not historic. The current doors have been re-clad and reconstructed as needed over time and contain a mixture of historic and non-historic materials.

No additional alterations would occur on the façade.

Southwest Elevation (side)

Metal cladding would continue onto the side and rear elevations and would be consistent along the entire building exterior.

On the southwest elevation, one single-leaf steel pedestrian door would be replaced in-kind, which is roughly centered on the elevation and accessed via a concrete path. One additional single-leaf steel pedestrian door would be added to the building, located behind the mechanical housing of the hangar doors, and would be minimally visible. Lastly, one double-leaf steel door would be installed within the addition on the rear (southeast) elevation that would be recessed back from the main body of the side elevation and be primarily visible from the rear of the building (see Figures 6 and 7).



Figure 2. Image showing the current hangar doors and façade.

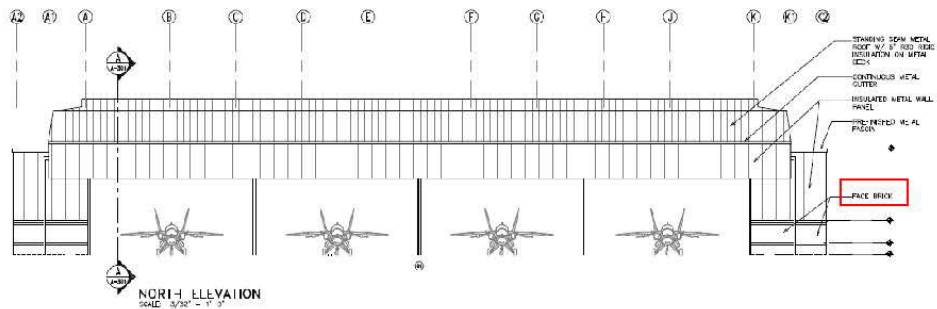


Figure 3. Image showing the proposed hangar door configuration, showing four bays, retaining an articulated pattern. The note indicated in red, which is shown on the 35 percent design plans, indicated that brick veneer would be installed; however, that design element has been removed to avoid impacts to the historic property.



Figure 4. Image showing a recent example of vertical lift doors being used on existing DAF hangars (image provided by DAF). The color option on the right, noted in red, would be the approximate color of the doors that would be used on Building Nos. 452 and 454.



Figure 5. Image showing an example of an off-white vertical lift door, to provide a more detailed example of the proposed color, which appears slightly darker when cast in shadow.

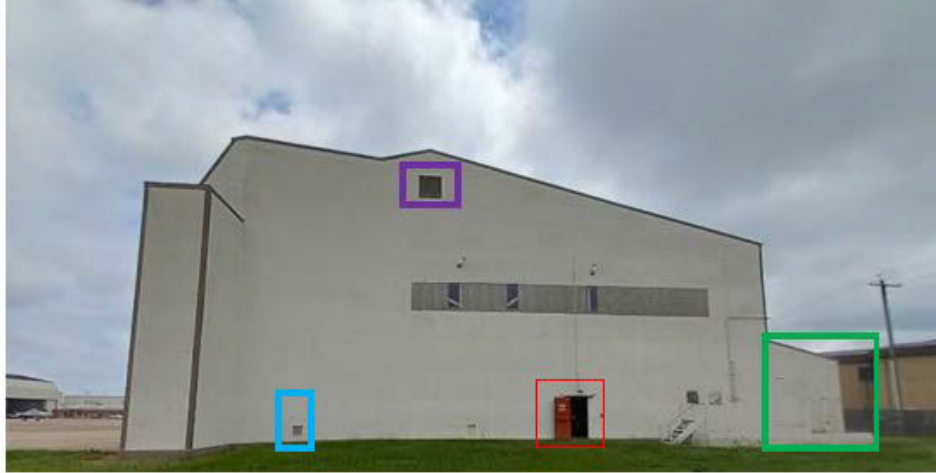


Figure 6. Image showing the current southwest (side) elevation. The door indicated in red would be replaced in-kind and the location indicated in blue would contain one new, identical door. The addition noted in green would be removed. A new addition would be recessed back on the elevation and primarily visible only from the rear elevation. One vent noted in purple would be removed.

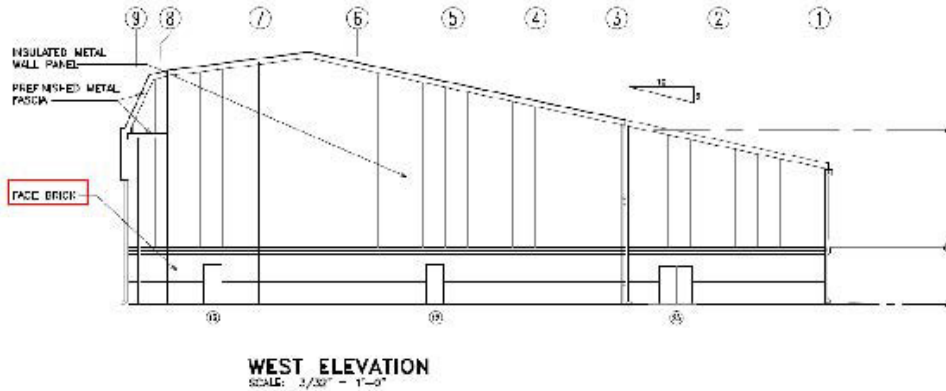


Figure 7. Image showing the proposed configuration of the southwest elevation. The note indicated in red, which is shown on the 35 percent design plans, indicated that brick veneer would be installed; however, that design element has been removed to avoid impacts to the historic property. Note, no change is proposed to the roof pitch. Due to the 3D/2D nature of the above two images, it gives a false appearance that the roof pitch would change.

Southeast Elevation (rear)

Metal cladding would continue onto the side and rear elevations and would be consistent along the entire building exterior.

On the southeast elevation, two ca. 1980 additions would be removed, and one addition would be added. A concrete stoop protected by a metal canopy, added ca. 1980, would be reconstructed in-kind with a new concrete pad and steel canopy with vertical supports (see Figures 8 and 9).

As a result of the proposed undertaking, one sliding door would be replaced with a roll-top door and a single-leaf pedestrian door to the left of the nose dock. To the right of the nose dock, an addition would be constructed. Within the addition, five pedestrian doors would be installed, as well as one small aluminum-framed window, which would provide daylight to the new interior breakroom. Lastly, a pedestrian door would be added within the nose dock, which was previously enclosed and originally included a pedestrian entrance (see Figures 10 and 11).

Northeast Elevation (side)

Metal cladding would continue onto the side and rear elevations and would be consistent along the entire building exterior.

On the northeast elevation, two single-leaf steel pedestrian doors would be replaced in-kind. One single-leaf steel pedestrian door would be added to the building, located behind the mechanical housing of the hangar doors, and would be minimally visible. One additional roll-top door would also be added, adjacent to an existing door (see Figures 12 and 13).

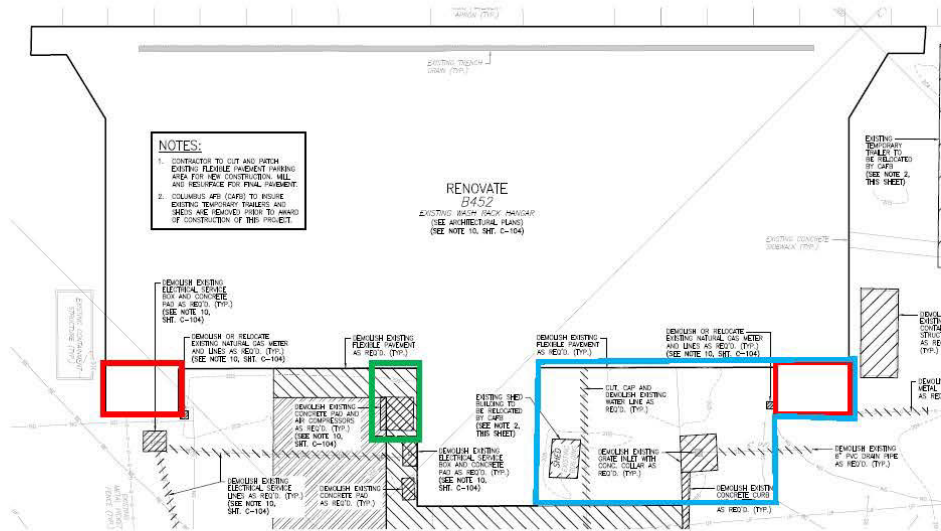


Figure 8. Image showing the current building footprint. The ca. 1980 additions noted in red would be removed, and the location of the new addition is noted in blue. The small stoop and porch indicated in green, which were added ca. 1980, would be reconstructed in-kind with a new concrete stoop and steel canopy with vertical supports.

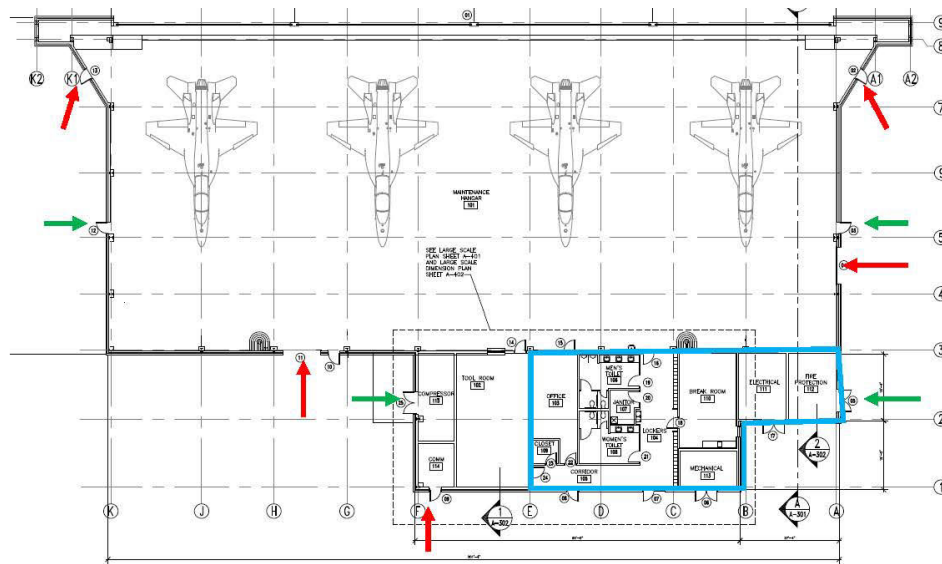


Figure 9. Image of the proposed building footprint, addition noted in blue. All doors that would be added are noted by red arrows, and all those that would be replaced in-kind are noted by green arrows.



Figure 10. Image showing the current configuration of the southeast elevation. The additions indicated by the red arrows would be removed. The canopy indicated by the blue arrow would be replaced in-kind. The doors that would be removed are indicated by green arrows. The roll-top door noted in Figure 11 below is outlined in purple. The infilled nose dock is indicated by the yellow arrow.

