# Appendix B. Biological Resources Technical Memo

# Biological Resources Technical Memorandum

**Prepared For:** Montana Army National Guard (MTARNG)

**Prepared By:** Jacobs Engineering Group Inc. (Jacobs)

**Date:** November 22, 2021

## 1. Introduction

The Montana Army National Guard (MTARNG), in coordination with the National Guard Bureau (NGB), is proposing to develop and operate a Limited Army Aviation Support Facility (LAASF) out of a hangar in Billings, Montana located immediately west of the Billings Logan International Airport (Figure 1).

This technical memorandum presents the existing conditions, impact assessment, and applicable mitigation measures related to Biological Resources.

### 1.1 Regulatory Context

Management responsibilities and regulatory authority applicable to general wildlife, habitats, and wildlife management for the LAASF are based on several regulatory policies designated at both the federal and state level (e.g., NEPA, ESA, Sikes Act, MCA Title 87). As part of the Department of Defense (DoD)'s policy for management of natural resources, the MTARNG prepares environmental reports including Integrated Natural Resource Management Plans for specific training locations and other National Environmental Policy Act (NEPA) documentation for statewide activities that guide the management of natural resources to support and be consistent with the military mission, while protecting and enhancing those resources.

#### 1.1.1 Endangered Species Act

The Endangered Species Act of 1973 (ESA) authorizes the U.S. Fish and Wildlife Service (USFWS) (while working cooperatively with States) to identify, list, and monitor qualifying species as endangered and threatened. The process by which potential candidates are listed is determined by the vulnerability of the species population considering a number of different factors. Species that are designated as either endangered or threatened are afforded protection from possession, sale, transport, and take. The definition of take is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" including "incidental take" or significant habitat modification. Take, however, can be permitted by USFWS through the ESA Section 7 consultation process among federal agencies or by individual permit under ESA Section 10(a)(1)(B) and an accompanying habitat conservation plan.

#### 1.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) integrates and implements four international treaties that provide for the protection of migratory birds. The MBTA prohibits the "taking, killing, possession, transportation, import, and export of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior." (16 United States Code [U.S.C.] § 703). The word "take" is defined by regulation as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect" (50 *Code of Federal Regulations* [CFR] § 10.12). USFWS maintains a list of all species protected by the MBTA at 50 CFR § 10.13. This list includes over one

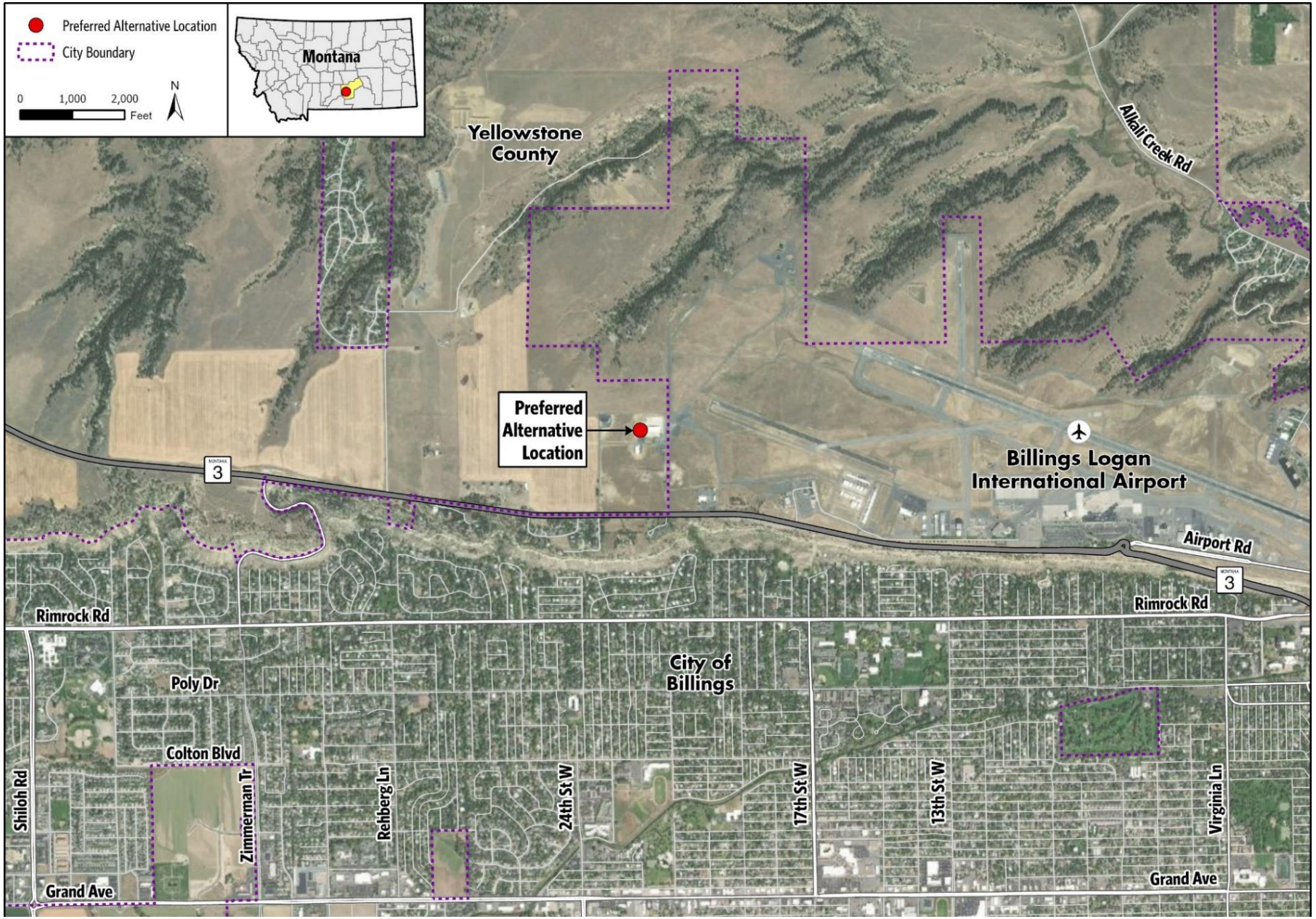



**Figure 1. Preferred Alternative Location**

thousand species of migratory birds, including eagles and other raptors, waterfowl, shorebirds, seabirds, wading birds, and perching birds.

