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ENVIRONMENTAL ASSESSMENT FOR PARACHUTE AND SOARING OPERATIONS AT BULLSEYE AUXILIARY AIRFIELD, COLORADO



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PRIVACY ADVISORY

Any personal information provided throughout this process has been used only to identify individuals' desire to make a comment during the public review period or to requests for copies of the Draft EA or associated documents. Private addresses were compiled to develop a mailing list for those requesting copies of the Draft EA.

FINDING OF NO SIGNIFICANT IMPACT

BACKGROUND

Pursuant to provisions of the National Environmental Policy Act (NEPA), 42 United States Code §§ 4321–4270d, implementing Council on Environmental Quality (CEQ) Regulations, 40 Code of Federal Regulations (CFR) §§ 1500–1508, and 32 CFR 989, *Environmental Impact Analysis Process*, the U.S. Air Force (USAF) assessed the potential environmental consequences resulting from using Bullseye Auxiliary Airfield (Bullseye) to conduct parachute and soaring operations away from the U.S. Air Force Academy (Academy).

The Environmental Assessment (EA), incorporated by reference into this Finding of No Significant Impact (FONSI), analyzes the potential environmental consequences of activities associated with the proposed action and, where necessary provides environmental protection measures to avoid or reduce adverse environmental impacts.

The EA considers all potential impacts of the proposed action and the No Action Alternative. As part of the initial EA process, the Federal Aviation Administration (FAA) was contacted to serve as a Cooperating Agency (CA). Because the proposed action would not result in a rulemaking action, the FAA did not serve as a CA. Coordination still occurred with the FAA and their recommendations have been incorporated into the proposed action.

PURPOSE AND NEED

The purpose of the proposed action is to provide operational flexibility and capability for 98th Flying Training Squadron (98 FTS) parachute and 94th Flying Training Squadron (94 FTS) soaring operations by providing an additional location for parachute operations training and soaring operations away from the Academy.

Additional flexibility and capability is needed to ensure that the 94 FTS and 98 FTS can continue to provide effective training. The Academy continuously trains and certifies cadets in parachute and soaring operations by maintaining a schedule that has cadets advancing to cadet instructors so that those cadet instructors can then train the next class of cadets. Current parachute and soaring training is primarily conducted over Academy lands, with pilots taking off and landing at Davis Airfield. The presence of the Front Range adjacent to the airfield generates wind speeds greater than 20 miles per hour (mph). These conditions are unfavorable for parachute and soaring operations. In 2016, the 98 FTS experienced 89 lost or shortened jump days due to weather conditions. In 2017, they experienced 101 lost or shortened jump days, resulting in the loss of more than 5,500 jumps that year. Loss of training jumps, especially for demonstration teams, has the potential to increase demonstration mishaps due to lack of training. In addition to weather conditions impacting operations, construction or other planned activities at Davis Airfield also negatively affect both parachute and soaring training opportunities. Any type of disruption to training negatively affects the continuous student training throughput schedule maintained by the Academy. An alternative airfield that is in close proximity to the Academy with less potential for training restrictions is needed to increase training flexibility and capability without adding extensive development or travel costs.

PROPOSED ACTION/ALTERNATIVES

Section 2.0 of the EA provides a detailed description of the proposed action. Under the proposed action, Bullseye would provide an additional location where the 98 FTS could conduct parachute

operations and the 94 FTS could conduct soaring operations with minimal interference to other military or civilian aircraft operations. Both parachute and soaring operations would require minimal infrastructure at Bullseye. Temporary lavatory facilities (i.e., portable toilets, wash stations, etc.) would be used during training days and a tent would be placed in a grass area near the ramp at Bullseye. For parachute operations, a drop zone would be used for cadet landings and would be located in the area south of the tent. The 94 FTS would operate out of a command trailer (enclosed trailer that could be towed by a pickup truck). No construction is planned as part of this action. Bullseye would be used for parachute operations for up to 10 weeks per year and for soaring operations up to 66 days per year. Operations at Bullseye would increase by approximately 44 percent.

NO ACTION ALTERNATIVE

Implementation of the No Action Alternative would not result in any changes in activity at Bullseye. The 94 FTS and 98 FTS would continue to conduct operations at Davis Airfield with no alternate location for training operations. Analysis of the No Action Alternative provides a basis for comparing the environmental consequences of the proposed action to the existing (baseline) conditions, over time. Implementation of the No Action Alternative would mean that training days would continue to be impacted.

SUMMARY OF FINDINGS

The USAF has concluded that no significant impacts to the resource areas described in Table 1 would result from implementation of the proposed action. Therefore, it has been determined that an Environmental Impact Statement (EIS) is not required. Table 1 includes a summary of findings by resource areas carried forward for detailed analysis in the EA. Pursuant to CEQ and USAF regulations (40 CFR §1501.7(a)(3), 32 CFR 989.18), water and earth resources, hazardous materials and waste, infrastructure and utilities, socioeconomics, and environmental justice were eliminated from detailed study in the EA because they have no potential to be impacted by the implementation of the proposed actions.

Table 1. Summary Comparison of Environmental Consequences

Resource Area	Proposed Action	No Action
<i>Airspace</i>	No new special use airspace or modifications of existing special use airspace are planned as part of the proposed action. Implementation of the proposed action is not anticipated to result in significant impacts to the management or use of airspace at Bullseye.	Under the No Action Alternative, no additional operations would occur at Bullseye. Baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to the management or use of airspace.

Table 1. Summary Comparison of Environmental Consequences

Resource Area	Proposed Action	No Action
Noise/Acoustic Environment	Aircraft operations would generate noise levels comparable to the T-53 and DA-20 aircraft currently operating at Bullseye. Noise levels would not exceed FAA impact criteria or the USEPA-identified threshold of 55 decibels at the closest noise-sensitive location. The number of aircraft noise events with potential to momentarily interfere with speech would remain low (1 per average annual day) at the closest residence. Flying operations between 10:00 PM and 7:00 AM would be limited to PA-18 initial approaches to land. These early morning approaches would not be sufficiently loud to interfere with activities such as indoor conversation or sleep. Noise impacts under the proposed action would not be significant.	Implementation of the No Action Alternative would result in no changes in noise levels at and near Bullseye. Implementation of the No Action Alternative would result in an increased likelihood of delays to parachuting and soaring training when weather and other factors are not conducive to training at Davis Airfield.
Air Quality	Emissions associated with parachute and soaring operations at Bullseye would not generate significant quantities of any pollutants. Emissions from commuting/transporting cadets and staff from the Academy to Bullseye, would be minimal. There would be no significant impacts to air quality under the proposed action.	Under the No Action Alternative, parachute and soaring operations would continue to operate out of Davis Airfield and there would be no changes at Bullseye. Air emissions would remain at current baseline levels and there would be no impact to air quality in the Region of Influence.
Biological Resources	No federally listed species or potential habitat for these species is known to occur at Bullseye. Therefore, the USAF has made a determination of no effect for this action. Impacts to other species and biological habitat would be minimal. There would be no significant impacts to biological resources under the proposed action.	Under the No Action Alternative, no additional operations would occur at Bullseye and baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to biological resources.
Cultural Resources	No ground disturbance is expected from the soaring or parachuting operations, and project planning is complete under National Historic Preservation Act, Section 106, for a determination of "no historic properties affected" (36 CFR § 800.4(d)(1)). The undertaking will have no adverse effect on any historic properties. There would be no significant impacts (direct, indirect, or cumulative) to cultural resources under the proposed action.	Under the No Action Alternative, no parachute or soaring operations would occur at Bullseye. Baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to cultural resources at Bullseye.
Land Use	No major land use changes would occur as a result of implementing the proposed action. Therefore, no impacts to land use are anticipated.	Under the No Action Alternative, no additional operations would occur at Bullseye and baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to land use.
Safety and Occupational Health	No aspects of the proposed action would create new or unique ground safety issues. No permanent construction is planned as part of the proposed action. No significant impacts to ground safety are anticipated to result from implementation of the proposed action. No significant impacts are anticipated to occur related to bird/wildlife strike hazards.	Under the No Action Alternative, no additional operations would occur at Bullseye and baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in minor adverse impacts to safety and occupational health. These impacts would result if conditions at Davis Airfield required cancellation of training which has the potential to lead to increased chances of mishaps due to missed training opportunities.

PUBLIC AND AGENCY OUTREACH

Public participation opportunities with respect to this EA and decision making on the proposed action are guided by 32 CFR 989. The Draft EA was made available to the public and others online at <https://www.usafa.af.mil/Units/10th-Air-Base-Wing/> and at the Calhan Library located at 600 Bank Street, Calhan, CO 80808 for 30 days between August 30, 2021, and September 29, 2021. A public notice for the 30-day Draft EA public comment period was published in the Colorado Gazette and the Ranchland News on August 30, 2021. Scoping letters were sent out to federal, state, and local agencies; Native American tribes; and potentially interested stakeholders in the region. Responses to these letters are included in the EA.

In addition, the USAF closely coordinated with the Colorado State Historic Preservation Officer (SHPO) and federally affiliated tribes with interest in the project area. In a letter dated May 24, 2021, the Colorado SHPO concurred that the undertaking would result in no adverse effects. Additional details on SHPO correspondence are included in the EA and incorporated here by reference. The USAF also coordinated with Native American Tribes. Additional details on tribal correspondence are included in the EA (Appendix A) and incorporated here by reference.

FINDING OF NO SIGNIFICANT IMPACT

Based on my review of the facts and analyses contained in the attached EA, conducted under the provisions of NEPA, CEQ regulations, and 32 CFR 989, I conclude that implementation of the projects identified in the EA would not have a significant environmental impact. Accordingly, an EIS is not required. The signing of this FONSI completes the environmental impact analysis process for these actions.

LIEUTENANT GENERAL CLARK
Superintendent

DATE

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
LIST OF FIGURES	iv
LIST OF TABLES	iv
LIST OF APPENDICES	iv
ACRONYMS AND ABBREVIATIONS.....	v
1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION	1-1
1.1 INTRODUCTION	1-1
1.2 PURPOSE OF THE PROPOSED ACTION.....	1-3
1.3 NEED FOR THE PROPOSED ACTION.....	1-3
1.4 DECISION TO BE MADE.....	1-3
1.5 INTERAGENCY AND INTERGOVERNMENTAL COORDINATION AND CONSULTATIONS.....	1-4
1.6 APPLICABLE LAWS AND REGULATIONS	1-4
2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES.....	2-1
2.1 PROPOSED ACTION	2-1
2.2 SELECTION STANDARDS.....	2-1
2.3 SCREENING OF ALTERNATIVES	2-2
2.4 DETAILED DESCRIPTION OF THE ALTERNATIVES	2-2
2.4.1 Preferred Alternative.....	2-2
2.4.2 No Action Alternative.....	2-6
2.5 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION	2-6
2.6 SUMMARY COMPARISON OF ENVIRONMENTAL CONSEQUENCES	2-8
3.0 AFFECTED ENVIRONMENT	3-1
3.1 SCOPE OF THE ANALYSIS	3-1
3.1.1 Resources Analyzed.....	3-1
3.1.2 Resources Eliminated from Detailed Analysis	3-1
3.2 AIRSPACE	3-2
3.2.1 Definition of the Resource	3-2
3.2.2 Existing Conditions.....	3-4
3.3 NOISE / ACOUSTIC ENVIRONMENT	3-6
3.3.1 Definition of the Resource	3-6
3.3.2 Existing Conditions.....	3-8
3.4 AIR QUALITY AND CLIMATE CHANGE.....	3-10
3.4.1 Definition of the Resource	3-10
3.4.2 Existing Conditions.....	3-10

<u>Section</u>	<u>Page</u>
3.5	BIOLOGICAL / NATURAL RESOURCES..... 3-11
3.5.1	Definition of the Resource 3-11
3.5.2	Existing Conditions..... 3-12
3.6	CULTURAL RESOURCES 3-15
3.6.1	Definition of the Resource 3-15
3.6.2	Existing Conditions..... 3-15
3.7	LAND USE..... 3-16
3.7.1	Definition of the Resource 3-16
3.7.2	Existing Conditions..... 3-17
3.8	SAFETY AND OCCUPATIONAL HEALTH..... 3-17
3.8.1	Definition of the Resource 3-17
3.8.2	Existing Conditions..... 3-17
4.0	ENVIRONMENTAL CONSEQUENCES 4-1
4.1	INTRODUCTION 4-1
4.2	AIRSPACE 4-1
4.2.1	Proposed Action..... 4-1
4.2.2	No Action Alternative..... 4-2
4.3	NOISE / ACOUSTIC ENVIRONMENT 4-2
4.3.1	Proposed Action..... 4-2
4.3.2	No Action Alternative..... 4-5
4.4	AIR QUALITY AND CLIMATE CHANGE..... 4-5
4.4.1	Proposed Action..... 4-5
4.4.2	No Action Alternative..... 4-6
4.5	BIOLOGICAL / NATURAL RESOURCES..... 4-6
4.5.1	Proposed Action..... 4-6
4.5.2	No Action Alternative..... 4-7
4.6	CULTURAL RESOURCES 4-7
4.6.1	Proposed Action..... 4-7
4.6.2	No Action Alternative..... 4-7
4.7	LAND USE..... 4-8
4.7.1	Proposed Action..... 4-8
4.7.2	No Action Alternative..... 4-8
4.8	SAFETY AND OCCUPATIONAL HEALTH..... 4-8
4.8.1	Proposed Action..... 4-8
4.8.2	No Action Alternative..... 4-9
4.9	OTHER NEPA CONSIDERATIONS 4-9
4.9.1	Unavoidable Adverse Effects 4-9
4.9.2	Relationship of Short-Term Uses and Long-Term Productivity..... 4-9
4.9.3	Irreversible and Irretrievable Commitments of Resources 4-9

<u>Section</u>	<u>Page</u>
5.0 LIST OF PREPARERS.....	5-1
6.0 REFERENCES.....	6-1

LIST OF FIGURES

	<u>Page</u>
Figure 1-1. Regional Map of the Academy and Bullseye.....	1-2
Figure 2-1. Bullseye Auxiliary Airfield.....	2-3
Figure 2-2. Bullseye Proposed Soaring Area.....	2-7
Figure 3-1. Controlled/Uncontrolled Airspace Schematic.....	3-3
Figure 3-2. Training Areas near Bullseye.....	3-5
Figure 3-3. Typical A-Weighted Levels of Common Sounds	3-7
Figure 3-4. Baseline DNL for Bullseye Auxiliary Airfield.....	3-9
Figure 4-1. Noise Contours at Bullseye Resulting from the Proposed Action Relative to Existing Conditions.....	4-4

LIST OF TABLES

	<u>Page</u>
Table 1-1. Current Annual Aircraft Operations at Bullseye.....	1-1
Table 2-1. Current and Proposed Aircraft Operations at Bullseye	2-5
Table 2-2. Potential Environmental Consequences	2-8
Table 3-1. Baseline Emissions Inventory for El Paso County.....	3-10
Table 3-2. Baseline Greenhouse Gas Emissions Inventory for El Paso County	3-11
Table 3-3. Federally Listed Species with Potential to Occur in El Paso County, Colorado.....	3-12
Table 3-4. State-Listed Species with Potential to Occur in El Paso County, Colorado	3-14
Table 4-1. Individual Overflight Maximum Noise Levels at a Distance of 1,000 Feet	4-2
Table 4-2. Proposed Action Emissions.....	4-5

LIST OF APPENDICES

- Appendix A. Public Involvement
- Appendix B. Air Quality

ACRONYMS AND ABBREVIATIONS

94 FTS	94th Flying Training Squadron
98 FTS	98th Flying Training Squadron
306 FTG	306th Flying Training Group
Academy	U.S. Air Force Academy
ACAM	Air Conformity Applicability Model
AFB	Air Force Base
AFI	Air Force Instruction
AGL	above ground level
AICUZ	Air Installation Compatible Use Zone Study
APE	Area of Potential Effect
APZ	Accident Potential Zone
ATC	Air Traffic Control
Bullseye	Bullseye Auxiliary Airfield
<i>CFR</i>	<i>Code of Federal Regulations</i>
CH ₄	methane
CO	carbon monoxide
CO ₂	carbon dioxide
CO _{2e}	carbon dioxide equivalent
COS	Colorado Springs Airport
CPW	Colorado Parks and Wildlife
CZ	Clear Zone
dB	decibel(s)
dBA	A-weighted decibel(s)
DNL	day-night average sound level
DNWG	DoD Noise Working Group
DoD	U.S. Department of Defense
DoDI	Department of Defense Instruction
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EO	Executive Order
FAA	Federal Aviation Administration
FL	Flight Level
FTG	Flying Training Group
FTS	Flying Training Squadron
GHG	greenhouse gas
HFC	hydrofluorocarbon
Hz	hertz
I-	Interstate
IFR	Instrument Flight Rules
IFT	Initial Flight Training
IPaC	Information for Planning and Consultation
L _{max}	maximum sound level
MSL	mean sea level
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NEI	National Emissions Inventory
NEPA	National Environmental Policy Act

NHPA	National Historic Preservation Act
NM	nautical mile(s)
NO	nitrogen dioxide
NO _x	nitrogen oxides
NPS	National Park Service
NRHP	National Register of Historic Places
O ₃	ozone
OSHA	Occupational Safety and Health Administration
PFC	perfluorocarbon
PFP	Powered Flight Program
PM	particulate matter
PM _{2.5}	particulate matter less than or equal to 2.5 micrometers in diameter
PM ₁₀	particulate matter less than or equal to 10 micrometers in diameter
ROI	Region of Influence
ROW	Right of Way
SCO	Soaring Control Officer
SF ₆	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SO ₂	sulfur dioxide
SO _x	sulfur oxides
SUA	Special Use Airspace
USAF	U.S. Air Force
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VFR	Visual Flight Rules
VOC	volatile organic compound

1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

The U.S. Air Force Academy (Academy) is located in Colorado Springs, Colorado, adjacent to the Front Range of the Southern Rocky Mountains (Figure 1-1). The 306th Flying Training Group (306 FTG) is the airmanship-training unit located at the Academy. The 306 FTG primarily operates from Davis Airfield (also known as the Main Airfield) at the Academy but also uses Bullseye Auxiliary Airfield (Bullseye) (approximately 30 miles southeast of the Academy), and Colorado Springs Airport (COS). The 306 FTG ensures that the sailplane, parachuting, and powered-flight courses offered at the Academy contribute to the leadership and development of cadets. The 306 FTG provides management and oversight of training to 2,500 cadets and 2,200 undergraduate flight-training candidates annually. The 306 FTG consists of five training squadrons (the 1st Flying Training Squadron, 306th Operations Support Squadron, 94th Flying Training Squadron [94 FTS], 557th Flying Training Squadron, and 98th Flying Training Squadron [98 FTS]) (306 FTG 2020).

This Environmental Assessment (EA) focuses on activities of the 94 FTS and 98 FTS proposed for Bullseye. Bullseye is currently used for powered-flight training/initial flight training and for when wind conditions at Davis Airfield do not allow for safe training operations. Bullseye does not have a control tower or assigned air traffic control personnel. Bullseye consists of one 3,500-foot paved runway (75 feet wide) oriented in a generally north-south direction. Due to the small size of Bullseye, generally no more than four aircraft are in the pattern at one time (AICUZ 2019). Currently, 132 powered-flight operations occur at Bullseye on an average day, totaling 48,026 powered-flight operations per year. No parachute or soaring operations currently occur at Bullseye (Table 1-1).

Table 1-1. Current Annual Aircraft Operations at Bullseye

Aircraft	Initial Arrivals to Bullseye	Flights Starting and Ending at Bullseye - Full Circuits ^a	Departures to Other Airfields	Annual Airfield Operations
T-53	1,386	5,275	1,386	13,322
DA-20	3,155	14,197	3,155	34,704
Total (baseline)	4,541	19,472	4,541	48,026

^a Each “arrival” and “departure” event includes one airfield operation, but each “full circuit” event includes two airfield operations (reflecting a departure and subsequent arrival segment of the flight).

The 98 FTS conducts annual parachute training for approximately 700 Academy cadets. This training focuses on safety and emergency procedures, and includes basic parachute training as well as competitive and demonstration parachute programs. Training is conducted using UV-18 Twin Otter aircraft stationed at Peterson Air Force Base (AFB) (306 FTG 2020) and parachute operations occur over a designated landing area at Davis Airfield.



In addition to parachute training, the Academy conducts soaring operations. The 94 FTS conducts more than 20,000 training and competition sailplane sorties per year. This training includes a basic soaring course and a solo course. Aircraft used in soaring include the TG-15 (Schempp-Hirth Duo Discus) and TG-16 (DG Flugzeugbau DG-1000) sailplanes. The soaring mission also uses Piper PA-18 Super Cub tow planes. Tow plane pilots fly standardized departure and arrival flight patterns that can be modified to maintain safe deconfliction with other pilots operating in the area or when weather conditions

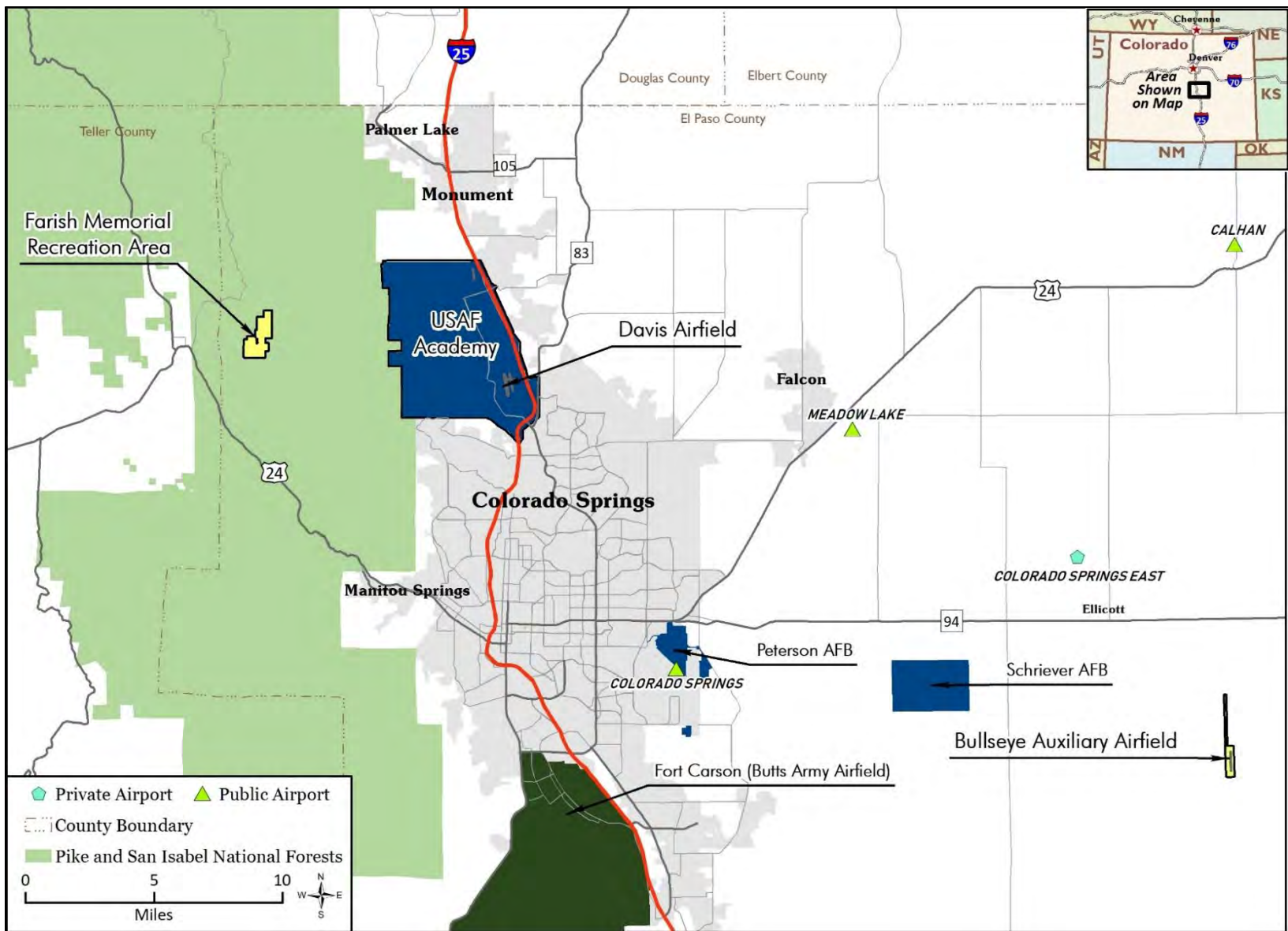


Figure 1-1. Regional Map of the Academy and Bullseye

warrant deviations in the interest of safety. Soaring operations are primarily conducted over Academy property extending west of Interstate (I)-25 and periodically over areas located south of the Academy.

Other training squadrons use the Cirrus SR-20 (T-53A Kadet II), the Cessna 150 (T-51), and the Cessna 172 (T-41 Mescalero) aircraft for powered-flight training. Cadet pilot training is primarily conducted using the T-53A Kadet II aircraft. The Academy's Flying Team exclusively uses the T-41 and T-51. Collectively, these aircraft are flown in training areas to the northeast, east, and southeast of Colorado Springs. They also conduct flight pattern training at Bullseye, COS, and Davis Airfield, which typically consists of multiple takeoffs and landings (including touch-and-go landings).



1.2 PURPOSE OF THE PROPOSED ACTION

The purpose of the Proposed Action is to provide operational flexibility and capability for 98 FTS parachute and 94 FTS soaring operations by providing an additional location for parachute training and soaring operations away from the Academy.

1.3 NEED FOR THE PROPOSED ACTION

Additional flexibility and capability is needed to ensure that the 94 FTS and 98 FTS can continue to provide effective training. The Academy continuously trains and certifies cadets in parachute and soaring operations by maintaining a schedule that has cadets advancing to cadet instructors so that those cadet instructors can then train the next class of cadets. Current parachute and soaring training is primarily conducted over Academy lands, with pilots taking off and landing at Davis Airfield. The presence of the Front Range adjacent to the airfield generates wind speeds greater than 20 miles per hour. These conditions are unfavorable for parachute and soaring operations. In 2016, the 98 FTS experienced 89 lost or shortened jump days due to weather conditions. In 2017, they experienced 101 lost or shortened jump days, resulting in the loss of more than 5,500 jumps that year. Loss of training jumps, especially for demonstration teams, has the potential to increase demonstration mishaps due to lack of training. In addition to weather conditions impacting operations, construction or other planned activities at Davis Airfield also negatively affect both parachute and soaring training opportunities. Any type of disruption to training negatively affects the continuous cadet training throughput schedule maintained by the Academy. An alternative airfield that is in close proximity to the Academy with less potential for training restrictions is needed to increase training flexibility and capability without adding extensive development or travel costs.

1.4 DECISION TO BE MADE

The purpose of this EA is to inform decision makers of the potential environmental consequences that could result from implementation of the Proposed Action or the No Action Alternative. This EA identifies, documents, and evaluates the potential human and natural environmental effects of implementation of the Proposed Action. An interdisciplinary team of airspace specialists, environmental scientists, noise analysts, biologists, planners, and engineers analyzed the Proposed Action relative to existing conditions and identified the potential impacts that could result from implementation of the Proposed Action. Chapter 2 describes the Proposed Action, the No Action Alternative, and alternatives eliminated from further consideration. Conditions existing as of 2020, considered the "baseline" conditions, are described in Chapter 3, Affected Environment. The

expected effects of the Proposed Action are presented in Chapter 4, Environmental Consequences. Chapter 4 also addresses any mitigation measures that might be necessary.

1.5 INTERAGENCY AND INTERGOVERNMENTAL COORDINATION AND CONSULTATIONS

Executive Order (EO) 12372, *Intergovernmental Review of Federal Programs*, requires intergovernmental notifications prior to making any detailed statement of environmental consequences. Through the process of Interagency and Intergovernmental Coordination for Environmental Planning, the proponent must notify concerned federal, state, and local agencies and allow them sufficient time to evaluate potential environmental consequences of a proposed action. Comments from these agencies are subsequently incorporated into the environmental analysis.

The U.S. Air Force (USAF) encourages and invites public/agency, tribal, and other participation in the National Environmental Policy Act (NEPA) process. Consideration of the views and information of all interested persons promotes open communication and enables better decision making. During the planning stages of this project, on 21 May 2021, the USAF sent scoping letters to surrounding airports, local, state and federal agencies and county officials. The scoping letters explained the project, provided a map of the Bullseye area, and requested comments within 30 days of receipt of the scoping letter. Copies of the scoping letters and responses received are included in Appendix A.

All agencies, organizations, tribes, and members of the public with a potential interest in the Proposed Action are encouraged to participate in the decision-making process during the 30-day Draft EA public comment period.

Public participation opportunities with respect to this EA and decision making on the Proposed Action are guided by 32 *Code of Federal Regulations (CFR)* 989, *Environmental Impact Analysis Process (EIAP)*. The Draft EA has been made available to the public and others online at <https://www.usafa.af.mil/Units/10th-Air-Base-Wing/> and at the Calhan Library located at 600 Bank Street, Calhan, CO 80808 for 30 days between 30 August 2021 and 29 September 2021. A public notice for the 30-day Draft EA public comment period was published in the Colorado Gazette and the Ranchland News (see Appendix A).

Under Section 106 of the National Historic Preservation Act (36 CFR Part 800, *Protection of Historic Properties*) federal agencies consider the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. That planning process involves consultation with State Historic Preservation Officer(s) (SHPOs) and others such as federally recognized tribes and the public. A summary of Section 106 consultation is included in Appendix A.

Under Section 7 of the Endangered Species Act, agencies must consult with the United States Fish and Wildlife (USFWS) when an action may affect a listed, endangered, or threatened species. If the agency determines that the action is not likely to affect any listed species or critical habitat then there is no consultation requirement. Section 4.5 of the EA contains additional information on Endangered Species Act consultation.

1.6 APPLICABLE LAWS AND REGULATIONS

This EA has been prepared in accordance with the NEPA of 1969 (40 *CFR* §§ 1500-1508) and implementing regulations issued by the President's Council on Environmental Quality. Federal agencies have developed "agency-specific" procedures for implementing the NEPA. The NEPA procedures for the USAF are described in 32 *CFR* 989.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The 306 FTG is evaluating alternative locations to conduct parachute and soaring operations away from the Academy. Unfavorable weather (i.e., wind speeds greater than 20 miles per hour), generated by the presence of the Front Range, limits both parachute and soaring training opportunities at Davis Airfield. Construction and other planned activities at Davis Airfield also have the potential to limit training opportunities. The Proposed Action is the use of an auxiliary airfield to conduct parachute and soaring operations away from the Academy.

2.2 SELECTION STANDARDS

To identify alternatives for the Proposed Action, the 306 FTG implemented a multistep evaluation process. Screening criteria were developed to define reasonable alternatives that could meet the requirements of an alternate airfield for parachute and soaring operations away from the Academy. The 306 FTG determined that a reasonable alternative should meet the following seven criteria:

- **Criterion 1. Achieves Mission Requirements.** Alternative sites should allow the 94 FTS and 98 FTS to safely conduct operations in an area where weather or other factors would be more favorable than at Davis Airfield. This criterion meets the purpose and need for a training site that is less likely to be impacted by weather conditions near the Front Range or other conditions that would limit training at the Academy.
- **Criterion 2. Provides for Mission Flexibility.** Alternative sites should maximize flexibility for mission requirements. Flexibility includes the ability to schedule and perform training without interference from ongoing activities at the selected airfield. All ongoing flight operations would be required to cease during the proposed parachute and soaring operations. Flexibility also includes the ability to provide for future expansion should training requirements change in the future. Mission flexibility can best be accomplished by locating the site on existing U.S. Department of Defense (DoD)-owned property or at a facility that allows for deconfliction with existing flying activities. This criterion directly meets the purpose and need of the project to find a site that would increase training flexibility and reduce training restrictions.
- **Criterion 3. Provide Accessible Location.** Alternative sites should be located within 50 miles of the Academy in order to limit travel costs and maximize time available for training. This criterion meets the project need to obtain training while minimizing travel time and transportation costs.
- **Criterion 4. Provide Efficient Implementation of Training.** Alternative sites should provide a training location that minimizes the initial startup costs and requirements for training. The site should be available for training without extensive requirements for the purchase of land, leases, easements, or other agreements that would delay the implementation of training. This criterion meets the project need to obtain additional training flexibility.
- **Criterion 5. Provides for Accessibility.** Alternative sites should be located near existing roadways and infrastructure to negate requirements for new road construction or construction of any airfield improvements, and to minimize potential environmental impacts. This criterion applies to the project requirement to provide operational flexibility and capability with minimal development costs.

- **Criterion 6. Avoids Civil Aviation Conflicts.** Alternative sites should avoid, to the extent possible, potential conflicts with nonparticipating civil (i.e., commercial and civilian) and other military air traffic. This criterion applies to the project requirement to provide operational flexibility and capability.

2.3 SCREENING OF ALTERNATIVES

The first step in screening alternatives was to evaluate existing military and civilian public airstrips that could meet the screening criteria described in Section 2.2. The 306 FTG identified the following alternative airfields within 50 miles of the Academy (Figure 1-1): Butts Army Airfield at Fort Carson, COS at Peterson AFB, Springs East Airport, Bullseye, and the Meadow Lake Airport. Although Peterson AFB and Fort Carson both have airfields that could support the proposed parachute and soaring operations, they do not meet Criteria 1, 2, or 4, as listed in Section 2.2. Ongoing fixed-wing and helicopter operations at Peterson AFB and Fort Carson, respectively, could not cease during the proposed parachute and soaring operations. In addition, none of the civilian public airports would meet Criteria 2 or 6 by ceasing all aircraft operations during the proposed parachute and soaring operations to avoid conflicts with civil aviation. Bullseye is the only airfield that meets all of the selection criteria.

2.4 DETAILED DESCRIPTION OF THE ALTERNATIVES

2.4.1 Preferred Alternative

Under the preferred alternative, Bullseye would provide an additional location where the 98 FTS could conduct parachute operations and the 94 FTS could conduct soaring operations with minimal interference to other military or civilian aircraft operations. Both parachute and soaring operations would require minimal infrastructure at Bullseye. Temporary lavatory facilities (i.e., portable toilets, wash stations, etc.) would be used during training days and a tent would be placed in the grass area west of the ramp and south of the fire station (Figure 2-1). For parachute operations, a drop zone would be used for cadet landings and would be located in the area south of the tent. The drop zone would be temporarily marked during parachute operations using chalk, paint, cones, etc. The 94 FTS would operate out of a command trailer (enclosed trailer that could be towed by a pickup truck). No construction is planned as part of this action. The ability to schedule parachute and soaring operations at Bullseye would increase operational flexibility and capabilities because the wind conditions at Bullseye are often more favorable than those at Davis Airfield; therefore, parachute and soaring operations at Bullseye would be less likely to be impacted by wind conditions. Parachute operations at Bullseye would still be planned several weeks in advance; however, because the weather conditions at Bullseye are generally more favorable than those at Davis Airfield, there is less chance that these operations would be cancelled. Because parachute operations are planned weeks in advance, sudden weather changes at Davis Airfield would not result in immediate unplanned shifts of operations to Bullseye. Bullseye would be used for parachute operations for up to 10 weeks per year (up to 24 days per year) and for soaring operations up to 66 days per year.