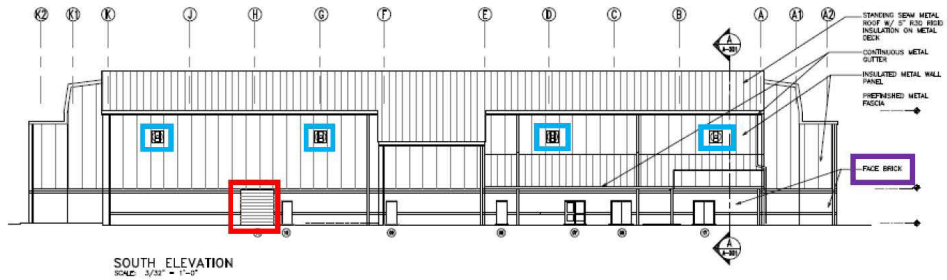


Figure 11. Image showing the proposed configuration of the southeast elevation. All of the pedestrian doors would be single and double leaf with steel components, similar to those located on the current building. The one vertical roll-top door that would be installed left of the nose dock (indicated in red) would appear similar to a roll-top door being removed from the elevation on the right side of the nose dock (see Figure 10). Four vents would be added to the rear elevation, which are indicated in blue. The drawing note indicated in purple, which is shown on the 35 percent design plans, indicated that brick veneer would be installed; however, that design element has been removed to avoid impacts to the historic property.

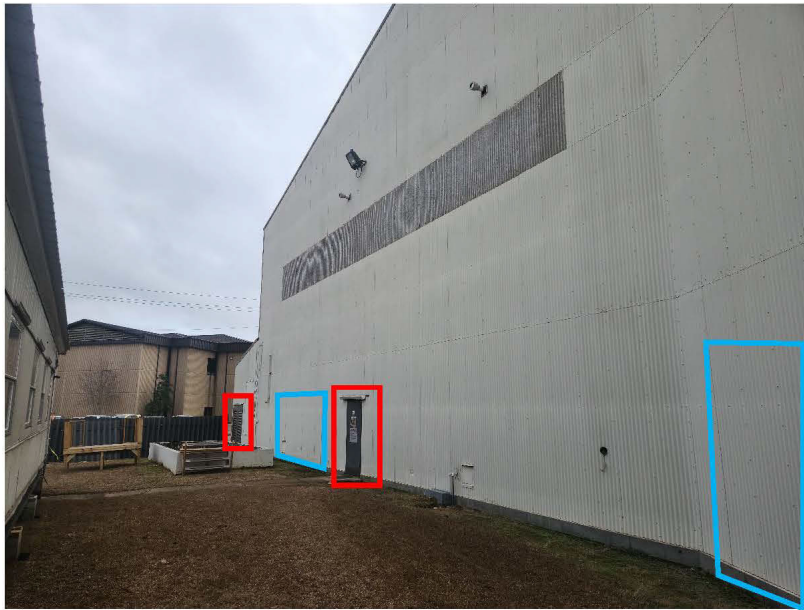


Figure 12. Image showing the current composition of the northeast elevation. The doors indicated in red would be replaced in-kind. The new steel doors would be added in the approximate locations indicated in blue.

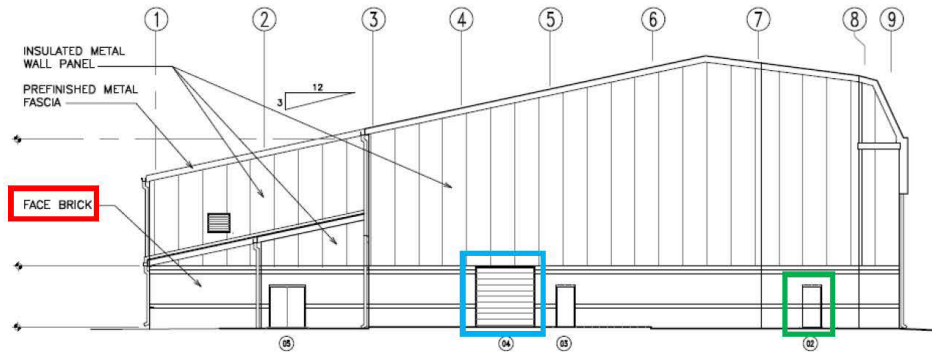


Figure 13. Image showing the proposed configuration of the southwest elevation. The note indicated in red, which is shown on the 35 percent design plans, indicated that brick veneer would be installed; however, that design element has been removed to avoid impacts to the historic property. The roll-top door indicated in blue, and the single-leaf door indicated in green would be added.

Assessment of Effects

Character-Defining Features

The character-defining features of Building No. 452 are its location, overall form (except for the non-historic additions), the use of exterior metal cladding, and the location and scale of the hangar doors on the façade (northwest elevation). As most of the pedestrian doors have been replaced and are located on secondary and rear elevations, none are recommended to be character defining. All windows were previously removed from the building. The two ca. 1980 additions on the rear of the building are not considered character-defining features. Lastly, the immediate setting is not character defining as it contains non-historic pavement and three adjacent non-historic outbuildings, which would be relocated to support the proposed undertaking.

Criteria for Adverse Effect

- i. Physical destruction of or damage to all or part of the property

The proposed undertaking would not cause physical destruction or damage to the building, which is regularly maintained by DAF.

- ii. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary of the Interior's (SOI's) Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines

The proposed undertaking would require rehabilitation work, which would meet the SOI standards, specifically as they relate to the Standards for Rehabilitation:

- There would be no change in building use.
- The historic character of the property would be retained and preserved, including the retention of the overall plan; cladding material; and location, scale, and color of doors. Distinctive materials and features would be retained to the maximum extent possible.
- No changes would be made that create a false sense of historical development
- No changes to the property that have acquired historic significance would be impacted, the 1980s additions that would be removed are not significant.
- Distinctive materials, features, and examples of craftsmanship would be retained to the maximum extent possible.
- Deteriorated historic features that require replacement (cladding, doors, and roofing) are being replaced in such a way that matches with the existing in color, pattern, scale, and texture to the maximum extent possible.
- No chemical treatments would be applied to the property.
- No archaeological resources are anticipated to be encountered.
- The new addition is located on the rear of the property, in a location where additions have occurred prior. The addition will also utilize in-kind metal cladding, in-kind new doors, and will be the same height as previous additions.

- iii. Removal of property from its historic location

The property will not be moved.

- iv. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance

No historic or original setting elements would be impacted by the proposed undertaking.

Three small, non-historic structures located adjacent to Building No. 452 would be relocated and removed to complete the proposed work. A small, prefabricated shed located adjacent to the nose dock on the southeast elevation would be relocated. A temporary storage trailer located adjacent to the northeast elevation would be relocated. Lastly, a small, concrete containment structure located adjacent to the northeast elevation south of the storage trailer would be removed. A section of chain-link metal fencing would be removed for construction and replaced in-kind (see Figure 1).

- v. Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features

Project-related construction activities within the APE could result in temporary increases in noise and vibration, as well as truck traffic, traffic congestion, temporary changes to access, and increased dust. The presence of Project-related construction equipment within the APE could result in short-term, minor, visual changes to the setting.

- vi. Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization

No neglect would occur as a result of the proposed undertaking. In fact, the proposed alterations will protect the property from further deterioration and aid in its retention and future use.

- vii. Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance

No transfer, lease, or sale of property would occur.

Summary

None of the activities proposed as part of the undertaking would have the potential to affect the character-defining features of the property. In addition, all effects related to construction activity would be temporary and minimal. Therefore, pursuant to 36 CFR 800.4(d), DAF is recommending that no historic properties would be adversely affected by the proposed renovations to Building 452.

Building No. 454

Project Components

Setting and adjacent infrastructure

The proposed plan would include demolition of existing electrical service, and sewer and waterline connections. It would include the installation of new utility connections, as well as new site and building drainage. Pavement located behind the building to the southeast would be removed and replaced in-kind. In addition, one nearby section of concrete curb would be replaced in-kind to improve an existing gutter (see Figure 14).

One small, non-historic shed located adjacent to the Building No. 454 would be relocated and removed to complete the proposed work (see Figure 1).

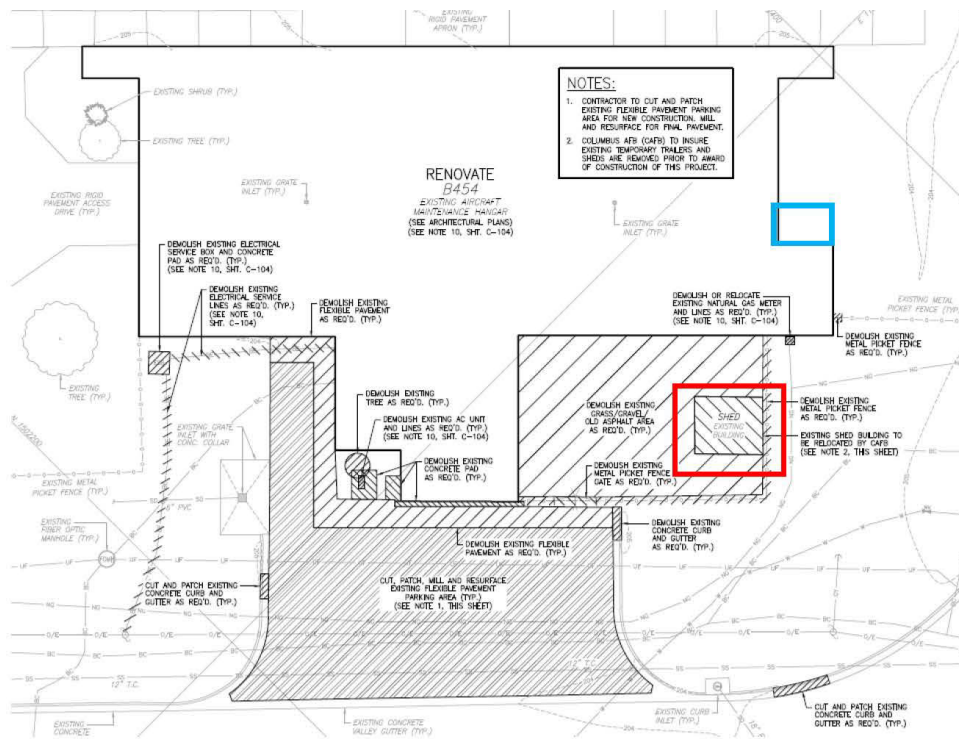


Figure 14. Image showing the planned changes within the setting of Building No. 454. The non-historic shed that would be relocated is noted in red. The location of a proposed addition is shown in blue.

Exterior

The exterior building design will generally follow the architectural style and use of materials established by the Columbus AFB IFS standards for group III facilities and similar recently renovated structures in the adjacent flight apron area.

The building would receive updated wall insulation throughout, which would be covered with prefinished composite metal wall panels appearing similar to the existing exterior metal wall panels. DAF drawings at 35 percent design had originally planned for a faux-brick veneer to be applied to the exterior for easier maintenance from the foundation extending the first 10 feet of the exterior elevation. However, to minimize impacts to the eligible property, that design element was adjusted, and the entire exterior will now be re-clad in prefinished composite metal wall panels. Thus, the exterior siding replacement would be considered in-kind and similar in appearance to the current cladding.

The roofing material would also be replaced in-kind with standing seam metal panels, following the removal of the existing roofing and installation of insulation.

A small addition would be constructed the northeast (side) elevation, which would be attached to an existing ca. 1980 mechanical room addition.

Northwest Elevation (Façade)

On the façade, the overall form would remain unchanged, and the cladding would be replaced in-kind. The hangar doors located on the façade are able to be protected and retained; however, they would receive new internal insulation and new external metal skin coating. The track system would be retained and repaired as needed to maintain functionality. Thus, the doors would appear very similar and would be restored for continued use. Lastly, a section of eave that appears to have been previously removed to conduct repairs to the hangar doors would be reinstalled, restoring uniformity to the façade (see Figures 15 and 16).

Southwest Elevation (side)

Metal cladding would continue onto the side and rear elevations and would be consistent along the entire building exterior.

On the southwest elevation, one single-leaf pedestrian door would be replaced in-kind and shifted in location. Within a previous rear addition (ca. 1980), a single-leaf pedestrian door would be replaced in-kind and two small aluminum-framed windows would be added (see Figures 17 and 18).