### 1.1.3 Bald and Golden Eagle Protection Act

Under authority of the Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668–668d), bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are afforded legal protections in addition to the MBTA. BGEPA prohibits the take, sale, purchase, barter, offer of sale, transport, export or import, at any time or in any manner of any bald or golden eagle, alive or dead, or any part, nest, or egg thereof. The BGEPA also expands the common law scope of "take" to include "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb," (16 U.S.C. 668c), and includes criminal and civil penalties for violating the statute (16 U.S.C. 668). The USFWS further defined the term "disturb" as agitating or bothering an eagle to a degree that causes, or is likely to cause, injury, or either a decrease in productivity or nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior. BGEPA specifies that violations must occur "knowingly, or with wanton disregard for his act."

### 1.1.4 Birds of Conservation Concern

The 1988 amendment to the Fish and Wildlife Conservation Act mandates the U.S. Fish and Wildlife Service to identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act. Birds of Conservation Concern 2021 ([BCC] USFWS 2021a) is the most recent effort to carry out this mandate. The report identifies the migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent the Service's highest conservation priorities. BCC10, BCC11, and BCC17 designations represent inclusion on the BCC list for Bird Conservation Region 10, 11, and 17 in Montana, respectively.

### 1.1.5 Environmental Analysis of Army Actions (Final Rule, 29 March 2002).

NEPA and the Council on Environmental Quality (CEQ) regulations require Federal agencies to develop internal implementing procedures to ensure that environmental factors are considered in decision-making by using a systematic, interdisciplinary analytical approach. The Army has developed these agency-specific procedures, codified at 32 CFR Part 651, *Environmental Analysis of Army Actions* (Final Rule, 29 March 2002). Specifically, 32 CFR Part 651 —... "applies to actions of the Army and Army Reserve, to functions of the [Army National Guard] ARNG involving Federal funding, and to functions for which the Army is the DoD executive agent (32 CFR Part 651.1(e))". 32 CFR Part 651 does the following:

- Sets forth policies, responsibilities, and procedures for integrating environmental considerations into Army and ARNG planning and decision-making.
- Describes the Army and ARNG process for preparing an Environmental Assessment (EA) or an Environmental Impact Statement (EIS).
- Establishes criteria for determining Army and ARNG actions that may be categorically excluded from the requirements to prepare an EA or an EIS.

# 2. Project Description

In Montana and around the country, the ARNG prepares helicopter crews to effectively fight and serve on missions from security and combat to disaster relief and rescue operations. Numerous aviation facilities are situated around the country. Currently, MTARNG has one Army Aviation Support Facility (AASF) located at the Helena Regional Airport in western Montana. MTARNG seeks to expand aviation capabilities to the east to better serve the community and soldiers during training by having assets more readily available in the geography for the state of Montana and other surrounding states.

## 2.1 Purpose of the Project

The purpose of the proposed action is to expand MTARNG aviation capabilities and fill an existing coverage deficiency for helicopters reaching portions of eastern Montana. This would enable soldiers on the eastern side of the state more accessible training, improve response time to assist in emergency situations, increase training opportunities with interagency partners, and reduce operational costs.

## 2.2 Need for the Project

Additional aviation support to serve eastern Montana is needed to:

- Improve coverage and availability for military training and rescue response
    - Emergency response time
    - Prioritizing people and work-life balance
    - Enhance/expand training opportunities and enable flight operations
- Reduce costs
    - Reduced need for flights between Helena and locations in eastern Montana (e.g., fuel, time, aircraft wear and tear)
    - Reduced travel to Helena for training/duty for soldiers

A location is needed that has or can accommodate a hangar for the helicopters needed for training and operations. In addition, air traffic control is needed so training can take place in all weather conditions.

## 2.3 Description of the No Action Alternative

Under the No Action Alternative, no new aviation facilities would be operated on the eastern side of Montana. Training and emergency responses would continue to occur out of Helena. Emergency response to eastern Montana would require the time to mobilize, fly from Helena to Billings (approximately 1.5 hours) and refuel (approximately 1 hour) when weather permits. MTARNG personnel from eastern parts of Montana would travel to Helena monthly for drill weekends. No additional hangars would be required, but additional infrastructure could be purchased or constructed under separate actions, if funding is obtained.

## 2.4 Description of the Preferred Alternative

The LAASF would be located in a hangar that is privately-owned by Billings Flying Service (BFS), located immediately west of the Billings Logan International Airport (see Figure 1). Up to two temporary portable offices would be located on the property adjacent to the hangar. Personal vehicles would be parked on the gravel or asphalt lot adjacent to the hangar. The hangar is served by electricity and a septic system. Water is provided via a cistern.

The 14 fulltime personnel would live in their personal residences in Billings or the surrounding area and commute to the hangar daily. On drill weekends, the estimated 60 personnel would travel to the hangar from their residences. Given that Billings is the largest community in Montana and has a higher number of MTARNG personnel who live in Billings compared to other locations, it is estimated that 20-30 soldiers would stay in local hotels during drill weekends. Flights during drill weekends would occur primarily during the day, but at least one-night flight per weekend would occur with the aircraft returning after dark, the timing of which would vary with the season.