2.4.1.1 Proposed Parachute Operations

A typical day of parachute operations would begin with the UV-18 aircraft being flown from their permanent station at Peterson AFB either directly to Bullseye or to Davis Airfield to pick up cadets. If the cadets are picked up from Davis Airfield, they would be flown to Bullseye. If the aircraft are flown directly to Bullseye, the cadets would commute from the Academy to Bullseye using either government or personal vehicles (cadets would commute by ground approximately 30 percent of

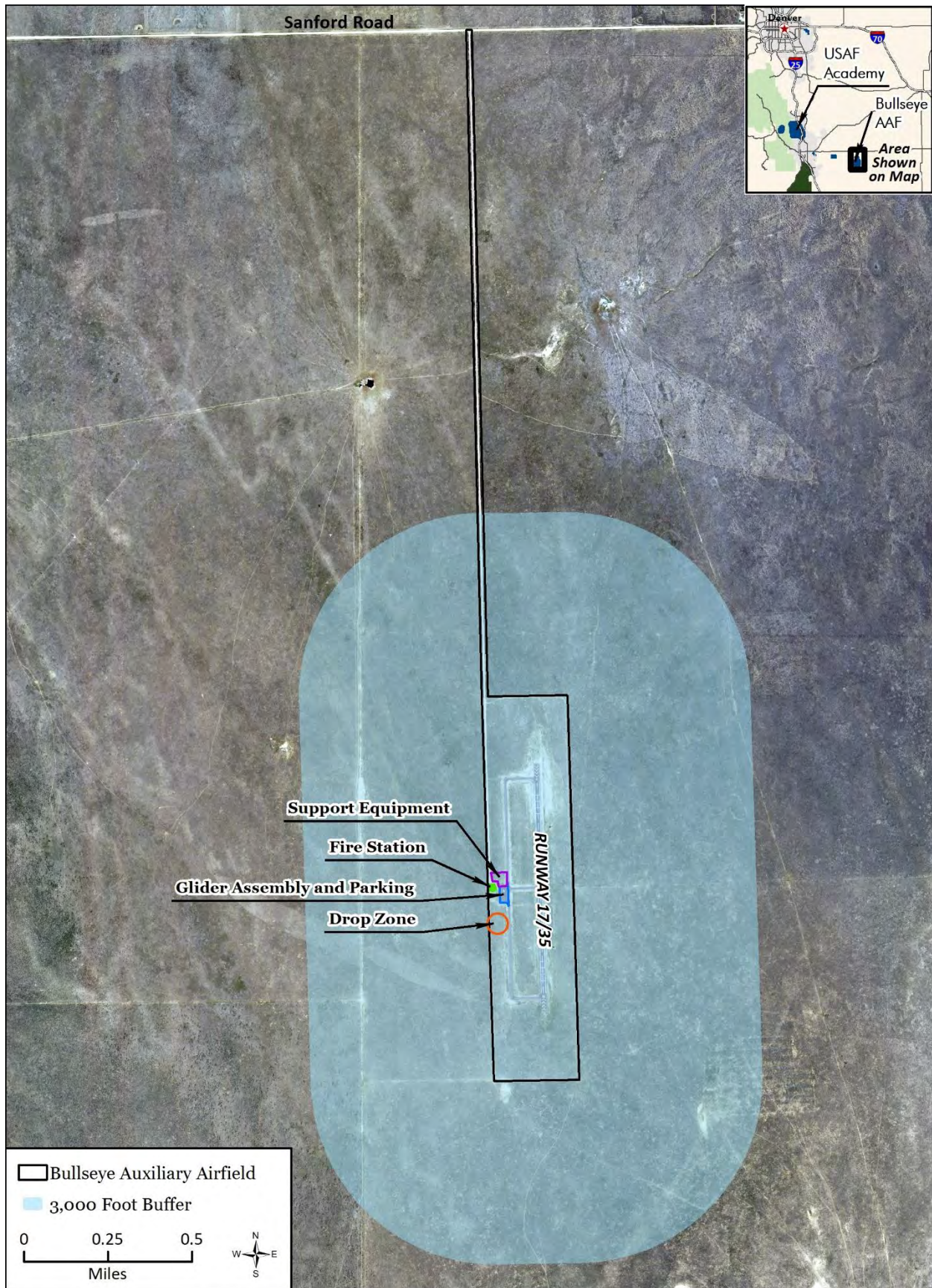


Figure 2-1. Bullseye Auxiliary Airfield

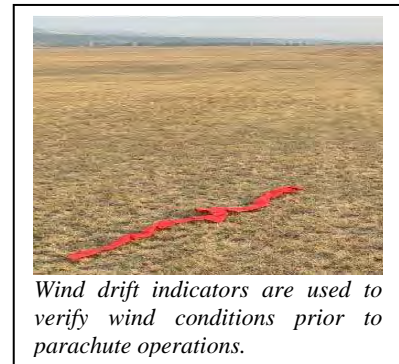
the time and staff with support equipment would commute by ground 100 percent of the time). Up to 6 buses and 12 to 18 personal vehicles per day would be used to transport cadets and staff to and from Bullseye. Vehicles would be parked on existing surfaces with overflow vehicle parking in unimproved areas, as needed. At the conclusion of a training day, the UV-18 aircraft would be flown back to Davis Airfield or Peterson AFB.

During parachute operations, up to two UV-18 aircraft would be used to conduct landing and takeoff operations at Bullseye. After takeoff from Bullseye, the aircraft would be flown to various parachute altitudes. The maximum parachute altitude is 16,000 feet mean sea level (MSL).

Parachute operations would result in an increase of 1,200 annual airfield operations, or approximately 50 operations per day over 24 days. Typical daily operations for one aircraft would include an arrival from Davis Airfield or Peterson AFB, 23 airdrop circuits, and one departure (Table 2-1).

After the final airdrop of the day, the UV-18 aircraft would be flown back to Davis Airfield or to Peterson AFB. These operations would generally occur on weekends and no more than 2 days per month. Davis Airfield does not operate on Sundays; therefore, parachute operations conducted on Sundays would require the UV-18 aircraft to fly directly to Bullseye from Peterson AFB and cadets would be transported to Bullseye by bus or personal vehicles. No other aircraft operations would be planned at Bullseye during parachute operations.

As part of parachute operations, during an average year, approximately 40 wind drift indicators would be dropped from the UV-18 aircraft. These drift indicators consist of a 10 to 12-foot long biodegradable crepe paper streamer attached to a thin metal rod (approximately 6 inches long and 1/8 inch in diameter). These indicators are used to verify wind conditions immediately prior to jumps. Wind drift indicators that land on Bullseye would be recovered by cadets walking out and picking them up. It is estimated that approximately 10 of these drift indicators per year could be carried by the wind outside the boundaries of Bullseye and land in the pastures surrounding the airfield. It is estimated that the majority of these indicators would remain within a 3,000-foot area surrounding the Bullseye boundary (Figure 2-1). Recovery of these indicators would be handled on a case-by-case basis, with USAF striving for a pedestrian recovery unless coordination with the landowner and surrounding lessee prescribes they not be recovered or that the lessee would recover them.



2.4.1.2 Proposed Soaring Operations

A typical day of soaring operations at Bullseye would begin with the Soaring Control Officer (SCO) from the 94 FTS contacting the Federal Aviation Administration (FAA) at COS to notify them of soaring operations being conducted from Bullseye. The SCO is a rated pilot who would be at Bullseye during soaring operations acting as the officer in charge when soaring operations are occurring. Once the FAA has been notified, up to six tow planes (PA-18 aircraft) would be flown from Davis Airfield to Bullseye. Up to 12 sailplanes would be hauled to Bullseye in trailers and assembled on site (Figure 2-1). The tow planes would land at Bullseye. Once the tow planes have landed, they would be attached to the sailplanes to prepare for takeoff. Sailplane pilots would primarily land on Runway 17/35. The taxiway would be a second landing option, and the grass airfield would be a third landing option, if needed and pending a survey of the landing surface.

Table 2-1. Current and Proposed Aircraft Operations at Bullseye

Aircraft	Depart Bullseye			Arrive Bullseye			Flights starting and ending at Bullseye - Airdrop Circuits			Annual Airfield Operations (all types)	Average Annual Day Airfield Operations (all types) ^a
	Day	Night	Total	Day	Night	Total	Day	Night	Total ^b	Total	Total
T-53 (baseline)	1,386	0	1,386	1,386	0	1,386	5,275	0	5,275	13,322	37
DA-20 (baseline)	3,155	0	3,155	3,155	0	3,155	14,197	0	14,197	34,704	95
UV-18 (proposed)	48	0	48	48	0	48	552	0	552	1,200	3
PA-18 (proposed)	330	0	330	132	198	330	9,570	0	9,570	19,800	54
Total (baseline)	4,541	0	4,541	4,541	0	4,541	19,472	0	19,472	48,026	132
Total (proposed)	4,919	0	4,919	4,721	198	4,919	29,594	0	29,594	69,026	189

^a Average annual day airfield operations are rounded.

^b Each “arrival” and “departure” event includes one airfield operation, but each “full circuit” event includes two airfield operations (reflecting a departure and subsequent arrival segment of the flight).

The Proposed Action includes soaring operations at Bullseye for up to 66 days per year. Soaring operations would typically consist of monthly training (2 to 3 days each month), two weeklong training events (6 days each), and an additional two to three weeklong events (6 days each) as contingency days for periods when Davis Airfield is unavailable (e.g. construction shut downs). Generally, the weeklong soaring operations would occur Monday through Saturday, sunrise to sunset. Shorter training periods would occur on weekends, Friday through Sunday, sunrise to sunset.

In total, approximately 660 arrivals and departures associated with the training operation would occur from Bullseye per year resulting in 9,570 towing circuits per year (Table 2-1). Soaring operations would be conducted inside of a circular area with a 5-nautical mile (NM) radius centered on Bullseye. Soaring operations would occur up to 9,500 MSL in the Proposed Soaring Area located in the northeast quadrant of the circular area (see Figure 2-2). If soaring operations were to go above 9,500 MSL, the SCO would contact the FAA at COS and request approval for soaring operations from 9,500 MSL up to 12,500 MSL. The proposed aircraft operations represent the high-end of operations tempo (i.e., maximum number of events) for conducting soaring operations. No other aircraft operations would be planned at Bullseye during soaring operations and the PA-18 aircraft would return to Davis Airfield each day.

Current use of Bullseye by pilots operating the T-53, as part of the Academy's Powered Flight Program (PFP) and the DA-20 aircraft as part of the Initial Flight Training (IFT) program, would continue at the same rate under the Proposed Action. The Academy would schedule T-53 and DA-20 PFP and DA-20 IFT operations so that they do not occur on the same days as parachute or soaring operations. The proposed parachute and soaring operations would represent a 44 percent increase in aircraft operations at Bullseye.

2.4.2 No Action Alternative

Implementation of the No Action Alternative would not result in any changes in activity at Bullseye. The 94 FTS and 98 FTS would continue to conduct operations at Davis Airfield with no alternate location for training operations. Analysis of the No Action Alternative provides a basis for comparing the environmental consequences of the Proposed Action to the existing (baseline) conditions, over time. Implementation of the No Action Alternative would mean that training days would continue to be impacted.

2.5 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

As described in Section 2.3, Butts Army Airfield at Fort Carson, Springs East Airport, and the Meadow Lake Airport were considered as alternative airfields in the early planning stages of this action. These alternative airfields were eliminated from further consideration as they did not meet Criteria 2 and 7.

Another alternative that was considered early on in the planning process was to travel to an out of state location (e.g., Gila Bend, Arizona) as a temporary duty assignment. This alternative was eliminated, as it did not meet Criterion 3 (provide accessible locations).

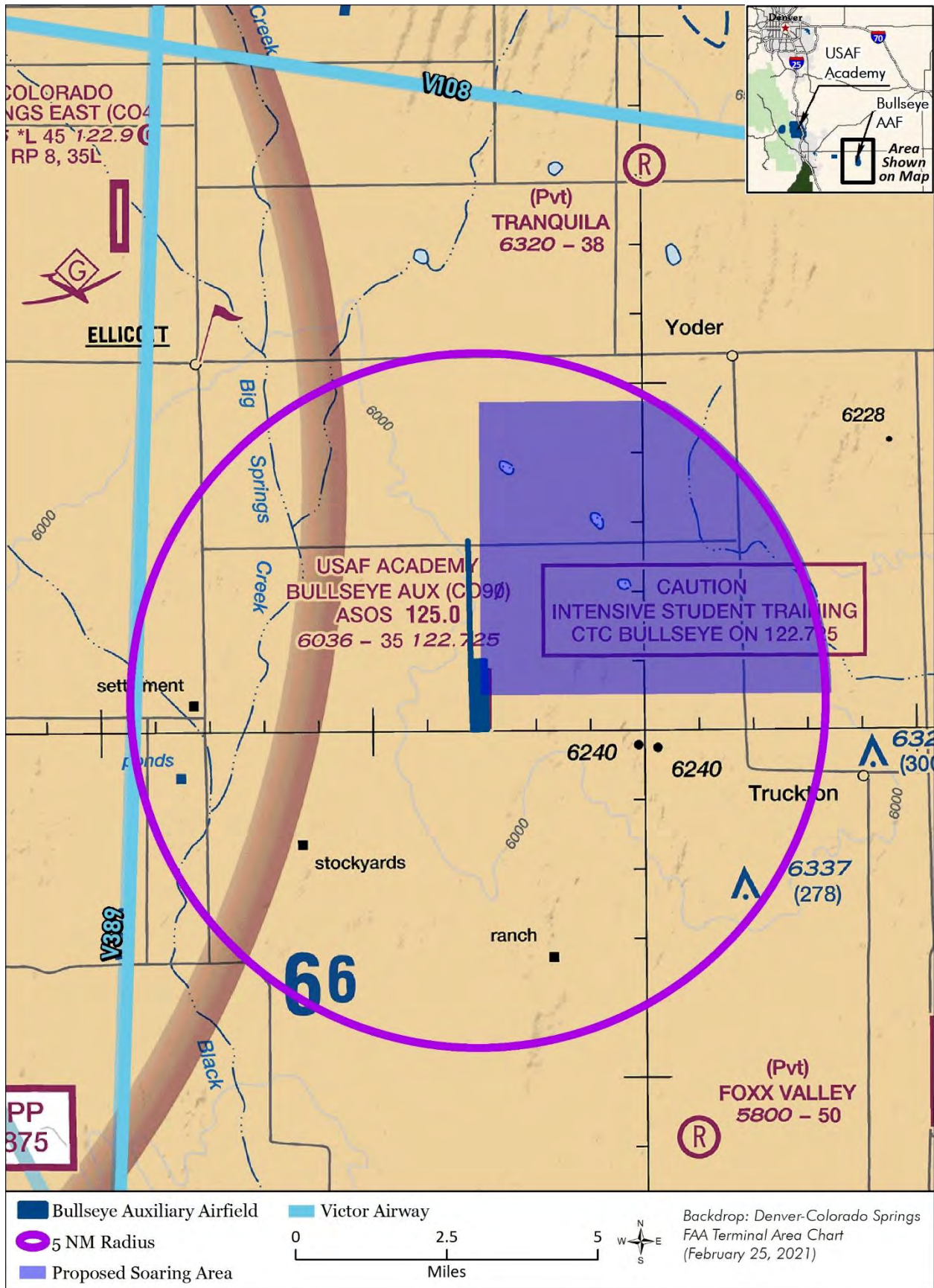


Figure 2-2. Bullseye Proposed Soaring Area

2.6 SUMMARY COMPARISON OF ENVIRONMENTAL CONSEQUENCES

Table 2-2 summarizes the potential environmental consequences from Chapter 4 where the project description from Chapter 2 is overlaid on the baseline conditions from Chapter 3. The consequences are presented for each environmental resource area and are described for the Proposed Action and the No Action Alternative.

Table 2-2. Potential Environmental Consequences

Resource Area	Proposed Action	No Action
<i>Airspace</i>	No new SUA or modifications of existing SUA are planned as part of the Proposed Action. Implementation of the Proposed Action is not anticipated to result in significant impacts to the management or use of airspace at Bullseye.	Under the No Action Alternative, no additional operations would occur at Bullseye. Baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to the management or use of airspace.
<i>Noise/Acoustic Environment</i>	Aircraft operations would generate noise levels comparable to the T-53 and DA-20 aircraft currently operating at Bullseye. Noise levels would not exceed FAA impact criteria or the USEPA-identified threshold of 55 dB at the closest noise-sensitive location. The number of aircraft noise events with the potential to momentarily interfere with speech would remain low (1 per average annual day) at the closest residence. Flying operations between 10:00 PM and 7:00 AM would be limited to PA-18 initial approaches to land. These early morning approaches would not be sufficiently loud to interfere with activities such as indoor conversation or sleep. Noise impacts under the Proposed Action would not be significant.	Implementation of the No Action Alternative would result in no changes in noise levels at and near Bullseye. Implementation of the No Action Alternative would result in an increased likelihood of delays to parachuting and soaring training when weather and other factors are not conducive to training at Davis Airfield.
<i>Air Quality</i>	Emissions associated with parachute and soaring operations at Bullseye would not generate significant quantities of any pollutants. Emissions from commuting/transporting cadets and staff from the Academy to Bullseye would be minimal. There would be no significant impacts to air quality under the Proposed Action.	Under the No Action Alternative, the parachute and soaring operations would continue to operate out of Davis Airfield and there would be no changes at Bullseye. Air emissions would remain at current baseline levels and there would be no impact to air quality in the ROI.
<i>Biological Resources</i>	No federally listed species or potential habitat for these species is known to occur at Bullseye. Therefore, the USAF has made a determination of no effect for this action. Impacts to other species and biological habitat would be minimal. There would be no significant impacts to biological resources under the Proposed Action.	Under the No Action Alternative, no additional operations would occur at Bullseye and baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to biological resources.
<i>Cultural Resources</i>	No ground disturbance is expected to result from the soaring or parachuting operations and USAF has made a determination of “no historic properties affected” as described in 36 CFR § 800.4(d)(1), because the undertaking would have no direct, indirect, or cumulative adverse effect on any historic properties. There would be no significant impacts to cultural resources under the Proposed Action.	Under the No Action Alternative, no parachute or soaring operations would occur at Bullseye. Baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to cultural resources at Bullseye.

Table 2-2. Potential Environmental Consequences (Cont.)

Resource Area	Proposed Action	No Action
<i>Land Use</i>	No major land use changes would occur as a result of implementing the Proposed Action. Therefore, no impacts to land use are anticipated.	Under the No Action Alternative, no additional operations would occur at Bullseye and baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to land use.
<i>Safety and Occupational Health</i>	No aspects of the Proposed Action would create new or unique ground safety issues. No permanent construction is planned as part of the Proposed Action. No significant impacts to ground safety are anticipated to result from implementation of the Proposed Action. No significant impacts are anticipated to occur related to bird/wildlife strike hazards.	Under the No Action Alternative, no additional operations would occur at Bullseye and baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in minor adverse impacts to safety and occupational health. These impacts would result if conditions at Davis Airfield required cancellation of training which has the potential to lead to increased chances of mishaps due to missed training opportunities.

CFR = Code of Federal Regulations; dB = decibels; FAA = Federal Aviation Administration; ROI = Region of Influence; SUA = Special Use Airspace; USAF = U.S. Air Force; USEPA = U.S. Environmental Protection Agency

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3.0 AFFECTED ENVIRONMENT

This chapter describes the environmental resource areas and existing conditions that could be affected by the proposed parachute and soaring operations and training at Bullseye. The baseline or existing conditions for each environmental resource area, as described in this chapter, constitute conditions under the No Action Alternative.

3.1 SCOPE OF THE ANALYSIS

For most of the resource areas, the Region of Influence (ROI) is defined as the area(s) of Bullseye affected by the proposed parachute and soaring operations. For some environmental resource areas (noise/acoustic environment, cultural resources), the ROI extends into surrounding areas and/or under the airspace proposed for use.

Determining which environmental resource areas will be analyzed versus those not carried forward for detailed analysis is part of the EA scoping process. Council on Environmental Quality and USAF regulations (40 *CFR* §1501.7(a)(3), 32 *CFR* 989.18) encourage project proponents to identify and eliminate from detailed study the environmental resource areas that have no potential to be impacted through implementation of their respective proposed actions.

3.1.1 Resources Analyzed

Airspace, noise/acoustic environment, air quality and climate change, biological/natural resources, cultural resources, land use, and safety and occupational health are carried forward for analysis in this EA.

3.1.2 Resources Eliminated from Detailed Analysis

The following paragraphs describe why water and earth resources, hazardous materials and waste, infrastructure and utilities, socioeconomic resources, and environmental justice were not carried forward for detailed analysis in this EA.

Water and Earth Resources. Implementation of 98 FTS parachute and 94 FTS soaring operations and training at Bullseye would not affect water or earth resources. No construction, ground disturbance, or changes to the existing paved or mowed areas are planned as part of the Proposed Action. Therefore, further analysis of water and earth resources is not warranted.

Hazardous Materials and Waste. Implementation of 98 FTS parachute and 94 FTS soaring operations and training at Bullseye would not impact hazardous materials and waste management. The Proposed Action does not include aircraft maintenance, storage or use of hazardous materials, or generation of hazardous waste at Bullseye. Aircraft refueling would occur at Bullseye using one of the Academy refueling trucks. The truck would be driven from the Academy to Bullseye each day and be returned to the Academy at the completion of flying operations. The refueling process would follow the same procedures and requirements that are used on a daily basis at Davis Airfield. Any spills would be handled in accordance with the Academy *Spill Prevention Control and Countermeasure Plan* (USAFA 2020a). Therefore, further analysis of hazardous materials and waste is not warranted.

Infrastructure and Utilities. Implementation of 98 FTS parachute and 94 FTS soaring operations and training at Bullseye would not affect infrastructure or utilities. The Proposed Action does not include permanent changes to any infrastructure or utilities. Temporary lavatory facilities (i.e., portable toilets, wash stations, etc.) would be set up during each training event and removed when a training event is complete. Therefore, further analysis of infrastructure and utilities is not warranted.

Socioeconomic Resources. Implementation of 98 FTS parachute and 94 FTS soaring operations and training at Bullseye would not affect socioeconomic resources. Due to the proximity of Bullseye to the Academy and the intermittent nature of these operations and training, no permanent changes to local populations or demand for public/social services would occur. In addition, no changes in housing demand, employment, or use of schools would occur. Therefore, further analysis of socioeconomic resources is not warranted.

Environmental Justice. EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, requires federal agencies to identify and assess health risks and safety risks that may disproportionately affect children. EO 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, requires federal agencies to consider any potentially disproportionate human health or environmental risks their activities, policies, or programs may pose to minority or low-income populations.

Implementation of 98 FTS parachute and 94 FTS soaring operations and training at Bullseye would not result in any health and safety risks that would disproportionately affect children or cause disproportionately high or adverse human health or environmental risks on any minority or low-income populations. No adverse environmental impacts are anticipated as a result of the Proposed Action. The project would result in no permanent ground disturbance and no increases in regional emissions. Increases in noise would be minimal and would not exceed levels that would increase incompatible land use. Because there would be no adverse environmental impacts, further analysis of environmental justice is not warranted. This determination has been made in compliance with USAF guidance as found in *The Guide for Environmental Justice Analysis Under the Environmental Impact Analysis Process* (USAF 2014).

3.2 AIRSPACE

3.2.1 Definition of the Resource

Airspace management and use consists of the direction, control, and coordination of flight operations in the “navigable airspace” that overlies the geopolitical borders of the United States and its territories. Airspace management considers how navigable airspace is designated, used, and administered to best accommodate the individual and common needs of military, commercial, and general aviation. Navigable airspace consists of airspace above the minimum altitudes of flight prescribed by United States Code (USC) Title 49, Subtitle VII, Part A, and includes airspace needed to ensure safety in the takeoff and landing of aircraft (49 USC § 40102). The U.S. government has exclusive sovereignty over all U.S. airspace extending from the ground surface to above 60,000 feet MSL (49 USC 40103(a)(1)).

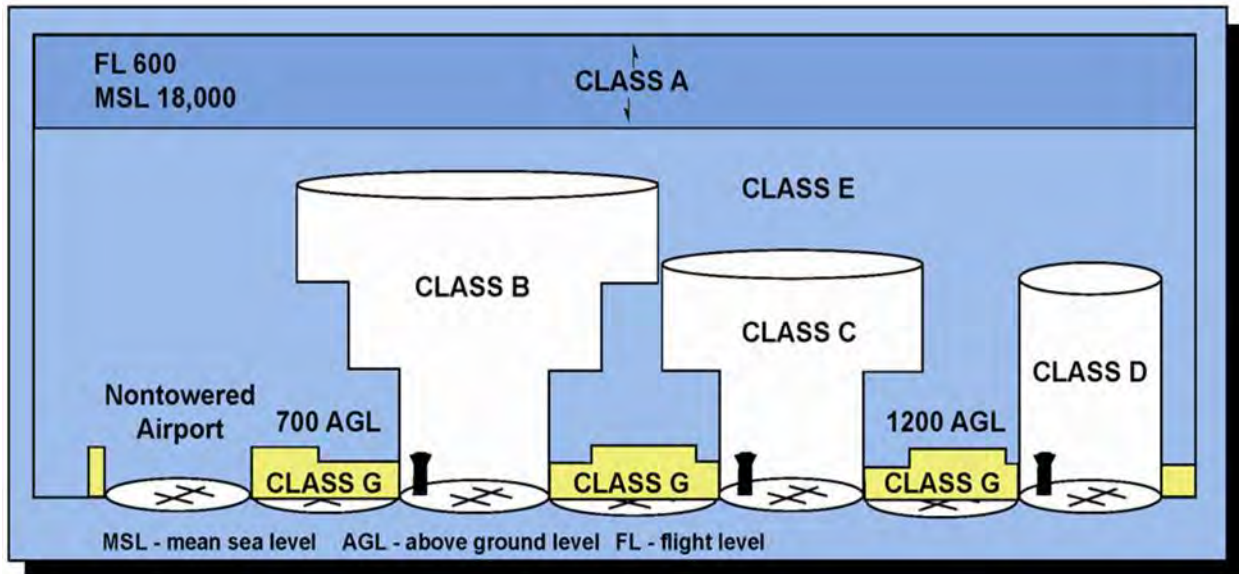
For the purposes of this airspace analysis, the ROI for the Proposed Action and No Action Alternative includes the airfield environment around Bullseye.

3.2.1.1 Airspace Categories

The FAA defines two categories of airspace: regulatory and non-regulatory. Within these two categories are four types of airspace: controlled, Special Use Airspace (SUA), other, and uncontrolled. Controlled airspace is airspace of defined dimensions within which Air Traffic Control (ATC) service is provided to Instrument Flight Rules (IFR) and Visual Flight Rules (VFR) flights in accordance with the airspace classification (FAA 2019a).

Controlled airspace is categorized into five separate classes, designated as Classes A through E. The airspace classes are graphically shown on Figure 3-1. Classes A through E identify airspace

that is controlled, airspace supporting airport operations, and designated airways affording en-route transit from place to place. The classes also dictate pilot qualification requirements, rules of flight that must be followed, and the type of equipment necessary to operate within that airspace. Figure 3-1 also shows Class G airspace, which is categorized as uncontrolled.



Source: FAA 2003

Figure 3-1. Controlled/Uncontrolled Airspace Schematic

Class A airspace generally extends from 18,000 feet MSL up to and including Flight Level (FL) 600. FL 600 is equal to approximately 60,000 feet MSL. FLs are MSL altitudes based on the use of a directed barometric altimeter setting and are expressed in hundreds of feet.

Class B airspace generally extends from the surface to 10,000 feet MSL and is located around the nation's busiest airports. The actual configuration of Class B airspace is individually tailored, and consists of a surface area and two or more layers. Class B airspace is designed to contain all published instrument procedures (FAA 2019a).

Class C airspace generally extends from the surface up to 4,000 feet above the airport elevation (charted in MSL) surrounding those airports that have an operational control tower, are serviced by a radar approach control, and that have a certain number of IFR operations or passenger enplanements. Although the actual configuration of Class C airspace is individually tailored, it typically consists of a surface area with a 5-NM radius, and an outer circle with a 10-NM radius that extends from 1,200 feet to 4,000 feet above the airport elevation (FAA 2019a).

Class D airspace generally extends from the surface to 2,500 feet above the airport elevation (charted in MSL) surrounding those airports that have an operational control tower. The configuration of each Class D airspace area is individually tailored, and when instrument procedures are published, the airspace will normally be designed to contain the procedures. Arrival extensions for instrument approach procedures may be designated as Class D or E airspace (FAA 2019a).

Class E airspace is controlled airspace that is not Class A, B, C, or D. Areas in which Class E airspace begins at either the surface or 700 feet above ground level (AGL) are used to transition to/from the terminal or en-route environment (around non-towered airports). These areas are designated by VFR sectional charts. In most areas of the United States, Class E airspace extends from 1,200 feet AGL up to but not including 18,000 feet MSL, the lower limit of Class A airspace.

No ATC clearance or radio communication is required for VFR flight in Class E airspace. VFR visibility requirements below 10,000 feet MSL are 3 statute miles visibility and cloud clearance of 500 feet below, 1,000 feet above, and 2,000 feet laterally. VFR visibility requirements above 10,000 feet MSL are 5 statute miles visibility and cloud clearance of 1,000 feet below, 1,000 feet above, and 1 mile laterally (FAA 2003). Class G airspace is uncontrolled.

Victor Airways are “highways in the sky” used by pilots to transit between navigational aids. Victor Airways are Class E airspace that typically extend from 1,200 feet AGL to FL 180 or 18,000 feet MSL. The width of the victor corridor can vary but is generally 4 NM on either side of the centerline. In certain cases, the width of the corridor may extend beyond 4 NM.

3.2.1.2 Special Activity Airspace

Special Activity Airspace, a term that includes SUA and others (e.g., Temporary Flight Restrictions), is any airspace with defined dimensions in the National Airspace System wherein limitations can be imposed upon aircraft operations. This airspace could include Prohibited Areas, Military Operations Areas, Military Training Routes (Instrument Routes/Visual Routes), aerial refueling track/anchors, slow routes, low-altitude tactical navigation areas, ATC-assigned airspace, Alert Areas, and any other charted airspace.

3.2.2 Existing Conditions

Bullseye is an auxiliary airfield with a single 3,500-foot runway generally oriented in a north-south direction. The airfield is used by pilots operating the T-53, as part of the Academy’s PFP and by pilots operating the DA-20 aircraft as part of the IFT. Pilots from both organizations conduct approximately 48,000 operations in a typical year (Table 1-1).

The FAA Denver Air Route Traffic Control Center has overall responsibility for managing airspace throughout this region. The Colorado Springs Terminal Radar Approach Control provides guidance to aircraft approaching and departing airports in the regional area as well as aircraft that may be flying over the region.

Bullseye is an uncontrolled airfield (i.e. no ATC tower) and has staff on site during aircraft operations to monitor pilot communications. The closest charted airspace near Bullseye is COS Class C Airspace, located approximately 10 miles from the runway. The Academy has several designated training areas in the vicinity of Bullseye that are utilized by cadets for the PFP (see Figure 3-2). Although these areas are noted on FAA charts, they are not considered SUA.

Two Victor Airways are located near Bullseye. Victor Airway 389 is located approximately 5 NM west of Bullseye on a north-south orientation and Victor Airway 108 is located approximately 9 NM north of Bullseye on an east-west orientation (Figure 3-2).

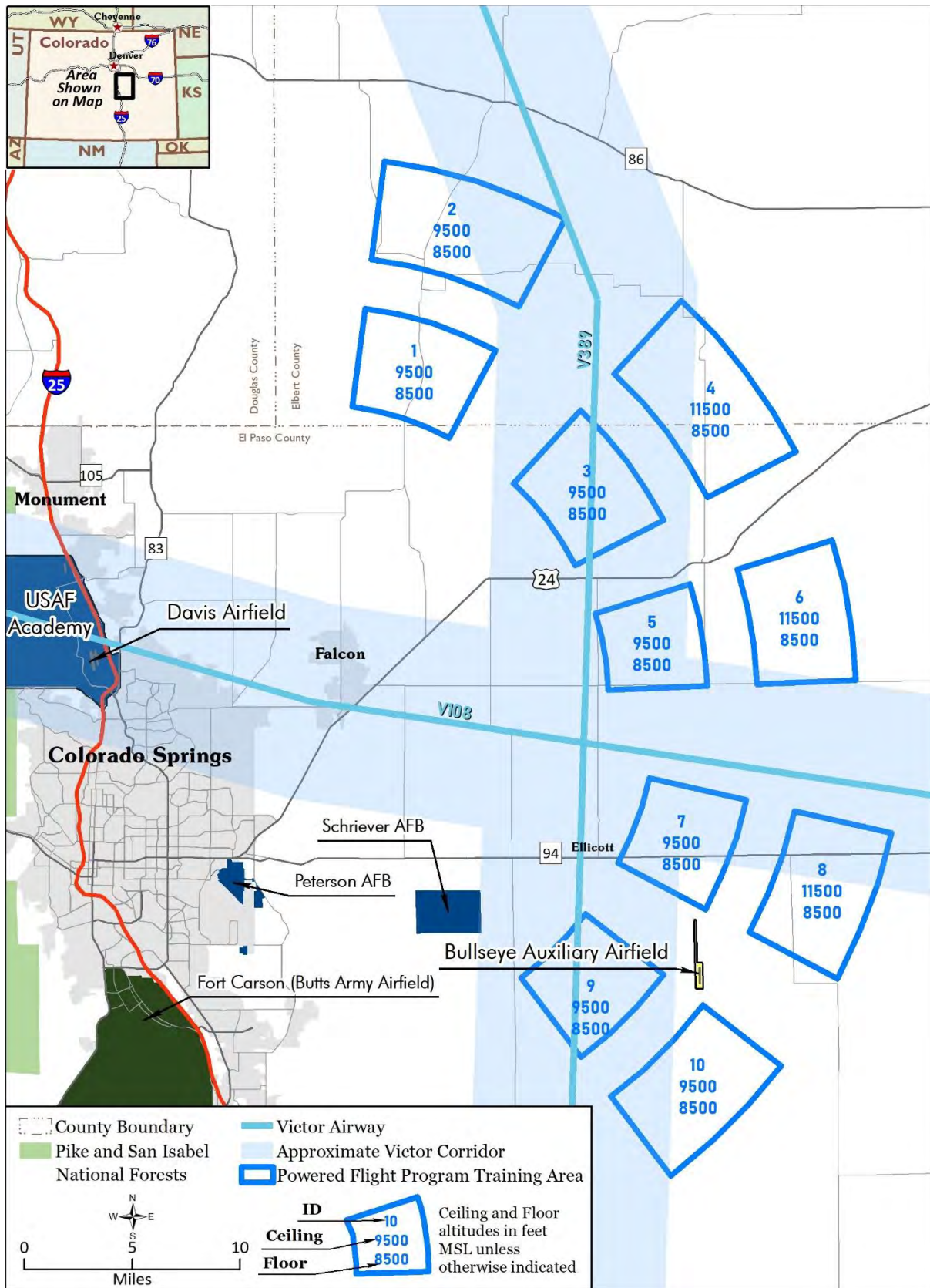


Figure 3-2. Training Areas near Bullseye

3.3 NOISE / ACOUSTIC ENVIRONMENT

3.3.1 Definition of the Resource

Noise is unwanted sound that interferes with normal activities or otherwise diminishes the quality of the environment. Responses to noise vary widely according to the characteristics of the sound, the source, the time of day, the distance between the noise source and the person hearing the sound, and the sensitivity and expectations of the person hearing the sound. This section describes noise as it relates to human health and welfare.