Figure 15. Image showing the façade, which would appear very similar following the proposed undertaking. A section of missing, projecting eave (indicated in red) would be reconnected as a result of the proposed undertaking.

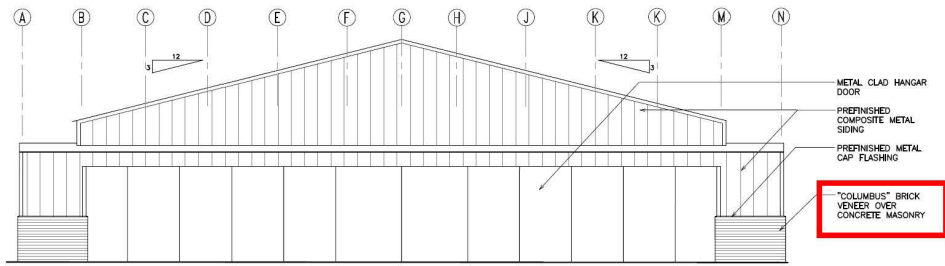


Figure 16. Image showing the proposed hangar door configuration, which shows the doors being retained in place. The note indicated in red, which is shown on the 35 percent design plans, indicated that brick veneer would be installed; however, that design element has been removed to avoid impacts to the historic property.



Figure 17. Image showing the current southwest (side) elevation. The door indicated in red would be replaced in-kind and shifted in location (indicated by red arrow and box). The bush located to the far right blocks the view of the addition from this image.

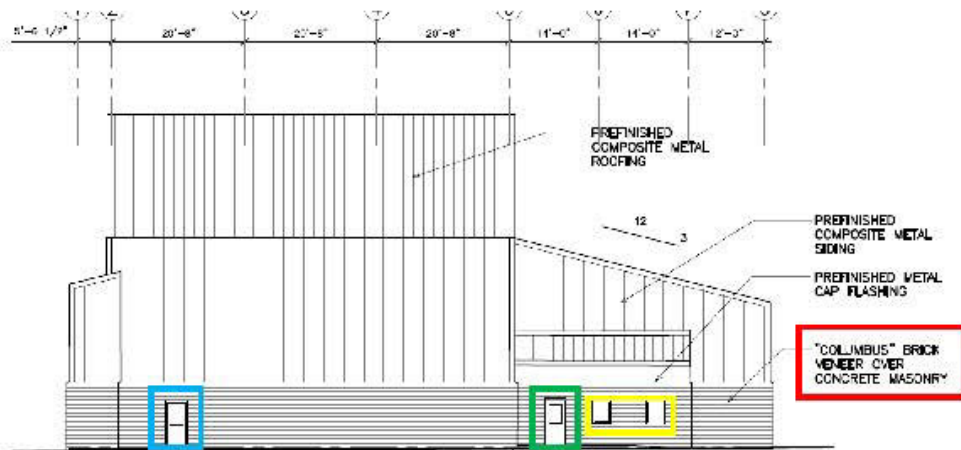


Figure 18. Image showing the proposed configuration of the southwest elevation. The note indicated in red, which is shown on the 35 percent design plans, indicated that brick veneer would be installed; however, that design element has been removed to avoid impacts to the historic property. The door that would be shifted is noted in blue, the door that would be replaced in-kind is noted in green, and the two new windows within the addition are noted in yellow.

Southeast Elevation (rear)

Metal cladding would continue onto the side and rear elevations and would be consistent along the entire building exterior.

On the southeast elevation, one sliding door that was partially covered by an addition ca. 1980 and does not function would be replaced with a roll-top steel door and a single-leaf steel pedestrian door. The sliding door within the nose dock would be replaced with one single and one double-leaf steel door. Lastly, one additional sliding door would be removed and covered with cladding (see Figures 19-21).

Northeast Elevation (side)

Metal cladding would continue onto the side and rear elevations and would be consistent along the entire building exterior.

On the northeast elevation, one door within the nose dock area would be replaced in-kind, one door would be shifted in location to allow for the extension of the ca. 1980 mechanical room addition, and one door would be added within the new addition (see Figures 22 and 23).

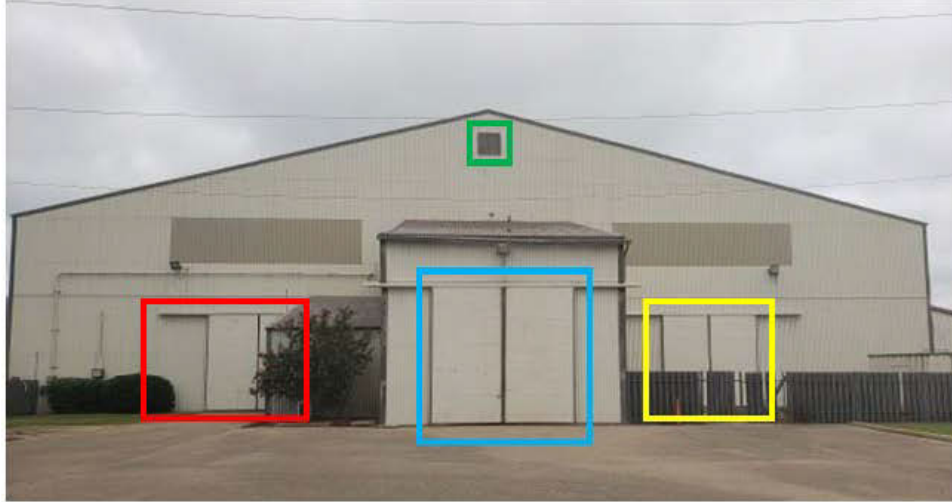


Figure 19. Image showing the current configuration of the southeast elevation. The partially obscured sliding door indicated in red would be replaced with single-leaf and roll-top doors. The sliding door on the nose dock would be replaced with a single and double-leaf steel pedestrian door, indicated in blue. The sliding door indicated in yellow would be removed and covered with siding. Lastly, the vent indicated in green would be removed.

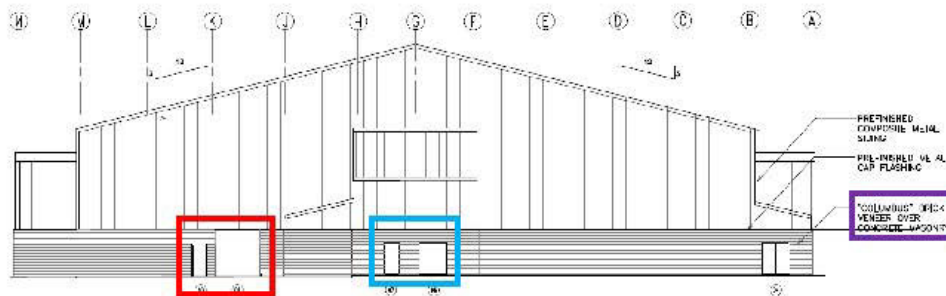


Figure 20. Image showing the proposed configuration of the southeast elevation. All of the pedestrian doors would be single and double leaf with steel components, similar to those located on the current building. One vertical roll-top door and one single-leaf door would be installed left of the nose dock (indicated in red), and two new doors would be installed in the nose dock (indicated in blue). The drawing note indicated in purple, which is shown on the 35 percent design plans, indicated that brick veneer would be installed; however, that design element has been removed to avoid impacts to the historic property.



Figure 21. Detail showing the ca. 1980 addition on the rear elevation indicated in red, which partially covered an existing door indicated by the blue arrow.



Figure 22. Image showing the current composition of the northeast elevation. The door indicated in red would be replaced with a new single-leaf steel door and shifted in location to allow for a small addition to the mechanical room.

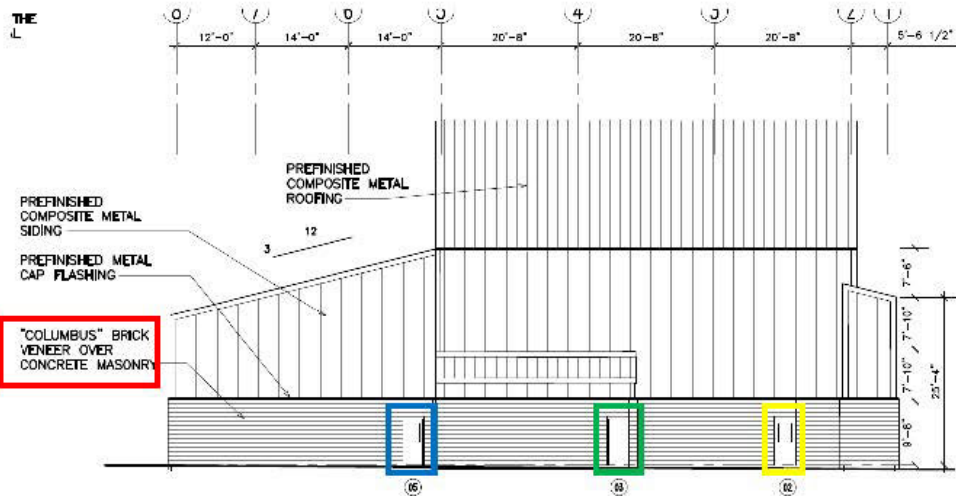


Figure 23. Image showing the proposed configuration of the northeast elevation. The note indicated in red, which is shown on the 35 percent design plans, indicated that brick veneer would be installed; however, that design element has been removed to avoid impacts to the historic property. One door would be replaced in-kind within the nose dock area (indicated in

blue), one door would be added in the extension of the ca. 1980 addition (indicated in green), and one door would be shifted in location (indicated in yellow).

Assessment of Effects

Character-Defining Features

The character-defining features of Building No. 454 are its location, overall form (except for the non-historic additions), the use of exterior metal cladding, and the location and scale of the hangar doors on the façade (northwest elevation). As most of the pedestrian doors have been replaced and are located on secondary and rear elevations, none are recommended to be character defining. All windows were previously removed from the building. The ca. 1980 addition on the side of the building is not considered a character-defining feature. Lastly, the immediate setting is not character defining as it contains non-historic pavement and an adjacent non-historic outbuilding, which would be relocated to support the proposed undertaking.

Criteria for Adverse Effect

viii. Physical destruction of or damage to all or part of the property

The proposed undertaking would not cause physical destruction or damage to the building, which is regularly maintained by DAF.

ix. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary of the Interior's (SOI's) Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines

The proposed undertaking would require rehabilitation work, which would meet the SOI standards, specifically as they relate to the Standards for Rehabilitation:

- There would be no change in building use.
- The historic character of the property would be retained and preserved, including the retention of the overall plan, cladding material, and location and scale of doors. The hangar doors will also be repaired and retained. Distinctive materials and features would be retained to the maximum extent possible.
- No changes would be made that create a false sense of historical development
- No changes to the property that have acquired historic significance would be impacted, the addition that would be altered (expanded) is not significant.
- Distinctive materials, features, and examples of craftsmanship would be retained to the maximum extent possible.
- Deteriorated historic features that require replacement (cladding and roofing) are being replaced in such a way that matches in-kind with the existing in color, pattern, scale, and texture to the maximum extent possible.
- No chemical treatments would be applied to the property.
- No archaeological resources are anticipated to be encountered.

- The new addition is located on the side of the building, in a location where an addition was previously constructed. The addition will also utilize in-kind metal cladding, in-kind new doors, and will be the same height as the previous addition.

x. Removal of property from its historic location

The property will not be moved.

xi. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance

No historic or original setting elements would be impacted by the proposed undertaking.