Maintenance hover runs or flights would be 10 minutes or less per aircraft, when required, and would be conducted at the airport, away from established buildings. Maintenance test flights would follow established flight patterns north of Billings. The LAASF would support up to six (6) helicopters (including but not limited to the CH-47 [Chinook], UH-60 [Blackhawk], and UH-72 [Lakota]). No more than two maintenance test flights per helicopter per week are anticipated. Refueling would be done on-site, using a 5,000-gallon over-the-road tanker and a heavy expanded mobility tactical truck (HEMTT).

Annual training (AT) could occur at the LAASF about once every five years, likely beginning in 2026. Unlike other ATs where multiple units may train together, only the unit assigned to the LAASF would participate at these periodic events. Training activities (number of people, flights, etc.) would be the same as on a drill weekend but would extend over a two-week period.

The MTARNG would also aid local search and rescue services, along with assisting local law enforcement when needed.

The LAASF would begin operations at the end of fiscal year (FY) 2022 or FY 2023, once all clearances are approved. These facilities would fulfill needs in the short-term (approximately 5 to 10 years), but a larger, long-term facility would be needed in the future to accommodate the emerging growth needs and coverage requirements of the MTARNG aviation assets.

# 3. Methodology

Biological resources include general wildlife, plant and animal species that have been assigned special designations by a federal, state, or local governmental agency, and the vegetative communities that provide habitat for these species. This section provides an overview of the biological resources of the proposed Billings LAASF and serves as a foundation for the analysis of potential effects on biological resources as a result of proposed project actions and alternatives.

While a wider area is considered to identify regional context and wildlife movement patterns, the area of influence for biological resources is confined to the limits of the Billings LAASF project (project area) and include the hangar and adjacent facilities on a cement pad with a gravel or asphalt lot adjacent to the hangar.

# 4. Existing Conditions

The proposed LAASF is located in the Great Plains Physiographic Province, a vast high plateau of semiarid grassland characterized by low hills and incised stream valleys (Britannica 2021). The area is subject to variable climatic conditions characterized by cold winters and warm summers, with low precipitation and humidity, and is often windy (Britannica 2021). The soils of the Great Plains are correlated with rainfall and natural grass cover. Elevation of the project site is approximately 3,727 feet above mean sea level.

The project occurs at the western edge of the Billings Logan International Airport, on the fringe of the urbanized area of the City of Billings. Paved roadways lead to the facility. Surrounding land use

consists mostly of commercial airfield, agricultural lands, residential development, and undeveloped open areas (Figure 2). State Route 3 transportation corridor occurs south of the project (refer to Figure 1).

## 4.1 Land Use and Vegetation

The LAASF occurs on a disturbed lot with cement pad, additional structures, and graded parking area. The project is located within habitat classified as a combination of developed/open space containing vegetation (primarily grasses) with less than 20 percent impervious surfaces; low intensity residential areas with a mixture of constructed materials and vegetation with impervious surfaces accounting for 20-50 percent of total area; and Great Plains mixed-grass prairie (Montana Natural Heritage Program [MTNHP] 2021a). The mixed-grass prairie in the vicinity of the project contains grasses that comprise the greatest canopy cover, and western wheatgrass (*Pascopyrum smithii*) is usually dominant. Other species include thickspike wheatgrass (*Elymus lanceolatus*), green needlegrass (*Nassella viridula*), blue grama (*Bouteloua gracilis*), and needle and thread (*Hesperostipa comata*). In this area of southeastern and central Montana, where sagebrush steppe borders the mixed grass prairie, common plant associations include Wyoming big sagebrush-western wheatgrass (*Artemisia tridentata* ssp. *wyomingensis/Pascopyrum smithii*). This prairie habitat is primarily influenced by fire and grazing, although drought can also impact it. With intensive grazing, cool season exotics such as Kentucky bluegrass (*Poa pratensis*), smooth brome (*Bromus inermis*), and Japanese brome (*Bromus japonicus*) can also occur (MTNHP 2021a).

Eastern ponderosa pine (*Pinus ponderosa*) forest occurs in areas on hills, drainages, and escarpments within the project vicinity. Immediately adjacent to the project site are agricultural lands and open space lands on airport property that are mowed and maintained to reduce wildlife occurrences.

No wetlands as mapped by the USFWS National Wetlands Inventory (USFWS 2021b) occur in the project area.

## 4.2 Wildlife

Numerous species of wildlife occur within the adjacent prairie landscape including white-tailed deer (*Odocoileus virginianus*), mule deer (*Odocoileus hemionus*), coyote (*Canus lutrans*), Richardson's ground squirrel (*Spermophilus richardsonii*), plains garter snake (*Thamnophis radix*) , prairie rattlesnake (*Crotalus viridis*), bats (e.g., *Myotis* spp., *Antrozous pallidus*), western meadowlark (*Sturnella neglecta*), great-horned owl (*Bubo virginianus*), and common sagebrush lizard (*Sceloporus graciosus*) (MTNHP 2021b). The area surrounding the project site has been previously disturbed and the patchwork distribution of grasslands does not maintain the physical and biological dynamics of landscape characteristics within this prairie expanse.

Man-made obstacles such as airports, highways, and fences that are found in association with or adjacent to the hangar are partial or complete barriers to movement of some wildlife species. Major highways in the vicinity include State Route 3. Additionally, airport land use and associated fencing of the airfield, has also reduced wildlife access to the area, reducing any wildlife movement corridors.