Sound intensity varies widely (e.g., from a soft whisper to a jet engine), and it is measured on a logarithmic scale to accommodate this wide range. The logarithm is a mathematical tool used to simplify dealing with very large and very small numbers. For example, the logarithm of the number 1,000,000 is 6, and the logarithm of the number 0.000001 is -6.

The frequency (or pitch) of sound is measured in cycles per second, or hertz (Hz). This measurement reflects the number of times per second the air vibrates from the acoustic energy. Low-frequency sounds are heard as rumbles or roars, and high-frequency sounds are heard as screeches.

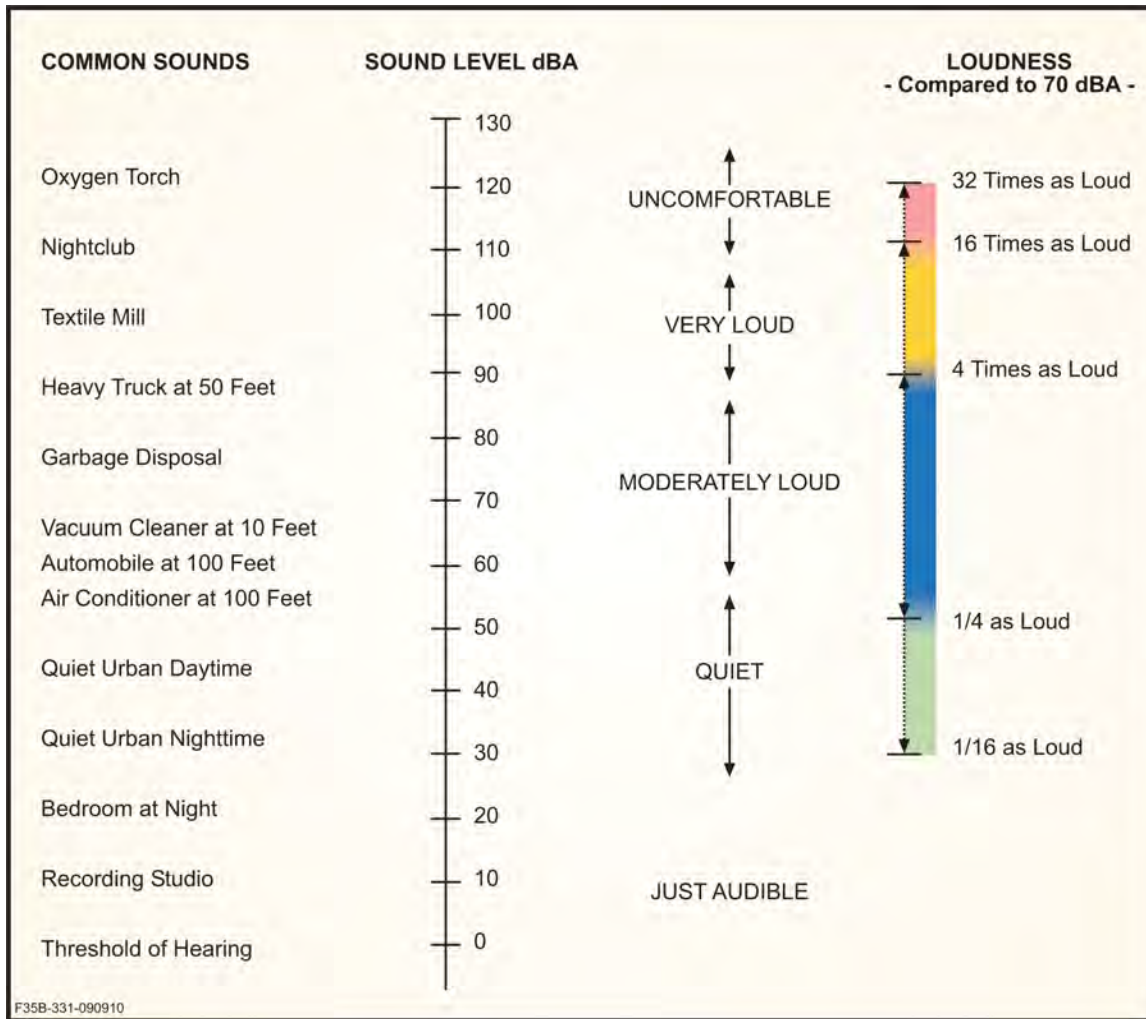
The communication of sound intensity is refined to account for frequency through the use of “A-weighting.” An A-weighting is applied to measured sound to account for differences in how people respond to sound. This scale most closely approximates the relative loudness of sounds in air as perceived by the human ear (FAA 2019b). The normal human ear can detect sounds that range in frequency from approximately 20 to 20,000 Hz, but not all sounds in this range are heard equally well. Therefore, through internal electronic circuitry, some sound meters are calibrated to emphasize frequencies in the 1,000 to 4,000 Hz range and de-emphasize sound energy in other frequencies. The human ear is most sensitive to frequencies in this range, and sounds measured with these instruments are termed “A-weighted.” In this document, all stated decibel (dB) levels provided are A-weighted decibels (dBA). Examples of typical dBA of common sounds are shown on Figure 3-3.

The word “metric” is used to describe a standard of measurement. As used in environmental noise analysis, there are many different types of noise metrics. Each metric has a different physical meaning and was developed by researchers attempting to represent a particular set of noise effects.

This analysis includes the noise metric day-night average sound level (DNL), which FAA and DoD regulations identify as the primary noise metric for assessment of community noise impacts, as well as supplemental noise metrics, that further describe the noise or predict particular noise impact categories. In accordance with DoD and FAA regulations, the DNL calculations are conducted for an ‘average annual day’ (i.e., 1/365th of total annual operations). Metrics other than DNL (i.e., supplemental noise metrics) are used to describe sound levels more fully in accordance with DoD Noise Working Group (DNWG) recommendations (DNWG 2013).

The metrics supporting the assessment of noise from aircraft operations and other activities evaluated in this EA are the maximum sound level (L_{max}) and DNL.

Maximum Sound Level (L_{max}). The L_{max} is simply the highest sound level reached during a single event. In the case of an aircraft overflight, the sound level increases as the aircraft approaches a listener, reaches its maximum, and then decreases after the aircraft passes by the listener and moves into the distance.



Day-Night Average Sound Level (DNL). The DNL metric sums individual noise events and averages the acoustic energy over a 24-hour period. Thus, it is a composite metric that considers the maximum noise levels, the duration of the events, the number of events that occur, and the time of day during which they occur. This metric adds 10 dB to those events that occur between 10:00 PM and 7:00 AM to account for the increased intrusiveness of noise events that occur at night when ambient noise levels are normally lower than during the daytime.

Ignoring the acoustic nighttime penalty, DNL may be thought of as the continuous or cumulative A-weighted sound level that would be present if all of the variations in sound level over the given time period were smoothed out so as to contain the same total sound energy. It is fully recognized that the DNL metric does not provide specific information on the number of noise events or the specific individual sound levels that occur. For example, a DNL of 65 dB could result from a few very noisy events or a large number of quieter events.

Although it does not represent the sound level heard at any one particular time, DNL does accurately represent the total sound exposure at a location. Social surveys have found the DNL metric to be the best predictor of community annoyance resulting from transportation noise. Its use is endorsed by the scientific community and several governmental agencies (USEPA 1974; FICON 1992; FICUN 1980). The DoD and several other federal agencies consider certain noise-sensitive land uses to be incompatible with DNL greater than 65 dB. The most common impact

associated with exposure to elevated noise levels is public annoyance. Annoyance due to aircraft noise can be predicted based on the noise metric DNL (Schultz 1978; Finegold et al. 1994). When subjected to DNL of 65 dB, approximately 12 percent of persons exposed will be “highly annoyed” by the noise. At levels below 55 dB, the percentage of annoyance is correspondingly lower (less than 3 percent). The percentage of people annoyed by noise never drops to zero, because some people experience annoyance to any elevated noise level, regardless of magnitude. However, at levels below 55 dB, noise is reduced enough to be essentially negligible. The United States Environmental Protection Agency (USEPA) has identified 55 dB as a noise level that is protective of public health and welfare with an adequate margin of safety (USEPA 1974). Based on numerous sociological surveys and recommendations of federal interagency councils, the most common benchmark referred to is 65 dB DNL. This threshold is often used to determine residential land use compatibility around airports, highways, or other transportation corridors.

In order to determine noise levels resulting from aircraft operations, the USAF uses the computer program NoiseMap (version 7.3) to calculate noise levels in the airfield vicinity. Computer noise modeling allows informed decision making by allowing for direct comparisons of the proposed alternative(s) to the No Action Alternative baseline. NoiseMap makes use of field-measured aircraft noise levels. Because DA-20 and T-53 aircraft noise levels are not yet included in the NoiseMap reference noise level dataset, baseline noise level calculations were conducted using the most-similar surrogate noise sources. The DA-20 and T-53 aircraft were represented by the T-41 and the single-engine fixed-pitch propeller-driven aircraft, respectively.

3.3.2 Existing Conditions

Bullseye currently supports flight training with T-53 and DA-20 aircraft on a regular basis. Training consists primarily of practice approaches to the airfield totaling approximately 48,000 airfield operations per year. Flying operations do not typically occur during the late-night time period between 10:00 PM and 7:00 AM.

As shown on Figure 3-4, the highest baseline noise levels are below 65 dB DNL at all locations on or near Bullseye. The closest visible residence is located approximately 2.4 miles north of the airfield (see Figure 3-4). Aircraft noise levels calculated specifically for the closest residence are below 35 dB DNL. L_{max} at the closest residence are not sufficiently high to interrupt conversation inside the residence.

Although onsite noise level measurements are not available for the area surrounding Bullseye, ambient (i.e., not related to aircraft activities) noise levels can be assumed to be fairly low. Studies conducted by the National Park Service (NPS) have found that nearby human activities are a primary factor in predicting ambient noise levels (NPS 2020). Time-averaged daytime ambient noise levels in lightly populated areas are predicted to be approximately 35 dB, while noise levels in more remote areas may be even lower. While ambient noise levels predicted by the NPS are stated using an average sound level noise metric (including both times of quiet and louder sounds), they are not directly comparable to the federal standard of DNL. However, the range of noise level values estimated by the NPS does provide an indication of ambient conditions in the area of interest.

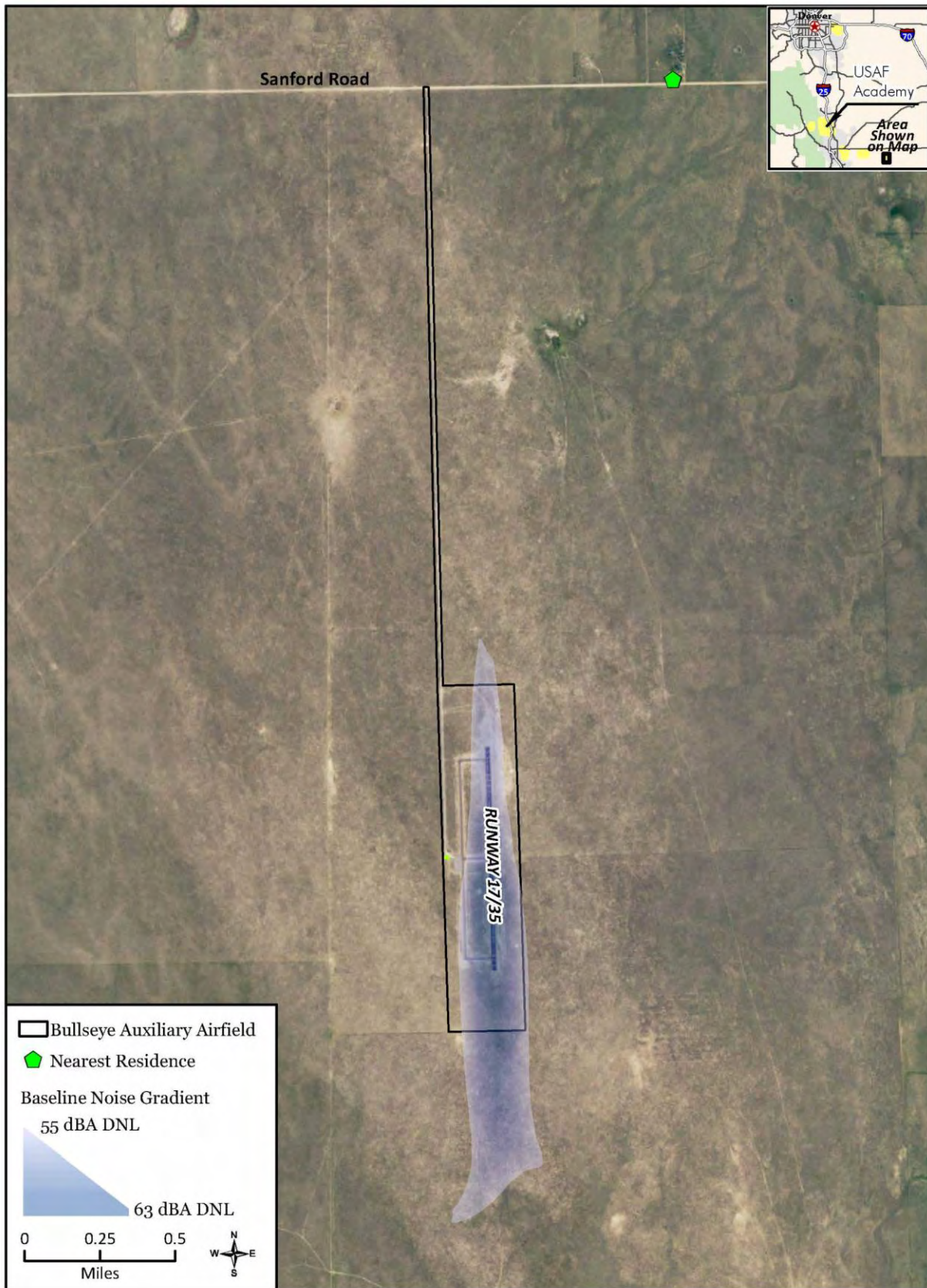


Figure 3-4. Baseline DNL for Bullseye Auxiliary Airfield

3.4 AIR QUALITY AND CLIMATE CHANGE

3.4.1 Definition of the Resource

Air quality is determined by the type and amount of pollutants emitted into the atmosphere, the size and topography of the affected air basin, and the prevailing meteorological conditions. Pollutants such as ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb) and particulate matter (PM), are considered criteria air pollutants for which an ambient air quality standard has been set.

The baseline standards for criteria pollutant concentrations are the National Ambient Air Quality Standards (NAAQS) and state air quality standards. These standards represent the maximum allowable atmospheric concentration that may occur and still protect public health and welfare (Table 3-1). Based on measured ambient air pollutant concentrations, the USEPA designates whether areas of the United States meet the NAAQS. Those areas demonstrating compliance with the NAAQS are considered “attainment” areas, while those not in compliance are known as “nonattainment” areas. Those areas that cannot be classified on the basis of available information for a particular pollutant are “unclassifiable” and are treated as attainment areas until proven otherwise.

Table 3-1. Baseline Emissions Inventory for El Paso County

County	Emissions (tons/year)						
	CO	NO _x	PM ₁₀	PM _{2.5}	SO _x	VOC	Pb
El Paso County	77,861	14,710	14,326	3,370	2,048	18,336	0.717

Source: USEPA 2020a

CO = carbon monoxide; NO_x = nitrogen oxides; PM₁₀ = particulate matter less than or equal to 10 micrometers in diameter; PM_{2.5} = particulate matter less than or equal to 2.5 micrometers in diameter; SO_x = sulfur oxides; VOC = volatile organic compound

Greenhouse gases (GHGs) are gases that trap heat in the atmosphere. These emissions are generated by both natural processes and human activities. The accumulation of GHGs in the atmosphere regulates the Earth’s temperature. Climate projections for the United States indicate continued warming in all seasons, higher heat indices, increased drought, and more intense hurricanes (IPCC 2007). The USEPA has determined that the combined emissions of six GHGs (carbon dioxide [CO₂], methane [CH₄], nitrous oxide [N₂O], hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆]) in the atmosphere may “reasonably” be anticipated to endanger public health and welfare (USEPA 2009) and, thus, should be considered pollutants covered under the Clean Air Act. Currently, there are no standards similar to the NAAQS for GHGs.

3.4.2 Existing Conditions

An air emissions inventory qualitatively and quantitatively describes the amount of emissions from a facility or within an area. Emissions inventories are designed to locate pollution sources, define the type and size of the sources, characterize emissions from each source, and estimate total mass emissions generated over a period of time, normally one year. Inventory data establish relative contributions to air pollution concerns by classifying sources and determining the adequacy as well as the necessity of air regulations.

For comparison purposes, Table 3-1 presents the USEPA’s 2017 National Emissions Inventory (NEI) data for El Paso County (USEPA 2020a). The county data include emissions from point sources, area sources, and mobile sources. Point sources are stationary sources that can be

identified by name and location. Area sources are point sources whose emissions are too small to track individually, such as a home or small office building or a diffuse stationary source, such as wildfires or agricultural tilling. Mobile sources are any kind of vehicle or equipment with gasoline or diesel engine, an airplane, or a ship. Two types of mobile sources are considered: on-road and nonroad. On-road mobile sources consist of vehicles such as cars, light trucks, heavy trucks, buses, engines, and motorcycles. Nonroad sources are aircraft, locomotives, diesel and gasoline boats and ships, personal watercraft, lawn and garden equipment, agricultural and construction equipment, and recreational vehicles.

To provide for a more conservative analysis, El Paso County was selected as the ROI instead of the USEPA-designated Air Quality Control Region, which is a much larger area. To identify impacts, calculated air emissions were compared with the annual total emissions of the ROI as represented in the 2017 NEI. El Paso County was once classified as nonattainment due to exceeding the 1971 carbon monoxide standard. However, El Paso County was redesignated to maintenance on October 25, 1999, and is currently in attainment for all pollutants (USEPA 2020b). Therefore, a General Conformity applicability analysis was conducted. The air quality analysis focused on emissions associated with parachute and soaring operations at Bullseye.

The six primary GHGs are carbon dioxide, methane, nitrous oxide, HFCs, PFCs, and sulfur hexafluoride. Only emissions of carbon dioxide, methane, and nitrous oxide are considered in this EA; the other constituents do not apply. Each GHG has an estimated global warming potential, which is a function of its atmospheric lifetime and its ability to absorb and radiate infrared energy emitted from the Earth’s surface.

HFCs, PFCs, SF₆, and nitrogen trifluoride are produced in relatively very small quantities and most often by very specific niche industries, such as electronic component manufacturing. Therefore, CO₂, CH₄, and N₂O are the primary GHGs of concern. For the purposes of this EA, GHGs have been calculated and analyzed in terms of carbon dioxide equivalent (CO₂e), which is a term that describes various GHGs in a common unit based on the amount of CO₂ that would have the equivalent warming potential.

Table 3-2 provides the current USEPA 2017 NEI GHG inventory for El Paso County. While there are currently no regulatory thresholds for GHGs, this provides a point of reference for evaluating the context and intensity of potential climate change impacts from implementation of the Proposed Action and alternatives within the scope of NEPA.

Table 3-2. Baseline Greenhouse Gas Emissions Inventory for El Paso County

County	Emissions (tons/year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
El Paso County	7,406,020	15,314	158	7,836,107

Source: USEPA 2020a

3.5 BIOLOGICAL / NATURAL RESOURCES

3.5.1 Definition of the Resource

For the purposes of this EA, sensitive and protected biological resources include plant and animal species that are federally (USFWS) or state (Colorado Parks and Wildlife [CPW]) listed for protection. Identifying which species occur in an area affected by an action can be accomplished through literature reviews and coordination with appropriate federal and state regulatory agency

representatives, resource managers, and other knowledgeable experts. The ROI for biological / natural resources includes Bullseye.

3.5.2 Existing Conditions

Bullseye is located in the Central Shortgrass Prairie Ecoregion and is part of a large rangeland ecosystem comprised of units of agricultural land, shortgrass prairie, and mixed-grass prairie. The shortgrass prairie is dominated by blue grama (*Bouteloua gracilis*). The agricultural land produces hay crops. The mixed-grass prairie is dominated by grasses such as blowout grass (*Redfieldia flexuosa*) and sand bluestem (*Andropogon hallii*) with an understory of blue grama (USAFA 2018). No wetlands or surface water features are located at Bullseye (USAFA 2018, Fort Carson 2014).

Wildlife species found on Bullseye are typical of the shortgrass prairie and include species such as coyote (*Canis latrans*), red-tailed hawk (*Buteo jamaicensis*), vesper sparrow (*Pooecetes gramineus*), and horned lark (*Eremophila alpestris*) (USAFA 2018).

The USFWS Information for Planning and Consultation (IPaC) system was accessed online to request an *Official Species List* to identify species protected under Section 7(c) of the Endangered Species Act that could occur in El Paso County. On October 30, 2020, an *Official Species List* with the names of nine federally listed species that could occur in El Paso County (Table 3-3) was generated (via online letters) by the USFWS Colorado Ecological Services Field Office. No critical habitat was located in the ROI.

Table 3-3. Federally Listed Species with Potential to Occur in El Paso County, Colorado

Common Name	Scientific Name	Protection Status	Habitat	Potential to Occur within the Project Area
Mammals				
Preble’s meadow jumping mouse	<i>Zapus hudsonius preblei</i>	Threatened	Preble’s meadow jumping mouse inhabits well-developed riparian habitat with adjacent, relatively undisturbed grassland communities, and a nearby water source.	None. No suitable habitat present.
Birds				
Least tern	<i>Sterna antillarum</i>	Endangered	This species uses riparian habitats. The species nests in young, rapidly growing stands of riparian areas, including willows, cottonwoods, and box elders.	None. No suitable habitat present.
Mexican spotted owl	<i>Strix occidentalis lucida</i>	Threatened	Spotted owls are residents of old-growth or mature forests that possess complex structural components (uneven aged stands, high canopy closure, multi-storied levels, high tree density). Canyons with riparian or conifer communities are also important components.	None. No woodland habitat present.
Piping plover	<i>Charadrius melodus</i>	Threatened	Piping plovers use wide, flat, open, sandy beaches with very little grass or other vegetation. Nesting territories often include small creeks or wetlands.	None. No beach or wetland habitat present.
Whooping crane	<i>Grus americana</i>	Endangered	The whooping crane breeds, migrates, winters, and forages in a variety of wetland and other habitats, including coastal marshes and estuaries, inland marshes, lakes, ponds, wet meadows and rivers, and agricultural fields.	None. No wetland habitat present and no whooping cranes have been observed on site.

**Table 3-3 Federally Listed Species with Potential to Occur in El Paso County, Colorado
(Cont.)**

Common Name	Scientific Name	Protection Status	Habitat	Potential to Occur within the Project Area
Fishes				
Greenback cutthroat trout	<i>Oncorhynchus clarkia stomias</i>	Threatened	This species inhabits cold-water streams and cold-water lakes with adequate stream spawning habitat present during spring.	None. No perennial streams are present.
Pallid sturgeon	<i>Scaphirhynchus albus</i>	Endangered	This species is a large river fish inhabiting the Missouri and Mississippi rivers and some tributaries.	None. No perennial streams are present.
Flowering Plants				
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	Threatened	This species occurs along riparian edges, gravel bars, old oxbows, high-flow channels, and moist-to-wet meadows along perennial streams. The species typically occurs in stable wetland and seep areas associated with old landscape features in historical floodplains of major rivers, as well as in wetlands and seeps near freshwater lakes or springs.	None. No riparian, stream or wetland habitat present.
Western prairie fringed orchid	<i>Platanthera praeclara</i>	Threatened	This species is a perennial orchid of the tall grass prairie and is found most often on unplowed, calcareous prairies and sedge meadows. Soil moisture is a critical determinant of growth, flowering, and distribution of western prairie fringed orchid.	None. No tall grass prairie or wet prairie habitat is present.

Source: USFWS 2020

No federally listed plant or animal species have been documented in the ROI (USAFA 2018). No habitat suitable for federally listed species is present in the ROI.

The USFWS IPaC system identified seven migratory bird species of particular concern with potential to occur in El Paso County (USFWS 2020). Golden eagles have been occasionally seen overflying Bullseye. Eagles have also been observed perched on transmission lines in the vicinity of Bullseye. It is unknown if any eagles are nesting in the immediate vicinity of Bullseye.

Two state-listed threatened species and several state species of concern are known to occur in El Paso County (Table 3-4). Black-tailed prairie dogs and burrowing owls were last observed at Bullseye in 2012 (USAFA 2018). Swift fox are occasionally observed at Bullseye and have excavated dens inside the fenced area. If swift fox dens are identified on the airfield property, they are trapped by USDA and Colorado Parks and Wildlife biologists and relocated to suitable habitat in Eastern Colorado.

Table 3-4. State-Listed Species with Potential to Occur in El Paso County, Colorado

Common Name ^a	Scientific Name	Status	Habitat	Potential to Occur within the Project Area
Mammals				
Black-tailed prairie dog	<i>Cynomys ludovicianus</i>	State Special Concern	Black-tailed prairie dogs live on grassy plains or prairies and typically reside in grassland areas below 6,000 feet, east of Colorado's foothills.	Unlikely. Prairie dogs were last observed at Bullseye in 2012.
Swift fox	<i>Vulpes velox</i>	State Special Concern	This species occurs in short- and mixed-grass prairies often in proximity to prairie dog colonies.	Occasionally observed and have denned within the fenced area. Swift fox are sometimes trapped by USDA and Colorado Parks and Wildlife staff and relocated to suitable habitat in Eastern Colorado.
Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	State Special Concern	This species occurs in areas with an availability of roosts, such as caves, mines, tunnels, crevices and masonry structures with suitable temperatures.	None. No suitable habitat present.
Birds				
American peregrine falcon	<i>Falco peregrinus anatum</i>	State Special Concern	Peregrine falcons inhabit open spaces usually associated with high cliffs and bluffs overlooking rivers and coasts.	Unlikely. Suitable habitat is not present and no falcons have been observed at Bullseye.
Burrowing owl	<i>Athene cunicularia</i>	State Threatened	The burrowing owl usually lives in dry, open areas with short grasses and no trees. They nest and live in underground burrows created by prairie dogs, ground squirrels and badgers. Burrowing owls can be found where suitable burrows exist on golf courses, cemeteries, airports, vacant lots, university campuses, and pastures.	Unlikely. Burrowing owls were last observed at Bullseye in 2012.
Long-billed curlew	<i>Numenius americanus</i>	State Special Concern	This species occurs in rangeland and dry grassland. Nesting general occurs in pastures that are not overly grazed.	Unlikely. Habitat is possibly present but no long-billed curlews have been observed at Bullseye.
Mountain plovers	<i>Charadrius montanus</i>	State Special Concern	Mountain plovers inhabit prairie grasslands, arid plains and fields. Nesting plovers choose shortgrass prairies grazed by prairie dogs, bison and cattle, and overgrazed tallgrass and fallow field.	Unlikely. Suitable habitat is not present and no mountain plovers have been observed at Bullseye.
Fishes				
Arkansas darter	<i>Etheostoma cragini</i>	State Threatened	The Arkansas darter prefers shallow, clear, sandy streams with spring-fed pools and abundant rooted aquatic vegetation.	None. No suitable habitat present.

Table 3-4. State-Listed Species with Potential to Occur in El Paso County, Colorado (Cont.)

Common Name ^a	Scientific Name	Status	Habitat	Potential to Occur within the Project Area
<i>Reptiles</i>				
Plains leopard frog	<i>Rana blairi</i>	State Special Concern	This species occurs in the vicinity of streams, natural and artificial ponds, reservoirs, creek pools, irrigation ditches, and other bodies of water in plains grassland, sandhills, stream valleys, and canyon bottoms.	None. No suitable habitat present.
Massasauga	<i>Sistrurus catenatus</i>	State Special Concern	This species occurs in dry plains grassland and sandhill areas; attracted to sandy soils supporting abundant rodent and lizard populations; hibernates singly in rodent burrows, often in firm, loamy soils adjacent to sandy areas used for feeding.	Unlikely. No massasauga have been observed at Bullseye.
Triploid checkered whiptail	<i>Cnemidophorus neotesselatus</i>	State Special Concern	This species is found in juniper and pinyon-juniper woodland, arid, rocky canyons, rocky hillsides, shrubby areas, and open savannahs around the Arkansas, Huerfano, Apishapa, and Purgatoire rivers and their tributaries.	None. No suitable habitat present.

Sources: USAFA 2018, CPW 2020, Colorado Natural Heritage Program 2001

^a The State of Colorado has no regulatory protection for plant species and therefore does not maintain a list of state threatened and endangered plant species. Several state plant species of concern occur in El Paso County but are not listed as the Proposed Action does not involve permanent ground disturbance.

3.6 CULTURAL RESOURCES

3.6.1 Definition of the Resource

Cultural resources are districts, sites, buildings, structures, or objects considered important to a culture or community for scientific, traditional, religious, or other purposes. They include historic architectural/engineering resources, archaeological resources, American Indian sacred sites, and traditional resources. Historic properties are any prehistoric, historic, or traditional resource included in or eligible for inclusion in the National Register of Historic Places (NRHP) (36 CFR 800.16(l)). For the purposes of this cultural resources analysis, the Area of Potential Effect (APE) for the Proposed Action and No Action Alternative is Bullseye and the surrounding 3,000-foot buffer area (see Figure 2-2).

3.6.2 Existing Conditions

The Academy leases Bullseye from the Colorado State Land Board. The Academy has a perpetual Right of Way (ROW) for the airfield and a ROW for the road. The Academy manages cultural resources in its lease area, a small portion of the total APE, by following provisions of NHPA Section 106, consulting the State Historic Preservation Officer and more than 30 stakeholder tribes. The bulk of the APE is state land under grazing lease(s) not surveyed for cultural resources in the past or for the present proposed undertaking. The benign nature of the proposed undertaking for the total APE was interpreted to not require field investigations for architectural or archeological cultural resources beyond that which the Academy coincidentally had performed previously for its airfield lease area. The SHPO's COMPASS system shows no NRHP-listed or eligible historic properties in the APE beyond the airfield. This level of inventory effort was concurred on by the Colorado SHPO/THPOs (See Appendix A).

3.6.2.1 Architectural Resources

Based on review of the COMPASS system and a windshield survey of the site, no architectural resources of any nature appear present in the APE except for a late 1980s fire station the Academy built upon the Bullseye leased land. The other main features on the airfield property include the runway and the weather station. The site is surrounded by a barbwire perimeter fence. Additional runway support infrastructure such as windsocks, airfield signs, and bird deterrents (e.g., Sonic Net) is also located on Bullseye.

3.6.2.2 Archaeological Resources

A cultural resources survey was conducted on the Bullseye lease area in 2018 (Owens and Miller 2018). Prehistoric resources that were identified included an open lithic scatter of unknown age and five randomly scattered isolated finds. The only historic resource identified was an isolated farm equipment part. None of the resources were recommended as eligible for listing in the NRHP. One of the prehistoric isolated finds is an ash stain of unknown age. This isolated find was recommended to be a “needs data” cultural resource requiring protection by avoidance until evaluative testing occurs. In a letter dated 26 April 2019, the Colorado SHPO concurred with these determinations of eligibility. The 188-acre area to the east of the airfield was previously inventoried. This inventory resulted in the identification of three archaeological sites and three isolated finds. None of these resources are within the 3,000-foot buffer around Bullseye.

3.6.2.3 American Indian Sacred Sites and Traditional Resources

Pursuant to Sections 101(d)(6)(B) and 106 of the National Historic Preservation Act and implementing regulations prescribed in 36 *CFR* 800.2(c)(2), the USAF is in the process of consulting, on a government-to-government basis, with tribes culturally affiliated with the Academy (Appendix A). Besides the SHPO's COMPASS system showing no documented tribal sacred sites or properties of traditional religious and cultural importance, unless one or more tribes who are stakeholders to the Academy provide information presently unknown to the Academy and State of Colorado, no such properties exist in the APE.

3.7 LAND USE

3.7.1 Definition of the Resource

Land use describes the way the natural landscape has been modified or managed to provide for human needs. In developed and urbanized areas, land uses typically include residential, commercial, industrial, utilities and transportation, recreation, open space, and mixes of these basic types. Other uses such as mining, agriculture, forestry, and specially protected areas (e.g., monuments, parks, and preserves) are usually found on the fringes of or outside of urbanized areas. Plans and policies guide how land resources are allocated and managed to best serve multiple needs and interests. Ordinances and regulations define specific limitations on uses.

The attributes of land use addressed in this analysis include general land use patterns within and surrounding Bullseye and the land use regulatory setting. The regulatory setting is the framework for managing land use and approving new development. It pertains to federal, state, and local statutes, regulations, plans, programs, and ordinances.

For the purposes of this land use analysis, the ROI for the Proposed Action and No Action Alternative includes Bullseye and the region surrounding Bullseye in a 5-NM radius.

3.7.2 Existing Conditions

Bullseye is located on state-owned property that is leased to the Academy from the Colorado State Land Board. The Academy has a perpetual ROW for the airfield and a ROW for the road. The Colorado State Land Board also owns approximately 48,000 acres surrounding Bullseye. Much of the land surrounding Bullseye is leased to the Nature Conservancy and subleased for cattle grazing. The closest residential property is approximately 2.4 miles north of the airfield. Land uses within a 5-NM radius of Bullseye consist of agricultural (pasture and irrigated crop fields) and low-density residential. Ellicott, with a population of approximately 1,100 people, is the closest community and is located within the Colorado Springs metropolitan area.

Bullseye is accessible via a right-of-way along an access road from Sanborn Road. An aviation easement¹ exists on the north and south ends of the runway. The aviation easement helps preserve flight paths into and out of Bullseye and prevents development or land uses in the clear zone that would not be compatible with use of the Bullseye runway.

3.8 SAFETY AND OCCUPATIONAL HEALTH

3.8.1 Definition of the Resource

Safety and health considers activities or operations that have the potential to affect the safety, well-being, or health of members of the USAF and the public. The primary goal is to identify and prevent potential accidents or impacts on the general public. Health and safety addresses flight safety, including the potential for aircraft mishaps and hazards related to construction activities, when applicable.