One small, non-historic shed located adjacent to Building No. 454 would be relocated and removed to complete the proposed work (see Figure 1).

xii. Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features

Project-related construction activities within the APE could result in temporary increases in noise and vibration, as well as truck traffic, traffic congestion, temporary changes to access, and increased dust. The presence of Project-related construction equipment within the APE could result in short-term, minor, visual changes to the setting.

xiii. Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization

No neglect would occur as a result of the proposed undertaking. In fact, the proposed alterations will protect the property from further deterioration and aid in its retention and future use.

xiv. Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance

No transfer, lease, or sale of property would occur.

Summary

None of the activities proposed as part of the undertaking would have the potential to affect the character-defining features of the property. In addition, all effects related to construction activity would be temporary and minimal. Therefore, pursuant to 36 CFR 800.4(d), DAF is recommending that no historic properties would be adversely affected by the proposed renovations to Building 454.

Concurrence of No Adverse Effect to Buildings 452 and 454 (June 2023)



P.O. Box 571
Jackson, MS 39205-0571
601-576-6850
mdah.ms.gov

June 21, 2023

Mr. Allen Reed
USAF
555 Simler Blvd
Columbus AFB, Mississippi 39710

RE: Design Plans for Buildings No. 452 and 454 for the Proposed Recapitalization of Flight Training Program and Construction/Upgrade of Facilities, Columbus Air Force Base, (USAF) MDAH Project Log #05-162-23 (10-095-22) (02-179-23) (03-168-23) (03-182-23) (05-016-23), Lowndes County

Dear Mr. Reed:

We have reviewed your May 23, 2023 request for a cultural resources assessment for the above referenced project in accordance with our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800.

After review, the proposed alterations to Buildings No. 452 and 454 appear to be mostly in-kind replacement and minimal exterior alteration on secondary elevations. Therefore, the proposed changes would not adversely affect either historic resource provided that the following conditions are met:

- The proposed installation of vertical lift doors occur within the existing openings for both buildings.
- The application of a brick veneer to the exterior is eliminated as specified in the latest submission.

With these conditions, SHPO concurs with the determination of No Adverse Effect and has no objections to the proposed undertaking.

Should there be additional work in connection with the project, or any changes in the scope of work, please let us know in order that we may provide you with appropriate comments in compliance with the above referenced regulations. If you have any questions, please do not hesitate to contact us at (601) 576-6940.

Board of Trustees: Spence Flatgard, *president* | Hilda Cope Povall, *vice president* | Carter Burns | Kimberly L. Campbell | Nancy Carpenter | Betsy Hamilton | Mark E. Keenum | Lucius M. Lampton, MD | T.J. Taylor

Sincerely,

A handwritten signature in black ink, appearing to read "Amy D. Myers". The signature is cursive and somewhat stylized, with the first name "Amy" being the most prominent.

Amy D. Myers
Preservation Planning Administrator

FOR: Katie Blount
State Historic Preservation Officer

Consultation letter sent to the Mississippi SHPO (July 2023) requesting concurrence of *No Historic Properties Affected* for Archaeological Resources and *No Adverse Effect to Historic Properties* for the Undertaking as a Whole



DEPARTMENT OF THE AIR FORCE
14TH FLYING TRAINING WING (AETC)
COLUMBUS AIR FORCE BASE MISSISSIPPI

26 Jul 2023

Allen S. Reed, Chief
Installation Management Flight
14 CES/CEI
555 Simler Blvd., Ste. 108B
Columbus AFB MS 39710

Ms. Katie Blount
Mississippi State Historic Preservation Officer
Mississippi Department of Archives and History
P.O. Box 571
Jackson, Mississippi 39205-0571

Subject: Request for Concurrence for the Proposed Recapitalization of Flight Training Program and Construction/Upgrade of Facilities, Columbus Air Force Base, (USAF) MDAH Project Log #10-095-22, Lowndes County

Dear Ms. Blount:

The United States Department of the Air Force (DAF) is proposing to recapitalize its flight training program with newer and more capable T-7A Red Hawk aircraft at Columbus Air Force Base (AFB), Mississippi. Recapitalization is the phased acquisition of the new generation T-7A aircraft and construction and upgrade of specific facilities to support the training, operation, and maintenance of the T-7A aircraft. Per 54 U.S.C. 306108 and Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, DAF is requesting concurrence for the proposed undertaking that has the potential to affect historic properties.

On 23 May 2023, DAF provided an analysis of affect to the Mississippi Department of Archives & History (MDAH) regarding the undertaking's potential to affect the two historic properties within its area of potential effect (APE) – Buildings No. 452 and 454. On 21 Jun 2023, DAF received a letter response from MDAH concurring with DAF's No Adverse Effect finding for both historic properties. In DAF's 23 May 2023, letter it was stated that additional consultation would occur following the completion of the forthcoming archaeological survey to support the proposed undertaking, after which point, DAF would request concurrence for the undertaking as a whole. The purpose of this letter is to provide a summary of the findings for the recently completed archaeological survey and to request a finding of *No Adverse Effect to Historic Properties* for the undertaking as a whole.

Archaeological Survey Background:

DAF initiated consultation for the undertaking on 18 Oct 2022, and received a response from MDAH on 18 Nov 2022. MDAH's response stated that it did not request additional archaeological survey at that time. On 17 Jan 2023, Lindsey D. Bilyeu, Program Coordinator with the Choctaw Nation of Oklahoma, responded to DAF over email and requested that a survey be conducted within the APE for potential cultural resources not previously documented.

DAF contracted HDR, Inc. to conduct an intensive Phase I archaeological survey of the project APE to identify and evaluate any archaeological resources that, if present, may be adversely affected by the undertaking. A Work Plan that presented the results of preliminary background research and outlined field methods to be used during the Phase I survey was provided to MDAH and the Choctaw Nation of Oklahoma prior to field work. The Choctaw Nation of Oklahoma approved that Work Plan on 29 Apr 2023 and MDAH approved on 29 Apr 2023.

Description of Undertaking:

The undertaking would include construction for five military construction (MILCON) projects and six facilities sustainment, restoration, and modernization (FSRM) projects at Columbus AFB to provide modern facilities and infrastructure to support the T-7A aircraft's maintenance, training, and operational requirements. The MILCON and FSRM projects include new building construction and renovation of existing facilities. The APE was defined in the Work Plan and totals 36.9 acres, approximately 28 acres of which is currently paved or covered by existing buildings and structures. Ground disturbance is planned in association with five project components: Unit Maintenance Trainer Facility, Ground Based Training System Facility, Trim Pad, Hush House (Building 227) and, Egress Shop (Building 452). The first three components will be new facilities while the latter two are modifications to existing facilities.

Identification of Historic Properties:

On 24 Feb 2023, HDR conducted a search of the MDAH Historic Resources Inventory database and requested data from Columbus AFB for all previous cultural resource studies and recorded archaeological sites within one mile of the APE. A total of nine previous cultural resource studies were conducted within one mile of the APE between 1983 and 2012, and one archaeological resource was recorded outside of but within one mile of the APE. None of the previous cultural resource studies intersect the APE.

All fieldwork conformed with the Mississippi Standards for Archaeological Practices (MDAH 2020) and with the Work Plan prepared for the effort (Leard 2023), which was reviewed and approved by MDAH and the Choctaw Nation of Oklahoma prior to fieldwork. From 01 Jun - 06 Jun 2023, HDR archaeologists completed a Phase I archaeological survey of all accessible areas within the APE. Subsurface testing was completed over all undeveloped areas of the APE where ground disturbance was anticipated. A total of 45 shovel test pits (STPs) were excavated within landscaped areas covered by mowed grass. Ground surface visibility ranged from 0 to 10 percent.

All STPs were negative for archaeological resources and testing revealed a high level of soil disturbance relating to development of Columbus AFB. Based on personal communications from Columbus AFB environmental staff members, the entire APE was covered over with imported soil during the construction of the base. Prior to this, the area would have been mostly marshland. Shovel testing revealed inconsistent soil stratigraphy and highly compacted layers of mixed fill that confirm this assessment.

Evaluation of Eligibility and Assessment of Effects:

The investigation failed to identify any buried cultural material fifty years of age or older. The entire APE appears to have been covered with imported soil and gravel, compacted, and leveled for construction. Based on the absence of archaeological resources identified during the subsurface survey, and considering the evidence for extensive disturbance noted, the APE is considered to have very low

sensitivity for containing significant archaeological deposits. Therefore, a determination of No Historic Properties Affected is appropriate for this undertaking as it relates to archeological resources.

Finding of No Historic Properties Affected:

Based on the negative findings from the survey, the limited nature of the action, and because the site has been highly disturbed from the development of Columbus AFB, DAF has determined that no archaeological resources would be affected by the undertaking. DAF requests your concurrence with this determination. In accordance with Section 106 of the National Historic Preservation Act, DAF has also notified The Choctaw Nation of Oklahoma of this determination.

Enclosed is an electronic copy of the full cultural resources investigation report. This letter serves as our project coordination in accordance with 36 CFR Part 800.3.g, and we are requesting an expedited review of the following:

- 1) Review and Comment on Identification Efforts for Archaeological Resources
- 2) SHPO Concurrence with the DAF Determination of *No Historic Properties Affected* for Archaeological Resources
- 3) SHPO Concurrence with the DAF Determination of *No Adverse Effect to Historic Properties* for the Undertaking as a Whole.

Your prompt attention to this request is greatly appreciated. If DAF has not received a response from your office within 30 days of your receipt of this determination letter, DAF will consider its responsibilities under Section 106 to have been fulfilled. Written correspondence may be submitted to me by mail at the following address:

Allen S. Reed
14 CES/CEI
555 Simler Blvd., Ste. 108B
Columbus AFB MS 39710

If possible, please send correspondence by email to allen.reed@us.af.mil.

We look forward to continuing the Section 106 consultation process with you. If you require additional information or have any questions or concerns, please feel free to contact me by telephone at 662-574-2509 or by email at allen.reed@us.af.mil.

Sincerely,



ALLEN S. REED, Chief
Installation Management Flight

Enclosure: *Phase I Archaeological Survey for T-7A Recapitalization at Columbus Air Force Base, Mississippi, MDAH Project Log #10-095-22, Lowndes County, Mississippi. July 2023.*

SHPO concurrence of *No Historic Properties Affected* for Archaeological Resources (August 2023)



P.O. Box 571
Jackson, MS 39205-0571
601-576-6850
mdah.ms.gov

August 2, 2023

Mr. Allen Reed
USAF
555 Simler Blvd
Columbus AFB, Mississippi 39710

RE: Phase I Archaeological Survey for T-7A Recapitalization at Columbus Air Force Base, (USAF) MDAH Project Log #07-163-23 (10-095-22) (02-179-23) (03-168-23) (03-182-23), Report #23-0240, Lowndes County

Dear Mr. Reed:

We have reviewed the July 2023, archaeological survey, by Daniel Leard, with HDR, Inc., received on July 26, 2023, for the above referenced undertaking, pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After reviewing the information provided, we concur that no resources eligible for listing in the National Register of Historic Places were identified within the project area or are likely to be affected by the project. As such, we have no objections to the project.

Should there be additional work in connection with the project, or any changes in the scope of work, please let us know in order that we may provide you with appropriate comments in compliance with the above referenced regulations.

Please provide Mr. Leard with a copy of this letter. If you have any questions, please do not hesitate to contact us at (601) 576-6940.

Sincerely,

A handwritten signature in black ink, appearing to read "Amy D. Myers", is written over a faint, circular stamp or watermark.