Montana Fish, Wildlife and Parks Department (FWP) maintains management authority for the state's wildlife. , The Montana Natural Heritage Program (MTNHP) database is a program of the Montana State Library and operated by the University of Montana. The USFWS Information for Planning and Consultation (IPaC) System, and the MTNHP were reviewed to determine if any federally-listed species potentially occur in the vicinity of the proposed LAASF. Species included on the USFWS


**Figure 2. Project Area Map**

IPaC are addressed in Table 1 along with their corresponding ESA status; a brief description of habitat; and the potential for occurrence of the species or its habitat at the LAASF.

**Table 1. ESA-Listed Species and their Potential to Occur within the Proposed Project Vicinity**

| Species Name | Status* | Habitat | Potential to Occur |
|---|---|---|---|
| Monarch butterfly *(Danaus plexippusi)* | ESA-C | Variety of habitats, including fields, roadside areas, native prairie, wet areas, or gardens with milkweed and flowering plants. Rely on nectar of blooming plants during the monarch migration timeframe (February to March; September to November). Rarely above treeline in alpine terrain during migration. | There is no suitable habitat due to limited vegetation resources in the project limits. |

*Source*: USFWS October 27, 2021c, http://ecos.fws.gov/ipac.; October 27, 2021 MTNHP 2021c; https://FieldGuide.mt.gov
*C = ESA Candidate.

ESA candidate species are those species for which sufficient information on biological status and threats exists to propose to list them as threatened or endangered; however, none of the substantive or procedural provisions of the ESA apply to candidate species.

There is no critical habitat within the project area.

## Special Status Plant Species

There are no plant species of concern or special status in the project area as indicated by MTNHP databases (MTNHP 2021d).

## Montana State Species of Concern

Species of Concern are native taxa that are at-risk due to declining population trends, threats to their habitats, restricted distribution, and/or other factors. Designation as a Montana Species of Concern or Potential Species of Concern is based on the Montana Status Rank and is not a statutory or regulatory classification. Rather, these designations provide information that helps resource managers make proactive decisions regarding species conservation and data collection priorities.

**Table 2. Montana State Species of Concern and their Potential to Occur within the Project Vicinity**

| Species Name | Status* | Habitat | Potential to Occur |
|---|---|---|---|
| Black-tailed Prairie Dog (*Cynomys ludovicianus*) | S3 | Flat, open grasslands and shrub/grasslands with low stature, relatively sparse vegetation. The most frequently occupied habitat in Montana is dominated by western wheatgrass, blue grama, and big sagebrush. | No suitable habitat in the project area |
| Little Brown Myotis (*Myotis lucifugus*) | S3 | Found in a variety of habitats across a large elevation gradient. Commonly forages over water. Summer day roosts include attics, barns, bridges, snags, loose bark, and bat houses. Known maternity roosts in Montana are primarily buildings. | May be present in the project area |

| Species Name | Status* | Habitat | Potential to Occur |
|---|---|---|---|
| Golden Eagle (*Aquila chrysaetos*) | BGEPA; MBTA; S3 | Nest on cliffs and in large trees (occasionally on power poles), and hunt over prairie (grasslands) and open woodlands. Observation reported along Highway 3, Yellowstone County, in 2011. | No suitable nesting habitat; high level of human activity at airport and adjacent land uses reduce potential of suitable foraging habitat. |
| Burrowing Owl (*Athene cunicularia*) | MBTA; BCC17 | Open grasslands, uses abandoned burrows dug by mammals such as ground squirrels (*Spermophilus* spp.), prairie dogs (*Cynomies* spp.) and badgers (*Taxidea taxus*). Black-tailed prairie dog (*Cynomys ludoviscianus*) and Richardson's ground squirrel colonies provide the primary and secondary habitat in the area. | No suitable burrow habitat in the project area due to restricted areas of bare ground |
| Ferruginous Hawk (*Buteo regalis*) | MBTA; BCC17 | Summer breeding occurs in mixed-grass prairie with black greasewood (*Sarcobatus vermiculatus*) and big sagebrush (*Artemisia tridentata*) in uplands and drainages. Also found in shrub-grasslands, grasslands, grass-sagebrush complex, and sagebrush steppe. Do not appear to nest in areas converted to agriculture. Observation reported along Highway 3, Billings in 2011. | May be present in project area |
| Chestnut-collared Longspur (*Calcarius ornatus*) | MBTA; BCC11; BCC17; S2 | Grasslands with short-to-medium grasses that have been recently grazed or mowed. Prefers native pastures. | May be present in project area |
| Baird's Sparrow (*Centronyx bairdii*) | MBTA; BCC11; BCC17 | Grasslands. Prefer to nest in native prairie with a relatively complex structure. | May be present in project area |
| Bobolink (*Dolichonyx oryzivorus*) | MBTA; BCC10; BCC11; BCC17 | Moist Grasslands. Nests built in tall grass and mixed-grass prairies. Prefers "old" hay fields with high grass-to-legume ratios. | May be present in project area |
| Long-billed Curlew (*Numenius americanus*) | MBTA; BCC11 | Grasslands. Breeds in mixed-grass prairie habitats and moist meadows throughout Montana. It prefers to nest in open, short-statured grasslands and avoids areas with trees, dense shrubs, or tall, dense grasses Observation reported along Highway 3, Billings in 2011. | May be present in project area |
| Greater short-horned Lizard (*Phrynosoma hernandesi*) | S3; SGIN | Sandy / gravelly soils, ridge crests between coulees, and in sparse, short grass and sagebrush with sun-baked soil. | No suitable habitat present |

*Source*: MTNHP 2021c. Montana Natural Heritage Program October 27, 2021, https://FieldGuide.mt.gov;
BCC =Birds of Conservation Concern; regions 10, 11, 17 occur in Montana
MBTA- Migratory Bird Treaty Act
Montana State Species Ranking: S2: At risk because of very limited and/or potentially declining population numbers, range and/or habitat, making it vulnerable to global extinction or extirpation in the state; S3: Potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas; SGIN = species of greatest inventory need; species in need of survey data

## 4.3 No Action Alternative

No additional military operational activities would occur in the project area under the No Action Alternative. Noise would not increase from additional helicopter flights or vehicle use. Biological and natural resources would continue as existing conditions allow.