A number of USAF regulations deal with various aspects of safety. Flight safety is addressed in policies such as Air Force Instruction (AFI) 91-202, *U.S. Air Force Mishap Prevention Program*, and Department of Defense Instruction (DoDI) 605.07, *Mishap Notification, Investigation, Reporting, and Record Keeping*. Workplace safety regulations are generally addressed under the 29 CFR 1960 series, Occupation Safety and Health Administration (OSHA) standards. Applicable OSHA standards are reflected in AFI 91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health*, and Air Force Manual 91-203, *Air Force Occupational Safety, Fire and Health Standards*.

3.8.2 Existing Conditions

For the purposes of this EA, the safety resource area is separated into ground and flight safety. The ROI for the Proposed Action and No Action Alternative includes Bullseye and the surrounding areas.

3.8.2.1 Ground Safety

Ground safety considers any issues associated with construction, if applicable, and ground activities that support aircraft operations, including fire and emergency response.

Construction activities and daily maintenance and support activities are performed in accordance with applicable USAF safety regulations, USAF technical guidance, and standards stipulated in Air Force Occupational Safety and Health requirements.

¹ An aviation easement is an easement or right of overflight in the airspace above or in the vicinity of a particular property.

For aircraft emergencies and crash response, Bullseye has a fire station that is staffed by firefighting personnel during aircraft operations. The Academy maintains mutual aid agreements with Ellicott and El Paso County and additional aid can be requested should an aircraft emergency exceed the capacity of the onsite response.

The Academy maintains an emergency and mishap response plan that applies to Bullseye to guide mishap response. This plan assigns responsibilities and prescribes functional activities necessary to react to mishaps, whether on- or off-station. When these measures are implemented, risks are minimized, even though they can never be eliminated. The Academy also conducts annual training drills, where emergency personnel are instructed on proper response procedures. These drills could include participation of emergency response agencies from the local community.

3.8.2.2 Flight Safety

The primary safety concern regarding military aircraft operations is the potential for aircraft mishaps to occur. Mishaps can be caused by mid-air collisions with other aircraft, birds or objects, weather, mechanical failures, pilot error, etc. Although mishap rates from previous years cannot predict future mishap rates, reviewing mishap historical data is helpful in providing perspective. Aircraft mishaps are categorized based on the extent of property damage, loss of life, or disability they cause. The military services define four categories of aircraft mishaps (A to D), with “Class A” mishaps defined as the most serious. Class A mishaps are classified as resulting in a total property damage of \$2 million or more, a fatality, or permanent total disability.

Per DoDI 4165.57, *Air Installations Compatible Use Zones (AICUZ)*, all structures on the ground have the potential to create hazards to flight. These obstructions also have the potential to create a hazard for parachute operations. The USAF has processes in place, including compliance with AFI 13-217, *Drop Zone and Landing Zone Operations* that identify and minimize these hazards.

The USAF also has programs in place to identify areas where past analysis indicates aircraft accidents are likely to occur. These include clear zones (CZs) and accident potential zones (APZs), APZ I and APZ II (AFI 32-7063). The CZ starts at both ends of the runway, extends outward 3,000 feet in length, and is 3,000 feet wide. Of the three zones, the CZ has the highest incidence of accidents. APZ I extends from the CZ by an additional 5,000 feet by 3,000 feet, and APZ II extends from APZ I by an additional 7,000 feet by 3,000 feet, with the potential for an accident decreasing in each subsequent area should accidents occur.

The Academy participates in the Southern Colorado Mid-Air Collision Avoidance program. Flight safety units from Peterson AFB, Buckley AFB, the Academy, Butts Army Airfield, and IFT Flight Safety, as well as staff from the FAA participate in the program, which has goals to eliminate mid-air collisions and reduce close calls between aircraft. Part of this program is regular briefing to local flying organizations to provide information on military flights and training areas in the region.

Bullseye is located in a low-density population area surrounded by land zoned for agricultural use. Only a portion of the CZ is located on the land leased to the Academy. The remainder of the CZ and APZ 1 and 2 are used for grazing. There are no encroachments (i.e. built structures) in any of these zones. However, the portion of the CZ located outside of Academy leased property is considered an incompatible land use.

Bird-aircraft strikes constitute a safety concern because they can result in damage to aircraft, injury to aircrews, or injury to local human populations if an aircraft crashes. Most birds fly below 500 feet AGL, except during migration, and the greatest chance for a bird-aircraft strike occurs in

the lower elevations around the airfield environment. Approximately 97 percent of reported bird-aircraft strikes occur below 3,000 feet AGL, and of these, slightly more than 75 percent occur in the airport environment (USAF 2020). The Academy maintains a Bird Aircraft Strike Hazard (BASH) program to minimize risks from bird strikes. The program serves to establish overall bird/wildlife control protocols to minimize aircraft exposure to potentially hazardous wildlife strikes. The BASH plan is based on known hazards from both resident and seasonal bird populations that utilize the area (USAFA 2020b).

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4.0 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This section describes the potential environmental consequences to the environmental resource areas and existing conditions from the implementation of the proposed parachute and soaring operations and training at Bullseye. Analysis of the implementation of the No Action Alternative is also included in this section. This provides a basis for comparing the environmental consequences of the Proposed Action to the existing (baseline) conditions over time.

4.2 AIRSPACE

4.2.1 Proposed Action

No new SUA or modifications of existing SUA are planned as part of the Proposed Action. Soaring operations would occur in the immediate vicinity of the airfield (5-NM radius) (Figure 2-2) at altitudes below 12,500 feet MSL (FAA notification would occur for operations between 9,500 and 12,500 feet MSL). Parachute operations would also occur in the immediate vicinity of the airfield at altitudes below 16,000 feet MSL with a drop zone at Bullseye. As described in Section 2.4.1, Preferred Alternative, parachute operations would generally occur on weekends and soaring operations would generally occur during the week.

Implementation of the Proposed Action would result in a maximum of 69,026 annual arrivals and departures associated with parachute and soaring operations. Currently there are 48,026 airfield operations at Bullseye every year. Implementation of the Proposed Action would represent an approximately 44 percent increase in the number of annual operations at Bullseye. This increase in annual airfield operations would not require changes to local airspace.

Within 24-hours of commencing soaring operations, the 306 FTG would contact COS to issue a Notice to Airman that soaring and jump operations are proposed to occur. A typical day of soaring operations would begin with a SCO from the 94 FTS contacting the FAA at COS to notify them of soaring operations being conducted from Bullseye. The SCO is a rated pilot who would be at Bullseye during soaring operations acting as the officer in charge at all times when soaring operations are occurring.

Flight operations at Bullseye are scheduled and coordinated by the 306 FTG. If parachute and soaring operations were planned to occur at Bullseye, the 306 FTG would coordinate with the PFP and IFT to deconflict operations. There are currently no regularly scheduled operations on weekends at Bullseye and parachute operations conducted during weekends would have no impact on existing airfield operations.

As shown on Figure 2-2, all soaring operations would be conducted inside of a circular area with a 5-NM radius centered on Bullseye. The Academy coordinated with the FAA during development of the Proposed Action and the following modifications were made. In order to avoid conflicts with civilian aircraft approaching or departing to and from COS, soaring operations would occur up to 9,500 feet MSL in the Proposed Soaring Area located in the northeast quadrant of the circular area (see Figure 2-2). If soaring operations were to go above 9,500 feet MSL, the SCO would contact the FAA at COS and request approval for soaring operations from 9,500 feet MSL up to 12,500 feet MSL. All PA-18 aircraft used to tow sailplanes would be equipped with transponders.

Implementation of the Proposed Action is not anticipated to result in significant impacts to the management or use of airspace at Bullseye.

4.2.2 No Action Alternative

Under the No Action Alternative, no additional operations would occur at Bullseye. Baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to the management or use of airspace.

4.3 NOISE / ACOUSTIC ENVIRONMENT

Under the Proposed Action, UV-18 and PA-18 powered-flight operations (as well as associated parachuting and gliding operations) would begin to occur at Bullseye on a regular basis and would continue indefinitely. The Proposed Action, which is described in more detail in Section 2.4.1, also includes the use of ground vehicles such as cars, vans, and buses (i.e., transportation of personnel and equipment to/from the airfield), and other ground support activities (e.g., operation of the command trailer). The noise ROI includes areas affected by noise generated by these operations and ground support activities.

The USAF considers “significance” of noise impacts in the context of NEPA in terms of the potentially affected environment and degree, and has not defined uniformly applicable significance thresholds. The FAA defines a threshold for “significant” noise impacts in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, as a DNL increase of 1.5 dB or more relative to the No Action Alternative, at a noise-sensitive area, that is exposed to DNL greater than or equal to 65 dB. The FAA also establishes thresholds for “reportable” impacts if a noise-sensitive area experiences a 3-dB increase and the end-state DNL is between 60 and 65 dB or if a noise-sensitive area experiences a 5-dB increase and the end-state DNL is between 45 and 60 dB. If “reportable” impacts would be associated with a proposed action, other factors must be considered in determining whether a significant impact would occur. For the purposes of this EA, noise impacts would be considered potentially significant if the FAA thresholds described above would be exceeded. The relative change in number of aircraft noise events with potential to interfere with speech was also considered in assessing the significance of noise impacts.

4.3.1 Proposed Action

As shown in Table 4-1, PA-18 and UV-18 aircraft operations generate noise levels comparable to the T-53 and DA-20 aircraft currently operating at Bullseye. Besides the tow and jump planes, soaring and parachute operations do not involve powered flight, and generate minimal noise. The NoiseMap reference noise levels dataset does not include noise level data for PA-18 or UV-18 aircraft, so the most-similar noise surrogate was chosen for noise modeling. The PA-18 aircraft was represented by the single-engine, fixed-pitch propeller-driven aircraft, and the DHC-6 aircraft represents the UV-18 aircraft. Aircraft noise levels are highly dependent on aircraft configuration, atmospheric conditions, and other factors that vary from one flight to the next. Therefore, the noise level values listed in Table 4-1 are intended to only provide a general indication of the relative noise levels generated by various aircraft types.

Table 4-1. Individual Overflight Maximum Noise Levels at a Distance of 1,000 Feet

Aircraft	Engine Power	L _{max} (dB) ^a
<i>Departure</i>		
PA-18 (Proposed Ops) ^b	100% RPM	77
UV-18 (Proposed Ops) ^b	96% RPM	81
DA-20 (Baseline Ops) ^b	100% RPM	70
T-53 (Baseline Ops) ^b	100% RPM	77

Table 4-1. Individual Overflight Maximum Noise Levels at a Distance of 1,000 Feet (Cont.)

Aircraft	Engine Power	L _{max} (dB) ^a
<i>Approach</i>		
PA-18 (Proposed Ops) ^b	43% RPM	64
UV-18 (Proposed Ops) ^b	75% RPM	79
DA-20 (Baseline Ops) ^b	24% RPM	51
T-53 (Baseline Ops) ^b	43% RPM	64

^a All reference sound levels are for aircraft at 160 knots in 59° Fahrenheit and 70 percent relative humidity

^b A generic single-engine aircraft with a fixed-pitch propeller was used as noise surrogate for PA-18. The DHC-6 was used as a surrogate for UV-18, and the T-41 was used as a surrogate for the DA-20

RPM = revolutions per minute

DNL near Bullseye under the Proposed Action would slightly increase, exposing approximately 0.14 acre of USAF-leased land immediately adjacent to the Bullseye runway to noise levels at or above 65 dB (Figure 4-1). The affected area would not include any noise-sensitive receptors that are visible on aerial photographs (Figure 4-1). The calculated aircraft noise level at the closest residence (2.4 miles north of the airfield) would be 35.2 dB DNL. Noise levels at the closest noise-sensitive location would be well below FAA impact criteria and the USEPA-identified noise level threshold that is protective of public health and welfare with an adequate margin of safety (i.e., 55 dB).

Individual overflight noise events at the closest residence with potential to momentarily interfere with indoor speech would increase from exceedingly rare under baseline conditions to approximately one per average annual day under the Proposed Action. This result was calculated assuming that people would not raise their voices to be heard over the sound of the overflying aircraft, and that momentary speech interference is possible at indoor noise levels above 50 dB. The calculation also assumes that the residence's windows are open at the time of overflight, and that the residence provides typical levels of outdoor-to-indoor noise level attenuation (15 dB) while windows are open.

Operations conducted between the hours of 10:00 PM and 7:00 AM would typically be limited to approaches of PA-18 aircraft making their initial approach to the airfield just prior to 7:00 AM. Of the total annual aircraft operations, approximately 150 would be early morning (i.e., before 7:00 AM). Approaches would involve descending using a very low engine power setting. Even if the aircraft were to come within 1,000 feet of a residence (which is not expected), the outdoor noise level generated at the residence would be 64 dB L_{max} (see Table 4-1). This outdoor level equates to roughly 49 dB indoors if windows are open. This indoor noise level is not sufficiently high to interfere with activities such as conversation or sleep.

Ground vehicle and support operations would increase local noise levels just prior to, during, and immediately after Bullseye training operations. Ground vehicles used to support training would be similar in type and noise levels generated to other vehicles currently operating on local roadways. No adverse noise impacts would be expected to occur as a result of ground vehicle operations. Any such operations at Bullseye would not be expected to be audible at the closest residence, which is located 2.4 miles north of the airfield.

In summary, UV-18 and PA-18 flying operations would generate noise levels similar to the flying operations of aircraft currently operating at Bullseye. Noise levels would not exceed FAA impact criteria or the USEPA-identified threshold of 55 dB at the closest noise-sensitive location. The number of aircraft noise events with potential to momentarily interfere with speech would remain low (one per average annual day) at the closest residence. Flying operations between 10:00 PM and 7:00 AM would be limited to PA-18 initial approaches to land. These early morning approaches

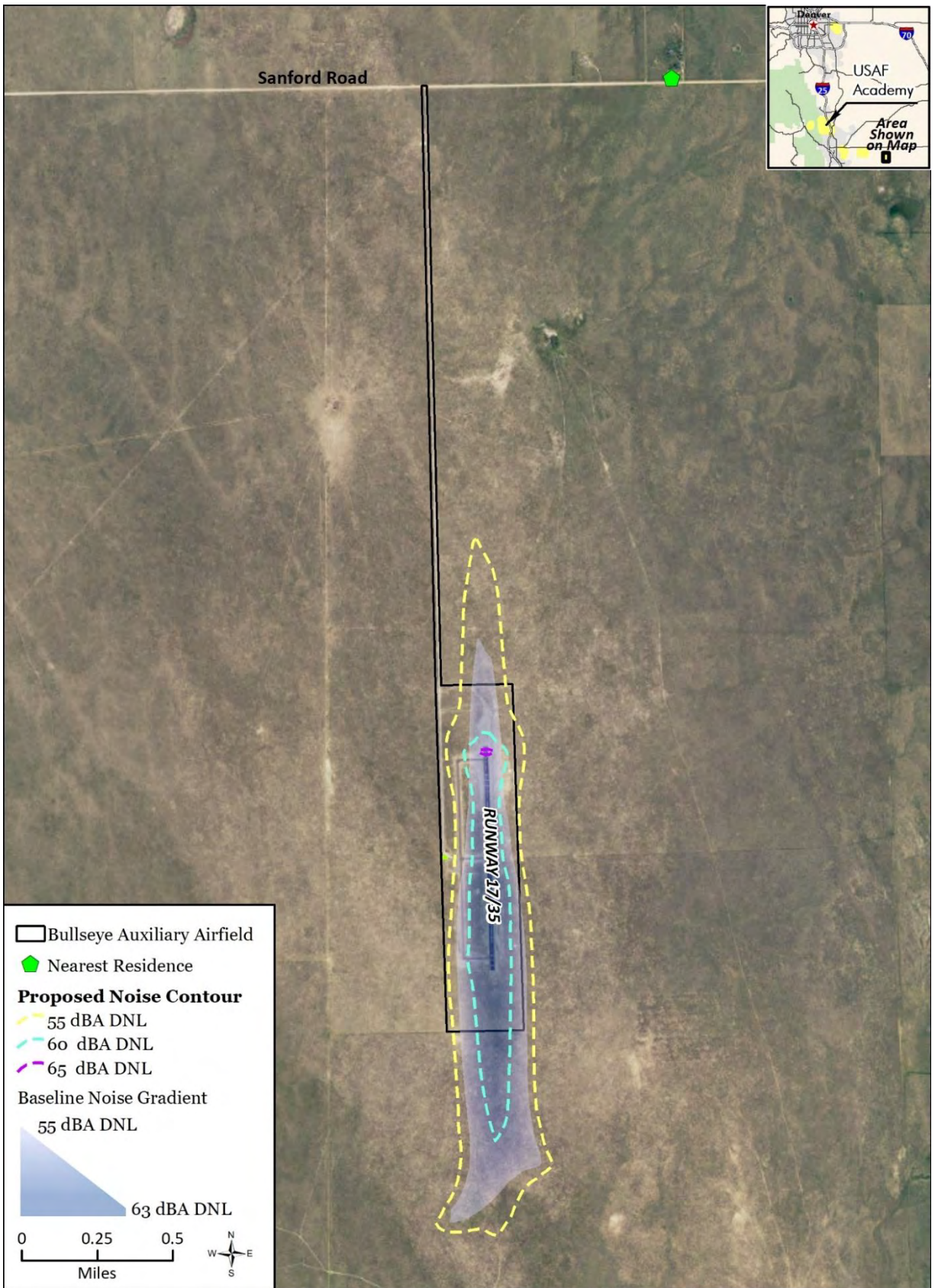


Figure 4-1. Noise Contours at Bullseye Resulting from the Proposed Action Relative to Existing Conditions

would not be sufficiently loud to interfere with activities such as indoor conversation or sleep. Noise impacts under the Proposed Action would not be significant, and no noise mitigation measures are proposed at this time.

4.3.2 No Action Alternative

Implementation of the No Action Alternative would result in no changes in noise levels at and near Bullseye. Implementation of the No Action Alternative would result in an increased likelihood of delays to parachuting and soaring training when weather and other factors are not conducive to training at Davis Airfield.

4.4 AIR QUALITY AND CLIMATE CHANGE

4.4.1 Proposed Action

Total net direct and indirect emissions associated with the action were estimated using the Air Conformity Applicability Model (ACAM) version 5.0.14a (Solutio Environmental, Inc. 2019) 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 algorithms, emission factors, and methodologies used are described in detail in the *USAF Air Emissions Guide for Air Force Mobile Sources* (USAF 2020b), and the *USAF Air Emissions Guide for Air Force Transitory Sources* (USAF 2020c).

Analysis of proposed aircraft operations is limited to operations that would occur in the lowest 3,000 feet of the atmosphere, because this is the typical depth of the atmospheric mixing layer, where the release of aircraft emissions would affect ground-level pollutant concentrations. In general, aircraft emissions released above the mixing layer would not appreciably affect ground-level air quality.

Because a portion of the ROI is classified as a maintenance area for CO, the General Conformity *de minimis* thresholds were used for comparison. For all other pollutants, although not applicable in a regulatory capacity, the significance threshold of 250 tons per year was applied for comparison. These provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the 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 of one or more NAAQS. 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* (USAF 2020d).

Table 4-2 provides the net emissions for the Proposed Action compared against the *de minimis* levels. A comparison to the ROI baseline NEI emissions is also provided to give another point of comparison for the context and intensity of the potential impacts. There are currently no thresholds for GHGs, so GHG emissions are provided (as CO₂e) in comparison to regional baseline emissions only.

Table 4-2. Proposed Action Emissions

	Annual Emissions (tons/year)							
	CO	NO _x	PM ₁₀	PM _{2.5}	SO _x	VOCs	Pb	CO ₂ e
Aircraft Emissions	55.308	0.875	2.594	2.335	0.176	4.206	0.000	532.6
Commuting Emissions	0.515	0.224	0.007	0.007	0.001	0.055	0.000	97.0
Proposed Action Total	55.823	1.099	2.601	2.342	0.177	4.261	0.000	629.6
<i>De Minimis</i> threshold	100	100	100	100	100	100	25	-
Exceedance (Yes or No)	No	No	No	No	No	No	No	-
ROI Baseline Emissions	77,861	14,710	14,326	3,370	2,048	18,336	0.717	7,836,107
<i>Percentage of Baseline</i>	0.07%	0.01%	0.02%	0.07%	0.01%	0.02%	0.00%	0.01%

Emissions associated with parachute and soaring operations at Bullseye would not generate significant quantities of any pollutants. Emissions from commuting/transporting cadets and staff from the Academy to Bullseye would be minimal. There would be no significant impacts to air quality under the Proposed Action.

4.4.2 No Action Alternative

Under the No Action Alternative, the parachute and soaring operations would continue to operate out of Davis Airfield and there would be no changes at Bullseye. Air emissions would remain at current baseline levels and there would be no impact to air quality in the ROI.

4.5 BIOLOGICAL / NATURAL RESOURCES

4.5.1 Proposed Action

No construction is planned as part of the Proposed Action and therefore no permanent direct impacts to biological resources are anticipated.

Implementation of the Proposed Action would increase operations at Bullseye with minor increases in aircraft noise and personnel present at the airfield. Impacts to vegetation could result from increased vehicular traffic in staging areas adjacent to the runway and from pedestrian traffic in the drop zone. These impacts would consist of minor damage to vegetation. Vegetation would have time to recover between parachute and soaring operations. Vegetation at Bullseye is typical of mixed prairie in the region and no unique or rare species are present. Therefore, significant impacts to vegetation would not result from implementation of the Proposed Action.

Impacts to wildlife would also be short term and minor. These short-term minor impacts would result from disturbance due to increased activity at Bullseye. This increased activity would be limited to the drop zone and areas surrounding the taxiway and runway and would last for a short duration. Wildlife that are present at Bullseye are already adapted to the presence of aircraft and activity along the runway and taxiway and implementation and this disturbance would not be significant.

As described in Section 4.3, Noise / Acoustic Environment, noise increases resulting from implementation of the Proposed Action would be minimal and would pose no significant impact to wildlife.

There is a chance that increased operations could result in an increase in bird or wildlife strikes. Bullseye maintains a rigorous BASH program (Section 3.8, Safety and Occupational Health) with the goal of avoiding and minimizing wildlife strikes. An increase in operations does not necessarily correlate to an increase in strikes. The BASH program is adaptive and should an increase in strikes be observed, additional prevention measures would be implemented. No significant impacts to wildlife would result from implementation of the Proposed Action.

As described in Section 3.5, no federally listed species or potential habitat for these species is known to occur at Bullseye. Therefore, the USAF has made a determination of no effect for this action (USAFA 2020c). The USFWS has been included in interagency coordination for this project. The USFWS has indicated that there are no concerns with impacts to federally listed species as a result of implementing the Proposed Action (see letter dated 1 June 2021, Appendix A).

Two state-listed species (prairie dog/burrowing owl) have historically been documented at Bullseye. These species have not been observed at the airfield since 2012. The Academy will continue to monitor for these species. Should a new population of either species be observed at Bullseye, the management of these species would be incorporated into the installation's *Integrated Natural*

Resources Management Plan. Impacts to other species and biological habitat would be minimal. Implementation of the Proposed Action would not result in significant impacts to biological resources.

4.5.2 No Action Alternative

Under the No Action Alternative, no additional operations would occur at Bullseye and baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to biological resources.

4.6 CULTURAL RESOURCES

4.6.1 Proposed Action

No ground disturbance is planned as part of the Proposed Action. The support equipment and sailplane assembly areas would be existing dirt and paved areas, respectively, adjacent to the fire station that are regularly used for parking and existing operational activities. The temporary tent would be in a grass area just south of the fire station. This area has been regularly used for outdoor living activities by the fire crew. No cultural resources have been identified in these areas. The additional use of these areas has no potential to create impacts to historic properties, including the ash stain feature interpreted as "needs data" and therefore treated as potentially eligible for the NRHP. The drop zone would be in an undeveloped, mowed grass, area just south of the temporary tent area and the fire station. The Academy's past inventory for Bullseye airfield identified no cultural resources in this proposed landing area for parachutists, and therefore no historic properties would be impacted. Other than the landing and takeoff of aircraft from the runways, the only action that would occur on the remainder of Bullseye and in the 3,000-foot buffer area around it would be infrequent pedestrian access to pick up wind indicators. Within the Bullseye leased area, with the exception of the ash stain area, all of the area inside the perimeter fence is mowed. Outside the Bullseye boundary, the lessee grazes cattle and occasionally drives vehicles to check on the cattle, water tanks, etc.

Based on the requirements and planned use of Bullseye for soaring and parachute operations, the types of actions proposed to occur and the locations these actions would occur lead the Academy to propose a determination of "no historic properties affected" as described in 36 *CFR* § 800.4(d)(1), because the undertaking would have no direct, indirect, or cumulative adverse effect on any historic properties.

During preparation of the Draft EA, the USAF submitted a Section 106 letter to the Colorado SHPO. The letter defined the APE and included the USAF determination that the undertaking would have no adverse effect on historic properties. In a letter dated 24 May 2021, the Colorado SHPO concurred that the project would have no adverse effects on historic properties (Appendix A). As described in Appendix A, the Academy continues to consult on a government-to-government basis with tribes and if consequential new information, concerns, or responses are not received prior to an Academy decision being made on this proposed undertaking, the assessment of no adverse effect will be considered complete.

4.6.2 No Action Alternative

Under the No Action Alternative, no parachute or soaring operations would occur at Bullseye. Baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to cultural resources at Bullseye.

4.7 LAND USE

4.7.1 Proposed Action

No changes to land use would result from implementation of the Proposed Action. Ground activities at Bullseye would consist of temporary activities that would not change land use at the airfield. All other elements of the Proposed Action, including the increased aircraft operations and minor noise increases would have no impact on land use at Bullseye or in the 5-NM radius proposed for soaring operations. As described in Section 4.3, Noise / Acoustic Environment, noise levels resulting from implementation of the Proposed Action would be minimal and noise levels would not result in incompatible land use in the vicinity of Bullseye. Therefore, no impacts to land use are anticipated to result from this action.

4.7.2 No Action Alternative

Under the No Action Alternative, no additional operations would occur at Bullseye and baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in no impacts to land use.

4.8 SAFETY AND OCCUPATIONAL HEALTH

4.8.1 Proposed Action

4.8.1.1 Ground Safety

No aspects of the Proposed Action would create new or unique ground safety issues. No permanent construction is planned as part of the Proposed Action. Temporary facilities such as tents and portable toilets would be used during planned training events. None of the temporary facilities would impact aircraft takeoff and landings or interfere with the runway approaches. Temporary facilities would not result in any safety risk or obstructions to navigation. There are no significant safety impacts related to the facilities associated with the Proposed Action.

Capability for fire and emergency response would continue to be located at Bullseye during parachute and soaring operations. Fire response capabilities are currently located at Bullseye during flying operations and these capabilities would continue under the Proposed Action. The existing fire station would continue to be staffed by firefighting personnel during aircraft operations. One firefighting engine from the Academy would continue to be present when the airfield is open for operations. Mutual aid agreements are in place with Ellicott and El Paso County and aid can be requested if needed. Under the Proposed Action, an ambulance from the Academy would be present at Bullseye during parachute operations.

A drop zone survey has been conducted as part of the planning process to use Bullseye for parachute operations. The survey has designated the area shown on Figure 2-1 as the drop zone and identified potential hazards (e.g. boundary fence, fire station, airfield lighting and marker) that will be briefed to cadets prior to commencing parachute operations.

Implementation of the Proposed Action is not expected to increase ground safety risks beyond those normally associated with parachute and soaring operations. No significant impacts to ground safety are anticipated to result from implementation of the Proposed Action.

4.8.1.2 Flight Safety

Airspace near Bullseye is within the region controlled by COS Terminal Radar Approach Control and Denver Center. In 2019, 135,431 aircraft operations were recorded from COS (Wikipedia 2021). The addition of parachute and sailplane operations at Bullseye would be a small fraction of the operations

currently conducted in this region. The 306 FTG will continue to deconflict operations at Bullseye such that aircraft operations associated with the PFP and IFT would not occur during parachute and soaring operations. Firefighting personnel would continue to monitor in-flight communications and provide emergency response as described in Section 4.8.1.1, Ground Safety. Current safety policies and procedures at Bullseye ensure the lowest possible potential for aircraft mishaps. These safety policies and procedures would continue upon implementation of the Proposed Action. The mid-air collision avoidance program would be updated to include information on parachute and soaring operations at Bullseye.

The Academy maintains a bird and wildlife hazard program that includes Bullseye. This includes onsite monitoring and notification of increased bird activity, active harassment of problem birds, and use of other systems. All safety actions currently in place would continue. No significant impacts are anticipated to occur related to bird/wildlife strike hazards.

4.8.2 No Action Alternative

Under the No Action Alternative, no additional operations would occur at Bullseye and baseline conditions would remain unchanged. Implementation of the No Action Alternative would result in minor adverse impacts to safety and occupational health. These impacts would result if conditions at Davis Airfield required cancellation of training which has the potential to lead to increased chances of mishaps due to missed training opportunities.

4.9 OTHER NEPA CONSIDERATIONS

4.9.1 Unavoidable Adverse Effects

This EA identifies any unavoidable adverse impacts that would result from implementation of the Proposed Action and the significance of the potential impacts to resources and issues. Unavoidable short-term adverse impacts associated with implementing the Proposed Action would include the short-term disturbance of vegetation from temporary facilities, minor noise increases, and minor air emissions due to increased aircraft operations at Bullseye. However, these effects are considered minor and would be confined to the immediate area of Bullseye. No unavoidable, long-term, adverse impacts are anticipated to result from implementation of the Proposed Action.

4.9.2 Relationship of Short-Term Uses and Long-Term Productivity

The relationship between short-term uses and enhancement of long-term productivity from implementation of the Proposed Action is evaluated from the standpoint of short- and long-term effects. The Proposed Action represents an enhancement of long-term productivity for parachute and soaring operations at the Academy. There are no short-term negative effects associated with the Proposed Action. Immediate and long-term benefits would be realized for operations after completion of the Proposed Action.

4.9.3 Irreversible and Irretrievable Commitments of Resources

The irreversible environmental changes that would result from implementation of the Proposed Action involve the consumption of material resources and energy resources. The use of these resources is considered permanent. Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the impacts that use of these resources will have on future generations. Irreversible impacts primarily result from use or destruction of a specific resource that cannot be replaced within a reasonable timeframe (e.g., energy and minerals). Irretrievable

resource commitments also involve the loss in value of an affected resource that cannot be restored as a result of the action.

Operation and training activities would continue to involve the consumption of nonrenewable resources, such as fuel used in aircraft and vehicles. None of these activities is expected to significantly decrease the availability of minerals or petroleum resources. Buses, personal vehicle use by cadets, and vehicles and aircraft used to support the existing missions consume fuel, oil, and lubricants. Implementation of the Proposed Action would slightly increase the amount of these materials used; however, this additional use is not expected to significantly affect the availability of resources in the region or the nation. Specific information for each resource area is described below.

4.9.3.1 Airspace

No new airspace is being created or being used in a manner that is irreversible or irretrievable.

4.9.3.2 Noise

No irreversible or irretrievable impacts to the noise environment would result from implementation of the Proposed Action.

4.9.3.3 Air Quality and Climate Change

The proposed operational activities in the Bullseye project region would primarily generate air emissions from (1) aircraft operations and, (2) staff commuting activities. As discussed in Section 4.4, these activities would result in emissions that would not exceed any annual indicator threshold or applicable General Conformity threshold for NO_x or VOCs. Due to their intermittent nature, operational emissions would disperse to relatively low ambient levels at offsite locations. Therefore, emissions from proposed operational activities, in combination with emissions from cumulative projects, would not contribute to an exceedance of a NAAQS. Therefore, proposed operational activities within the Bullseye project region would result in less than significant cumulative air quality impacts.

4.9.3.4 Biological Resources and Natural Resources

No irreversible or irretrievable impacts to biological resources would occur. Any disturbed vegetation or wildlife habitat would be returned to preexisting conditions once the temporary mission is completed.

4.9.3.5 Cultural Resources

No irreversible or irretrievable impacts to cultural resources would occur.

4.9.3.6 Land Use

No irreversible or irretrievable impacts to land use would occur. There is no construction associated with the Proposed Action and the land could be made available for other land uses as desired.

4.9.3.7 Safety

No irreversible or irretrievable impacts related to safety would occur.

5.0 LIST OF PREPARERS

Government Agency Development Team			
Name/Title		Role	
U.S. Air Force Academy Jennifer McCorkle		Project Manager/Environmental Planning	
U.S. Air Force Academy Mark Stoffel		Academy Airspace Manager	
U.S. Air Force Academy Amy Kelley		Community Initiatives Director	
Air Force Civil Engineer Center (AFCEC) Hamid Kamalpour, Technical POC		Environmental Planning/Lead EA Development	
U.S. Air Force		Proponent	
Contractor Development Team			
Name/Title	Project Role	Subject Area	Qualifications
<i>Jay Austin</i> Noise Analyst M.S. Environmental Science B.A. Biology	Section Author	Noise	13 years environmental science
<i>Brad Boykin</i> Air Quality Meteorologist B.A. Environmental Studies	Section Author	Air Quality	15 years environmental science
<i>Tom Daues, PMP</i> Biologist M.S. Natural Resources B.S. Biology	Project Manager, Section Author, Editor	QA/QC	26 years environmental science
<i>Denise DeLancey</i> Electronic Publishing Specialist B.A. English/Communications	Document Production	Document Production	19 years document production
<i>Anthony Finley</i> Electronic Publishing Specialist B.A. English	Document Production	Document Production	11 years document production
<i>Nathan Gross, CHMM</i> Environmental Scientist B.S. Wildlife and Fisheries Management	Section Author	Hazardous Materials and Waste	16 years environmental science
<i>Melanie Peterson</i> Document Production Specialist M.A. English B.A. English	Production	Document Production	8 years editing, document production
<i>Jennifer Wallin</i> Technical Editor M.S. Environmental Toxicology B.S. Biology	Production	Document Production	18 years editing, document production
<i>Sarah Rauch</i> Conservation Ecologist B.S. Plant Biology, Environmental Science and Ecology	Section Author	Biological Resources	12 years environmental science
<i>Brian Tutterow</i> Environmental Scientist B.S. Biology	Assistant Project Manager, Section Author	Cultural Resources, Land Use	20 years environmental science

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6.0 REFERENCES

- 306 FTG 2020. 306th Flying Training Group. Accessed on August 21, 2020. <https://www.jbsa.mil/Mission-Partners/12th-Flying-Training-Wing/306th-Flying-Training-Group/>
- AICUZ 2019. *U.S. Air Force Academy, Air Installation Compatible Use Zones Study*. July.
- CPW 2020. Threatened and Endangered List. <https://cpw.state.co.us/learn/Pages/SOC-ThreatenedEndangeredList.aspx>, accessed on November 12, 2020. Colorado Parks and Wildlife
- Colorado Natural Heritage Program 2001. *Survey of Critical Biological Resources, El Paso County, Colorado*. Colorado State University. December.
- DNWG 2013. *Speech Interference From Aircraft Noise*. Department of Defense Noise Working Group.
- FAA 2003. Pilot's Handbook of Aeronautical Knowledge FAA H-8083-25. Federal Aviation Administration. October 28.
- FAA 2019a. Federal Aviation Administration. Pilot/Controller Glossary. 28 February. https://www.faa.gov/air_traffic/publications/media/pcg_basic_chgs%201_2_3_2-28-19.pdf.
- FAA 2019b. Federal Aviation Administration. Fundamentals of Noise and Sound. https://www.faa.gov/regulations_policies/policy_guidance/noise/basics/. Accessed November 19, 2019.
- FICON 1992. *Federal Agency Review of Selected Airport Noise Analysis Issues*. Federal Interagency Committee on Noise. August.
- FICUN. 1980. *Guidelines for Considering Noise in Land Use Planning and Control*. Federal Interagency Committee on Urban Noise.
- Finegold, L. C., C. S. Harris, and H. E. von Gierke 1994. Community annoyance and sleep disturbance: updated criteria for assessing the impacts of general transportation noise on people. *Noise Control Engineering Journal*, Volume 42, Number 1: 25-30.
- Fort Carson 2014. *Environmental Assessment for Army Use of the Bullseye Auxiliary Airfield, Colorado*. Fort Carson, Colorado. May
- IPCC 2007. *Climate Change 2007 Synthesis Report*. Geneva, Switzerland: Intergovernmental Panel on Climate Change. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment.
- National Park Service 2020. Geospatial Sound Modeling (Integrated Resource Management Applications website). <https://irma.nps.gov/Datastore/Reference/Profile/2217356>.
- Owens, Mark and Pamela Miller 2018. *Archaeological Survey for the Repair of the Bullseye Airfield Perimeter Fence, El Paso County, Colorado*. Air Force Civil Engineer Center, Peterson Air Force Base, Colorado. Submitted to United States Air Force Academy, 10th Civil Engineer Squadron, Colorado Springs, Colorado. On file, United States Air Force Academy.
- Schultz, T. 1978. Synthesis of social surveys on noise annoyance. *The Journal of the Acoustical Society of America*, Volume 64: 377-405.