Amy D. Myers
Preservation Planning Administrator

FOR: Katie Blount
State Historic Preservation Officer

Board of Trustees: Spence Flatgard, *president* | Hilda Cope Povall, *vice president* | Carter Burns | Kimberly L. Campbell | Nancy Carpenter | Betsy Hamilton | Mark E. Keenum | Lucius M. Lampton, MD | TJ Taylor

This page intentionally left blank.

Native American Tribal Nation Consultation

DAF consulted under Section 106 of the National Historic Preservation Act with the following 18 Native American Tribes with an expressed or potential interest in cultural resources at Columbus AFB and the airspace areas:

- Alabama-Coushatta Tribe of Texas
- Alabama-Quassarte
- Apache Tribe of Oklahoma
- Cherokee Nation
- Chickasaw Nation
- Choctaw Nation of Oklahoma
- Coushatta Tribe of Louisiana
- Eastern Band of Cherokee Indians
- Mississippi Band of Choctaw Indians
- Jena Band of Choctaw Indians
- Kialegee Tribal Town
- Muscogee Creek Nation
- Osage Nation
- Poarch Creek Indians
- Quapaw Nation
- Shawnee Tribe of Oklahoma
- Eastern Shawnee Tribe of Oklahoma
- Tunica-Biloxi Tribe of Louisiana.

Section 3.5 contains further information regarding the outcome of the consultation with the Native American Tribes. A copy of the consultation letters and responses is on the following pages.

Example of DAF's first consultation letter (late March 2022) sent to the Native American tribes

Each of the 18 tribes received an identical letter. A copy of each tribe's letter has been retained in the project's administrative record.



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 14TH FLYING TRAINING WING
COLUMBUS AIR FORCE BASE MISSISSIPPI**

31 March 2022

Allen S. Reed, Chief
Installation Management Flight
14 CES/CEI
555 Simler Blvd, Ste 108B
Columbus AFB MS 39710

Honorable Ms. Nita Battise, Chairwoman
Alabama-Coushatta Tribe of Texas
571 State Park Road 56
Livingston TX 77351

Dear Chairwoman Battise,

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, and its implementing regulations (40 Code of Federal Regulations [CFR] 1500-1508), the U.S. Department of the Air Force (DAF) is preparing an Environmental Impact Statement (EIS) to assess the potential environmental consequences associated with T-7A recapitalization at Columbus Air Force Base (AFB), Mississippi. Under this proposal, DAF would recapitalize the T-38C Talon flight training program at Columbus AFB with T-7A Red Hawk aircraft. This proposal supports the Secretary of the Air Force's strategic basing decisions to recapitalize existing T-38C pilot training installations, and Columbus AFB would be the second installation to be environmentally analyzed for possible recapitalization.

Recapitalization entails introduction of T-7A aircraft and flight operations at Columbus AFB and associated airspace to replace all T-38C aircraft assigned to the installation; introduction of nighttime (between 10 p.m. and 7 a.m.) flight operations; changes to the number of personnel and dependents in the Columbus AFB region; and construction and upgrade of support and maintenance facilities. 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. 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. The enclosed informational brochure provides further background information on this proposal, describes the Proposed Action and alternatives in detail, and summarizes the EIS process.

DAF invites all members of your community to remotely participate in public scoping for the EIS. In accordance with DAF guidance, in-person public scoping meetings will not be held. Public scoping is being accomplished remotely, in accordance with the 2020 version of 40 CFR Part 1506.6, via the project website at <https://columbus.t-7anepadocuments.com/>. The website provides posters, a presentation, the enclosed informational brochure, other meeting materials, and a capability for the public to provide public scoping comments. Requests for printed scoping materials may be made to the address provided below. For printed material requests, the standard U.S. Postal Service shipping timeline will apply. Please consider the environment before requesting printed material.

We are requesting government-to-government consultation with your community on preparation of this EIS, pursuant to Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, *Protection of Historic Properties*. DAF is committed to sustained, meaningful and respectful consultation with federally recognized Indian Tribes. In accordance with the NEPA process, government-to-government consultation with federally recognized Tribal Nations is required per Executive Memorandum, April 29, 1994, *Government-to-Government Relations with Native American Tribal Governments*; Department of Defense (DoD) Instruction 4710.02: *DoD Interactions with Federally-Recognized Tribes*; and Department of Air Force Instruction (DAFI) 90-2002: *Interactions with Federally-Recognized Tribes*.

DAF has determined that for the purposes of Section 106, the current project is an undertaking that should be subject to Section 106 analysis. Section 106 for the current project will be carried out in parallel to the NEPA process, and the results of Section 106 will inform the NEPA analysis. DAF is soliciting any comments or concerns you may have at this time regarding the project, and is seeking any information you might be willing to share regarding properties of traditional or cultural significance that you feel should be considered in any analysis of the project. DAF will continue Section 106 consultation with your tribe as more information becomes available regarding the finalized Area of Potential Effect (APE), DAF good faith efforts to identify historic properties within the APE, determinations of eligibility and effect, and any proposed mitigation for possible adverse effects.

The DAF Point of Contact for this project is Mr. Nolan Swick, NEPA Program Manager. Please send him your comments and concerns to Attn: Columbus AFB T-7A Recapitalization EIS; Headquarters AETC Public Affairs; 100 H. East Street, Suite 4; Randolph AFB, TX 78150, or by email or phone at nolan.swick@us.af.mil or 210-925-3392. Should your tribe have no further interest in this project, please let us know in writing, via email or letter. I look forward to receiving any input you may have regarding this endeavor. Thank you in advance for your assistance in this effort.

Sincerely,



Allen S. Reed, Chief
Installation Management Flight

Enclosure:

1. Brochure: Public Scoping for T-7A Recapitalization at Columbus AFB, Mississippi



ENVIRONMENTAL IMPACT STATEMENT

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



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

Introduction

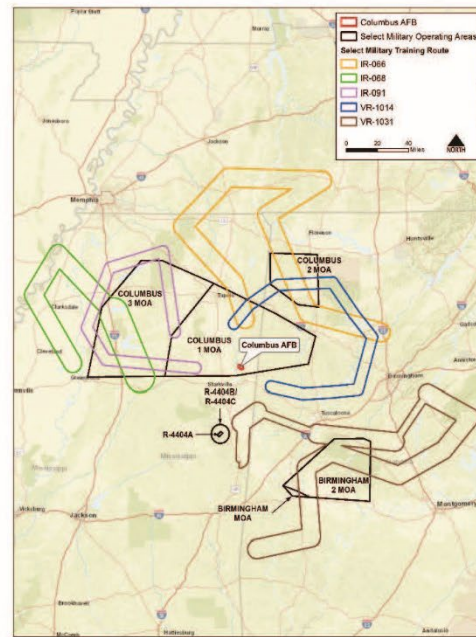
The National Environmental Policy Act (NEPA) was enacted to address concerns about federal actions and their effects on the environment. An Environmental Impact Statement (EIS) is the most detailed analysis prescribed by regulations implementing NEPA. The U.S. Department of the Air Force (DAF) has published a Notice of Intent to prepare an EIS, pursuant to NEPA, for the proposed T-7A recapitalization at Columbus Air Force Base (AFB). Recapitalization entails introduction of T-7A Red Hawk aircraft and flight operations at Columbus AFB and associated airspace to replace all T-38C Talon aircraft assigned to the installation; 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; and construction and upgrade of support and maintenance facilities. The number of T-7A aircraft, aircraft operations, and nighttime operations is evaluated as part of the Proposed Action and action alternatives described on the back of this brochure.

Background

DAF proposes to recapitalize the flight training program at Columbus AFB with T-7A 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.



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



Columbus AFB and Affected Military Training Airspace

What is the Public Scoping Process?

Public scoping is an early and open process, conducted in compliance with NEPA, for identifying issues and alternatives to be addressed in an EIS and determining who (e.g., public and government agencies) is interested in a proposed action. Public outreach is conducted as a part of the public scoping process to provide information to interested parties and to receive comments on a proposed action, alternatives, and potential impacts. Comments received during the public scoping process are considered in the preparation of the Draft EIS. A timeline showing the steps of the EIS process is on the back of this brochure.

Personnel and Construction

Columbus AFB and surrounding region would experience a 43 staff and 82 dependent increase during the aircraft transition period of 2028 and 2029 and a 31 staff and 59 dependent decrease (relative to current personnel levels) after 2029. Six military construction and nine facility sustainment, restoration, and modernization projects would be undertaken. These projects include construction at Columbus AFB of a new Ground Based Training System Facility, Unit Maintenance Trainer Facility, and hush house; addition to the Egress Shop; and 61 T-7A shelters.

Proposed Action and Alternatives

DAF is considering the Proposed Action, two reasonable action alternatives (i.e., Alternatives 1 and 2), and no action. These alternatives are described as follows:

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

Columbus AFB would receive 61 T-7A aircraft between 2028 and 2030. Pilot training operations would gradually transition from the T-38C to the T-7A during 2028, 2029, and 2030, and pilot training operations would be performed at a level to meet DAF's 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 T-7A operations would occur. Existing military training airspace would be used, and no changes to airspace configurations would be required. All T-7A operations would be sub-sonic.

Alternative 1: 61 T-7A Aircraft and T-7A Operations 25 Percent Greater than the Proposed Action

Alternative 1 would be identical to the Proposed Action except T-7A operations would be 25 percent greater than the Proposed Action. Up to 593 annual nighttime T-7A operations would occur. Alternative 1 covers a potential scenario in which DAF requires a surge or increase in pilot training operations above current plan.

Alternative 2: 77 T-7A Aircraft and T-7A Operations 25 Percent Greater than the Proposed Action

Alternative 2 would be identical to the Proposed Action and Alternative 1 except 16 additional T-7A aircraft would be delivered in 2028 and 77 T-7A shelters would be constructed. T-7A operations would be identical to Alternative 1. Alternative 2 covers a 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.

No Action Alternative: Does Not Implement T-7A Recapitalization at Columbus AFB

The No Action Alternative assesses the environmental consequences from taking no action and serves as a baseline to compare the environmental consequences of the Proposed Action and action alternatives. For the No Action Alternative, T-38C aircraft would 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 would occur, and no construction would be undertaken.

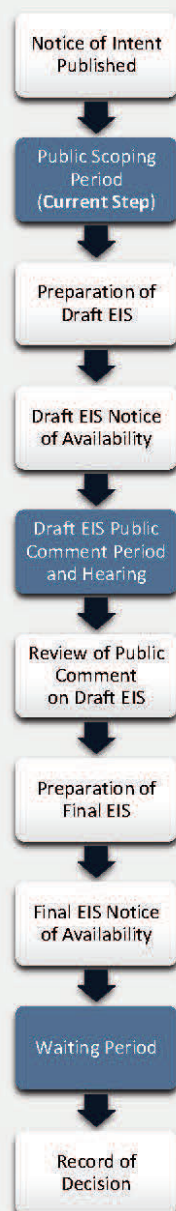
Environmental Impact Analysis Process

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

1. Increased air emissions, particularly nitrogen oxides.
2. Increased noise from aircraft operations because the T-7A is inherently louder than the T-38C and the addition of nighttime operations may be bothersome to some residents. Increased noise could have a disproportionate impact on certain populations and impact off-installation land use compatibility.
3. Increased potential for bird/wildlife aircraft strike hazards.
4. 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. Consultation will be incorporated into the preparation of the EIS and will include, but not be limited to, consultation under Section 7 of the Endangered Species Act and consultation under Section 106 of the National Historic Preservation Act. Additional analysis will be provided in the Draft EIS, which is anticipated in late 2022. The Final EIS and a decision on which alternative to implement is expected in mid-2023.