## 4.4 Preferred Alternative

Since existing facilities would be used and no construction would occur, there would be no disturbance to soil or vegetation under the preferred alternative. No habitat loss or alteration would occur; no noxious or invasive plant species would be introduced as a result of construction and soil disturbance.

The main source of disturbance to wildlife with the LAASF would be from helicopter activities and noise (e.g., aircraft overflights). Ongoing aviation activities affect wildlife, including special status species, and those effects would continue, although with a minor increase in quantity if the project is authorized. Addition of helicopters, vehicles, and personnel would increase the noise levels in and adjacent to the project site. However, the project is located adjacent to an existing airport; there is existing aircraft noise and the expectation that it will continue. Wildlife inhabiting the project area would be expected to have habituated to the continuous noise generated by aircraft using the airport and the presence of people.

Direct impacts to wildlife, including disturbance occurring from human activities required for military training would be long term with the duration of military operations. Vehicle use for personnel accessing the training facility can result in incidental injury to wildlife. Mortality to birds (bird strike) could occur with the addition of flights but would be limited since no more than two maintenance test flights per helicopter per week (12 flights total) are anticipated. Measures for reducing conflicts of aircraft with wildlife, in particular bird strike, are a component of the Federally mandated Wildlife Hazard Management Plan for the adjacent Billings Logan International Airport. With the close proximity to the airport, the proposed LAASF would also benefit from these already implemented measures. Existing fencing along the perimeter of the existing airport restricts wildlife movement in this area.

No special status plant species are known to occur and so no impact is anticipated from the project.

Migratory birds protected under the Migratory Bird Treaty Act, DoD Partners in Flight mission-sensitive priority bird species, and other special status avian species would be managed as recommended by FWP and the Billings Logan International Airport regulations. Many of these birds occur in the project vicinity and would continue to do so; there would be a negligible adverse impact on migratory birds.

# 5. Mitigation Measures

No mitigation measures are required.

# 6. References

Britannica. 2021. *Great Plains region, North America.* Primary Authors: Elwyn B. Robinson and John L. Dietz. https://www.britannica.com/place/Great-Plains. Encyclopaedia Britannica, Inc. Accessed October 2021.

Montana Natural Heritage Program (MTNHP). 2021a. Natural Heritage Map Viewer. Land Cover. Available at: https://mtnhp.org/mapviewer/. Accessed October 26, 2021.

_____. 2021b. Natural Heritage Map Viewer. Generalized Observations for Species. Available at: https://mtnhp.org/mapviewer/. Accessed October 26, 2021.

_____. 2021c. Montana Field Guide. Available at: https://FieldGuide.mt.gov. Accessed on October 29, 2021.

_____. 2021d. Natural Heritage Plant Species of Concern and Special Status Species. Available at: https://mtnhp.org/SpeciesOfConcern/?AorP=p. Accessed on October 31, 2021.

U.S. Fish and Wildlife Service. 2021a. Birds of Conservation Concern 2021. United States Department of the Interior, U.S. Fish and Wildlife Service, Migratory Birds, Falls Church, Virginia. http://www.fws.gov/birds/management/ managed-species/birds-of-conservation-concern.php.

_____. 2021b. National Wetlands Inventory, Wetlands Mapper. Available at: https://www.fws.gov/wetlands/data/mapper.html. Accessed October 29, 2021.

_____. 2021c. Information for Planning and Consultation System (IPAC) Species List. Available at: http://www.ecos.fws.gov/ipac.pdf. Accessed October 26, 2021.