- USAF. 2014. *The Guide for Environmental Justice Analysis Under the Environmental Impact Analysis Process*. United States Air Force.
- USAF 2020a. USAF Wildlife Strikes by Altitude FY 1995-FY 2016. Air Force Safety Center. Accessed from: <https://www.safety.af.mil/Divisions/Aviation-Safety-Division/Aviation-Statistics/> in December 2020.
- USAF 2020b. *Air Emissions Guide for Air Force Mobile Sources: Methods for Estimating Emissions of Air Pollutants for Mobile Sources at United States Air Force Installations*. Air Force Civil Engineer Center, San Antonio, TX. June 2020. Available: <https://aqhelp.com/Documents/2020%20Mobile%20Guide%20-%20Final.pdf>.
- USAF 2020c. *Air Emissions Guide for Air Force Transitory Sources: Methods for Estimating Emissions of Air Pollutants for Stationary Sources at United States Air Force Installations*. Air Force Civil Engineer Center, San Antonio, TX. June 2020. Available: <https://aqhelp.com/Documents/2020%20Stationary%20Guide%20-%20Final.pdf>.
- USAF. 2020d. *Air Quality Environmental Impact Analysis Process (EIAP) Guide: Volume II - Advanced Assessments*. Air Force Civil Engineer Center, Compliance Technical Support Branch. Lackland AFB, TX. Available: <https://aqhelp.com/Documents/AQ%20EIAP%20Guide%20Volume%20II%20Jul%202020.pdf>.
- USAFA 2018. *U.S. Air Force Integrated Natural Resources Management Plan*. U.S. Air Force Academy. January 3.
- USAFA 2020a. *Final Spill Prevention, Control, and Countermeasures Plan*.
- USAFA 2020b. USAFA Plan 91-22. Bird/Wildlife Aircraft Strike Hazard (BASH). 306 FTG/SEF. U.S. Air Force Academy. February.
- USAFA 2020c. Memorandum for Record. Biological Assessment for Bullseye Auxiliary Airfield (Bullseye) Jump and Soaring Operations Environmental Assessment.
- USEPA 1974. Information on Levels of Environmental Noise Requisite to Protect Public Health and welfare With an Adequate Margin of Safety, Report 550/9-74-004. United States Environmental Protection Agency Office of Noise Abatement and Control.
- USEPA 2009. 40 CFR I Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act; Final Rule. Washington, D.C.: Federal Register Volume 74 Number 239. December 15, 66496-66546.
- USEPA 2020a. 2017 National Emissions Inventory (NEI) Data. Retrieved from United States Environmental Protection Agency: <https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data>.
- USEPA 2020b. Colorado Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants. Retrieved from United States Environmental Protection Agency: https://www3.epa.gov/airquality/greenbook/anayo_co.html.
- USFWS 2020. IPac Resource List. Accessed October 30.
- Wikipedia 2021. Colorado Springs Airport. https://en.wikipedia.org/wiki/Colorado_Springs_Airport#cite_note-Airport-1. Accessed June 16, 2021.

Appendix A
Correspondence and Outreach

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STATE HISTORIC PRESERVATION OFFICE CORRESPONDENCE

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DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Lieutenant Colonel Jeremy V. Oldham
Commander
10th Civil Engineer Squadron
8120 Edgerton Drive, Suite 40
USAF Academy CO 80840-2400

Mr. Steve Turner, AIA
History Colorado
1200 Broadway
Denver CO 80203-2137

Dear Mr. Turner

The United States Air Force Academy (USAFA) is in the early stages of planning new activities at USAFA's Bullseye Auxiliary Airfield (BAA). The proposed new undertaking will involve parachute and soaring (glider) cadet training at BAA. In other recent consultations with your office, BAA was inventoried for cultural resources (HC #75875; HC #70085). By the present letter, we are initiating contact with you via the National Historic Preservation Act, Section 106, 36 CFR § 800.3, and providing preliminary information on the new activities proposed for BAA.

This new undertaking is needed to ensure that USAFA's 94th and 98th Flying Training Squadrons have additional flexibility and capability to allow cadets to parachute or soar at a location away from USAFA's main location. Besides planning conveyed by the present communication under Section 106, USAFA will also develop a National Environmental Policy Act environmental assessment for the proposed undertaking.

The current concepts of the undertaking portray no significant ground disturbance, and the project's Area of Potential Effects may be closely aligned with the present BAA footprint of approximately 197 acres leased from the state of Colorado (Attachment 1). At present, in keeping with this step in the Section 106 process, we wish to (1) give you early coordination particularly should you have questions or comments at this time, and (2) solicit your concurrence on, or suggestions otherwise, for the Section 106 stakeholders indicated in Attachment 2. At this time, details on this project's schedule are lacking other than USAFA anticipates planning to be completed in calendar year 2021.

Integrity - Service - Excellence

For questions or comments please contact Mr. Erwin Roemer, 10 CES/CENP, USAFA Cultural Resources Manager, at erwin.roemer@us.af.mil or (719) 333-7341. Thank you for consideration of this early communication, and for the support you and your staff provide to USAFA on other Section 106-related matters.

Sincerely

OLDHAM.JEREMY.VON.115 Digitally signed by
8169130 OLDHAM.JEREMY.VON.1150160930
Date: 2020.10.20 15:46:54 -0500
JEREMY V. OLDHAM, PE, Lt Col, USAF

- 2 Attachments:
1. Map of BAA
 2. Initial List of Consulting/Interested Parties

ATTACHMENT 1
United States Air Force Academy (USAFA) Cultural Resources Section (CRS)
Section 106 Initiation
 Map of Bullseye Auxiliary Airfield, vicinity of Ellicott, CO



Aerial overview of existing Bullseye Auxiliary Airfield with access road.

ATTACHMENT 2
 Consulting/Interested Parties

- Apache Tribe of Oklahoma
- Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation
- Cheyenne and Arapaho Tribes of Oklahoma
- Cheyenne River Sioux Tribe
- Comanche Nation of Oklahoma
- Crow Nation
- Eastern Shoshone Tribe of the Wind River Reservation
- Flandreau Santee Sioux Tribe of South Dakota
- Fort Belknap Indian Community
- Fort Sill Apache Tribe
- Jicarilla Apache Tribe
- Kiowa Tribe of Oklahoma
- Lower Brule Sioux Tribe of the Lower Brule Reservation
- Mescalero Apache Tribe
- Navajo Nation
- Northern Arapaho Tribe
- Northern Cheyenne Tribe
- Oglala Sioux Tribe
- Pawnee Nation of Oklahoma
- Pueblo de Coehiti
- Pueblo of Picuris
- Pueblo of Santa Ana
- Pueblo of Santa Clara
- Pueblo of Taos
- Pueblo of Zuni
- Rosebud Sioux Tribe
- Santee Sioux Nation
- Southern Ute Indian Tribe
- Spirit Lake Nation
- Standing Rock Sioux Tribe
- Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nation
- Ute Indian Tribe of the Uintah and Ouray Reservation
- Ute Mountain Ute Tribe
- Yankton Sioux Tribe

- Colorado State Historic Preservation Officer (SHPO)
- Colorado State Land Board
- El Paso County



Lieutenant Colonel Jeremy V. Oldham
Commander
10th Civil Engineer Squadron
U. S. Air Force Academy Colorado
Department of the Air Force
8120 Edgerton Drive, Suite 40
USAF Academy, Colorado 80840-2400

RE: USAFA's Bullseye Auxiliary Airfield Parachute and Glider Cadet Training (HC# 78812)

Dear Lieutenant Colonel Oldham,

Thank you for your correspondence dated October 20, 2020 and received by our office on October 22, 2020 requesting the review of the above referenced undertaking under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations 36 CFR 800.

Your October 2020 correspondence only seeks to initiate consultation with our office regarding the subject undertaking according to 36 CFR 800.3. The October 2020 letter notes that the subject undertaking involves the development of a parachute and glider training area for cadets at Bullseye Auxiliary Airfield. The provided documentation, however, notes that plans for the proposed undertaking have not been developed and that your agency will consult with our office according to 36 CFR 800.4 through 36 CFR 800.6 in future correspondences.

We appreciate the initiation of the Section 106 process for the subject undertaking with our office. We look forward to reviewing additional information on the undertaking as it is developed. In particular, we look forward to receiving information on the finalized location of the training area as well as any access routes or staging areas that will be developed for the proposed undertaking.

The provided documentation requests that we review a list of stakeholders that was submitted with the October 2020 correspondence. After review of the documentation provided, we do not have additional suggestions or comments at this time. We look forward to continued consultation for the subject undertaking according to 36 CFR 800.3 through 36 CFR 800.6.

We request being involved in the consultation process with the local government, which as stipulated in 36 CFR 800.3 is required to be notified of the undertaking, and with other consulting parties. Additional information provided by the local government or consulting parties might cause our office to re-evaluate our eligibility and potential effect findings. Please note that our compliance letter does not end the 30-day review period provided to other consulting parties.

Thank you for the opportunity to comment. If you have any questions, please contact Matthew Marques, Section 106 Compliance Manager, at (303) 866-4678, or matthew.marques@state.co.us.

Sincerely,

Dr. Holly Kathryn Norton Digitally signed by Dr. Holly Kathryn Norton
Date: 2020.10.23 11:26:33 -06'00'

Steve Turner, AIA
State Historic Preservation Officer

We are now accepting electronic consultation through our secure file transfer system, MoveIT. Directions for digital submission and registration for MoveIT are available at <https://www.historycolorado.org/submitting-your-data-preservation-programs>.

WWW.HISTORYCOLORADO.ORG

HISTORY COLORADO CENTER 1200 BROADWAY DENVER CO 80203

WWW.HISTORYCOLORADO.ORG

HISTORY COLORADO CENTER 1200 BROADWAY DENVER CO 80203



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Lieutenant Colonel Jeremy V. Oldham
Commander
10th Civil Engineer Squadron
8120 Edgerton Drive, Suite 40
USAF Academy CO 80840-2400

Mr. Steve Turner, AIA
History Colorado
1200 Broadway
Denver CO 80203-2137

Dear Mr. Turner

The United States Air Force Academy (USAFA) contacted your office in October 2020 to initiate consultation on proposed soaring and parachute operations at USAFA's Bullseye Auxiliary Airfield (BAA). Your office responded (Attachment 1) that you look forward to additional consultation once more information is provided on the undertaking, designated HC#78812. This letter transmits the project's description (Attachment 2) for details on the proposed BAA soaring and parachute operations. Based on the information presented, USAFA requests your concurrence on our proposed determination "no historic properties affected" as described in 36 CFR § 800.4(d)(1).

Due to the nature and scope of this undertaking, in accordance with 36 CFR 800.2(c) USAFA is sending duplicate information to American Indian tribes (Attachment 3). Other stakeholders consulted are El Paso County and the State Land Board. We will address any comments or concerns therefrom. This Section 106 consultation also facilitates a National Environmental Policy Act environmental assessment in which additional stakeholders, including the public, are being engaged.

For questions please contact Mr. Erwin Roemer, 10 CES/CENP, USAFA Cultural Resources Manager at erwin.roemer@us.af.mil or teleworking (646) 673-4642. We appreciate your review and assistance on this matter.

Sincerely

OLDHAM, JEREMY, VO Digitally signed by
N.1158169130 OLDHAM, JEREMY, VO#1158169130
Date: 2021.05.24 17:16:12 -0600
JEREMY V. OLDHAM, PE, Lt Col, USAF

3 Attachments:

1. SHPO correspondence from Section 106 initiation (HC#78812)
2. Project Description
3. List of Consulting Parties

ATTACHMENT 2

United States Air Force Academy (USAFA) Cultural Resources Section (CRS)
Section 106 Undertaking Description for
Parachute and Soaring Operations at Bullseye Auxiliary Airfield, Colorado

Undertaking and Summary:

Conduct parachute and soaring operations at Bullseye Auxiliary Airfield (BAA). This additional project description document provides the details on the proposed soaring and parachute operation at BAA and how those operations would affect cultural resources. Based on the information presented, USAFA proposes a determination of "no historic properties affected" as described in 36 CFR § 800.4(d)(1).

Background and Purpose of Undertaking:

The 306th Flying Training Group (306 FTG) is the airmanship-training unit located at USAFA. The 306 FTG primarily operates from Davis Airfield (also known as the Main Airfield) on the USAFA campus, but also uses Bullseye Auxiliary Airfield (Bullseye) (approximately 30 miles southeast of the Academy), and Colorado Springs Airport (see Figure 1). The 306 FTG ensures that the glider (i.e., soaring), parachuting, and powered flight courses offered at the Academy contribute to the leadership and development of cadets. The 306 FTG provides management and oversight of training to 2,500 cadets and 2,200 undergraduate flight-training candidates annually. The 306 FTG consists of five training squadrons (the 1st Flying Training Squadron, 306th Operations Support Squadron, 94th Flying Training Squadron [94 FTS], 557th Flying Training Squadron, and 98th Flying Training Squadron [98 FTS]).



Figure 1: Regional map showing military installations and airfields.

As part of parachute operations, during an average year, approximately 40 wind drift indicators would be dropped from the UV-18 aircraft. These drift indicators consist of a 6-foot long crepe paper streamer attached to a thin metal rod (approximately 6 inches long and 1/8 inch in diameter) (Figure 3). These indicators are used to verify wind conditions immediately prior to jumps. Wind drift indicators that land on Bullseye would be recovered by foot. It is estimated that approximately 10 of these indicators per year could be carried by the wind outside the boundaries of Bullseye and land in the pastures surrounding the airfield. It is estimated that the majority of these indicators would remain within a 3,000 foot buffer surrounding the Bullseye boundary (Figure 4). Recovery of these indicators would be handled on a case-by-case basis, with USAF striving for a pedestrian recovery, unless coordination with the surrounding lessee prescribes they not be recovered or that the lessee will recover them and return them to USAFA.



Figure 3. Wind Drift Indicator



Figure 4. Aerial overview of existing Bullseye Auxiliary Airfield with access road; showing 3000-foot buffer that up to 10 wind indicators may land in each year. This blue shaded area is the physical APE for the project.

For training days when soaring operation occur, up to six tow planes (PA-18 aircraft) would be flown from Davis Airfield to Bullseye. Up to 12 sailplanes would be hauled to Bullseye in trailers and assembled onsite in the Glider Assembly area (Figure 2). Soaring operations would be conducted inside of a circular area with a five nautical mile radius centered on Bullseye. Soaring operations would occur up to 9,500 MSL in the Proposed Soaring Area located in the northeast quadrant of the circular area (see Figure 5).



Figure 5. Flight navigation chart showing proposed area of soaring operations.

The ability to schedule parachute and soaring operations at Bullseye would increase operational flexibility and capabilities because the wind conditions at Bullseye are often more favorable than those at Davis Airfield; therefore, parachute and soaring operations at Bullseye would be less likely to be impacted by wind conditions. Parachute and soaring operations at Bullseye would still be planned several weeks in advance; however, because the weather conditions at Bullseye are generally more favorable than those at Davis Airfield, there is less chance that these operations would be cancelled. Because these operations are planned weeks in advance, sudden weather changes at Davis Airfield would not result in immediate unplanned shifts to Bullseye. Bullseye would be used for parachute operations for up to 10 weeks per year and for soaring operations up to 66 days per year. Because parachuting, soaring, and powered flight operations will not be conducted simultaneously at BAA, it is unclear how much additional use the facility will receive. It is estimated that if all operations can be scheduled perfectly to not conflict, the use of the field could increase by 40 percent. However, it is unlikely that scheduling and weather will cooperate to facilitate such use.

Steps Taken to Identify the Area of Potential Effects (APE):

The physical APE (Figure 4) for the undertaking encompasses the BAA and the 3000-foot buffer around it where it is possible USAFA staff could walk out and pick up errant wind indicators. On BAA itself there will only be temporary facilities set up for training days, involving no ground disturbance. All physical activities with the potential to affect historic properties will occur within this APE. The flying of powered tow planes, gliders, and jump aircraft in the air space above BAA have no potential to physically affect historic properties. While these activities could have limited visual and limited auditory effects to any historic properties on the ground, where historic properties could be present, USAFA has operated powered aircraft in this airspace from BAA since 1985, with few complaints from the public over the years and no impacts of any nature regarding historic properties. Currently, a dozen or more aircraft are present in the airspace on an average powered flight day. On proposed parachute operation days, only two powered jump aircraft would be in the airspace, and on proposed soaring days no more than 6 powered towing aircraft and 12 sailplanes would be in the airspace. Obviously sailplanes would have a visual presence similar to powered aircraft, but they would produce no noise. After 35 years of operation, it has been demonstrated that USAFA aircraft operate at BAA with no reported impacts to historic properties. The USAFA submits that there is no potential for significant visual or auditory impacts from the aircraft operation, so BAA air space activity is considered not pertinent as a direct or indirect APE.

Potential for Impacts to Historic Properties:

The entirety of BAA was surveyed by archaeologists from Texas State University and the Air Force Civil Engineer Center during the summer of 2018 (Owens and Miller 2018). Likely prehistoric cultural resources are shown in Figures 6 and 7 and included an open lithic scatter of unknown age (5EP.8278) and five randomly scattered isolated finds (5EP.8279, 5EP.8280, 5EP.8281, 5EP.8282, 5EP.8284). An isolated farm equipment part composed the only historic cultural resource (5EP.8283). None of the newly identified cultural resources were recommended National Register of Historic Places (NRHP)-eligible. However, 5EP.8279, an ash stain of unknown age, was recommended to be a "needs data" cultural resource requiring protection by avoidance until evaluative testing occurs. In a letter dated April 26, 2019, the Colorado State Historic Preservation Officer (SHPO) concurred with these determinations of eligibility (HC#75875). The area to the east of the airfield, consisting of 188 acres, was inventoried previously resulting in the identification of 3 archaeological sites (5EP.961, prehistoric open camp; 5EP.960, prehistoric open lithic locale; 5EP.958, historical trash dump with associated depression) and 3 isolated finds (5EP.959, flake; 5EP.962, projectile point; 5EP.957, seraper) (Hackett Bambrey 1987). None of these resources are within the 3000-foot buffer around BAA where pedestrian access might occur. The remainder of the 3000-foot buffer around BAA has not been inventoried.

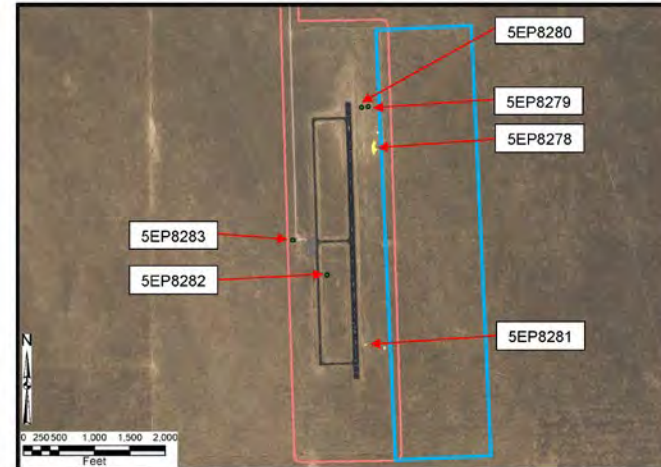


Figure 6: Aerial overview of BAA showing 2018 survey area (pink polygon), 1987 survey area (blue polygon) and location of cultural resources in APE.

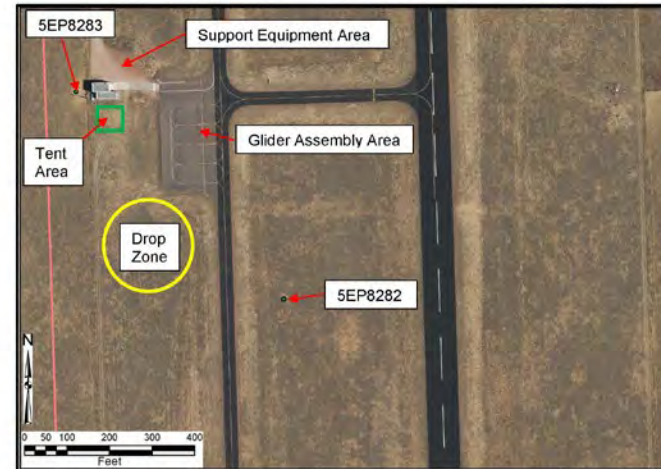


Figure 7: Aerial overview of BAA showing location of Isolated Finds and Temporary Facilities.

ATTACHMENT 3
Consulting Parties

As noted above, no ground disturbance is expected to result from the soaring or parachuting operations. The support equipment and glider assembly areas are a prepared dirt and paved area, respectively, adjacent to the fire station that are regularly used for parking and existing operational activities. The temporary tent is in a grass area just south of the fire station that has been regularly used for outdoor living activities by the fire crew. No cultural resources have been identified in these areas. The additional use of these areas has no potential to create impacts to historic properties. The drop zone will be in an undeveloped, mowed natural grass area just south of the temporary tent area and the fire station. The inventory of this area identified no cultural resources, so the landing of cadets by parachute in this area has no potential to impact historic properties. Other than the landing and takeoff of aircraft from the runways, the only action that will occur on the remainder of BAA and in the 3000-foot buffer area around it is infrequent pedestrian access to pick up wind indicators. Within the BAA boundary, the area, except the location of SEP.8279, is required to be mowed. Outside the BAA boundary the lessee grazes cattle and occasionally drives vehicles to check on the cattle, water tanks, etc. The SHPO's COMPASS system indicates no recorded historic properties in the 3000-foot buffer area (beyond BAA) and USAFA submits that the infrequent pedestrian access to that 3000-foot buffer is a type of activity so minimal that it has no potential to impact historic properties presuming any might be present, and therefore no new field survey for that larger area is required.

Determination of Effects:

As defined by 36 CFR§800.5(a)(1), "an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association." Based on the requirements and planned use of BAA for soaring and parachute operations, the types of actions to occur and the locations these actions will occur lead USAFA to propose a determination of "no historic properties affected" as described in 36 CFR § 800.4(d)(1), because the undertaking will have no direct, indirect, or cumulative adverse effect on any historic properties.

Should potential impacts to historic properties be identified in the future due to a change in the submitted scopes of work, proposed locations, or due to activities proposed beyond the scope of the undertaking, follow-up Section 106 consultation will occur as required.

References

- Hackett Bambrey, Lucy
1987 Cultural Resources Investigations for the U.S. Air Force Academy Auxiliary Airfield, El Paso County, Colorado. IT Corporation, Englewood, Colorado. Contract No. #F0561186D0042. Submitted to the U.S. Air Force Academy, Civil Engineering Division, Colorado Springs, Colorado.
- Owens, Mark and Pamela Miller
2018 Archaeological Survey for the Repair of the Bullseye Airfield Perimeter Fence, El Paso County, Colorado. Air Force Civil Engineer Center, Peterson Air Force Base, Colorado. Submitted to United States Air Force Academy, 10th Civil Engineer Squadron, Colorado. Copy on file at the United States Air Force Academy, Colorado.

- Apache Tribe of Oklahoma
- Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation
- Cheyenne and Arapaho Tribes of Oklahoma
- Cheyenne River Sioux Tribe
- Comanche Nation of Oklahoma
- Crow Nation
- Eastern Shoshone Tribe of the Wind River Reservation
- Flandreau Santee Sioux Tribe of South Dakota
- Fort Belknap Indian Community
- Fort Sill Apache Tribe
- Jicarilla Apache Tribe
- Kiowa Tribe of Oklahoma
- Lower Brule Sioux Tribe of the Lower Brule Reservation
- Mescalero Apache Tribe
- Navajo Nation
- Northern Arapaho Tribe
- Northern Cheyenne Tribe
- Oglala Sioux Tribe
- Pawnee Nation of Oklahoma
- Pueblo de Cochiti
- Pueblo of Picuris
- Pueblo of Santa Ana
- Pueblo of Santa Clara
- Pueblo of Taos
- Pueblo of Zuni
- Rosebud Sioux Tribe
- Santee Sioux Nation
- Southern Ute Indian Tribe
- Spirit Lake Nation
- Standing Rock Sioux Tribe
- Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nation
- Ute Indian Tribe of the Uintah and Ouray Reservation
- Ute Mountain Ute Tribe
- Yankton Sioux Tribe

- Colorado State Historic Preservation Officer (SHPO)
- Colorado State Land Board
- El Paso County



Lieutenant Colonel Jeremy V. Oldham
Commander
10th Civil Engineer Squadron
U. S. Air Force Academy Colorado
Department of the Air Force
8120 Edgerton Drive, Suite 40
USAF Academy, Colorado 80840-2400

RE: USAFA's Bullseye Auxiliary Airfield Parachute and Glider Cadet Training (HC# 78812)

Dear Lieutenant Colonel Oldham,

Thank you for your correspondence dated and received by our office on May 24, 2021 continuing consultation for the above referenced undertaking under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations 36 CFR 800.

We appreciate the additional documentation provided for our review. Based on the documentation provided, we agree that your finding of no historic properties affected [36 CFR 800.4(d)(1)] is appropriate for the subject undertaking.

Should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register eligibility criteria (36 CFR 60.4) in consultation with our office pursuant to 36 CFR 800.13. Also, should the consulted-upon scope of the work change, please contact our office for continued consultation under Section 106 of the NHPA.

We request being involved in the consultation process with the local government, which as stipulated in 36 CFR 800.3 is required to be notified of the undertaking, and with other consulting parties. Additional information provided by the local government or consulting parties might cause our office to re-evaluate our eligibility and potential effect findings. Please note that our compliance letter does not end the 30-day review period provided to other consulting parties.

Thank you for the opportunity to comment. If you have any questions, please contact Matthew Marques, Section 106 Compliance Manager, at (303) 866-4678, or matthew.marques@state.co.us.

Sincerely,

Dr. Holly Kathryn Norton

Steve Turner, AIA
State Historic Preservation Officer

Digitally signed by Dr. Holly Kathryn
Norton
Date: 2021.06.03 13:55:55 -06'00'

We are now accepting electronic consultation through our secure file transfer system, MoveIT. Directions for digital submission and registration for MoveIT are available at <https://www.historycolorado.org/submitting-your-data-preservation-programs>.

HISTORY COLORADO | 1200 BROADWAY | DENVER, CO 80203 | 303.441.9875 | HISTORYCOLORADO.ORG

From: Marques - HC, Matthew <matthew.marques@state.co.us>

Sent: Friday, June 4, 2021 2:51 PM

To: ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP <erwin.roemer@us.af.mil>

Subject: [Non-DoD Source] RE: USAFA's Bullseye Auxiliary Airfield Parachute and Glider Cadet Training (HC# 78812)

Dear Mr. Roemer,

From: History Colorado, Office of Archaeology and Historic Preservation

Attached is our letter on the subject undertaking in Adobe PDF format.

Please contact me at the below information if you have any questions.

Sincerely,

--

Matthew Marques

Section 106 Compliance Manager

History Colorado | State Historic Preservation Office

303.866.4678 | matthew.marques@state.co.us

1200 Broadway | Denver, Colorado 80203 | HistoryColorado.org

The Office of Archaeology and Historic Preservation is now accepting **electronic submissions** through its secure file transfer system, **MoveIT**. Information and registration for MoveIT is available [here](#). Please continue to contact the appropriate personnel or refer to our [website](#) for guidance on permit related items, file searches, and curation agreements.

Under the Colorado Open Records Act (CORA), all messages sent by or to me on this state-owned email account may be subject to public disclosure.

TRIBAL CORRESPONDENCE

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To support this EA, the USAF consulted on a government-to-government basis with tribes that are federally affiliated with the Academy. Tribes were initially notified of the project on 22 October 2020 and then formally requested to participate in the Section 106 process in May 2021. The list of Tribes contacted and summary responses are included in Table A-1.

Table A-1. Record of Tribal Outreach

Tribe	Section 106 Notification Letter Sent	Section 106 Letter Sent	Summary Response	Follow-Up Correspondence (email/phone calls)
Apache Tribe of Oklahoma	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Cheyenne and Arapaho Tribes of Oklahoma	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Cheyenne River Sioux Tribe	10/22/2020	5/2021	No effect.	6/22/21, email 6/30/21, phone call
Comanche Nation of Oklahoma	10/22/2020	5/2021	No concerns, no properties. No additional consultation needed.	Response received, no follow up necessary.
Crow Nation	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Eastern Shoshone Tribe of the Wind River Reservation	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Flandreau Santee Sioux Tribe of South Dakota	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Fort Belknap Indian Community	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Fort Sill Apache Tribe	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Jicarilla Apache Tribe	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Kiowa Tribe of Oklahoma	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Lower Brule Sioux Tribe of the Lower Brule Reservation	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Mescalero Apache Tribe	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Navajo Nation	10/22/2020	5/2021	No concerns, no additional consultation needed.	Response received, no follow up necessary.
Northern Arapaho Tribe	10/22/2020	5/2021	Additional information was requested. USAF provided additional information on 3 November 2020 and May 2021.	6/22/21, email 6/30/21, phone call
Northern Cheyenne Tribe	10/22/2020	5/2021	Additional consultation is only needed if the project would have ground disturbance.	6/22/21, email 6/30/21, phone call
Oglala Sioux Tribe	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call

Tribe	NEPA Notification Letter Sent	Section 106 Letter Sent	Summary Response	Follow-Up Correspondence (email/phone calls)
Pawnee Nation of Oklahoma	10/22/2020	5/2021	Initial response received. Interested in further information. USAF provided information on 3 December 2020 and May 2021.	Response received, no follow up necessary.
Pueblo de Cochiti	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Pueblo of Picuris	10/22/2020	5/2021	No comment, request additional information.	6/22/21, email 6/30/21, phone call
Pueblo of Santa Ana	10/22/2020	5/2021	No comments/no concerns.	6/22/21, email 6/30/21, phone call
Pueblo of Santa Clara	10/22/2020	5/2021	Initial response received. Interested in further information.	6/22/21, email 6/30/21, phone call
Pueblo of Taos	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Pueblo of Zuni	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Rosebud Sioux Tribe	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Santee Sioux Nation	10/22/2020	5/2021	No adverse effect.	6/22/21, email 6/30/21, phone call
Southern Ute Indian Tribe	10/22/2020	5/2021	Concur, no further consultation required.	Response received, no follow up necessary.
Spirit Lake Nation	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Standing Rock Sioux Tribe	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nation	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Ute Indian Tribe of the Uintah and Ouray Reservation	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Ute Mountain Ute Tribe	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call
Yankton Sioux Tribe	10/22/2020	5/2021	No response received.	6/22/21, email 6/30/21, phone call

From: [SCHRIEVER, BERNARD A II, CTR USAF/USAF 10 CES/CFNP](#)
To: [Nancy Phare](#)
Subject: Government to Government Section 106 Consultation Request for Comments: USAFA - Bullseye Auxiliary Airfield Activities
Date: Thursday, October 22, 2020 4:01:00 PM
Attachments: Tab 2 Tribes Others Ltr BAA EA.pdf
Atrh 1-2 BAA EA.docx

Lieutenant Colonel Jeremy V. Oldham
Commander
10th Civil Engineer Squadron
8120 Edgerton Drive, Suite 40
USAF Academy CO 80840-2400

JEREMY V. OLDHAM, Lt Col USAF

P.E.

2 Attachments:
1. Map of BAA
2. Initial List of Consulting/Interested Parties

Dear Tribal Historic Preservation Officer and other stakeholders

The United States Air Force Academy (USAF) is in the early stages of planning new activities at Bullseye Auxiliary Airfield (BAA). The proposed new undertaking will involve parachute and soaring (glider) cadet training at BAA. By the present letter, we are initiating engagement with you via National Historic Preservation Act, Section 106, 36 CFR § 800.3, and providing preliminary information on the proposed undertaking. For other purposes, USAFA recently completed cultural resources inventory of BAA. That inventory was coordinated with the Colorado State Historic Preservation Officer and the federally-recognized tribes USAFA routinely consults. Archeological evidence of interest to tribes is present at BAA.

This new undertaking is needed to ensure that USAFA's 94th and 98th Flying Training Squadrons have additional flexibility and capability to allow cadets to parachute or soar at a location away from USAFA's main location. Besides planning conveyed by the present communication under Section 106, USAFA will also develop a National Environmental Policy Act environmental assessment for the proposed undertaking.

The current concepts of the undertaking portray no significant ground disturbance, and the project's Area of Potential Effects may be closely aligned with the present BAA footprint of approximately 197 acres leased from the state of Colorado (Attachment 1). At present, in keeping with this step in the Section 106 process, we wish to (1) give you early coordination particularly should you have questions or comments at this time, and (2) solicit your concurrence or suggestions otherwise, for the Section 106 stakeholders indicated in Attachment 2. At this time, details on the project's schedule are lacking other than USAFA anticipates planning to be completed in calendar year 2021.

Please submit your comments to the above address or via email (either is suitable for our administrative record). We respectfully request comments be transmitted within 30 days of receiving this letter. For questions please do not hesitate to contact Mr. Erwin Roemer, 10 CES/CFNP, USAFA Cultural Resources Manager, at erwin.roemer@us.af.mil, or (646) 673-4642. Your review and assistance is much appreciated.

Sincerely

COMANCHE NATION



Department of the Air Force, 10th Civil Engineer Squadron
Attn: Mr. Erwin Roemer
8120 Edgerton Drive, Suite 40
Colorado 80840-2400

November 2, 2020

Re: Government to Government Section 106 Consultation Request for Comments:
USAFA Bullseye Auxiliary Airfield Activities

Dear Mr. Roemer:

In response to your request, the above reference project has been reviewed by staff of this office to identify areas that may potentially contain prehistoric or historic archeological materials. The location of your project has been cross referenced with the Comanche Nation site files, where an indication of "*No Properties*" have been identified. (IAW 36 CFR 800.4(d)(1)).