EIS Timeline



Please provide comments in English on the project website, by email at nolan.swick@us.af.mil, or via postal mail to 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. The scoping materials are also available in print at the Columbus-Lowndes Public Library (314 7th Street North, Columbus, Mississippi) and by request. Please consider the environment before requesting printed material.

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

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

Response from the Choctaw Nation of Oklahoma regarding DAF's first consultation letter

From: Lindsey Bilyeu <lbilyeu@choctawnation.com>
Sent: Friday, April 29, 2022 3:14 PM
To: SWICK, NOLAN T GS-13 USAF AFMC AFCEC/CZN <nolan.swick@us.af.mil>
Subject: [Non-DoD Source] RE: Notice of Intent to Prepare EIS for T7a Recapitalization at Columbus Air Force Base, MS

Mr. Swick,

The Choctaw Nation of Oklahoma thanks the Department of the Air Force for the correspondence regarding the above referenced project. The Choctaw Nation request to be a consulting party on this project. In order to determine if any known Choctaw cultural or sacred sites lie in the project area, could you please provide the GIS shapefiles or GPS coordinates of the project area? This will allow us to view the project area in our GIS database.

In addition, please forward our office all project materials, including cultural resources surveys, and a description of all ground disturbing activities.

If you have any questions, please contact me.

Thank you,

Lindsey D. Bilyeu, MS

Program Coordinator 2

Choctaw Nation of Oklahoma

Historic Preservation Department

Office: (580) 642-8377

Cell: (580) 740-9624

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure. If you have received this message in error, you are hereby notified that we do not consent to any reading, dissemination, distribution or copying of this message. If you have received this communication in error, please notify the sender immediately and destroy the transmitted information. Please note that any view or opinions presented in this email are solely those of the author and do not necessarily represent those of the Choctaw Nation.

Response from DAF regarding the Choctaw Nation of Oklahoma's correspondence dated April 29, 2022

From: REED, ALLEN S GS-13 USAF AETC 14 CES/CEI
To: Lindsey Bilyeu
Cc: SWICK, NOLAN T GS-13 USAF AFMC AFCEC/CZN; TURNER, TIMOTHY W GS-12 USAF AETC 14 CES/CEIE
Subject: Notice of Intent to Prepare EIS for T7a Recapitalization at Columbus Air Force Base, MS
Date: Tuesday, May 17, 2022 12:53:20 PM

Ms. Bilyeu,

Just wanted to touch base with you about the GIS files I sent to your email account via the DOD SAFE website, make sure you got them and were able to download.

I would like to thank you for your interest in this project and ask for your response if only to confirm you received the files. The GIS data provided shows the building construction and renovation project boundaries, as well as Columbus Air Force Base's boundary. The data was provided in two options. The .GDB is a traditional GIS database. There was also provided a .KMZ file that will load in Google Earth. If you have any issues receiving or opening these files, please let me know.

Further project information is available at: <https://columbus.t-7anepadocuments.com/>. A figure and brief list of the proposed construction projects are available at this link: https://columbus.t-7anepadocuments.com/download_file/view/137/158

We look forward to receiving any information you might be willing to share regarding properties of traditional or cultural significance that you feel should be considered in any analysis of the project.

If you have any additional questions at this time, please don't hesitate to contact me.

Further consultation correspondence will be forthcoming as our analysis proceeds.

Sincerely,
Allen Reed

Allen S. Reed, P.G., REM
Chief, Installation Management Flight
14th CES/CEI
555 Simler Blvd
Columbus AFB MS 39710-5010
DSN: 742-7328 COMM: 662-434-7328
CELL: 662-574-2509

Response from the Cherokee Nation regarding DAF's first consultation letter

From: Elizabeth Toombs <elizabeth-toombs@cherokee.org>

Sent: Monday, May 2, 2022 4:56 PM

To: SWICK, NOLAN T GS-13 USAF AFMC AFCEC/CZN <nolan.swick@us.af.mil>

Subject: [Non-DoD Source] T-7A Recapitalization at Columbus Air Force Base, Mississippi

Mr. Swick:

The Cherokee Nation recently received a review request for the T-7A Recapitalization at Columbus Air Force Base. Lowndes County, Mississippi is outside the Cherokee Nation's Area of Interest. Thus, this Office respectfully defers to federally recognized Tribes that have an interest in this landbase at this time.

Thank you for the opportunity to comment upon this proposed undertaking. Please contact me if there are any questions or concerns.

Wado,

Elizabeth Toombs, Tribal Historic Preservation Officer

Cherokee Nation

Tribal Historic Preservation Office

PO Box 948

Tahlequah, OK 74465-0948

918.453.5389

Example of DAF's second consultation letter (October 2022) sent to the Native American tribes

This letter was sent to 16 of the 18 Native American tribes. A copy of each tribe's letter has been retained in the project's administrative record. A tailored letter was sent to the Choctaw Nation of Oklahoma to reflect correspondence from the first consultation letter (see next letter in this appendix). The Cherokee Nation had already requested no further consultation.



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 14TH FLYING TRAINING WING
COLUMBUS AIR FORCE BASE MISSISSIPPI**

11 Oct 2022

Allen S. Reed, Chief
Installation Management Flight
14 CES/CEI
555 Simler Blvd., Ste. 108B
Columbus AFB, MS 39710

Ms. Nita Battise, Chairwoman
Alabama-Coushatta Tribe of Texas
571 State Park Road 56
Livingston, TX 77351

Dear Chairwoman Battise,

The United States Department of the Air Force (DAF) previously contacted your tribe with a letter dated 31 March 2022 regarding the Environmental Impact Statement (EIS) being prepared under the National Environmental Policy Act to evaluate potential environmental impacts associated with T-7A Recapitalization at Columbus Air Force Base (AFB), Mississippi. Recapitalization is the phased acquisition of the new generation T-7A aircraft and construction and upgrade of specific facilities to support the training, operation, and maintenance of the T-7A aircraft. Per 54 U.S.C. 306108 and Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, DAF is accounting for various environmental concerns and engaging early with tribal governments as it initiates the undertaking.

The undertaking would entail the phased introduction of T-7A aircraft and phased reduction of the T-38C aircraft currently operating from Columbus AFB; new intensities of flight operations at Columbus AFB including nighttime operations; and changes to the number of personnel assigned to Columbus AFB. T-7A operations would occur at a relatively high altitude within the same designated military airspace boundaries currently used for T-38C operations. No changes to these boundaries would be necessary to support the proposed operations of the T-7A (see **Attachment 1**). Additionally, construction for six military construction (MILCON) projects and six facilities sustainment, restoration, and modernization (FSRM) projects would occur at Columbus AFB to provide modern facilities and infrastructure to support the T-7A aircrafts' maintenance, training, and operational requirements. The MILCON and FSRM projects include new building construction and renovation of existing facilities. **Attachment 2** shows the locations of the MILCON and FSRM projects.

As a follow-up to our 31 March 2022 letter and in accordance with the NHPA, DAF would like to initiate government-to-government consultation regarding the proposed T-7A Recapitalization at Columbus AFB. DAF requests your input in identifying any historic properties of religious or cultural significance that you feel should be addressed in the

environmental analysis. Additionally, please let us know if you believe this undertaking might adversely affect any of these historic properties of religious and cultural significance to the Alabama-Coushatta Tribe of Texas.

If you have any questions, please contact Mr. Nolan Swick via email at nolan.swick@us.af.mil or mail at AFCEC/CZN, Attn: Columbus AFB T-7A Recapitalization EIS, 2261 Hughes Ave., Suite 155, JBSA-Lackland, TX 78236-9853. Thank you in advance for your assistance in this effort.

Sincerely,

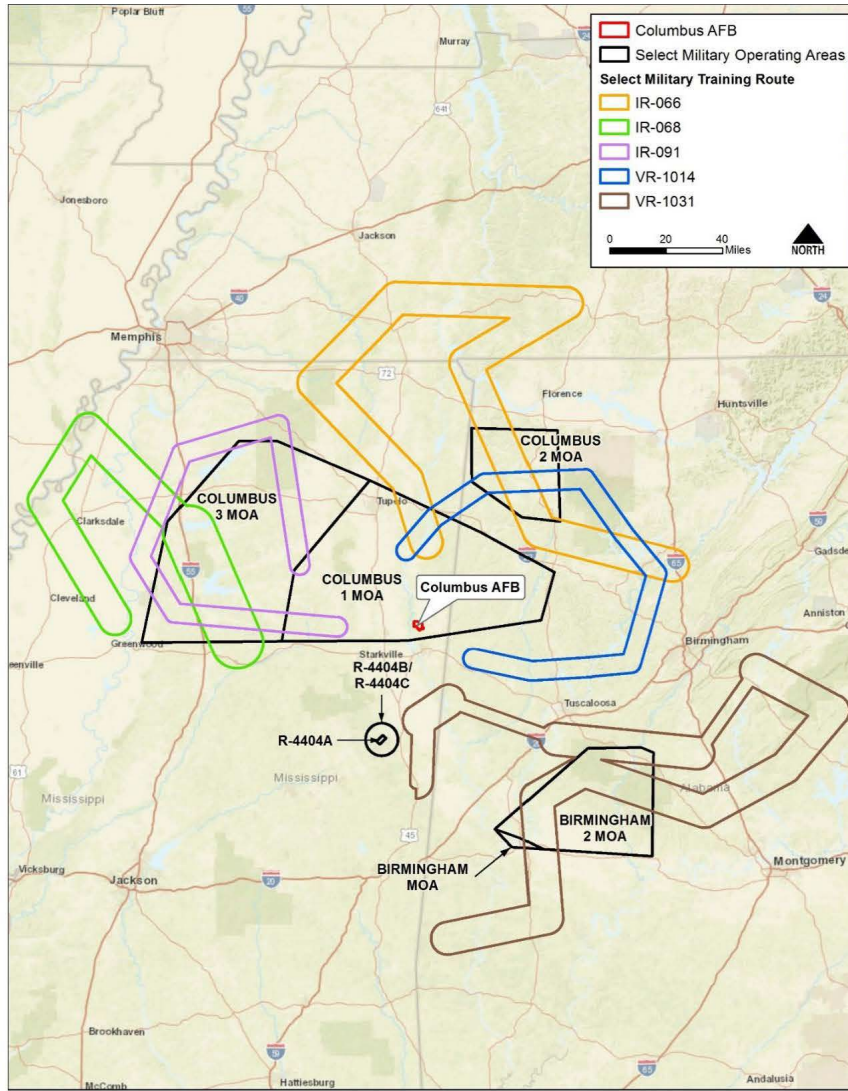
A handwritten signature in black ink that reads "Allen S. Reed". The signature is written in a cursive style with a large initial "A".