# Appendix C. USEPA EJScreen Report

# EJScreen Report (Version 2.0)

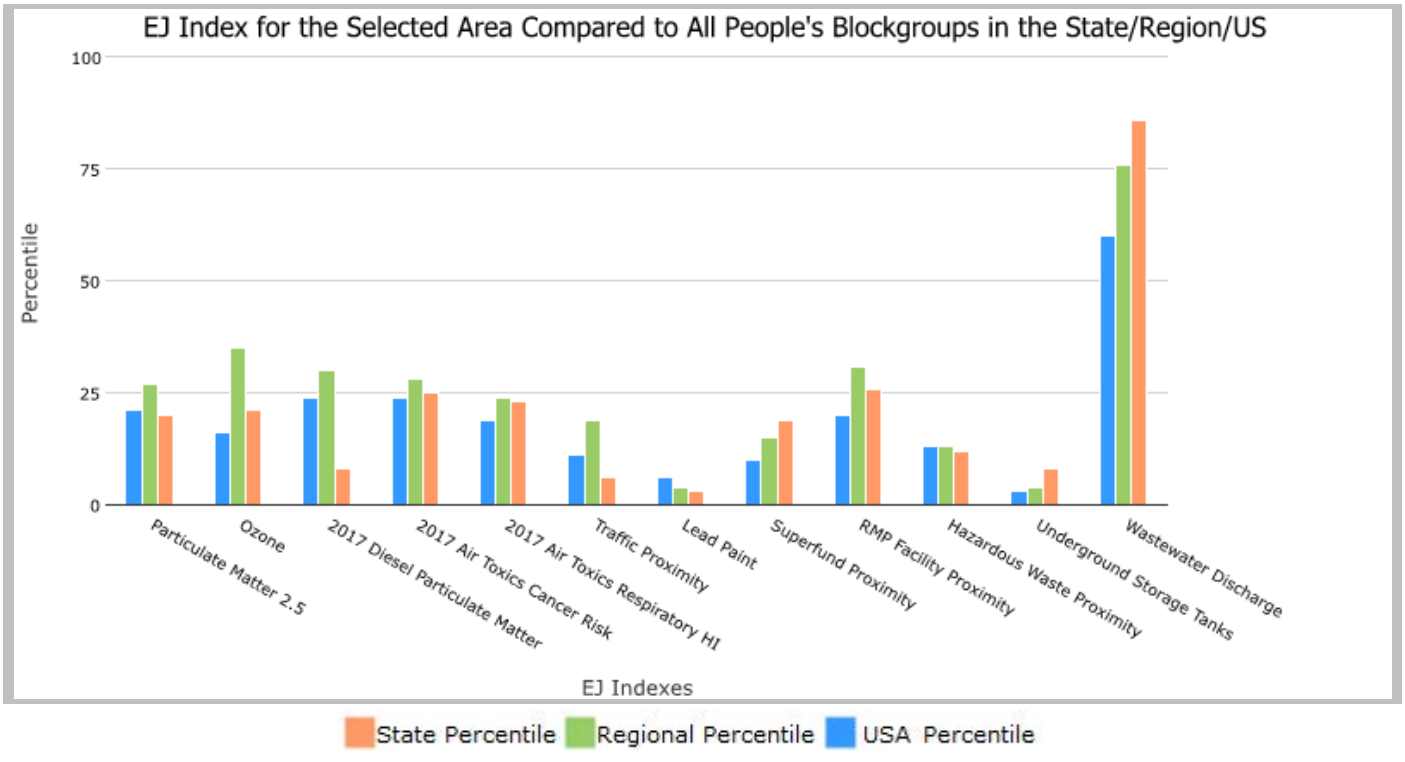
**1 mile Ring Centered at 45.808698,-108.571612, MONTANA, EPA Region 8**

**Approximate Population: 2,818**

**Input Area (sq. miles): 3.14**

**MTARNG LAASF Hangar**

| Selected Variables | State Percentile | EPA Region Percentile | USA Percentile |
|---|---|---|---|
| **Environmental Justice Indexes** | | | |
| EJ Index for Particulate Matter 2.5 | 20 | 27 | 21 |
| EJ Index for Ozone | 21 | 35 | 16 |
| EJ Index for 2017 Diesel Particulate Matter* | 8 | 30 | 24 |
| EJ Index for 2017 Air Toxics Cancer Risk* | 25 | 28 | 24 |
| EJ Index for 2017 Air Toxics Respiratory HI* | 23 | 24 | 19 |
| EJ Index for Traffic Proximity | 6 | 19 | 11 |
| EJ Index for Lead Paint | 3 | 4 | 6 |
| EJ Index for Superfund Proximity | 19 | 15 | 10 |
| EJ Index for RMP Facility Proximity | 26 | 31 | 20 |
| EJ Index for Hazardous Waste Proximity | 12 | 13 | 13 |
| EJ Index for Underground Storage Tanks | 8 | 4 | 3 |
| EJ Index for Wastewater Discharge | 86 | 76 | 60 |




This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

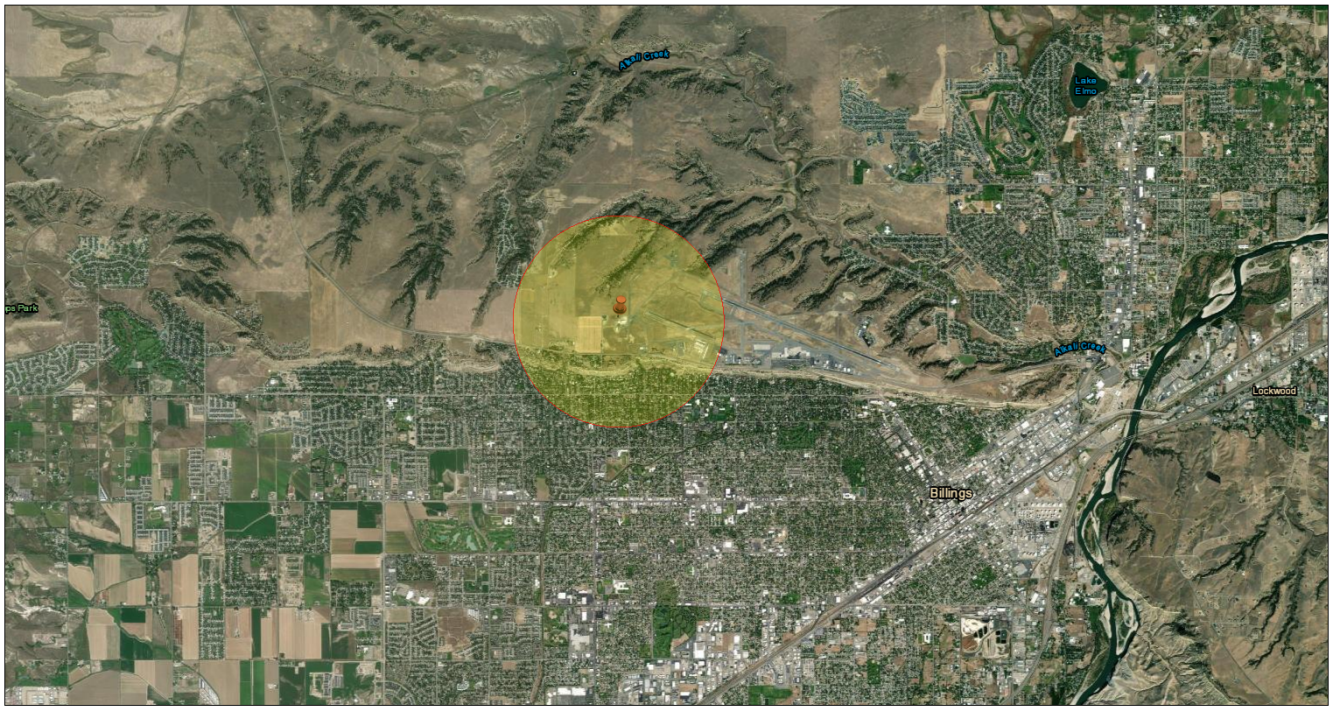
# EJScreen Report (Version 2.0)