Please contact this office at (580) 595-9960/9618) if you require additional information on this project.

This review is performed in order to identify and preserve the Comanche Nation and State cultural heritage, in conjunction with the State Historic Preservation Office.

Regards

Comanche Nation Historic Preservation Office
Theodore E. Villicana, Technician
#6 SW "D" Avenue, Suite C
Lawton, OK. 73502

Consult Response delayed due to Covid-19 work conditions.

From: Crystal C'Bearing <cbearing.nathpo@gmail.com>

Sent: Friday, October 23, 2020 2:20 PM

To: SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP <bernard.schriever.ctr@us.af.mil>;

ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP <erwin.roemer@us.af.mil>

Subject: [Non-DoD Source] Re: Government to Government Section 106 Consultation Request for

Comments: USAFA - Bullseye Auxiliary Airfield Activities

Hello Mr. Schriever,

The Northern Arapaho Tribe received your notification of the following proposed project. Based on the information provided, please provide an archaeological inventory of the Direct and Indirect APE within a 1-mile radius of the BAA to help us make a determination for the proposed project.

Please include the Northern Arapaho THPO in any and all future correspondence.

Thank you,
Crystal

Crystal C'Bearing

Deputy Director
Northern Arapaho Tribe
Tribal Historic Preservation Office
P.O. Box 67
St. Regis, Wyoming 82524
cbearing.nathpo@gmail.com

(office) 307-846-1625
(cell) 307-840-2933
(fax) 307-826-1974

COMANCHE NATION P.O. BOX 908 / LAWTON, OK 73502
PHONE: 580-492-4988 TOLL FREE: 1-877-492-4988

From: [ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP](mailto:erwin.roemer@us.af.mil)
To: [Joseph Reed](mailto:Joseph.Reed)
Cc: [BELOING, SAMANTHA 1 CTR USAF USAFA 10 CES/CENP](mailto:BELOING_SAMANTHA_1_CTR_USAF_USAFA_10_CES/CENP); [SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENP](mailto:SCHRIEVER, BERNARD A II_CTR_USAF_USAFA_10_CES/CENP)
Subject: RE Parachute training at Bullseye Airfield US Air Force Academy
Date: Thursday, December 3, 2020 10:28:59 AM

Hello. Sorry it took a while to get back to you on explanation RE your questions from email of 23 Nov (copied below).

"Have the artifacts discovered during the past pedestrian surveys been collected for preservation and curation?"

No artifacts have been collected from the archeological site(s) at Bullseye airfield (BAA). The BAA is on land leased from State of Colorado. That's not however a factor in collection or not of artifacts. For the archeological site(s) I don't recall if we earlier provided to you the Air Force-associated survey report of BAA, but if not let me know and we can send it by DoD Safe file transfer system. At BAA, a charcoal presence is recorded as a hearth of unknown age (and has been left at National Register of Historic Place's (NRHP) eligibility status "needs data" i.e. managed as a potential NRHP-eligible feature while it remains of unknown NRHP-eligibility. There is a lithic (flakes) scatter at BAA and it was evaluated as not NRHP-eligible. This new project for parachuting/gliding at BAA may give us an opportunity to put a more formal protection/management plan in place, such as for the hearth feature. Today's BAA mowing type maintenance avoids the hearth.

"Will there be use of vehicles or ATVs across the area where these artifacts were discovered?"

At present we simply don't know how the operation of the proposed parachuting/gliding at BAA might pertain to vehicles/ATVs accessing area of the BAA leased land, or for activities such as retrieving wind flag markers (metal pins with streamers, dropped from the air to gauge wind direction, etc.) which may drop beyond the BAA. The "next step" Sec. 106 communications on Area of Potential Effects (APE), cultural resources (CR) inventory of that APE, and assessment of effects for CR is all yet to be consulted to you and the CO SHPO/other tribes. The National Environmental Act Policy (NEPA) environmental assessment will have information besides what you'll get under National Hist. Preservation Act, Section 106 (information etc. under these two federal planning processes of course will be aligned). All that said, we CR staff at the Academy are going to be keeping a close watch that any of the proposed undertaking's activities, including possible use of vehicles/ATVs, is planned to avoid impacts to known and potential CR sites, artifacts, etc. upon or beyond the BAA.

I hope the above helps. If needed we can set up a teleconference and further discuss this project (including later too, after you get more information from us in the next Sec. 106 letter for specific APE, etc.). I expect that additional Sec. 106 info should be sent by January 2021 (my guess). We sincerely appreciate the good advice you've given us on other projects and now for this one. Stay safe on the virus stuff! Call me if needed. Best, Erwin

Erwin Roemer, RPA
Cultural Resources Manager
U.S. Air Force Academy (10 CES/CENP)

telework pers cell (646) 673-4642 Mountain Time
email erwin.roemer@us.af.mil

Reference email

From: Joseph Reed <jreed@pawneeation.org>
Sent: Monday, November 23, 2020 9:36 AM
To: ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP <erwin.roemer@us.af.mil>
Subject: [Non-DoD Source] Parachute training at Bullseye Airfield

Kèkaris,

I have a question regarding the plan for parachute training at Bullseye. Have the artifacts discovered during the past pedestrian surveys been collected for preservation and curation? Will there be use of vehicles or ATVs across the area where these artifacts were discovered? I'm worried that activity across that particular spot at Bullseye could destroy those artifacts and potentially any that have not been discovered.

Nawa irti,
Matt

Matt Reed
Tribal Historic Preservation Officer
Cultural Resource Division
Pawnee Nation of Oklahoma
PO Box 470
657 Harrison Street
Pawnee, OK 74058
918-762-2180 office
(END)

From: [ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP](#)
To: [Danny D. Naranjo](#)
Subject: RE: Government to Government Section 106 Consultation Request for Comments: USAFA - Bullseye Auxiliary Airfield Activities
Date: Tuesday, November 3, 2020 11:43:07 AM
Attachments: [AF Academy archeo report Bullseye Airfield Oct 2018.pdf](#)

Hello again. Here is some follow-on information from your request (copied below) to know what cultural resources are in or near the Air Force Academy's Bullseye Auxiliary Airfield (BAA). The airfield was archeologically surveyed with a report dated Oct 2018 (attached). That report was provided to you for a 2019 project at BAA involving a bird deterrent project. We've looked at the State of CO records for the local area around BAA and there's nothing recorded for approx. one mile radius (a typical situation, as I'm sure you know). The 2018 report also looked at surrounding area, with same finding. If you'd like, I can email to you the AF Academy letter and your email response on that previous project for bird deterrence (letter of 16 April 2019; your email reply 6 May 2019).

The bottom line remains: for this new project proposed for the Academy's Cadets to glide and/or parachute to BAA, it's so early in planning we don't have a Sec. 106 proposed Area of Potential Effects, etc. It likely will be some point in 2021 before you will see a letter communicating to you on the next steps of Sec. 106 for this project. We do expect BAA's 2018 archeological survey report to have sufficient information to know what's directly at the BAA footprint shown by the map sent to you by the initial letter dated 20 Oct 2020. This new project also will have a National Environmental Policy Act (NEPA) environmental assessment developed in addition to the Sec. 106 planning.

If you would like to visit soon, or later, by telephone on this project of course let me know. I could seek to get someone on-line who's knowledgeable on the current expectations, however preliminary, for the proposed activities. Well stay safe and on the continuing COVID-19 issues we wish the very best for Santa Clara Pueblo! Best, Erwin

From: ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP
Sent: Monday, October 26, 2020 2:43 PM
To: Danny D. Naranjo <ddnaranjo@santaclarapueblo.org>
Subject: RE: Government to Government Section 106 Consultation Request for Comments: USAFA - Bullseye Auxiliary Airfield Activities

Hello Mr. Naranjo. The precise Area of Potential Effects (APE) is not fine-tuned for this project but probably will be much like the map provided. For example, Cadets will be parachuting to the location but I'm not sure if they will have a buffer area beyond the airfield area of the map. There is at least one prehistoric type site (flakes) and one hearth (charcoal, age of hearth unknown) on the airfield lands (leased from state of Colorado). I will meet with the cultural staff who help me, Samantha Belding and Beau Schriever by tomorrow morning and we can get you an update by email. An official letter for the next step of Sec. 106 for this project (an official proposed APE; description of the full cultural resources inventory in that APE; and so forth) may take a while. I believe Ms. Belding mentioned to me when the present letter went out (what you have) that planning information is so preliminary all we can say at this point is what's in the letter you received (initiating Sec. 106). Anyway look for an update soon by email, and then at some point that next "official" letter for Sec. 106 process. -- I hope you, family, all tribal members are doing okay esp. with regard to the COVID-19 problems. Best, Erwin

Erwin Roemer, RPA
Cultural Resources Manager
U.S. Air Force Academy (10 CES/CENP)
telework pers cell (646) 673-4642 Mountain Time
Mon/Tue/Wed also may be at office tel (719) 333-7341
email erwin.roemer@us.af.mil

From: Danny D. Naranjo <ddnaranjo@santaclarapueblo.org>
Sent: Monday, October 26, 2020 2:09 PM
To: ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP <erwin.roemer@us.af.mil>
Subject: [Non-DoD Source] Government to Government Section 106 Consultation Request for Comments: USAFA - Bullseye Auxiliary Airfield Activities

Good afternoon Mr. Roemer,

This email is in regards to the Bullseye Auxiliary Airfield Activities. according to the letter there will be no significant ground disturbance expected of the project and will maintain within the current boundaries of the auxiliary field. Is there any know resources that the project will impact, if so can we get a listing of potentially impacted sites to further aid in decision making. Thank you for contacting Santa Clara Pueblo to consult with you on this project.

Danny Naranjo
Land and Cultural Resources Tech.

Environmental Assessment for Parachute and Soaring Operations at Bullseye Auxiliary Airfield, Colorado

From: Gary <gary.lafranier@cheyennation.com>
Sent: Wednesday, December 2, 2020 2:06 PM
To: ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP <erwin.roemer@us.af.mil>
Subject: [Non-DoD Source] Bullseye Auxiliary Airfield
Importance: High

Good Afternoon,

After looking over the project, I did not notice anything concerning due to the fact that no ground disturbance will occur.

Determination of **No Effect**.

Thank You,

Gary LaFranier
FCC/ Section 106 Coordinator
Northern Cheyenne THPO
(406)477-8114
Lame Deer, MT. 59043

From: [Richard M. Begay](#)
To: [SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENP](#)
Cc: [ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP](#); [Timothy Begay](#)
Subject: [Non-DoD Source] RE: Follow up Government to Government Section 106 Consultation Request for Comments: USAFA - Bullseye Auxiliary Airfield Activities
Date: Wednesday, November 25, 2020 9:16:33 AM

Good morning

I have reviewed your letter regarding the proposed Bullseye Auxiliary Airfield activities and have no questions or concerns. Please proceed without further consultation with the Navajo Nation.

Richard M. Begay, THPO
Navajo Nation

-----Original Message-----

From: SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP <bernard.schriever.ctr@us.af.mil>
Sent: Tuesday, November 24, 2020 3:54 PM
To: garrie.killsahundred@fst.org; Michael Black Wolf <mblackwolf@fbelknap.org>;
thpocompliance@fbelknap.org; Michael.darrow@fortsillapueblo-nsn.gov; holly@mathpo.org; janthpo@gmail.com;
thpo@kiowatribe.org; Curator@kiowatribe.org; Richard M. Begay <r.begay@navajo-nsn.gov>; Teanna Limpy
<teanna.limpy@cheyennation.com>; governor@cochiti.org; Joseph Reed <jreed@pawneeation.org>; Danny D
Naranjo <dldnaranjo@santaclarapueblo.org>; behavanna@santaclarapueblo.org; Cecilia Shields
<tribal.interpreter@picurispuablo.org>
Subject: Follow-up Government to Government Section 106 Consultation Request for Comments: USAFA -
Bullseye Auxiliary Airfield Activities

WARNING: External email. Please verify sender before opening attachments or clicking on links.

From: [Cecilia Shields](#)
To: [SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENP](#); [ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP](#)
Subject: [Non-DoD Source] Re: Follow-up Government to Government Section 106 Consultation Request for Comments: USAFA - Bullseye Auxiliary Airfield Activities
Date: Wednesday, November 25, 2020 11:59:01 AM

Thank you for providing the information to your proposed project. At this time, the Pueblo of Picuris does not have any comments on the information presented. Please keep us informed as the project progresses.

Thank you.

On Tue, Nov 24, 2020 at 6:58 PM SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP <bernard.schriever.ctr@us.af.mil> wrote:

Environmental Assessment for Parachute and Soaring Operations at Bullseye Auxiliary Airfield, Colorado

From: Tim Menchego <timothy.menchego@santaana-nsn.gov>
Sent: Wednesday, January 20, 2021 10:25 AM
To: ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP <erwin.roemer@us.af.mil>
Cc: Julian T. Garcia <Julian.Garcia@santaana-nsn.gov>
Subject: [Non-DoD Source] Bullseye Auxiliary Airfield

Greetings Mr. Roemer

The pueblo of Santa Ana Tribal Historic Preservation Office is in receipt of letter dated October 20th 2020. It describes a proposed new undertaking. The pueblo has no comments and no concerns.

Thank you

Timothy Menchego
THPO
Pueblo of Santa Ana
505-274-1782
tim.menchego@santaana-nsn.gov

Procedamus en pace, en nomine christi

Pueblo of Santa Ana Confidentiality Notice: This communication and any files attached may contain confidential or privileged information. If this email message concerns legal matters, this communication and any attachments are attorney client privileged and confidential and are intended only for the use of the individual(s) or entity to which the message is addressed. If this email message and/or its attachments contains information about Santa Ana Pueblo or its subdivisions that is not generally available to the public, it is confidential, and intended only for the use of the individual(s) or entity to which the message is addressed. If you are not the intended recipient, reading, disclosure, distribution, copying or the taking of any action in reliance upon this communication is strictly prohibited. If you have received this communication in error, please immediately notify the sender by reply e mail or forward this email to postmaster@santaana-nsn.gov and destroy the original communication, including any attachments. Thank you.

From: [Misty Frazier](#)
To: [SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CEHP](#)
Subject: [Non-DoD Source] Re: Government to Government Section 106 Consultation Request for Comments: USAFA - Bullseye Auxiliary Airfield Activities
Date: Saturday, November 14, 2020 2:21:18 PM

With our initial review of your section 106 review request we find no adverse effect on any tribal historic properties.

As the project progresses and potential tribal artifacts or burial artifacts are located, we trust that proper precautions and notifications will be made.

Thank you for your time in this matter.



SOUTHERN UTE INDIAN TRIBE

Southern Ute Cultural & Preservation Department
P.O. Box 737, Mail Stop #73, Ignacio CO 81137
Phone: 970-563-0100 Fax: 970-563-1098

December 18, 2020

Erwin Roemer
USAF Academy- 10th Civil Engineer Squadron
8120 Edgerton Drive, Suite 40
USAF Academy CO, 80840

Dear Mr. Roemer,

I have reviewed your Consultation Request under section 106 of the National Historic Preservation Act regarding the Bullseye Aux Airfield project and offer the following response as indicated by the box that is checked.

- NO EFFECT:** I have determined that there are no properties of religious and cultural significance to the Southern Ute Indian Tribe that are listed on the National Register within the area of potential effect or that the proposed project will have no effect on any such properties that may be present.
- NO ADVERSE EFFECT:** I have identified properties of cultural and religious significance within the area of effect that I believe are eligible for listing in the National Register, for which there would be no adverse effect as a result of the proposed project.
- ADVERSE EFFECT:** I have identified properties of cultural and religious significance within the area of potential effect (APE) that are eligible for listing in the National Register. I believe the proposed project would cause an adverse effect on these properties.
- REQUEST FOR ADDITIONAL INFORMATION:** The Southern Ute Indian Tribe requests additional information on the planned site for its impact on properties of religious and cultural importance to the Tribe as follows: _____

Please reply to Cassandra Atencio at catencio@southernute-nsn.gov and Garrett Briggs at gbriggs@southernute-nsn.gov and refer to _____ in future ongoing correspondence with this office.

Sincerely,

Ms. Cassandra Atencio
NAGPRA Coordinator
Southern Ute Cultural Department
Southern Ute Indian Tribe

From: [Joseph Reed](#)
To: [SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP](#)
Subject: [Non-DoD Source] FW: Follow-up Government to Government Section 106 Consultation Request for Comments: USAFA - Bullseye Auxiliary Airfield Activities
Date: Tuesday, December 29, 2020 7:48:40 AM
Attachments: 12-28-2020 USAFA Bullseye.pdf

Kêkarus,
I learned this morning that the attached letter that I emailed to you yesterday has a clerical error; a transposition from an earlier letter on a different project. I do not request a pedestrian survey for your project. I will try and get you a corrected letter as quickly as possible.
Nawa iri,
matt

From: Joseph Reed
Sent: Monday, December 28, 2020 10:46 AM
To: 'SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP' <bernard.schriever.ctr@us.af.mil>
Subject: RE: Follow-up Government to Government Section 106 Consultation Request for Comments: USAFA - Bullseye Auxiliary Airfield Activities

Kêkarus,
I've attached our letter regarding the parachute and glider training at Bullseye Airfield.
Nawa iri,

Matt Reed
Historic Preservation Officer
Pawnee Nation
PO Box 470
657 Harrison Street
Pawnee, Oklahoma 74058
(918) 762-2180 ext 220
(918) 762-3662 fax
jreed@pawneenation.org

From: SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP <bernard.schriever.ctr@us.af.mil>
Sent: Tuesday, November 24, 2020 4:54 PM
To: garrie.killsahundred@fsst.org; Michael Black Wolf <mblackwolf@ftbelknap.org>; thpocompliance@ftbelknap.org; Michael.darrow@fortsillapache-nsn.gov; holly@mathpo.org; jantthpo@gmail.com; thpo@kiowatribe.org; Curator@kiowatribe.org; r.begay@navajo-nsn.gov; Teanna Limpy <teanna.limpy@cheyennation.com>; governor@cochiti.org; Joseph Reed <jreed@pawneenation.org>; Danny D. Naranjo <ddnaranjo@santaclarapueblo.org>; hchavarria@santaclarapueblo.org; Cecilia Shields <tribal.interpreter@picurisueblo.org>
Subject: Follow-up Government to Government Section 106 Consultation Request for Comments: USAFA - Bullseye Auxiliary Airfield Activities



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Ms. Erin M. Manning
Deputy Director
10th Civil Engineer Squadron
8120 Edgerton Drive, Suite 40
USAF Academy CO 80840-2400

Dear Tribal Historic Preservation Officer, Colorado State Land Board, and El Paso County

The United States Air Force Academy (USAFA) contacted you in October 2020 (Attachment 1) to initiate National Historic Preservation Act, Section 106, consultation on proposed soaring and parachute operations at USAFA's Bullseye Auxiliary Airfield (BAA). This follow-on letter transmits project description (Attachment 2) with details on the proposed soaring and parachute operations. Based on this information, we request your concurrence on our proposed determination of "no historic properties affected" as described in 36 CFR § 800.4(d)(1).

Due to the nature and scope of this undertaking, in accordance with 36 CFR 800.2(e), we are sending this information to all the federally-recognized tribes routinely consulted by USAFA (Attachment 3). The Colorado State Historic Preservation Officer also is being consulted, and we will address any comments or concerns therefrom. This Section 106 consultation is linked to a National Environmental Policy Act environmental assessment in progress with additional stakeholders including the public.

For questions please contact Mr. Erwin Roemer, 10 CES/CENP, USAFA Cultural Resources Manager, at erwin.roemer@us.af.mil or teleworking (646) 673-4642. We appreciate your time for review and assistance on this matter.

Very Respectfully

MANNING, ERIN MAR | Engineer in Charge
E.1047632192 | 10th Civil Engineer Squadron
ERIN M. MANNING, GS-14, DAF

- 4 Attachments:
1a. Consultation Initiation Package (Letter)
1b. Consultation Initiation Package (Letter Attachments)
2. Project Description
3. List of Consulting Parties

Integrity - Service - Excellence

ATTACHMENT 2
United States Air Force Academy (USAFA) Cultural Resources Section (CRS)
Section 106 Undertaking Description for
Parachute and Soaring Operations at Bullseye Auxiliary Airfield, Colorado

Undertaking and Summary:

Conduct parachute and soaring operations at Bullseye Auxiliary Airfield (BAA). This additional project description document provides the details on the proposed soaring and parachute operation at BAA and how those operations would affect cultural resources. Based on the information presented USAFA proposes a determination of "no historic properties affected" as described in 36 CFR § 800.4(d)(1).

Background and Purpose of Undertaking:

The 306th Flying Training Group (306 FTG) is the airmanship-training unit located at USAFA. The 306 FTG primarily operates from Davis Airfield (also known as the Main Airfield) on the USAFA campus, but also uses Bullseye Auxiliary Airfield (Bullseye) (approximately 30 miles southeast of the Academy), and Colorado Springs Airport (see Figure 1). The 306 FTG ensures that the glider (i.e., soaring), parachuting, and powered flight courses offered at the Academy contribute to the leadership and development of cadets. The 306 FTG provides management and oversight of training to 2,500 cadets and 2,200 undergraduate flight-training candidates annually. The 306 FTG consists of five training squadrons (the 1st Flying Training Squadron, 306th Operations Support Squadron, 94th Flying Training Squadron [94 FTS], 557th Flying Training Squadron, and 98th Flying Training Squadron [98 FTS]).



Figure 1: Regional map showing military installations and airfields.

The 98 FTS conducts annual parachute training for approximately 700 Academy cadets. This training focuses on safety and emergency procedures, and includes basic jump training as well as competitive and demonstration parachute programs. Training is conducted using UV-18 Twin Otter aircraft stationed at Peterson Air Force Base (AFB) and jump operations occur over a designated landing area at Davis Airfield.

In addition to parachute training, the Academy conducts soaring operations. The 94 FTS conducts more than 20,000 training and competition sailplane sorties per year. This training includes a basic soaring course and a solo course. Aircraft used in soaring include the TG-15 (Schempp-Hirth Duo Discus) and TG-16 (DG Flugzeugbau DG-1000) sailplanes. The soaring mission also uses Piper PA-18 Super Cub tow planes. Tow plane pilots fly standardized departure and arrival flight patterns that can be modified to maintain safe deconfliction with other pilots operating in the area or when weather conditions warrant deviations in the interest of safety. Soaring operations are primarily conducted over Academy property extending west of Interstate (I)-25 and periodically over areas located south of the Academy.

The purpose of the proposed undertaking is to provide operational flexibility and capability for 98 FTS parachute and 94 FTS soaring operations by providing an additional location for parachute training and soaring operations away from the Academy. Unfavorable weather (i.e., wind speeds greater than 20 mph) generated by the presence of the Front Range limits both parachute and soaring training opportunities at Davis Airfield, located on the USAFA campus. In 2016, the 98 FTS experienced 89 lost or shortened jump days due to weather conditions. In 2017, they experienced 101 lost or shortened jump days, resulting in the loss of more than 5,500 jumps that year. Loss of training jumps, especially for demonstration teams, has the potential to increase demonstration mishaps due to lack of training. In addition to weather conditions impacting operations, construction or other planned activities at Davis Airfield also negatively affect both parachute and soaring training opportunities. Any type of disruption to training negatively affects the continuous student training throughput schedule maintained by the Academy.

BAA, a USAFA training facility, is currently used for powered-flight training, with additional use when wind conditions at Davis Airfield do not allow for safe training operations. Bullseye consists of one 3,500-foot paved runway (75 feet wide) oriented in a generally north-south direction. Due to the small size of Bullseye, generally no more than four aircraft are in the pattern at one time. Currently, 132 powered-flight operations occur at Bullseye on an average annual day, totaling 48,026 powered-flight operations per year. No parachute or soaring operations currently occur at Bullseye. If these operations are approved, only one type of operation is allowed to occur at BAA at a time (likely per day): either soaring, parachuting, or powered flight.

Undertaking Description:

BAA provides USAFA with an additional location to conduct parachute and soaring operations that would create little interference to other military or civilian aircraft operations. Conducting soaring and parachute operations at BAA would require minimal infrastructure, and no construction is planned as part of this undertaking. On parachute or soaring training days, temporary lavatory facilities (i.e., portable toilets, wash stations, etc.) would be brought to BAA and located in the Support Equipment area shown in Figure 2. A tent for shelter would be placed in the grass area west of the glider assembly area and south of the fire department. The 94 FTS would manage operations out of a command trailer (towed in by a pickup truck) temporarily located in the Equipment Support or Glider Assembly area.

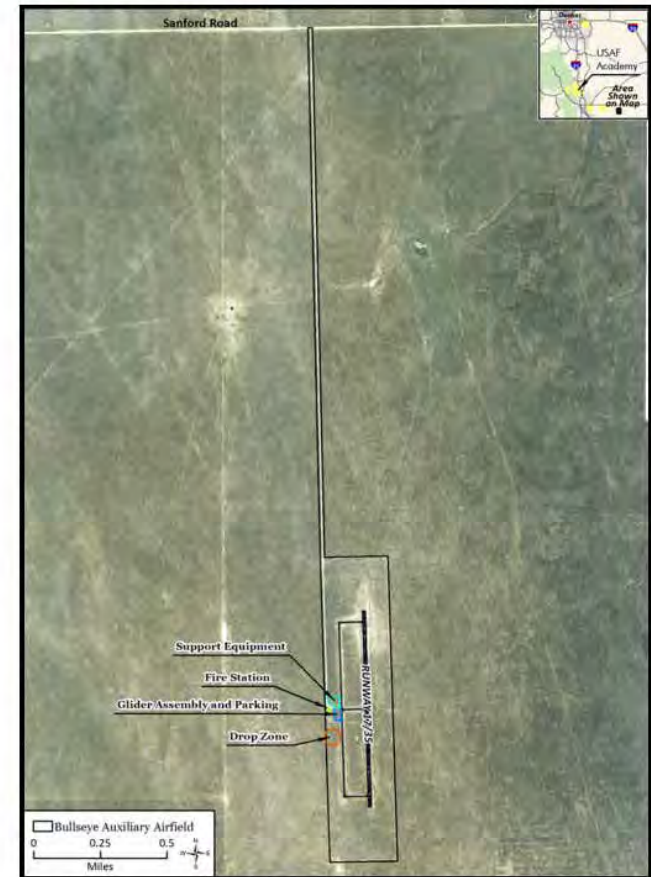


Figure 2. Aerial overview of existing Bullseye Auxiliary Airfield with access road, preliminary footprints of preferred undertaking shown/ noted.

For parachuting operations, cadets and staff would either drive personal vehicles, or be picked up at USAFA and flown or bussed to BAA and back. A drop zone, where cadets would land in, will be located in the area south of the tent. It will be marked using temporary means, such as chalk, paint, orange cones, etc. No ground disturbance will be involved in marking the drop zone.

As part of parachute operations, during an average year, approximately 40 wind drift indicators would be dropped from the UV-18 aircraft. These drift indicators consist of a 6-foot long crepe paper streamer attached to a thin metal rod (approximately 6 inches long and 1/8 inch in diameter) (Figure 3). These indicators are used to verify wind conditions immediately prior to jumps. Wind drift indicators that land on Bullseye would be recovered by foot. It is estimated that approximately 10 of these indicators per year could be carried by the wind outside the boundaries of Bullseye and land in the pastures surrounding the airfield. It is estimated that the majority of these indicators would remain within a 3,000 foot buffer surrounding the Bullseye boundary (Figure 4). Recovery of these indicators would be handled on a case-by-case basis, with USAF striving for a pedestrian recovery, unless coordination with the surrounding lessee prescribes they not be recovered or that the lessee will recover them and return them to USAFA.



Figure 3. Wind Drift Indicator



Figure 4. Aerial overview of existing Bullseye Auxiliary Airfield with access road; showing 3000 foot buffer that up to 10 wind indicators may land in each year. This blue shaded area is the physical APE for the project.

For training days when soaring operation occur, up to six tow planes (PA-18 aircraft) would be flown from Davis Airfield to Bullseye. Up to 12 sailplanes would be hauled to Bullseye in trailers and assembled onsite in the Glider Assembly area (Figure 2). Soaring operations would be conducted inside of a circular area with a five nautical mile radius centered on Bullseye. Soaring operations would occur up to 9,500 MSL in the Proposed Soaring Area located in the northeast quadrant of the circular area (see Figure 5).



Figure 5. Flight navigation chart showing proposed area of soaring operations.

The ability to schedule parachute and soaring operations at Bullseye would increase operational flexibility and capabilities because the wind conditions at Bullseye are often more favorable than those at Davis Airfield; therefore, parachute and soaring operations at Bullseye would be less likely to be impacted by wind conditions. Parachute and soaring operations at Bullseye would still be planned several weeks in advance; however, because the weather conditions at Bullseye are generally more favorable than those at Davis Airfield, there is less chance that these operations would be cancelled. Because these operations are planned weeks in advance, sudden weather changes at Davis Airfield would not result in immediate unplanned shifts to Bullseye. Bullseye would be used for parachute operations for up to 10 weeks per year and for soaring operations up to 66 days per year. Because parachuting, soaring, and powered flight operations will not be conducted simultaneously at BAA, it is unclear how much additional use the facility will receive. It is estimated that if all operations can be scheduled perfectly to not conflict, the use of the field could increase by 40 percent. However, it is unlikely that scheduling and weather will cooperate to facilitate such use.

Steps Taken to Identify the Area of Potential Effects (APE):

The physical APE (Figure 4) for the undertaking encompasses the BAA and the 3000-foot buffer around it where it is possible USAFA staff could walk out and pick up errant wind indicators. On BAA itself there will only be temporary facilities set up for training days, involving no ground disturbance. All physical activities with the potential to affect historic properties will occur within this APE. The flying of powered tow planes, gliders, and jump aircraft in the air space above BAA have no potential to physically affect historic properties. While these activities could have limited visual and limited auditory effects to any historic properties on the ground where historic properties could be present, USAFA has operated powered aircraft in this airspace from BAA since 1985, with few complaints from the public over the years and no impacts of any nature regarding historic properties. Currently, a dozen or more aircraft are present in the airspace on an average powered flight day. On proposed parachute operation days, only two powered jump aircraft would be in the airspace, and on proposed soaring days no more than 6 powered towing aircraft and 12 sailplanes would be in the airspace. Obviously sailplanes would have a visual presence similar to powered aircraft, but they would produce no noise. After 35 years of operation, it has been demonstrated that USAFA aircraft operate at BAA with no reported impacts to historic properties. The USAFA submits that there is no potential for significant visual or auditory impacts from the aircraft operation, so BAA air space activity is considered not pertinent as a direct or indirect APE.

Potential for Impacts to Historic Properties:

The entirety of BAA was surveyed by archaeologists from Texas State University and the Air Force Civil Engineer Center during the summer of 2018 (Owens and Miller 2018). Likely prehistoric cultural resources are shown in Figures 6 and 7 and included an open lithic scatter of unknown age (5EP.8278) and five randomly scattered isolated finds (5EP.8279, 5EP.8280, 5EP.8281, 5EP.8282, 5EP.8284). An isolated farm equipment part composed the only historic cultural resource (5EP.8283). None of the newly identified cultural resources were recommended National Register of Historic Places (NRHP)-eligible. However, 5EP.8279, an ash stain of unknown age, was recommended to be a "needs data" cultural resource requiring protection by avoidance until evaluative testing occurs. In a letter dated April 26, 2019, SHPO concurred with these determinations of eligibility (HC#75875). The area to the east of the airfield, consisting of 188 acres, was inventoried previously resulting in the identification of 3 archaeological sites (5EP.961, prehistoric open camp; 5EP.960, prehistoric open lithic locale; 5EP.958, historical trash dump with associated depression) and 3 isolated finds (5EP.959, flake; 5EP.962, projectile point; 5EP.957, scraper) (Hackett Bambrey 1987). None of these resources are within the 3000 foot buffer around BAA where pedestrian access might occur. The remainder of the 3000 foot buffer around BAA has not been inventoried.

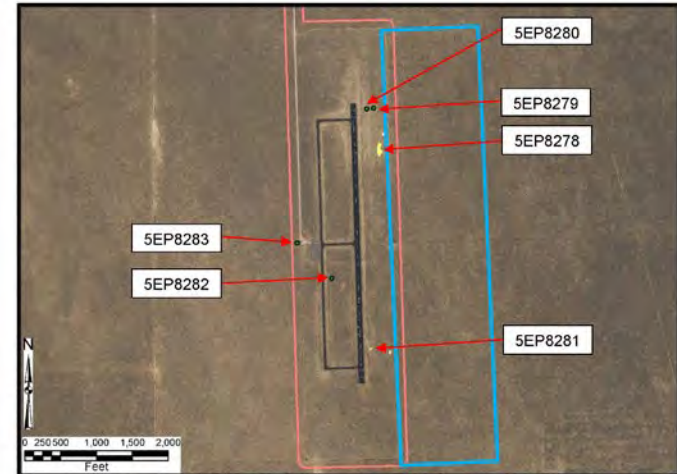


Figure 6: Aerial overview of BAA showing 2018 survey area (pink polygon), 1987 survey area (blue polygon) and location of cultural resources in APE.

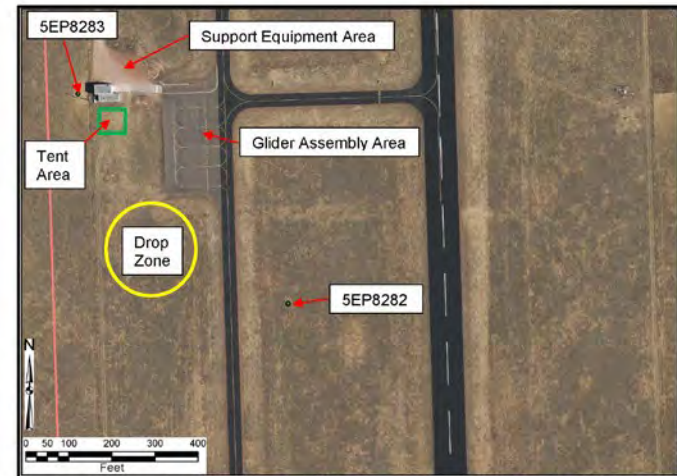


Figure 7: Aerial overview of BAA showing location of Isolated Finds and Temporary Facilities.