ALLEN S. REED
Installation Tribal Liaison Officer

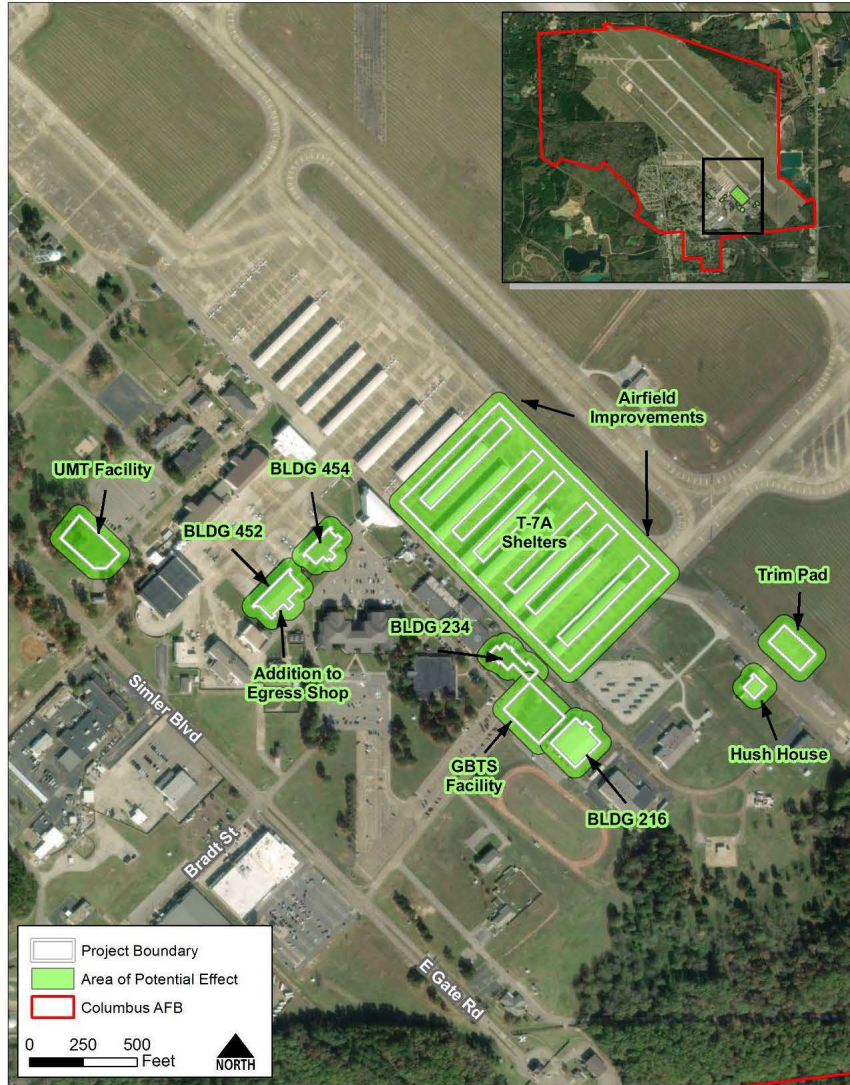
Attachments:

1. Airspace Map
2. MILCON and FSRM Project Map

Attachment 1: Airspace Map



Attachment 2: MILCON and FSRM Project Map



The tailored letter sent to the Choctaw Nation of Oklahoma (October 2022)



**DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 14TH FLYING TRAINING WING
COLUMBUS AIR FORCE BASE MISSISSIPPI**

11 Oct 2022

Allen S. Reed, Chief
Installation Management Flight
14 CES/CEI
555 Simler Blvd., Ste. 108B
Columbus AFB, MS 39710

Gary Batton, Chief
Choctaw Nation of Oklahoma
P.O. Box 1210
Durant OK 74702-1210

Dear Chief Batton:

The United States Department of the Air Force (DAF) previously contacted the Choctaw Nation of Oklahoma with a letter dated 31 March 2022 regarding the Environmental Impact Statement (EIS) being prepared under the National Environmental Policy Act to evaluate potential environmental impacts associated with T-7A Recapitalization at Columbus Air Force Base (AFB), Mississippi. Ms. Lindsey Bilyeu responded to our letter by email on 29 April 2022 requesting the Choctaw Nation of Oklahoma become a consulting party and access to the GIS shapefiles and coordinates of the project area to determine if any known tribal cultural or sacred sites exist within the project area. I responded to that email on 17 May 2022 to provide the requested materials.

As a follow-up to our earlier correspondence and in accordance with the NHPA, DAF would like to continue our government-to-government consultation regarding the proposed T-7A Recapitalization at Columbus AFB. As a reminder, recapitalization is the phased acquisition of the new generation T-7A aircraft and construction and upgrade of specific facilities to support the training, operation, and maintenance of the T-7A aircraft. Per 54 U.S.C. 306108 and Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, DAF is accounting for various environmental concerns and engaging early with tribal governments as it initiates the undertaking.

The undertaking would entail the phased introduction of T-7A aircraft and phased reduction of the T-38C aircraft currently operating from Columbus AFB; new intensities of flight operations at Columbus AFB including nighttime operations; and changes to the number of personnel assigned to Columbus AFB. T-7A operations would occur at a relatively high altitude within the same designated military airspace boundaries currently used for T-38C operations. No changes to these boundaries would be necessary to support the proposed operations of the T-7A (see **Attachment 1**). Additionally, construction for six military construction (MILCON) projects and six facilities sustainment, restoration, and modernization (FSRM) projects would occur at Columbus AFB to provide modern facilities and infrastructure to support the T-7A

aircrafts' maintenance, training, and operational requirements. The MILCON and FSRM projects include new building construction and renovation of existing facilities. **Attachment 2** shows the locations of the MILCON and FSRM projects.

DAF requests your input in identifying any historic properties of religious or cultural significance that you feel should be addressed in the environmental analysis. Additionally, please let us know if you believe this undertaking might adversely affect any of these historic properties of religious and cultural significance to the Choctaw Nation of Oklahoma.

If you have any questions, please contact Mr. Nolan Swick via email at nolan.swick@us.af.mil or mail at AFCEC/CZN, Attn: Columbus AFB T-7A Recapitalization EIS, 2261 Hughes Ave., Suite 155, JBASA-Lackland, TX 78236-9853. Thank you in advance for your assistance in this effort.

Sincerely,

A handwritten signature in black ink that reads "Allen S. Reed". The signature is written in a cursive style with a large initial "A" and "R".

ALLEN S. REED
Installation Tribal Liaison Officer

Attachments:

1. Airspace Map
2. MILCON and FSRM Project Map

Response from the Chickasaw Nation regarding DAF's second consultation letter

November 16, 2022

Mr. Nolan Swick
Department of the Air Force
Air Force Civil Engineer Center
Environmental Directorate
14 CES/CEIE
2261 Hughes Avenue, Suite 155
JBSA-Lackland, TX 78236-9853

Dear Mr. Swick:

Thank you for the letter of notification regarding the proposed construction of six facilities and the facilities sustainment, restoration and modernization associated with the phased introduction of the T-7A aircraft and phased reduction of the T-38C aircraft on Columbus Air Force Base in Lowndes County, Mississippi. We accept the invitation to consult under Section 106 of the National Historic Preservation Act.

The Chickasaw Nation is in support of the proposed undertaking and is presently unaware of any specific historic properties, including those of traditional religious and cultural significance, in the project areas. In the event the agency becomes aware of the need to enforce other statutes we request to be notified under ARPA, AIRFA, NEPA, NAGPRA, NHPA and Professional Standards.

We appreciate your efforts to preserve and protect significant historic properties. If you have any questions, please contact Ms. Karen Brunso, tribal historic preservation officer, at (580) 272-1106, or by email at hpo@chickasaw.net.

Sincerely,



Lisa John, Secretary
Department of Culture and Humanities

Cc: nolan.swick@us.af.mil

Response from the Choctaw Nation of Oklahoma regarding DAF's second consultation letter

From: Lindsey Bilyeu <lbilyeu@choctawnation.com>
Sent: Monday, December 5, 2022 10:25 AM
To: SWICK, NOLAN T GS-13 USAF AFMC AFCEC/CZN <nolan.swick@us.af.mil>
Subject: [Non-DoD Source] RE: T-7A Recapitalization, Columbus Air Force Base, MA

Mr. Swick,

The Choctaw Nation of Oklahoma thanks the Air Force for the correspondence regarding the above referenced project. Choctaw Nation would like to continue consultation on this project. While we weren't able to open the Shapefiles that were provided, we have looked at the general area, and it appears that Columbus Air Force Base lies in a Trail of Tears Removal Corridor. Therefore, we have strong concerns about the ground disturbing work that is proposed.

Could you please resend the GIS Shapefiles that contain a .shp file? This should enable us to view the entire APE in our database. Also, in regard to the phased approach, consultation will need to be undertaken on all ground disturbing activities as the project moves forward. We will need a description of the proposed activities, including ground disturbing work, maps, and the cultural resources surveys that have been undertaken for the project.

If you have any questions, please contact me.

Thank you,

Lindsey D. Bilyeu, M.S.
Program Coordinator 2
Choctaw Nation of Oklahoma
Historic Preservation Department
P.O. Box 1210
Durant, OK 74702
Office: (580) 642-8377
Cell: (580) 740-9624

This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure. If you have received this message in error, you are hereby notified that we do not consent to any reading, dissemination, distribution or copying of this message. If you have received this communication in error, please notify the sender immediately and destroy the transmitted information. Please note that any view or opinions presented in this email are solely those of the author and do not necessarily represent those of the Choctaw Nation.

Response from DAF regarding the Choctaw Nation of Oklahoma's correspondence dated December 5, 2022

From: [REED, ALLEN S GS-13 USAF AETC 14 CES/CEI](#)
To: [Lindsey Bilyeu](#)
Cc: [SWICK, NOLAN T GS-13 USAF AFMC AFCEC/C7N](#); [TURNER, TIMOTHY W GS-13 USAF AETC 14 CES/CEI](#)
Subject: T-7A Recapitalization, Columbus Air Force Base, MA
Date: Tuesday, December 13, 2022 10:20:30 AM
Attachments: [Installation_Boundary.cpg](#)
[Installation_Boundary.dbf](#)
[Installation_Boundary.pri](#)
[Installation_Boundary.sbn](#)
[Installation_Boundary.sbx](#)
[Installation_Boundary.shp](#)
[Installation_Boundary.shp.xml](#)
[Installation_Boundary.shx](#)
[Project_Area.cpg](#)
[Project_Area.dbf](#)
[Project_Area.pri](#)
[Project_Area.sbn](#)
[Project_Area.sbx](#)
[Project_Area.shp](#)
[Project_Area.shp.xml](#)
[Project_Area.shx](#)
[Tab 1. T-7A Recap at Columbus AFB. Construction Project Descriptions.pdf](#)
[Tab 2. T-7A Recap at Columbus AFB. MDAH Comments 11-17-22.pdf](#)
[Tab 3. Cultural Resource Reconnaissance Report. Columbus AFB.pdf](#)

Ms. Bilyeu,

Thank you for sharing the Choctaw Nation of Oklahoma's initial concerns regarding the T-7A recapitalization project at Columbus AFB, and for your request for additional information about this project.

Please find the 16 attached shapefiles, which contain the Columbus AFB boundary and the approximate footprint of the ground disturbance areas for this project, which constitute the Area of Potential Effect.

Also attached is a description of all construction to be undertaken as part of the T-7A recapitalization project (Tab 1).

We welcome your assistance in identifying any cultural resources and assessing impacts on them from this project. In particular, it is important for us to know whether the project is in the Trail of Tears Removal Corridor, and if it is, what precautionary measures you would recommend.

However, please keep in mind that all construction will take place in areas that are already highly developed.

The Mississippi Department of Archives & History (MDAH) believes that no archaeological surveys are necessary given the ground disturbance that occurred during prior construction.

Our latest correspondence with the MDAH is attached for your awareness (Tab 2). A copy of the cultural resource reconnaissance report of Columbus Air Force Base referenced by MDAH is also attached (Tab 3).

Should any cultural resources surveys be accomplished, we will provide them to you, as well as any additional information on the project design as it is developed.

Please let me know if you have any questions. We look forward to working with you on this project.