**1 mile Ring Centered at 45.808698,-108.571612, MONTANA, EPA Region 8**

**Approximate Population: 2,818**

**Input Area (sq. miles): 3.14**

**MTARNG LAASF Hangar**




| Sites reporting to EPA | |
|---|---|
| Superfund NPL | 0 |
| Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF) | 0 |

# EJScreen Report (Version 2.0)

**1 mile Ring Centered at 45.808698,-108.571612, MONTANA, EPA Region 8**

**Approximate Population: 2,818**

**Input Area (sq. miles): 3.14**

**MTARNG LAASF Hangar**

| Selected Variables | Value | State Avg. | %ile in State | EPA Region Avg. | %ile in EPA Region | USA Avg. | %ile in USA |
|---|---|---|---|---|---|---|---|
| **Pollution and Sources** | | | | | | | |
| Particulate Matter 2.5 (µg/m$^3$) | 7.2 | 6.88 | 65 | 7.07 | 47 | 8.74 | 15 |
| Ozone (ppb) | 42.8 | 42.2 | 59 | 52.5 | 18 | 42.6 | 56 |
| 2017 Diesel Particulate Matter* (µg/m$^3$) | 0.169 | 0.0794 | 90 | 0.211 | <50th | 0.295 | <50th |
| 2017 Air Toxics Cancer Risk* (lifetime risk per million) | 20 | 22 | 77 | 22 | 60-70th | 29 | <50th |
| 2017 Air Toxics Respiratory HI* | 0.3 | 0.33 | 72 | 0.3 | 70-80th | 0.36 | <50th |
| Traffic Proximity (daily traffic count/distance to road) | 380 | 200 | 81 | 520 | 62 | 710 | 62 |
| Lead Paint (% Pre-1960 Housing) | 0.41 | 0.28 | 73 | 0.21 | 81 | 0.28 | 72 |
| Superfund Proximity (site count/km distance) | 0.11 | 0.12 | 68 | 0.11 | 72 | 0.13 | 70 |
| RMP Facility Proximity (facility count/km distance) | 0.26 | 0.49 | 63 | 0.64 | 46 | 0.75 | 45 |
| Hazardous Waste Proximity (facility count/km distance) | 1.1 | 0.76 | 73 | 0.77 | 74 | 2.2 | 57 |
| Underground Storage Tanks (count/km$^2$) | 5.7 | 4.6 | 79 | 2.7 | 85 | 3.9 | 80 |
| Wastewater Discharge (toxicity-weighted concentration/m distance) | 0 | 2 | N/A | 3.5 | N/A | 12 | N/A |
| **Socioeconomic Indicators** | | | | | | | |
| Demographic Index | 10% | 23% | 10 | 26% | 12 | 36% | 8 |
| People of Color | 6% | 14% | 33 | 25% | 13 | 40% | 13 |
| Low Income | 14% | 32% | 11 | 27% | 27 | 31% | 23 |
| Unemployment Rate | 3% | 4% | 51 | 4% | 49 | 5% | 37 |
| Linguistically Isolated | 0% | 0% | 83 | 2% | 56 | 5% | 45 |
| Less Than High School Education | 6% | 6% | 56 | 8% | 54 | 12% | 36 |
| Under Age 5 | 3% | 6% | 21 | 7% | 15 | 6% | 19 |
| Over Age 64 | 26% | 18% | 81 | 14% | 91 | 16% | 88 |

*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

For additional information, see: www.epa.gov/environmentaljustice

# Appendix D. Air Quality Technical Memorandum, Record of Non Applicability, and Greenhouse Gas Emission Calculator Worksheets

# Air Quality Technical Memorandum

**Prepared For:** Montana Army National Guard (MTARNG)

**Prepared By:** Jacobs Engineering Group Inc. (Jacobs)

**Date:** 17 November 2021

## 1. Introduction

The Montana Army National Guard (MTARNG), in coordination with the National Guard Bureau (NGB), is proposing to develop and operate a Limited Army Aviation Support Facility (LAASF) out of a hangar in Billings, Montana located immediately west of the Billings Logan International Airport (Figure 1).

This technical memorandum presents the existing conditions, impact assessment, and applicable mitigation measures related to Air Quality.

### 1.1 Regulatory Context

Due to the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has created National Ambient Air Quality Standards (NAAQS) for seven pollutants that harm human health and the environment. Primary standards are for the protection of public health. Secondary standards are for the protection of public welfare, such as impacts on natural resources, vegetation, property, and visibility. A geographical area (such as a county or air basin) that meets these standards is designated as in attainment. An area that does not meet the standards is designated nonattainment, and the state is required to develop a State Implementation Plan (SIP) with regulations that are designed to reduce the concentration of that pollutant. An area that had been designated as nonattainment and later designated as attainment is a called a maintenance area. Billings is currently a maintenance area for sulfur dioxide and carbon monoxide and is in attainment for all other pollutants.

If the proposed action takes place in a nonattainment or maintenance area, the EPA General Conformity Rule (40 CFR Part 51, Subpart W and 40 CFR Part 93, Subpart B) is applicable. The General Conformity Rule establishes *de minimis* thresholds for criteria pollutants and their precursors. The attainment status of the area determines which threshold is applicable. If projected net emissions from an action exceed a General Conformity threshold, the action may adversely impact the goals of the SIP. For actions that do exceed a threshold, further analysis is recommended.