ATTACHMENT 3
Consulting Parties

Apache Tribe of Oklahoma
Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation
Cheyenne and Arapaho Tribes of Oklahoma
Cheyenne River Sioux Tribe
Comanche Nation of Oklahoma
Crow Nation
Eastern Shoshone Tribe of the Wind River Reservation
Flandreau Santee Sioux Tribe of South Dakota
Fort Belknap Indian Community
Fort Sill Apache Tribe
Jicarilla Apache Tribe
Kiowa Tribe of Oklahoma
Lower Brule Sioux Tribe of the Lower Brule Reservation
Mescalero Apache Tribe
Navajo Nation
Northern Arapaho Tribe
Northern Cheyenne Tribe
Oglala Sioux Tribe
Pawnee Nation of Oklahoma
Pueblo de Cochiti
Pueblo of Picuris
Pueblo of Santa Ana
Pueblo of Santa Clara
Pueblo of Taos
Pueblo of Zuni
Rosebud Sioux Tribe
Santee Sioux Nation
Southern Ute Indian Tribe
Spirit Lake Nation
Standing Rock Sioux Tribe
Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nation
Ute Indian Tribe of the Uintah and Ouray Reservation
Ute Mountain Ute Tribe
Yankton Sioux Tribe

Colorado State Historic Preservation Officer (SHPO)
Colorado State Land Board
El Paso County

From: [Joshua Mann](#)
To: [SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP](#)
Subject: [Non-DoD Source] Re: Follow-up Government to Government Section 106 Consultation Request for Comments: New Operations at USAFA Bullseye Auxiliary Airfield (BAA)
Date: Tuesday, June 22, 2021 3:13:31 PM
Attachments: [ESTHPO no adverse effects USAF Academy BullseyeAuxiliaryAirfield June22 2021.pdf](#)

Greetings:

Thank you for your submission regarding the New Operations at USAFA Bullseye Auxiliary Airfield (BAA). Please see attached the response letter on behalf of the ESTHPO. If you have any questions or concerns, please let me know.

Thank you for consulting with the Eastern Shoshone Tribe.

Respectfully,

Joshua Mann, ESTHPO
P.O. Box 538
Fort Washakie, WY 82514
PH: (307) 335-2081
Fax: (307) 332-3697



Eastern Shoshone Tribe
Tribal Historic Preservation Office
P.O. Box 538
Fort Washakie, WY 82514
Phone: (307)-335-2081

To: Mr. Erwin Roemer, USAFA Cultural Resources Manager
Date: June 22, 2021
Project: Parachute and Soaring Operations at Bullseye Auxiliary Airfield
Project Number:

X	FINDING OF NO ADVERSE EFFECT – While there may be cultural resources directly affected by the proposed undertaking; the integrity of this resource is not compromised. The Eastern Shoshone Tribe does not recommend this site as eligible for listing on the National Register of Historic Places. However, if cultural materials are discovered during construction please notify the Eastern Shoshone Tribal Historic Preservation Office.
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Under the authority of Section 106 of the National Preservation Act of 1966 and in accordance with 36 CFR 800.2A4, and after reviewing the materials you provided for the: **Parachute and Soaring Operations at Bullseye Auxiliary Airfield**, the Eastern Shoshone Tribal Historic Preservation Office finds that there may be a low potential for an adverse effect due to the proposed undertaking on cultural resources significant to the Eastern Shoshone Tribe.

The vicinity of the project is historically significant to the Eastern Shoshone Tribe. For millennia, the Eastern Shoshone have camped, hunted, practiced ceremonies, and gathered food throughout the surrounding vicinity. Since the area around the project was heavily utilized in prehistoric times, it is particularly important for the ground disturbance to remain in the areas designated in the original site plans. No further cultural resource work is necessary outside the areas designated, please notify our department and we can make the necessary arrangements.

If potential cultural resources are located during construction, please notify our office immediately. Thank you for consulting with the Eastern Shoshone Tribal Preservation Office. If you have any questions or concerns, please feel free to contact me at: (307) 335-2081 or (307) 438-0094. "who-we-hoo" (Thank you).

COMANCHE NATION



Department of the Air Force-10th Civil Engineer Squadron
Attn: Mr. Erwin Roemer
8120 Edgerton Drive, Suite 40
Colorado 80840-2400

June 24, 2021

Re: The Early Stages of Planning New Parachute and Soaring (glider)
Cadet Training at BAA

Dear Mr. Roemer:

In response to your request, the above reference project has been reviewed by staff of this office to identify areas that may potentially contain prehistoric or historic archeological materials. The location of your project has been cross referenced with the Comanche Nation site files, where an indication of "**No Properties**" have been identified. (LAW 36 CFR 800.4(d)(1)).

Please contact this office at (580) 595-9960/9618 if you require additional information on this project.

This review is performed in order to identify and preserve the Comanche Nation and State cultural heritage, in conjunction with the State Historic Preservation Office.

Regards

Comanche Nation Historic Preservation Office
Theodore E. Villicana, Technician
#6 SW "D" Avenue, Suite C
Lawton, OK. 73502

Consult Response delayed due to Covid-19 work conditions.

From: [Cecilia Shields](#)
To: [SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP](#)
Subject: [Non-DoD Source] Re: Follow-up Government to Government Section 106 Consultation Request for Comments: New Operations at USAFA Bullseye Auxiliary Airfield (BAA)
Date: Saturday, June 26, 2021 5:05:23 PM

Hello.

Thank you for your email. I also did receive the hardcopy as well. Upon reviewing the information presented, I do not have any questions or concerns at this time.

Thank you.

COMANCHE NATION P.O. BOX 908 / LAWTON, OK 73502
PHONE: 580-492-4988 TOLL FREE: 1-877-492-4988



SOUTHERN UTE INDIAN TRIBE

Southern Ute Cultural & Preservation Department
P.O. Box 737, Mail Stop #73, Ignacio CO 81137
Phone: 970-563-0100 Fax: 970-563-1098

June 28, 2021

Erwin Roemer
USAF Academy- 10th Civil Engineer Squadron
8120 Edgerton Drive, Suite 40
USAF Academy CO, 80840

Dear Mr. Roemer,

I have reviewed your Consultation Request under section 106 of the National Historic Preservation Act regarding the Bullseye Auxiliary Airfield project and offer the following response as indicated by the box that is checked.

- NO EFFECT: I have determined that there are no properties of religious and cultural significance to the Southern Ute Indian Tribe that are listed on the National Register within the area of potential effect or that the proposed project will have no effect on any such properties that may be present.
- NO ADVERSE EFFECT: I have identified properties of cultural and religious significance within the area of effect that I believe are eligible for listing in the National Register, for which there would be no adverse effect as a result of the proposed project.
- ADVERSE EFFECT: I have identified properties of cultural and religious significance within the area of potential effect (APE) that are eligible for listing in the National Register. I believe the proposed project would cause an adverse effect on these properties.
- REQUEST FOR ADDITIONAL INFORMATION: The Southern Ute Indian Tribe requests additional information on the planned site for its impact on properties of religious and cultural importance to the Tribe as follows: _____
Please reply to Cassandra Atencio at catencio@southernute-nsn.gov and Garrett Briggs at gbriggs@southernute-nsn.gov and refer to _____ in future ongoing correspondence with this office.

Sincerely,

Ms. Cassandra Atencio
NAGPRA Coordinator
Southern Ute Cultural Department
Southern Ute Indian Tribe

From: Timothy Begay <tbegay@navajo-nsn.gov>
Sent: Tuesday, June 29, 2021 3:54 PM
To: ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP <erwin.roemer@us.af.mil>
Subject: [Non-DoD Source] SOARING AND PARACHUTE OPERATIONS

Dear Mr. Roemer:

The Navajo Nation Heritage and Historic Preservation Department's (NNHHPD) Traditional Culture Program is (TCP) in receipt of your letter regarding the United States Air Force Academy's proposed soaring and parachute operation at USAFA's Bullseye Auxiliary Airfield, Colorado.

After reviewing your letter and cross referencing our Traditional Cultural Properties (TCP's) database, NNHHPD-TCP has determined that there are No Navajo TCP's within the project area and no concerns with the operations, you may proceed without further consultation.

If you have any additional questions, concerns or would like to discuss these issues further, please don't hesitate to contact our office at (928) 871-7198 or (928) 871-7152. Thank you for including the Navajo Nation in the consultation process.

Sincerely,

Timothy C. Begay
Navajo Cultural Specialist
Navajo Nation Heritage and Historic Preservation Department
P.O. Box 4950
Window Rock AZ 86515
Office Phone: (928)871-7152
tbegay@navajo-nsn.gov

Environmental Assessment for Parachute and Soaring Operations at Bullseye Auxiliary Airfield, Colorado

From: Gary <gary.lafranier@cheyennenation.com>
Sent: Tuesday, July 6, 2021 4:38 PM
To: ROEMER, ERWIN JR GS-12 USAF USAFA 10 CES/CENP <erwin.roemer@us.af.mil>
Subject: [Non-DoD Source] Bullseye Auxiliary Airfield, La Foret Trail, Massey & Gallagher House Demolition.
Importance: High

Bullseye Auxiliary Airfield: After going over the report, Northern Cheyenne does not have any concerns at this time. Your project may proceed as planned.

Determination of **No Effect**.

La Foret Trail: After reviewing the project, Northern Cheyenne does not have any concerns at this time. Your project may proceed as planned.

Determination of **No Effect**.

Massey & Gallagher House Demolition: After reviewing the project and report, Northern Cheyenne concurs with SHPO of the adverse effect. Since it will be demolished and the historic value will not be there anymore.

Therefore, Northern Cheyenne has no concerns with the project and may proceed as planned.

Determination of **No Historic Properties**.

Thank You,

Gary LaFranier
FCC/ Section 106 Coordinator
Northern Cheyenne THPO
(406)477-8114
Lame Deer, MT. 59043

From: [Joseph Reed](#)
To: [SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP](#)
Subject: [Non-DoD Source] RE: Government to Government Section 106 Consultation Request for Comments: New Operations at USAFA Bullseye Auxiliary Airfield (BAA)
Date: Thursday, July 8, 2021 2:58:16 PM

Nawa,
There is no change to our response letter regarding this activity that we forwarded to you on 12-28-2020.

Nawa iri,

Matt Reed
Historic Preservation Officer
Pawnee Nation
PO Box 470
657 Harrison Street
Pawnee, Oklahoma 74058
(918) 762-2180 ext 220
(918) 762-3662 fax
jreed@pawneenation.org

COMANCHE NATION



Department of the Air Force-10th Civil Engineer Squadron
Attn: Mr. Erwin Roemer
8120 Edgerton Drive, Suite 40
Colorado 80840-2400

July 20, 2021

Re: Proposed Soaring and Parachute Operations at USAFA's
Bullseye Auxiliary Airfield (BAA)

Dear Mr. Roemer:

In response to your request, the above reference project has been reviewed by staff of this office to identify areas that may potentially contain prehistoric or historic archeological materials. The location of your project has been cross referenced with the Comanche Nation site files, where an indication of "**No Properties**" have been identified. (IAW 36 CFR 800.4(d)(1)).

Please contact this office at (580) 595-9960/9618) if you require additional information on this project.

This review is performed in order to identify and preserve the Comanche Nation and State cultural heritage, in conjunction with the State Historic Preservation Office.

Regards

Comanche Nation Historic Preservation Office
Theodore E. Villicana , Technician
#6 SW "D" Avenue, Suite C
Lawton, OK. 73502

Consult Response delayed due to Covid-19 work conditions.

COMANCHE NATION P.O. BOX 908 / LAWTON, OK 73502
PHONE: 580-492-4988 TOLL FREE: 1-877-492-4988

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OTHER AGENCIES AND STAKEHOLDER CORRESPONDENCE

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Environmental Assessment for Parachute and Soaring Operations at Bullseye Auxiliary Airfield, Colorado



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U. S. Air Force Academy, CO 80840

Ms. Jenny Mayo
Peterson AFB Aero Club
Peterson AFB, CO 80914
Email address: jenny.mayo@spaceforce.mil

Dear Ms. Mayo

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting parachute and soaring training operations (See detailed Project Description in Attachment I) in airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

Parachute operations would result in an increase of 1,200 annual airfield operations, approximately 50 operations per day (24 days) at Bullseye. Soaring operations at Bullseye would occur for up to 66 days per year. The proposed soaring operations would result in 660 arrivals and departures from Bullseye per year, totaling 9,570 towing circuits per year. Soaring operations would be conducted inside of a circular area with a five nautical mile radius centered on Bullseye. Soaring operations would occur up to 9,500 MSL in the Proposed Soaring Area located in the northeast quadrant of the circular area (see Figure 2). If soaring operations were to go above 9,500 MSL, the SCO would contact the FAA at COS and request approval for soaring operations from 9,500 MSL up to 12,500 MSL. The proposed parachute and soaring operations would represent a 44 percent increase in aircraft operations at Bullseye. Both soaring and parachute operations would require minimal infrastructure at Bullseye. No subsurface excavation or permanent construction is proposed for the project.

The USAF requests your comments regarding the proposed project. Please provide us with your response within 30 days of receipt of this letter. Upon completion, the Draft EA will be made available in local libraries and on the internet for a 30-day public review and comment period.

Thank you in advance for your assistance in this process. If you have any questions on this project, please contact Mr. Robert Fant at 719-333-9739; robert.fant.1@us.af.mil; or 8120 Edgerton Drive, USAFA, CO 80840.

Sincerely,

FANT.ROBERT
L1112200084
Robert L. Fant, P.E.

Attachment:
1. Project Description

USAF Soaring and Parachute Operations at Bullseye Proposed Action

The USAF is preparing an Environmental Assessment (EA) to evaluate both parachute and soaring operations at the Bullseye Auxiliary Airfield (Bullseye) near Ellicott, Colorado. Additional flexibility and capability is needed to ensure that the 94th and 98th Flying Training Squadrons (FTS) can continue to provide effective parachute and soaring training away from Davis Airfield at the Air Force Academy (Academy). The Academy continuously trains and certifies cadets in parachute and soaring operations by maintaining a schedule that has cadets advancing to cadet instructors so that those cadet instructors can then train the next class of cadets. Current parachute and soaring training is primarily conducted over Academy lands, with pilots taking off and landing at Davis Airfield. The presence of the Front Range adjacent to the airfield generates wind speeds greater than 20 miles per hour (mph). These conditions are unfavorable for parachute and soaring operations. In 2016, the 98 FTS experienced 89 lost or shortened jump days due to weather conditions. In 2017, they experienced 101 lost or shortened jump days, resulting in the loss of more than 5,500 jumps that year. Loss of training jumps, especially for demonstration teams, has the potential to increase demonstration mishaps due to lack of training. In addition to weather conditions impacting operations, construction or other planned activities at Davis Airfield also negatively affect both parachute and soaring training opportunities. Any type of disruption to training negatively affects the continuous student training throughput schedule maintained by the Academy. An alternative airfield that is in close proximity to the Academy with less potential for training restrictions is needed to increase training flexibility and capability without adding extensive development or travel costs.

Under the preferred alternative, Bullseye would provide an additional location where the 98 FTS could conduct parachute operations and the 94 FTS could conduct soaring operations with minimal interference to other military or civilian aircraft operations. The runway at Bullseye, Runway 17/35, is 3,500 feet long and 75 feet wide. Bullseye would be used for parachute operations for up to 10 weeks per year and for soaring operations up to 66 days per year.

Both soaring and parachute operations would require minimal infrastructure at Bullseye. No ground disturbance for permanent facilities or structures are required for the proposed action. Portable toilets would be used during training days and a tent would be placed in the grass area west of the ramp and south of the fire department (See Figure 1). The 94 FTS would operate out of a command trailer (enclosed trailer that can be towed by a pickup truck).

A typical day of parachute operations would begin with the UV-18 aircraft being flown from their permanent station at Peterson AFB either directly to Bullseye or to Davis Airfield to pick up cadets. If the cadets are picked up from Davis Airfield, they would be flown to Bullseye. If the aircraft are flown directly to Bullseye, the cadets would commute from the Academy to Bullseye using either government or personal vehicles (cadets would commute by ground approximately 30 percent of the time, and staff with support equipment would commute by ground 100 percent of the time). Up to six buses and 12 to 18 personal vehicles per day would be used to transport cadets and staff to Bullseye. Parking would occur on existing surfaces with overflow parking occurring in unimproved areas as needed. At the conclusion of a training day, the UV-18 aircraft would be flown back to Peterson AFB.

During parachute operations, up to two UV-18 aircraft would be used to conduct landing and takeoff operations at Bullseye. After takeoff from Bullseye, the aircraft would be flown to various jump altitudes. The maximum jump altitude is 16,000 feet mean sea level (MSL).

Parachute operations would result in an increase of 1,200 annual airfield operations, or approximately 50 operations per day (24 days). Typical daily operations for one aircraft would

ATTACHMENT 1. PROJECT DESCRIPTION

USAFA Soaring and Parachute Operations at Bullseye Proposed Action

include an arrival from Davis Airfield or Peterson AFB, 23 airdrop circuits, and one departure (Table 1).

Table 1. Current and Proposed Aircraft Operations at Bullseye

Aircraft	Depart Bullseye			Arrive Bullseye			Flights starting and ending at Bullseye - Airdrop Circuits			Annual Airfield Operations (all types)	Average Annual Day Airfield Operations (all types) ²
	Day	Night	Total	Day	Night	Total	Day	Night	Total ¹	Total	Total
T-53 (baseline)	1,386	0	1,386	1,386	0	1,386	5,275	0	5,275	13,322	37
DA-20 (baseline)	3,155	0	3,155	3,155	0	3,155	14,197	0	14,197	34,704	95
UV-18 (proposed)	48	0	48	48	0	48	552	0	552	1,200	3
PA-18 (proposed)	330	0	330	132	198	330	9,570	0	9,570	19,800	54
Total (baseline)	4,541	0	4,541	4,541	0	4,541	19,472	0	19,472	48,026	132
Total (proposed)	4,919	0	4,919	4,721	198	4,919	29,594	0	29,594	69,026	189

¹ Average annual day airfield operations are rounded.

² Each "arrival" and "departure" event includes one airfield operation. (6) Each "full circuit" event includes two airfield operations (reflecting a departure and subsequent arrival segment of the flight).

After the final airdrop of the day, the UV-18 aircraft would be flown back to Davis Airfield or to Peterson AFB. These operations would generally occur on weekends and no more than 2 days per month. Davis Airfield does not operate on Sundays; therefore, parachute operations conducted on Sundays would require the UV-18 aircraft to fly directly to Bullseye from Peterson AFB and cadets would be transported to Bullseye by bus or personal vehicles. No other aircraft operations would be planned at Bullseye during parachute operations.

As part of parachute operations, during an average year, approximately 40 wind drift indicators would be dropped from the UV-18 aircraft. These drift indicators consist of a 10 to 12 foot long biodegradable crepe paper streamer attached to a thin metal rod (approximately 6 inches long and 1/8 inch in diameter). These indicators are used to verify wind conditions immediately prior to jumps. Wind drift indicators that land on Bullseye would be recovered. It is estimated that approximately 10 of these indicators per year could be carried by the wind outside the boundaries of Bullseye and land in the pastures surrounding the airfield. The majority of these indicators would remain within 0.5 to 1 mile of Bullseye on state-owned lands. A 3,000 foot buffer surrounding the Bullseye boundary was used to determine potential impacts associated with the recovery of wind drift indicators. Recovery of these indicators would be handled on a case-by-case basis, with USAF striving for a pedestrian recovery unless other coordination with the landowner or lessee is necessary.

A typical day of soaring operations at Bullseye would begin with the Soaring Control Officer (SCO) from the 94 FTS contacting the Federal Aviation Administration (FAA) at COS to notify them of soaring operations being conducted from Bullseye. The SCO is a rated pilot who would be at Bullseye during soaring operations acting as the officer in charge when soaring operations are occurring. Once the FAA has been notified, up to six tow planes (PA-18 aircraft) would be flown from Davis Airfield to Bullseye. Up to 12 sailplanes would be hauled to Bullseye in trailers and assembled onsite (Figure 1). The tow planes would land at Bullseye. Once the tow planes have

USAFA Soaring and Parachute Operations at Bullseye Proposed Action

landed, they would be attached to the sailplanes to prepare for takeoff. Sailplane pilots would primarily land on Runway 17/35. The taxiway would be a second landing option, and the grass airfield would be a third landing option, if needed and pending a survey of the landing surface.

The proposed action includes soaring operations at Bullseye for up to 66 days per year. Soaring operations would typically consist of monthly training (2-3 days each month), two week long training events (6 days each), and two to three week long events (6 days each) as contingency days for periods when Davis Airfield is unavailable (e.g. construction shut downs). Generally, the weeklong soaring operations would occur Monday through Saturday, sunrise to sunset. Shorter training periods would occur on weekends, Friday through Sunday, sunrise to sunset.

In total, approximately 660 arrivals and departures associated with training operation would occur from Bullseye per year and total 9,570 towing circuits per year (Table 1). Soaring operations would be conducted inside of a circular area with a five nautical mile radius centered on Bullseye. Soaring operations would occur up to 9,500 MSL in the Proposed Soaring Area located in the northeast quadrant of the circular area (see Figure 2). If soaring operations were to go above 9,500 MSL, the SCO would contact the FAA at COS and request approval for soaring operations from 9,500 MSL up to 12,500 MSL. The proposed aircraft operations represent the high-end of operations tempo (i.e., maximum number of events) for conducting soaring operations. No other aircraft operations would be planned at Bullseye during soaring operations and the PA-18 aircraft would return to Davis Airfield each day.

Current use of Bullseye by pilots operating the T-53, as part of the Academy's Powered Flight Program (PFP) and the DA-20 aircraft as part of the Initial Flight Training program, would continue at the same rate under the proposed action. The Academy would schedule T-53 and DA-20 PFP operations so that they do not occur on the same days as parachute or soaring operations. The proposed parachute and soaring operations would represent a 44 percent increase in aircraft operations at Bullseye.



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Mr. Mike Shafer
Environmental / Community Planner
21 CES/CEIE
580 Goodfellow Street, Suite 2370
Peterson AFB, CO 80914
Email address: michael.shafer.4@us.af.mil

Dear Mr. Shafer

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

Parachute operations would result in an increase of 1,200 annual airfield operations, or approximately 50 operations per day (24 days) at Bullseye. Soaring operations at Bullseye would occur for up to 66 days per year. The proposed soaring operations would result in 660 arrivals and departures from Bullseye per year, totaling 9,570 towing circuits per year. Soaring operations would be conducted inside of a circular area with a five nautical mile radius centered on Bullseye. Soaring operations would occur up to 9,500 MSL in the Proposed Soaring Area located in the northeast quadrant of the circular area (see Figure 2). If soaring operations were to go above 9,500 MSL, the SCO would contact the FAA at COS and request approval for soaring operations from 9,500 MSL up to 12,500 MSL. The proposed parachute and soaring operations would represent a 44 percent increase in aircraft operations at Bullseye. Both soaring and parachute operations would require minimal infrastructure at Bullseye. No subsurface excavation or permanent construction is proposed for the project.

The USAF requests your comments regarding the proposed project. Please provide us with your response within 30 days of receipt of this letter. Upon completion, the Draft EA will be made available in local libraries and on the internet for a 30-day public review and comment period.

Thank you in advance for your assistance in this process. If you have any questions on this project, please contact Mr. Robert Fant at 719-333-9739; robert.fant.1@us.af.mil; or 8120 Edgerton Drive, USAFA, CO 80840.

Sincerely,

FANT.ROBERT.
L1112200084
Robert L. Fant, P.E.

Attachment:
1. Project Description



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Ms. Ayoka Peak
Community Planner
21 CES/CEIE
580 Goodfellow Street, Suite 2370
Peterson AFB, CO 80914
Email address: ayoka.paek@us.af.mil

Dear Ms. Peak

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

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Sincerely,

FANT,ROBER
T.L.11122000
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Robert Fant, P.E.

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Date: 2021.08.13
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Attachment:
1. Project Description



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Mr. Daniel Sexton
Senior Planner
City of Colorado Springs
P. O. Box 1575, Mail Code 155
Colorado Springs, CO 80903
Email address: daniel.sexton@coloradosprings.gov

Dear Mr. Sexton

The United States Air Force (USAF) is in the early stages of preparing an Environment Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

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Thank you in advance for your assistance in this process. If you have any questions on this project, please contact Mr. Robert Fant at 719-333-9739; robert.fant.1@us.af.mil; or 8120 Edgerton Drive, USAFA, CO 80840.

Sincerely,

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Robert L. Fant, P.E.

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1. Project Description



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Ms. Kari Parsons
Planner II
El Paso County Planning & Community Development
El Paso County 1041 Office
2880 International Circle
Colorado Springs, CO 80910
Email address: kari@elpasoco.com

Dear Ms. Parsons

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

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Sincerely,

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Date: 2021.08.13
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Robert L. Fant, P.E.

Attachment:
1. Project Description



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Mr. Frank McGee
Area Wildlife Manager
Colorado Parks and Wildlife
4255 Sinton Road
Colorado Springs, CO 80907
Email address: frank.mcgee@state.co.us

Dear Mr. McGee

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

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Thank you in advance for your assistance in this process. If you have any questions on this project, please contact Mr. Robert Fant at 719-333-9739, robert.fant.1@us.af.mil, or 8120 Edgerton Drive, USAFA, CO 80840.

Sincerely,

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Robert L. Fant, P.E.

Attachment:

1. Project Description



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Mr. Pete Eunice
DOSS Aviation
Colorado Springs, CO
Email address: pete.eunice@L3Harris.com

Dear Mr. Eunice

The United States Air Force (USAF) is in the early stages of preparing an Enviro Assessment (EA) to evaluate the potential environmental impacts associated with conduct parachute and soaring training operations (See detailed Project Description in Attachment airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF I using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Progn the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional fle and capability to conduct parachute and soaring operations at a location away from the Ac This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulati Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Analysis Process.

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Sincerely,

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Date: 2021.05.13
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Robert L. Fant, P.E.

Attachment:

1. Project Description



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Ms. Angie Bell
NEPA Program Manager
Fort Carson
Email address: angie.l.bell.civ@mail.mil

Dear Ms. Bell

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

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Thank you in advance for your assistance in this process. If you have any questions on this project, please contact Mr. Robert Fant at 719-333-9739; robert.fant.1@us.af.mil; or 8120 Edgerton Drive, USAFA, CO 80840.

Sincerely,

Digitally signed by
FANT.ROBERT, FA18ROBERTL1112000
L1112200084, DN: cn=FANT.ROBERT, o=USAF, ou=10th Civil Engineer Squadron, email=robert.fant.1@us.af.mil, c=US
Date: 2021.05.13 15:38:21 -0500
Robert L. Fant, P.E.

Attachment:

1. Project Description



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Mr. Charlie Lawton
Environmental Planner
Schriever Air Force Base
50 CES/CIEI
Schriever AFB, CO 80912
Email address: william.lawton.4@us.af.mil

Dear Mr. Lawton

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

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Sincerely,

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FANT,ROBERT,104H,ROBERT,11122000
L.1112200084
DN: c=US, o=USAF, ou=10th Civil Engineer Squadron, cn=FANT,ROBERT,104H,ROBERT,1112200084
Robert L. Fant, P.E.

Attachment:

1. Project Description

Environmental Assessment for Parachute and Soaring Operations at Bullseye Auxiliary Airfield, Colorado



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Mr. Darren Horstmeier
Community Planner
Schriever Air Force Base
50 CES/CIEI
Schriever AFB, CO 80912
Email address: william.lawton_4@us.af.mil

Dear Mr. Horstmeier

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

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The USAF requests your comments regarding the proposed project. Please provide us with your response within 30 days of receipt of this letter. Upon completion, the Draft EA will be made available in local libraries and on the internet for a 30-day public review and comment period.

Thank you in advance for your assistance in this process. If you have any questions on this project, please contact Mr. Robert Fant at 719-333-9739; robert.fant.1@us.af.mil; or 8120 Edgerton Drive, USAFA, CO 80840.

Sincerely,

Digitally signed by
FANT,ROBERT, /CN=FANT,ROBERT,1.111220
084, O=USAF, OU=USAF ACADEMY, CN=L.1112200084
DATE: 2021.08.13
15:41:21 -0600

Robert L. Fant, P.E.

Attachment:

1. Project Description



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Mr. Greg Ochis
Assistant Director for Asset Management
State Land Board
1127 Sherman Street, Suite 300
Denver, CO 80905
Email address: greg.ochis@state.co.us

Dear Mr. Ochis

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Sincerely,

FANT,ROBERT
L.1112200084
Digitally signed by
FANT,ROBERT.L.11122000
DN: cn=FANT,ROBERT.L.11122000,
o=USAF, ou=10TH CIVIL ENGINEER SQUADRON,
c=US

Robert Fant, P.E.

Attachment:

1. Project Description

Environmental Assessment for Parachute and Soaring Operations at Bullseye Auxiliary Airfield, Colorado

From: David Ulane <david.ulane@state.co.us>
Sent: Monday, May 17, 2021 8:09 AM
To: MCCORKLE, JENNIFER L CTR USAF USAFA 10 CES/CENPP <jennifer.mccorkle.ctr@us.af.mil>
Cc: FANT, ROBERT L GS-13 USAF USAFA 10 CES/CEI <robert.fant.1@us.af.mil>; Kaitlyn Westendorf <kaitlyn.westendorf@state.co.us>; Todd Green <todd.green@state.co.us>
Subject: [Non-DoD Source] Re: Intergovernmental Review of AFA's Proposed Parachute & Soaring Operations at Bullseye AAF

Thank you for reaching out Jennifer. As an agency statutorily focused on public use airports, our Division would not have any input or comments on this proposal.

We would suggest, if you haven't already, that you reach out to the owners of the Springs East/Ellicott Airport, just northwest of Bullseye. While privately owned, the airport has recently changed from private to public use, and is now charted as such on FAA products. I would make a similar suggestion for the Meadow Lake airport. I've attached each airport's page out of our 2021 State Airport Directory if that's helpful.

Again, thanks for including us on this.

Dave

David Ulane, A.A.E.
Aeronautics Director



From: Salamack, Kristin A <kristin_salamack@fws.gov>
Sent: Tuesday, June 1, 2021 2:36 PM
To: MCCORKLE, JENNIFER L CTR USAF USAFA 10 CES/CENPP <jennifer.mccorkle.ctr@us.af.mil>; FANT, ROBERT L GS-13 USAF USAFA 10 CES/CEI <robert.fant.1@us.af.mil>
Subject: [Non-DoD Source] Intergovernmental Review of AFA's Proposed Parachute & Soaring Operations at Bullseye AAF

Hello Jennifer McCorkle and Robert Frant,

The U.S. Fish and Wildlife Service (Service) has reviewed the documents associated with the proposed parachute and training operations in the airspace surrounding the Bullseye Auxiliary Airfield near Ellicott, CO. The Service has no concerns with this project resulting in impacts to species listed under the Endangered Species Act as candidate, proposed, threatened, or endangered.

We appreciate your efforts to ensure the conservation of threatened and endangered species. Thank you for contacting us and please let me know if you have any further questions.

Kristin Salamack (she/her/hers)
CDOT/USFWS Liaison
Colorado Ecological Services Field Office
134 Union Blvd, Lakewood, CO 80228
Office: 303/236-4748 || Mobile: 518/441-2827



From: [Nancy Prieve](#)
To: robert.fant.l@us.af
Cc: [MCCORKLE, JENNIFER L CTR USAF USAFA 10 CES/CENPP](#)
Subject: [Non-DoD Source] Proposed Parachute and Soaring Operation at Bullseye AFA
Date: Monday, May 24, 2021 12:59:07 PM

Mr. Fant,

The El Paso County Environmental Division was forwarded the scoping letter for the Proposed Parachute and Soaring Operations at Bullseye AFA. We have no comments on the project.

Thank you,
Nancy Prieve

Nancy Prieve
El Paso County Community Services Department
Environmental Division
Natural Resources Specialist
3255 Akers Drive
Colorado Springs, CO 80922
(719) 520-7845

From: [Wigner - DNR, Cody](#)
To: [McGee - DNR, Frank](#)
Cc: [MCCORKLE, JENNIFER L CTR USAF USAFA 10 CES/CENPP](#); [FANT, ROBERT L GS-13 USAF USAFA 10 CES/CEI](#); [Kimberly Sams - DNR](#)
Subject: [Non-DoD Source] Re: Intergovernmental Review of AFA's Proposed Parachute & Soaring Operations at Bullseye AAF
Date: Wednesday, May 19, 2021 1:03:08 PM

Jennifer and Robert,

Thank you for the opportunity to comment. We will send you our comments back within the next 30 days.

Cody Wigner
Area Wildlife Manager-Colorado Springs



P 719.227.5218 | C 719.439.9634
4255 Sinton Road, Colorado Springs, CO 80907
cody.wigner@state.co.us | cpw.state.co.us

On Tue, May 18, 2021 at 1:20 PM McGee - DNR, Frank <frank.mcgee@state.co.us> wrote:

Jennifer,
I've started a new position with CPW, Cody Wigner has been selected as my replacement. I've copied him on this email.

Thanks,
Frank McGee
Law Enforcement Training Manager



P 303.291.7214 | C 720.642.0388
6060 Broadway, Denver, CO 80216
frank.mcgee@state.co.us | cpw.state.co.us





DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Mr. Hugh Privette
Colorado Springs East Airport
3060 Flying View
Calhan, CO 80808
Email address: htprivette2@yahoo.com

Dear Mr. Privette

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

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The USAF requests your comments regarding the proposed project. Please provide us with your response within 30 days of receipt of this letter. Upon completion, the Draft EA will be made available in local libraries and on the internet for a 30-day public review and comment period.

Thank you in advance for your assistance in this process. If you have any questions on this project, please contact Mr. Robert Fant at 719-333-9739; robert.fant.1@us.af.mil; or 8120 Edgerton Drive, USAFA, CO 80840.

Sincerely,

FANT.ROBERT
L.1112200084

Robert L. Fant, P.E.

Attachment:

1. Project Description

Environmental Assessment for Parachute and Soaring Operations at Bullseye Auxiliary Airfield, Colorado

From: [Nancy Prieve](#)
To: [SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP](#)
Subject: (Non-DoD Source) RE: Section 106 Consultation Request for Comments- New Operations at USAFA Bullseye Auxiliary Airfield (BAA)
Date: Tuesday, June 1, 2021 12:39:36 PM

The El Paso County Environmental Division has no comments on this project.

Nancy Prieve
El Paso County Community Services Department
Environmental Division
Natural Resources Specialist
3255 Akers Drive
Colorado Springs, CO 80922
(719) 520-7845

From: SCHRIEVER, BERNARD A II CTR USAF USAFA 10 CES/CENPP <bernard.schriever.ctr@us.af.mil>
Sent: Friday, May 28, 2021 10:23 AM
To: Nancy Prieve <NancyPrieve@elpasoco.com>; Osborne - DNR, Justin <justin.osborne@state.co.us>; Markham - DNR, Leann <leann.markham@state.co.us>
Subject: Section 106 Consultation Request for Comments. New Operations at USAFA Bullseye Auxiliary Airfield (BAA)

CAUTION: This email originated from outside the El Paso County technology network. Do not click links or open attachments unless you recognize the sender and know the content is safe. Please call IT Customer Support at 520-6355 if you are unsure of the integrity of this message.

Ms. Erin M. Manning
Deputy Director
10th Civil Engineer Squadron
8120 Edgerton Drive, Suite 40
USAF Academy CO 80840-2400

Dear Tribal Historic Preservation Officer, Colorado State Land Board, and El Paso County

The United States Air Force Academy (USAF A) contacted you in October 2020 (Attachment 1) to initiate National Historic Preservation Act, Section 106, consultation on proposed soaring and parachute operations at USAFA's Bullseye Auxiliary Airfield (BAA). This follow-on letter transmits project description (Attachment 2) with details on the proposed soaring and parachute operations. Based on this information, we request your concurrence on our proposed determination of "no historic properties affected" as described in 36 CFR § 800.4(d)(1).