Sincerely,
Allen Reed

Response from the Choctaw Nation of Oklahoma requesting an archaeological survey of the APE

-----Original Message-----

From: Lindsey Bilyeu <lbilyeu@choctawnation.com>
Sent: Tuesday, January 17, 2023 10:09 AM
To: REED, ALLEN S CIV USAF AETC 14 CES/CEI <allen.reed@us.af.mil>
Subject: [Non-DoD Source] RE: T-7A Recapitalization, Columbus Air Force Base, MA

Mr. Reed,

Thank you for providing the additional information regarding the project. Columbus Air Force Base entirely lies in our Trail of Tears Removal Corridor. Due to the sensitivity of the area, and the fact that the existing survey doesn't meet modern survey standards, we request that the project area be surveyed for cultural resources. Also, we will need to develop an inadvertent discovery clause to be used in the event that artifacts or human remains are encountered.

If you have any questions, please contact me.

Thank you,

Lindsey D. Bilyeu, M.S.

Program Coordinator 2

Choctaw Nation of Oklahoma

Historic Preservation Department

P.O. Box 1210

Durant, OK 74702

Office: (580) 642-8377

Cell: (580) 740-9624

Consultation letter sent to the Choctaw Nation of Oklahoma (July 2023) and the Mississippi Band of Choctaw Indians (August 2023) requesting review of the Phase I archaeological survey report and requesting concurrence of *no historic properties affected*



DEPARTMENT OF THE AIR FORCE
14TH FLYING TRAINING WING (AETC)
COLUMBUS AIR FORCE BASE MISSISSIPPI

26 July 2023

Allen S. Reed, Chief
Installation Management Flight
14 CES/CEI
555 Simler Blvd., Ste. 108B
Columbus AFB MS 39710

Gary Batton, Chief
Choctaw Nation of Oklahoma
P.O. Box 1210
Durant OK 74702-1210

Subject: Proposed Recapitalization of Flight Training Program and Construction/Upgrade of Facilities, Columbus Air Force Base, Lowndes County

Dear Chief Batton:

The United States Department of the Air Force (DAF) is proposing to recapitalize its flight training program with newer and more capable T-7A Red Hawk aircraft at Columbus Air Force Base (AFB), Mississippi. Recapitalization is the phased acquisition of the new generation T-7A aircraft and construction and upgrade of specific facilities to support the training, operation, and maintenance of the T-7A aircraft. Per 54 U.S.C. 306108 and Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, DAF is continuing consultation with the Choctaw Nation of Oklahoma for a proposed undertaking that has the potential to affect historic properties.

DAF initiated consultation with your tribe on 11 Oct 2022. On 17 Jan 2023, Ms. Lindsey D. Bilyeu, Program Coordinator with the Choctaw Nation of Oklahoma, responded to DAF via email and requested that a survey be conducted within the Area of Potential Effect (APE) for potential cultural resources not previously documented.

DAF contracted HDR, Inc. to conduct an intensive Phase I archaeological survey of the project APE to identify and evaluate any archaeological resources that, if present, may be adversely affected by the undertaking. A Work Plan that presented the results of preliminary background research and outlined field methods to be used during the Phase I archaeological survey was provided to the Mississippi Department of Archives and History (MDAH) and your tribe prior to field work. The Choctaw Nation of Oklahoma approved that work plan on 29 Apr 2023 and MDAH approved it on 12 May 2023.

Description of Undertaking:

The undertaking would include construction for five military construction (MILCON) projects and six facilities sustainment, restoration, and modernization (FSRM) projects at Columbus AFB to provide modern facilities and infrastructure to support the T-7A aircraft's maintenance, training, and operational requirements. The MILCON and FSRM projects include new building construction and renovation of existing facilities. The Area of Potential Effect (APE) was defined in the Work Plan and totals 36.9 acres, approximately 28 acres of which is currently paved or covered by existing buildings and structures. Ground disturbance is planned in association with five project components: Unit Maintenance Trainer Facility, Ground Based Training System Facility, Trim Pad, Hush House (Building 227) and, Egress Shop (Building 452). The first three components will be new facilities while the latter two are modifications to existing facilities.

Identification of Historic Properties:

On 24 Feb 2023, HDR conducted a search of the MDAH Historic Resources Inventory database and requested data from Columbus AFB for all previous cultural resource studies and recorded archaeological sites within one mile of the APE. A total of nine previous cultural resource studies were conducted within one mile of the APE between 1983 and 2012, and one archaeological resource was recorded outside of but within one mile of the APE. None of the previous cultural resource studies intersect the APE.

All fieldwork conformed with the Mississippi Standards for Archaeological Practices (MDAH 2020) and with the Work Plan prepared for the effort (Leard 2023), which was reviewed and approved by MDAH and your tribe prior to commencing fieldwork. From 01 Jun – 06 Jun 2023, HDR archaeologists completed a Phase I archaeological survey of all accessible areas within the APE. Subsurface testing was completed over all undeveloped areas of the APE where ground disturbance was anticipated. A total of 45 shovel test pits (STPs) were excavated within landscaped areas covered by mowed grass. Ground surface visibility ranged from 0 to 10 percent.

All STPs were negative for archaeological resources and testing revealed a high level of soil disturbance relating to development of Columbus AFB. Based on personal communications from Columbus AFB environmental staff members, the entire APE was covered over with imported soil during the construction of the base. Prior to this, the area would have been mostly marshland. Shovel testing revealed inconsistent soil stratigraphy and highly compacted layers of mixed fill that confirm this assessment.

Evaluation of Eligibility and Assessment of Effects:

The investigation failed to identify any buried cultural material fifty years of age or older. The entire APE appears to have been covered with imported soil and gravel, compacted, and leveled for construction. Based on the absence of archaeological resources identified during the subsurface survey, and considering the evidence for extensive disturbance noted, the APE is considered to have very low sensitivity for containing significant archaeological deposits. Therefore, a determination of *No Historic Properties Affected* is appropriate for this undertaking.

Finding of No Historic Properties Affected:

Based on the negative findings from the survey, the limited nature of the action, and because the site has been highly disturbed from the development of Columbus AFB, DAF has determined that no historic properties will be affected by the undertaking. DAF requests your tribe's concurrence with this determination. In accordance with Section 106 of the National Historic Preservation Act, DAF has also notified MDAH of this determination.

As you requested in your 29 Apr 2023 correspondence, enclosed is an electronic copy of the full cultural resources investigation report. This letter serves as our project coordination in accordance with 36 CFR Part 800.3.g, and we are requesting an expedited review of the following:

- 1) Review and Comment on Identification Efforts
- 2) Your Tribe's Concurrence with the DAF Determination of *No Historic Properties Affected*

Your prompt attention to this request is greatly appreciated. If DAF has not received a response from your tribe within 30 days of your receipt of this determination letter, DAF will consider its responsibilities under Section 106 to have been fulfilled. Written correspondence may be submitted to me by mail at the following address:

Allen S. Reed
Installation Management Flight
14 CES/CEI
555 Simler Blvd., Ste. 108B
Columbus AFB MS 39710

If possible, please send correspondence by email to allen.reed@us.af.mil.

We look forward to continuing the Section 106 consultation process with you. If you require additional information or have any questions or concerns, please feel free to contact me by telephone at 662-574-2509 or by email at allen.reed@us.af.mil.

Sincerely,



ALLEN S. REED, Chief
Installation Management Flight

Enclosure: *Phase I Archaeological Survey for T-7A Recapitalization at Columbus Air Force Base, Mississippi, MDAH Project Log #10-095-22, Lowndes County, Mississippi. July 2023.*

Concurrence from the Choctaw Nation of Oklahoma (August 2023) on the finding of *no historic properties affected*

From: Lindsey Bilyeu <lbilyeu@choctawnation.com>

Sent: Thursday, August 24, 2023 3:01 PM

To: REED, ALLEN S CIV USAF AETC 14 CES/CEI <allen.reed@us.af.mil>

Subject: [Non-DoD Source] RE: Final Archaeological Survey Report - Columbus AFB / MDAH Project Log #10-095-22,

Mr. Reed,

Thank you for providing the cultural resources survey report. Our office has reviewed the report and we concur with the finding of "no historic properties affected". However, we ask that work be stopped, and our office contacted immediately, in the event that Native American artifacts or human remains are encountered.

If you have any questions, please contact me.

Thank you,

Lindsey D. Bilyeu, M.S.
Program Coordinator 2
Choctaw Nation of Oklahoma
Historic Preservation Department
P.O. Box 1210
Durant, OK 74702
Office: (580) 642-8377
Cell: (580) 740-9624

DAF's acknowledgement of the Choctaw Nation of Oklahoma's concurrence

From: REED, ALLEN S CIV USAF AETC 14 CES/CEI <allen.reed@us.af.mil>
Sent: Thursday, August 31, 2023 10:41 AM
To: Lindsey Bilyeu <lbilyeu@choctawnation.com>
Cc: Didlake, Timothy J <Timothy.Didlake@hdrinc.com>; KIRK, JUSTIN C CIV USAF AFMC AFCEC/CZN <justin.kirk.13@us.af.mil>; TURNER, TIMOTHY W CIV USAF AETC 14 CES/CEIE <timothy.turner.24@us.af.mil>; FULGHAM, CHAD W CIV USAF AETC 14 CES/CENP <chad.fulgham.3@us.af.mil>
Subject: RE: [Non-DoD Source] RE: Final Archaeological Survey Report - Columbus AFB / MDAH Project Log #10-095-22,

Ms. Bilyeu,
Thank you so much for your quick response.
Be assured that if we encounter any artifacts or human remains during the construction work, all actions will be halted and you will be notified immediately.
Thanks again!
Respectfully,
Allen Reed

Allen S. Reed, P.G., REM ≡☉≡
Chief, Installation Management Flight
14th CES/CEI
555 Simler Blvd
Columbus AFB MS 39710-5010

DSN: 742-7328 COMM: 662-434-7328
CELL: 662-574-2509

CUI
Controlled by: 14 CES/CEI
CUI Category (IES): OPSEC
LDC/Distribution: FEDCON
POC: 14 CES/CEI DSN 742-7328

Concurrence from the Mississippi Band of Choctaw Indians (August 2023) on the finding of *no historic properties affected*



MISSISSIPPI BAND OF CHOCTAW INDIANS
TRIBAL HISTORIC PRESERVATION OFFICE
101 INDUSTRIAL ROAD
CHOCTAW, MS 39350

Mr. Allen Reed, Chief
Installation Management Flight
14 CES/CEI
555 Simler Blvd, Ste 108B
Columbus AB MS 39710

August 31, 2023

VIA E-MAIL AT: allen.reed@us.af.mil
RE: Section 106 Review Consultation, Proposed Recapitalization of Flight Training Program and Construction/Upgrade of Facilities, Columbus Air Force Base, Lowndes County, MS

Determination: No Adverse Effect to Historic Properties/No Tribal Interests Affected

Dear Mr. Reed:

The Mississippi Band of Choctaw Indians' (MBCI) THPO has received and appreciates your email dated August 23, 2023, in which you request our Tribe's review and consultation on the above-referenced site.

We have reviewed the full description of the proposed project that you have provided and the MBCI concurs with the finding of No Adverse Effect to Historic Properties. Additionally, MBCI does not have any tribal interests that would be affected by this project. However, we would like to be notified if there are any inadvertent discoveries of any potentially significant cultural items or artifacts during the execution of this project.

Thank you for consulting with the Mississippi Band of Choctaw Indians on the above-referenced project. If you have any questions that we at MBCI may be able answer, please do not hesitate to contact me by phone at (601) 663-7606, or by email at THPO@choctaw.org.

Sincerely,

A handwritten signature in black ink that reads "Melanie Carson".

Melanie Carson
Planner/THPO
Mississippi Band of Choctaw Indians
Planning Office
101 Industrial Rd
Choctaw, MS 39350

"CHOCTAW SELF-DETERMINATION"