Due to the nature and scope of this undertaking, in accordance with 36 CFR 800.2(c), we are sending this information to all the federally-recognized tribes routinely consulted by USAFA (Attachment 3). The Colorado State Historic Preservation Officer also is being consulted, and we will address any comments or concerns therefrom. This Section 106 consultation is linked to a National Environmental Policy Act environmental assessment in progress with additional stakeholders including the public.

For questions please contact Mr. Erwin Roemer, 10 CES/CENP, USAFA Cultural Resources Manager, at erwin.roemer@us.af.mil or teleworking (646) 673-4642. We appreciate your time for review and assistance on this matter.

Very Respectfully

ERIN M. MANNING, GS-14, DAF

4 Attachments:
1a. Consultation Initiation Package (Letter)
1b. Consultation Initiation Package (Letter Attachments)
2. Project Description
3. List of Consulting Parties

Thank you,

//SIGNED//

Bernard Schriever, CTR
Cultural Resources Planner
10 CES/CENPP
KIRA Facilities Services
8120 Edgerton Dr.
USAF Academy, CO 80840
Desk: 719-333-8375
Cell: 970-901-4999

MCCORKLE, JENNIFER L CTR USAF USAFA 10 CES/CENPP

From: Ochis - DNR, Greg <greg.ochis@state.co.us>
Sent: Tuesday, June 1, 2021 7:28 AM
To: MCCORKLE, JENNIFER L CTR USAF USAFA 10 CES/CENPP
Cc: KELLEY, AMY P GS-13 USAF USAFA 10 ABW/CVX; FANT, ROBERT L GS-13 USAF USAFA 10 CES/CEI
Subject: [Non-DoD Source] Re: Intergovernmental Review of AFA's Proposed Parachute & Soaring Operations at Bullseye AAF

Hi Jennifer,

We have reviewed the attached material and do not have any questions or concerns at this time. If the program is developed as described, we will need to work with AFA representatives to develop protocols for any activities outside of the existing ROW in order to ensure that there are no conflicts between people and livestock.

Thanks for the opportunity to provide you with comments.

On Fri, May 14, 2021 at 2:17 PM MCCORKLE, JENNIFER L CTR USAF USAFA 10 CES/CENPP <jennifer.mccorkle.ctr@us.af.mil> wrote:
Dear Mr. Ochis

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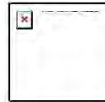
Thank you in advance for your assistance in this process. If you have any questions on this project, please contact Mr. Robert Fant at 719-333-9739; robert.fant.1@us.af.mil <mailto:robert.fant.1@us.af.mil>; or 8120 Edgerton Drive, USAFA, CO 80840.

Email sent on behalf of Mr. Robert Fant

//SIGN//

Jennifer McCorkle, Environmental Planner, desk (719) 333 0897 / cell (719) 440-4681

--
Greg Ochis
Assistant Director for Asset Management



P 303.866.3454 x3309 | F 303.866.3152 | C 303.641.1872
1127 Sherman Street, Suite 300, Denver, CO 80203
greg.ochis@state.co.us | www.colorado.gov/trustlands



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
DIRECTORATE OF PUBLIC WORKS
1626 EVANS STREET, BLDG 1219
FORT CARSON, CO 80913-4143

June 8, 2021

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Dear Mr. Fant:

Thank you for an opportunity to review the scoping letter you sent on May 14, 2021 concerning the proposed project to expand training at the Bullseye Auxiliary Airfield for parachute and glider soaring operations at and around the airfield.

The Fort Carson Airfield Operations Manager, 4th Infantry Division G-3 Aviation and 4th Combat Aviation Brigade have reviewed your proposal and have no comments or concerns.

Please include Fort Carson on any future opportunities to review additional information, including an opportunity to comment on the Environmental Assessment.

The point of contact for this action is Ms. Angie Bell, NEPA Program Manager, email: angie.l.bell.civ@mail.mil or telephone: (719) 526-4666.

WYKA,JOSEPH,ED
WARD.1078727531

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WYKA,JOSEPH,EDWARD.1078727
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Date: 2021.06.14 16:28:41 -06'00'

Joe Wyka
Director of Public Works

From: TOMLINSON, ROBERT R GS-13 USSF SPOC 21 CES/CEIE <robert.tomlinson@spaceforce.mil>
Sent: Monday, June 14, 2021 8:53 AM
To: FANT, ROBERT L GS-13 USAF USAFA 10 CES/CEI <robert.fant.1@us.af.mil>
Subject: RE: Intergovernmental Review of AFA's Proposed Parachute & Soaring Operations at Bullseye AAF

Hi Bob,

Sorry responding so late. Been crazy over here (transition to USSF). Finally got the last person to respond. No big concerns, just increased traffic and damage to apron, nothing that can't be overcome. Airfield management said no issues.

V/r

Robert Tomlinson, GS-13, Chief, Environmental Quality
21 CES/CEIE
580 Goodfellow Street, Suite 2370
Peterson AFB CO 80914-2370

DSN 834-6100
Commercial 719-556-6100

eDASH: <https://usaf.dps.mil/teams/eDASH/WPP/HomePage/Home.aspx>
Peterson eDASH Home: <https://usaf.dps.mil/teams/10624/Peterson/SitePages/Home.aspx>



DEPARTMENT OF THE AIR FORCE
10TH CIVIL ENGINEER SQUADRON
USAF ACADEMY COLORADO

Mr. Robert Fant, P.E.
Chief, Installation Management
8120 Edgerton Drive, Suite 40
U.S. Air Force Academy, CO 80840

Mr. Dave Elliott
Meadow Lake Airport
Falcon, CO 80808
Email address: falcon20flier@msn.com

Dear Mr. Elliott

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

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Thank you in advance for your assistance in this process. If you have any questions on this project, please contact Mr. Robert Fant at 719-333-9739, robert.fant.l@us.af.mil, or 8120 Edgerton Drive, USAFA, CO 80840.

Sincerely,

FANT.ROBERT
L.1112200084

Robert L. Fant, P.E.

Attachment:
1. Project Description

Environmental Assessment for Parachute and Soaring Operations at Bullseye Auxiliary Airfield, Colorado

From: David Elliott <falcon20flier@msn.com>
Sent: Friday, August 6, 2021 8:49 AM
To: MCCORKLE, JENNIFER L CTR USAF USAFA 10 CES/CENPP <jennifer.mccorkle.ctr@us.af.mil>
Cc: FANT, ROBERT L GS-14 USAF USAFA 10 CES/CEI <robert.fant.1@us.af.mil>; SCHATZ, BARRY A GS-12 USAF USAFA 10 CES/CEIE <barry.schatz.2@us.af.mil>; STOFFEL, MARK W CIV USAF USAFA 306 OSS/OSO <mark.stoffel@us.af.mil>
Subject: [Non-DoD Source] Re: Intergovernmental Review of AFA's Proposed Parachute & Soaring Operations at Bullseye AAF

Good Morning,

Sorry, I thought I had responded after our phone conversations, but can't even find my email. Must have neglected to hit the "send" button.

We have no objections to any expansion of operations at Bullseye. To the best of our knowledge, Meadow Lake based aircraft do not use that facility and remain clear of it.

Our only concern might be an unintended expansion of operations here at KFLY, if powered aircraft from Bullseye are displaced due to dissimilar operations on the one runway there. We are already seeing an increase in Rally, Bolt, Shark, and now Tiger, operations here and it frequently makes it difficult for our own 450+ based aircraft to train in the Meadow Lake pattern. Similar to USAFA, we have glider operations on the west side, and powered-paraglider operations under the powered traffic on the east side. We discourage parachute operations for safety reasons due to the saturated aircraft operations.

We're not suggesting a need to cut back at all. Meadow Lake is a totally open public-use airport and most of us support the USAFA/military mission. But being a non-towered airport and the No 2 training airport in the state (according to the Colorado Aeronautics Board), we have some safety concerns about over-saturation of our traffic pattern and the rapidly encroaching non-compatible land development around the airport.

Please feel free to contact me with any questions.

Dave
cell/text: 719-339-0928

From: MCCORKLE, JENNIFER L CTR USAF USAFA 10 CES/CENPP <jennifer.mccorkle.ctr@us.af.mil>
Sent: Friday, July 2, 2021 10:01 AM
To: falcon20flier@msn.com <falcon20flier@msn.com>
Cc: FANT, ROBERT L GS-13 USAF USAFA 10 CES/CEI <robert.fant.1@us.af.mil>; SCHATZ, BARRY A GS-12 USAF USAFA 10 CES/CEIE <barry.schatz.2@us.af.mil>
Subject: Intergovernmental Review of AFA's Proposed Parachute & Soaring Operations at Bullseye AAF

Dear Mr. Elliott

1

The United States Air Force (USAF) is in the early stages of preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with conducting both parachute and soaring training operations (See detailed Project Description in Attachment 1) in the airspace surrounding the Bullseye Auxiliary Airfield (Bullseye). Bullseye (Figure 1) is located approximately 30 miles southeast of the U.S. Air Force Academy (Academy). The USAF has been using Bullseye and surrounding training areas for the Powered Flight and Initial Flight Programs for the last 20 years. The 94th and 98th Flying Training Squadrons (FTS) require additional flexibility and capability to conduct parachute and soaring operations at a location away from the Academy. This EA is being prepared pursuant to the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321-4347), the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), 32 CFR Part 989, Environmental Impact Analysis Process.

Parachute operations would result in an increase of 1,200 annual airfield operations, or approximately 50 operations per day (24 days) at Bullseye. Soaring operations at Bullseye would occur for up to 66 days per year. The proposed soaring operations would result in 660 arrivals and departures from Bullseye per year, totaling 9,570 towing circuits per year. Soaring operations would be conducted inside of a circular area with a five nautical mile radius centered on Bullseye. Soaring operations would occur up to 9,500 MSL in the Proposed Soaring Area located in the northeast quadrant of the circular area (see Figure 2). If soaring operations were to go above 9,500 MSL, the SCO would contact the FAA at COS and request approval for soaring operations from 9,500 MSL up to 12,500 MSL. The proposed parachute and soaring operations would represent a 44 percent increase in aircraft operations at Bullseye. Both soaring and parachute operations would require minimal infrastructure at Bullseye. No subsurface excavation or permanent construction is proposed for the project.

The USAF requests your comments regarding the proposed project. Please provide us with your response within 30 days of receipt of this letter. Upon completion, the Draft EA will be made available in local libraries and on the internet for a 30-day public review and comment period.

Thank you in advance for your assistance in this process. If you have any questions on this project, please contact Mr. Robert Fant at 719-333-9739; robert.fant.1@us.af.mil; or 8120 Edgerton Drive, USAFA, CO 80840.

Sent on behalf of Mr. Robert Fant.

//SIGN//
Jennifer McCorkle, Environmental Planner, desk (719) 333 0897

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PUBLIC NOTICE NEWSPAPER ADVERTISEMENT

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PUBLIC NOTICE

**Notice of Availability (NOA) of the Draft
Environmental Assessment (EA) for Parachute and
Soaring Operations at Bullseye Auxiliary Airfield,
Colorado**

The Draft EA addresses the potential impacts resulting from the United States Air Force Academy conducting parachute and soaring operations at Bullseye Auxiliary Airfield.

Under the proposed action, Bullseye would provide an additional location where the 98 FTS could conduct parachute operations and the 94 FTS could conduct soaring operations with minimal interference to other military or civilian aircraft operations. Both parachute and soaring operations would require minimal infrastructure at Bullseye. No construction is planned as part of this action. Bullseye would be used for parachute operations for up to 10 weeks per year and for soaring operations up to 66 days per year. Aircraft operations at Bullseye would increase by approximately 44 percent. No new special use airspace will be required. The public is invited to review the Draft EA and provide comments. The public comment period extends from 8/30/21 to 9/29/21. An electronic copy of the Draft EA is available at:

www.usafa.af.mil/Units/10th-Air-Base-Wing/

A printed copy of the Draft EA is available at the Calhan Library located at 600 Bank Street, Calhan, CO 80808. Substantive written comments and questions will be addressed in the Final EA. To be included in the Final EA, substantive comments must be received prior to the close of the formal comment period on 9/29/21. Comments on the Draft EA can be directed to: Ms. Jennifer McCorkle at: jennifer.mccorkle.ctr@us.af.mil If you would rather mail your comments, please mail them to Ms. Jennifer McCorkle, 8120 Edgerton Drive, USAFA, CO 80840.

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APPENDIX B

AIR QUALITY

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1. AIR QUALITY SUPPORTING DOCUMENTATION

1.1 EMISSIONS CALCULATIONS

1.1.1 COMMUTE EMISSIONS

Emissions factors from ACAM were used to estimate the emissions from using buses and government or personally owned vehicles to commute cadets and support staff from the Academy to Bullseye. Approximately 6 buses and 18 POV/GOV would be used to commute daily. In order to provide a conservative estimate, it was assumed that all cadets and support staff would commute 40 miles each way every day.

Table A-1. Commute Vehicle Emissions (tons/year)

	No. Vehicles	Miles	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CO _{2e}
LDGV	7.2	5600	0.013378	8.89E-05	0.010311	0.149425	0.0004	0.000356	14.37286
LDGT	10.8	5600	0.0242004	0.0002	0.0268	0.302272	0.000733	0.000667	27.83426
HDDV	6	5600	0.01777807	0.000481	0.187114	0.062853	0.006222	0.005741	54.8405
TOTALS			0.055	0.001	0.224	0.515	0.007	0.007	97.048

1.1.2 ACAM DOCUMENTS

This section presents an export of results directly from the air quality modeling software, retaining the organizational headings and formatting produced by the software.

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

1. General Information

- Action Location

Base: USAF ACADEMY

State: Colorado

County(s): El Paso

Regulatory Area(s): Colorado Springs, CO; NOT IN A REGULATORY AREA

- Action Title: PARACHUTE AND SOARING OPERATIONS AT BULLSEYE AUXILIARY AIRFIELD, COLORADO

- Project Number/s (if applicable):

- Projected Action Start Date: 1 / 2021

- Action Purpose and Need:

The purpose of the proposed action is to provide operational flexibility and capability for 98 FTS parachute and 94 FTS soaring operations by providing an additional location for parachute training and soaring operations away from the Academy.

Additional flexibility and capability is needed to ensure that the 94 FTS and 98 FTS can continue to provide effective training. The Academy continuously trains and certifies cadets in parachute and soaring operations by maintaining a schedule that has cadets advancing to cadet instructors so that those cadet instructors can then train the next class of cadets. Current parachute and soaring training is primarily conducted over Academy lands, with pilots taking off and landing at Davis Airfield. The presence of the Front Range adjacent to the airfield generates wind speeds greater than 20 miles per hour (mph). These conditions are unfavorable for parachute and soaring operations. In 2016, the 98 FTS experienced 89 lost or shortened jump days due to weather conditions. In 2017, they experienced 101 lost or shortened jump days, resulting in the loss of more than 5,500 jumps that year.

- Action Description:

Under the preferred alternative, Bullseye would provide an additional location where the 98 FTS could conduct parachute operations and the 94 FTS could conduct soaring operations with minimal interference to other military or civilian aircraft operations. The ability to schedule parachute and soaring operations at Bullseye would increase operational flexibility and capabilities because the wind conditions at Bullseye are often more favorable than those at Davis Airfield; therefore, parachute and soaring operations at Bullseye would be less likely to be impacted by wind conditions.

- Point of Contact

Name: Brad Boykin

Title: CTR

Organization: Leidos

Email: boykinb@leidos.com

Phone Number: 737-717-8070

- Activity List:

	Activity Type	Activity Title
2.	Aircraft	Parachute Operations
3.	Aircraft	Soaring Operations

Emission factors and air emission estimating methods come from the United States Air Force's Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and Air Emissions Guide for Air Force Transitory Sources.

2. Aircraft

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

2.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Add

- Activity Location

County: El Paso

Regulatory Area(s): Colorado Springs, CO; NOT IN A REGULATORY AREA

- Activity Title: Parachute Operations

- Activity Description:

Up to 10 weeks of operations up to 25 LTOs per day

- Activity Start Date

Start Month: 1

Start Year: 2021

- Activity End Date

Indefinite: Yes

End Month: N/A

End Year: N/A

- Activity Emissions:

Pollutant	Emissions Per Year (TONs)
VOC	3.176111
SO _x	0.114969
NO _x	0.557397
CO	4.225455
PM 10	0.035233

Pollutant	Emissions Per Year (TONs)
PM 2.5	0.031807
Pb	0.000000
NH ₃	0.000000
CO ₂ e	347.5

- Activity Emissions [Flight Operations (includes Trim Test & APU) part]:

Pollutant	Emissions Per Year (TONs)
VOC	3.176111
SO _x	0.114969
NO _x	0.557397
CO	4.225455
PM 10	0.035233

Pollutant	Emissions Per Year (TONs)
PM 2.5	0.031807
Pb	0.000000
NH ₃	0.000000
CO ₂ e	347.5

2.2 Aircraft & Engines

2.2.1 Aircraft & Engines Assumptions

- Aircraft & Engine

Aircraft Designation: UV-18B

Engine Model: PT6A-27

Primary Function: Transport - Bomber

Aircraft has After burn: No

Number of Engines: 2

- Aircraft & Engine Surrogate

Is Aircraft & Engine a Surrogate? No

Original Aircraft Name:

Original Engine Name:

2.2.2 Aircraft & Engines Emission Factor(s)

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

- Aircraft & Engine Emissions Factors (lb/1000lb fuel)

	Fuel Flow	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CO _{2e}
Idle	115.00	57.70	1.07	2.43	64.00	0.50	0.45	3234
Approach	215.00	2.51	1.07	8.37	23.26	0.10	0.09	3234
Intermediate	400.00	0.00	1.07	7.00	1.20	0.25	0.23	3234
Military	425.00	0.00	1.07	7.81	1.01	0.24	0.22	3234
After Burn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3234

2.3 Flight Operations

2.3.1 Flight Operations Assumptions

- Flight Operations

Number of Aircraft:	1
Number of Annual LTOs (Landing and Take-off) cycles for all Aircraft:	1750
Number of Annual TGOs (Touch-and-Go) cycles for all Aircraft:	0
Number of Annual Trim Test(s) per Aircraft:	12

- Default Settings Used: Yes

- Flight Operations TIMs (Time In Mode)

Taxi/Idle Out [Idle] (mins):	9.2 (default)
Takeoff [Military] (mins):	0.4 (default)
Takeoff [After Burn] (mins):	0 (default)
Climb Out [Intermediate] (mins):	1.2 (default)
Approach [Approach] (mins):	5.1 (default)
Taxi/Idle In [Idle] (mins):	6.7 (default)

Per the Air Emissions Guide for Air Force Mobile Sources, the defaults values for military aircraft equipped with after burner for takeoff is 50% military power and 50% afterburner. (Exception made for F-35 where KARNES 3.2 flight profile was used)

- Trim Test

Idle (mins):	12 (default)
Approach (mins):	27 (default)
Intermediate (mins):	9 (default)
Military (mins):	12 (default)
AfterBurn (mins):	0 (default)

2.3.2 Flight Operations Formula(s)

- Aircraft Emissions per Mode for LTOs per Year

$$AEM_{POL} = (TIM / 60) * (FC / 1000) * EF * NE * LTO / 2000$$

AEM_{POL}: Aircraft Emissions per Pollutant & Mode (TONs)

TIM: Time in Mode (min)

60: Conversion Factor minutes to hours

FC: Fuel Flow Rate (lb/hr)

1000: Conversion Factor pounds to 1000pounds

EF: Emission Factor (lb/1000lb fuel)

NE: Number of Engines

LTO: Number of Landing and Take-off Cycles (for all aircraft)

2000: Conversion Factor pounds to TONS

- Aircraft Emissions for LTOs per Year

$$AE_{LTO} = AEM_{IDLE_IN} + AEM_{IDLE_OUT} + AEM_{APPROACH} + AEM_{CLIMBOUT} + AEM_{TAKEOFF}$$

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

A_{ELTO}: Aircraft Emissions (TONs)
A_{EMIDLE_IN}: Aircraft Emissions for Idle-In Mode (TONs)
A_{EMIDLE_OUT}: Aircraft Emissions for Idle-Out Mode (TONs)
A_{EMAPPROACH}: Aircraft Emissions for Approach Mode (TONs)
A_{EMCLIMBOUT}: Aircraft Emissions for Climb-Out Mode (TONs)
A_{EMTAKEOFF}: Aircraft Emissions for Take-Off Mode (TONs)

- Aircraft Emissions per Mode for TGOs per Year

$$AEM_{POL} = (TIM / 60) * (FC / 1000) * EF * NE * TGO / 2000$$

A_{EMPOL}: Aircraft Emissions per Pollutant & Mode (TONs)
TIM: Time in Mode (min)
60: Conversion Factor minutes to hours
FC: Fuel Flow Rate (lb/hr)
1000: Conversion Factor pounds to 1000pounds
EF: Emission Factor (lb/1000lb fuel)
NE: Number of Engines
TGO: Number of Touch-and-Go Cycles (for all aircraft)
2000: Conversion Factor pounds to TONS

- Aircraft Emissions for TGOs per Year

$$AETGO = AEM_{APPROACH} + AEM_{CLIMBOUT} + AEM_{TAKEOFF}$$

A_{ETGO}: Aircraft Emissions (TONs)
A_{EMAPPROACH}: Aircraft Emissions for Approach Mode (TONs)
A_{EMCLIMBOUT}: Aircraft Emissions for Climb-Out Mode (TONs)
A_{EMTAKEOFF}: Aircraft Emissions for Take-Off Mode (TONs)

- Aircraft Emissions per Mode for Trim per Year

$$AEPS_{POL} = (TD / 60) * (FC / 1000) * EF * NE * NA * NTT / 2000$$

A_{EPSPOL}: Aircraft Emissions per Pollutant & Power Setting (TONs)
TD: Test Duration (min)
60: Conversion Factor minutes to hours
FC: Fuel Flow Rate (lb/hr)
1000: Conversion Factor pounds to 1000pounds
EF: Emission Factor (lb/1000lb fuel)
NE: Number of Engines
NA: Number of Aircraft
NTT: Number of Trim Test
2000: Conversion Factor pounds to TONS

- Aircraft Emissions for Trim per Year

$$AETRIM = AEPS_{IDLE} + AEPS_{APPROACH} + AEPS_{INTERMEDIATE} + AEPS_{MILITARY} + AEPS_{AFTERBURN}$$

A_{ETRIM}: Aircraft Emissions (TONs)
A_{EPSIDLE}: Aircraft Emissions for Idle Power Setting (TONs)
A_{EPSAPPROACH}: Aircraft Emissions for Approach Power Setting (TONs)
A_{EPSINTERMEDIATE}: Aircraft Emissions for Intermediate Power Setting (TONs)
A_{EPSMILITARY}: Aircraft Emissions for Military Power Setting (TONs)
A_{EPSAFTERBURN}: Aircraft Emissions for After Burner Power Setting (TONs)

2.4 Auxiliary Power Unit (APU)

2.4.1 Auxiliary Power Unit (APU) Assumptions

- Default Settings Used: Yes

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

- Auxiliary Power Unit (APU) (default)

Number of APU per Aircraft	Operation Hours for Each LTO	Exempt Source?	Designation	Manufacturer
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2.4.2 Auxiliary Power Unit (APU) Emission Factor(s)

- Auxiliary Power Unit (APU) Emission Factor (lb/hr)

Designation	Fuel Flow	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CO _{2e}
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2.4.3 Auxiliary Power Unit (APU) Formula(s)

- Auxiliary Power Unit (APU) Emissions per Year

$$APU_{POL} = APU * OH * LTO * EF_{POL} / 2000$$

APU_{POL}: Auxiliary Power Unit (APU) Emissions per Pollutant (TONs)

APU: Number of Auxiliary Power Units

OH: Operation Hours for Each LTO (hour)

LTO: Number of LTOs

EF_{POL}: Emission Factor for Pollutant (lb/hr)

2000: Conversion Factor pounds to tons

3. Aircraft

3.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Add

- Activity Location

County: El Paso

Regulatory Area(s): NOT IN A REGULATORY AREA; Colorado Springs, CO

- Activity Title: Soaring Operations

- Activity Description:

Up to 10 weeks of operations using up to 6 towplanes for a total of 150 LTOs per day

- Activity Start Date

Start Month: 1

Start Year: 2021

- Activity End Date

Indefinite: Yes

End Month: N/A

End Year: N/A

- Activity Emissions:

Pollutant	Emissions Per Year (TONs)
VOC	1.029940
SO _x	0.061254
NO _x	0.317763
CO	51.082623
PM 10	2.558979

Pollutant	Emissions Per Year (TONs)
PM 2.5	2.303167
Pb	0.000000
NH ₃	0.000000
CO _{2e}	185.1

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

- Activity Emissions [Flight Operations (includes Trim Test & APU) part]:

Pollutant	Emissions Per Year (TONs)
VOC	1.029940
SO _x	0.061254
NO _x	0.317763
CO	51.082623
PM 10	2.558979

Pollutant	Emissions Per Year (TONs)
PM 2.5	2.303167
Pb	0.000000
NH ₃	0.000000
CO _{2e}	185.1

3.2 Aircraft & Engines

3.2.1 Aircraft & Engines Assumptions

- Aircraft & Engine

Aircraft Designation: T-41
Engine Model: IO-360-C
Primary Function: General - Piston
Aircraft has After burn: No
Number of Engines: 1

- Aircraft & Engine Surrogate

Is Aircraft & Engine a Surrogate? Yes
Original Aircraft Name: PA-18 Supercub
Original Engine Name: O-320-B2B

3.2.2 Aircraft & Engines Emission Factor(s)

- Aircraft & Engine Emissions Factors (lb/1000lb fuel)

	Fuel Flow	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CO _{2e}
Idle	8.00	56.58	1.07	1.16	897.40	60.00	54.00	3234
Approach	37.00	11.15	1.07	10.16	691.26	47.95	43.16	3234
Intermediate	72.00	9.38	1.07	4.59	983.26	40.00	36.00	3234
Military	103.00	11.50	1.07	1.99	1199.03	20.00	18.00	3234
After Burn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3234

3.3 Flight Operations

3.3.1 Flight Operations Assumptions

- Flight Operations

Number of Aircraft: 6
Number of Annual LTOs (Landing and Take-off) cycles for all Aircraft: 9000
Number of Annual TGOs (Touch-and-Go) cycles for all Aircraft: 0
Number of Annual Trim Test(s) per Aircraft: 12

- Default Settings Used: Yes

- Flight Operations TIMs (Time In Mode)

Taxi/Idle Out [Idle] (mins): 12 (default)
Takeoff [Military] (mins): 0.3 (default)
Takeoff [After Burn] (mins): 0 (default)
Climb Out [Intermediate] (mins): 4.98 (default)
Approach [Approach] (mins): 6 (default)
Taxi/Idle In [Idle] (mins): 4 (default)

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

Per the Air Emissions Guide for Air Force Mobile Sources, the defaults values for military aircraft equipped with after burner for takeoff is 50% military power and 50% afterburner. (Exception made for F-35 where KARNES 3.2 flight profile was used)

- Trim Test

Idle (mins):	12 (default)
Approach (mins):	27 (default)
Intermediate (mins):	9 (default)
Military (mins):	12 (default)
AfterBurn (mins):	0 (default)

3.3.2 Flight Operations Formula(s)

- Aircraft Emissions per Mode for LTOs per Year

$$AEM_{POL} = (TIM / 60) * (FC / 1000) * EF * NE * LTO / 2000$$

AEM_{POL} : Aircraft Emissions per Pollutant & Mode (TONs)

TIM: Time in Mode (min)

60: Conversion Factor minutes to hours

FC: Fuel Flow Rate (lb/hr)

1000: Conversion Factor pounds to 1000pounds

EF: Emission Factor (lb/1000lb fuel)

NE: Number of Engines

LTO: Number of Landing and Take-off Cycles (for all aircraft)

2000: Conversion Factor pounds to TONs

- Aircraft Emissions for LTOs per Year

$$AE_{LTO} = AEM_{IDLE_IN} + AEM_{IDLE_OUT} + AEM_{APPROACH} + AEM_{CLIMBOUT} + AEM_{TAKEOFF}$$

AE_{LTO} : Aircraft Emissions (TONs)

AEM_{IDLE_IN} : Aircraft Emissions for Idle-In Mode (TONs)

AEM_{IDLE_OUT} : Aircraft Emissions for Idle-Out Mode (TONs)

$AEM_{APPROACH}$: Aircraft Emissions for Approach Mode (TONs)

$AEM_{CLIMBOUT}$: Aircraft Emissions for Climb-Out Mode (TONs)

$AEM_{TAKEOFF}$: Aircraft Emissions for Take-Off Mode (TONs)

- Aircraft Emissions per Mode for TGOs per Year

$$AEM_{POL} = (TIM / 60) * (FC / 1000) * EF * NE * TGO / 2000$$

AEM_{POL} : Aircraft Emissions per Pollutant & Mode (TONs)

TIM: Time in Mode (min)

60: Conversion Factor minutes to hours

FC: Fuel Flow Rate (lb/hr)

1000: Conversion Factor pounds to 1000pounds

EF: Emission Factor (lb/1000lb fuel)

NE: Number of Engines

TGO: Number of Touch-and-Go Cycles (for all aircraft)

2000: Conversion Factor pounds to TONs

- Aircraft Emissions for TGOs per Year

$$AE_{TGO} = AEM_{APPROACH} + AEM_{CLIMBOUT} + AEM_{TAKEOFF}$$

AE_{TGO} : Aircraft Emissions (TONs)

$AEM_{APPROACH}$: Aircraft Emissions for Approach Mode (TONs)

$AEM_{CLIMBOUT}$: Aircraft Emissions for Climb-Out Mode (TONs)

$AEM_{TAKEOFF}$: Aircraft Emissions for Take-Off Mode (TONs)

DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

- Aircraft Emissions per Mode for Trim per Year

$$AEPS_{POL} = (TD / 60) * (FC / 1000) * EF * NE * NA * NTT / 2000$$

AEPS_{POL}: Aircraft Emissions per Pollutant & Power Setting (TONs)
 TD: Test Duration (min)
 60: Conversion Factor minutes to hours
 FC: Fuel Flow Rate (lb/hr)
 1000: Conversion Factor pounds to 1000pounds
 EF: Emission Factor (lb/1000lb fuel)
 NE: Number of Engines
 NA: Number of Aircraft
 NTT: Number of Trim Test
 2000: Conversion Factor pounds to TONS

- Aircraft Emissions for Trim per Year

$$AE_{TRIM} = AEPS_{IDLE} + AEPS_{APPROACH} + AEPS_{INTERMEDIATE} + AEPS_{MILITARY} + AEPS_{AFTERBURN}$$

AE_{TRIM}: Aircraft Emissions (TONs)
 AEPS_{IDLE}: Aircraft Emissions for Idle Power Setting (TONs)
 AEPS_{APPROACH}: Aircraft Emissions for Approach Power Setting (TONs)
 AEPS_{INTERMEDIATE}: Aircraft Emissions for Intermediate Power Setting (TONs)
 AEPS_{MILITARY}: Aircraft Emissions for Military Power Setting (TONs)
 AEPS_{AFTERBURN}: Aircraft Emissions for After Burner Power Setting (TONs)

3.4 Auxiliary Power Unit (APU)

3.4.1 Auxiliary Power Unit (APU) Assumptions

- Default Settings Used: Yes

- Auxiliary Power Unit (APU) (default)

Number of APU per Aircraft	Operation Hours for Each LTO	Exempt Source?	Designation	Manufacturer
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3.4.2 Auxiliary Power Unit (APU) Emission Factor(s)

- Auxiliary Power Unit (APU) Emission Factor (lb/hr)

Designation	Fuel Flow	VOC	SO _x	NO _x	CO	PM 10	PM 2.5	CO _{2e}
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3.4.3 Auxiliary Power Unit (APU) Formula(s)

- Auxiliary Power Unit (APU) Emissions per Year

$$APU_{POL} = APU * OH * LTO * EF_{POL} / 2000$$

APU_{POL}: Auxiliary Power Unit (APU) Emissions per Pollutant (TONs)
 APU: Number of Auxiliary Power Units
 OH: Operation Hours for Each LTO (hour)
 LTO: Number of LTOs
 EF_{POL}: Emission Factor for Pollutant (lb/hr)
 2000: Conversion Factor pounds to tons

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: USAF ACADEMY
State: Colorado
County(s): El Paso
Regulatory Area(s): Colorado Springs, CO; NOT IN A REGULATORY AREA

b. Action Title: PARACHUTE AND SOARING OPERATIONS AT BULLSEYE AUXILIARY AIRFIELD, COLORADO

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2021

e. Action Description:

Under the preferred alternative , Bullseye would provide an additional location where the 98 FTS could conduct parachute operations and the 94 FTS could conduct soaring operations with minimal interference to other military or civilian aircraft operations. The ability to schedule parachute and soaring operations at Bullseye would increase operational flexibility and capabilities because the wind conditions at Bullseye are often more favorable than those at Davis Airfield; therefore, parachute and soaring operations at Bullseye would be less likely to be impacted by wind conditions.

f. Point of Contact:

Name: Brad Boykin
Title: CTR
Organization: Leidos
Email: boykinb@leidos.com
Phone Number: 737-717-8070

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:

2021

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Colorado Springs, CO			
VOC	4.206		
NOx	0.875		
CO	55.308	100	No
SOx	0.176		

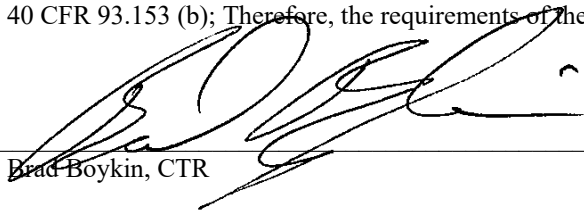
AIR CONFORMITY APPLICABILITY MODEL REPORT RECORD OF CONFORMITY ANALYSIS (ROCA)

PM 10	2.594		
PM 2.5	2.335		
Pb	0.000		
NH3	0.000		
CO2e	532.6		
NOT IN A REGULATORY AREA			
VOC	4.206		
NOx	0.875		
CO	55.308		
SOx	0.176		
PM 10	2.594		
PM 2.5	2.335		
Pb	0.000		
NH3	0.000		
CO2e	532.6		

2022 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Colorado Springs, CO			
VOC	4.206		
NOx	0.875		
CO	55.308	100	No
SOx	0.176		
PM 10	2.594		
PM 2.5	2.335		
Pb	0.000		
NH3	0.000		
CO2e	532.6		
NOT IN A REGULATORY AREA			
VOC	4.206		
NOx	0.875		
CO	55.308		
SOx	0.176		
PM 10	2.594		
PM 2.5	2.335		
Pb	0.000		
NH3	0.000		
CO2e	532.6		

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.



Brad Boykin, CTR

02/12/2020

DATE

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