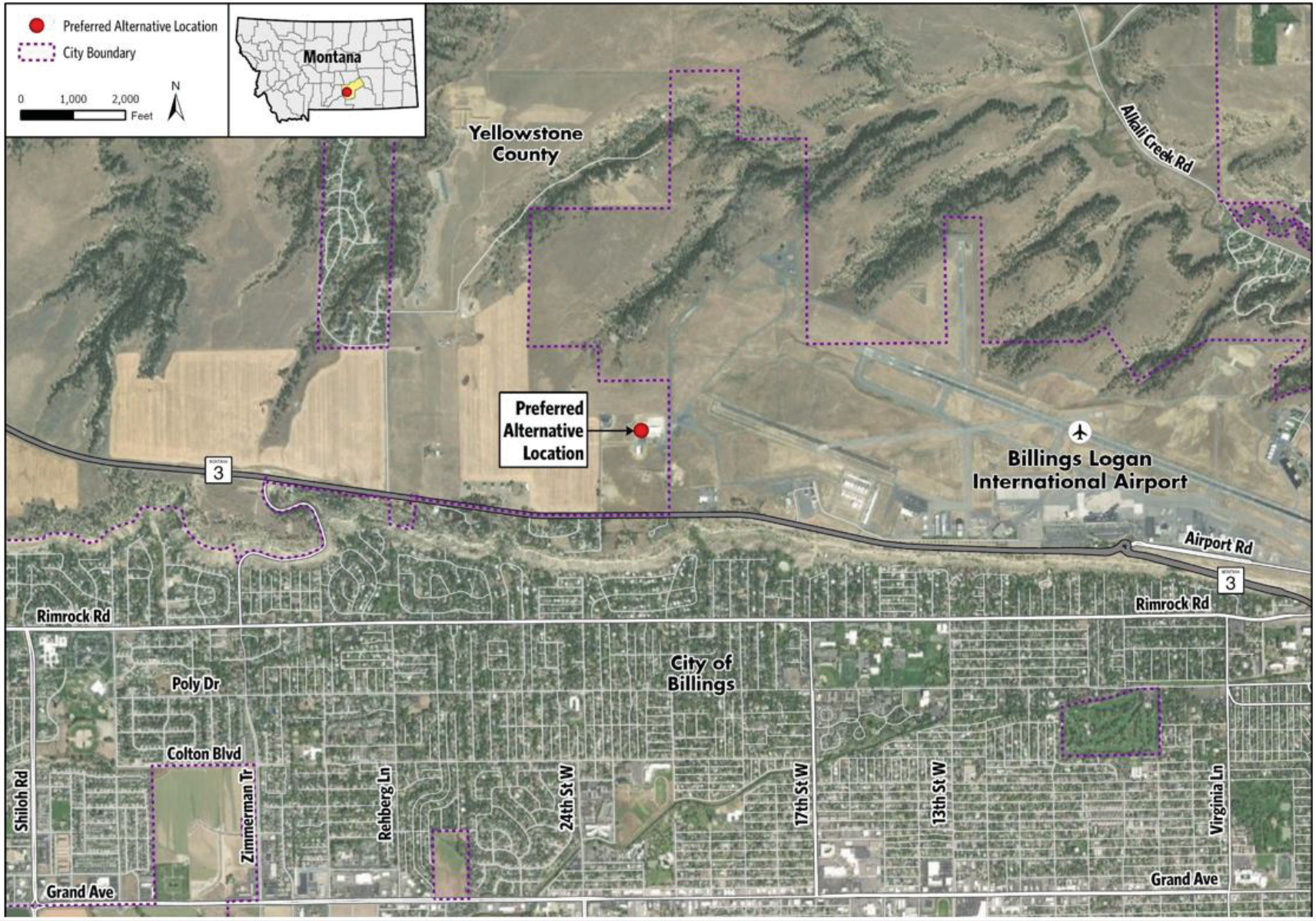



**Figure 1. Preferred Alternative Location**

# 2. Project Description

In Montana and around the country, the Army National Guard (ARNG) prepares helicopter crews to effectively fight and serve on missions from security and combat to disaster relief and rescue operations. These flight operations are flown out of Army Aviation Support Facilities or AASFs. An AASF is a facility that provides maintenance, modification of ARNG equipment, operations, and logistical support for seven or more ARNG aircraft. There are approximately 100 AASFs situated around the country, and only one is in Montana. Montana Army National Guard (MTARNG) operates an AASF at the Helena Regional Airport in western Montana. The Helena AASF is co-located with the Helena Aviation Readiness Center and a hangar for fixed-wing Beechcraft C-12 Huron transport aircraft. The 1-189th General Support Aviation Battalion is stationed at this location, and here, MTARNG trains soldiers, maintains and repairs helicopters, and when needed, deploys personnel to address emergency or military situations. Flights leave and return via the Helena Regional Airport runway.

MTARNG seeks to expand aviation capabilities to the eastern portion of Montana to better accommodate soldier training and the community by having assets more readily available in that geographic region. The Proposed Action is to operate a Limited AASF (LAASF) out of an existing hangar in eastern Montana. An LAASF provides the same functions as an AASF but supports only six or fewer aircraft.

## 2.1 Purpose of the Project

The purpose of the proposed action is to expand MTARNG aviation capabilities and fill an existing coverage deficiency for helicopters reaching portions of eastern Montana. This would provide soldiers on the eastern side of the state with more accessible training, improve response time to assist in emergency situations, increase training opportunities with interagency partners, and reduce operational costs.

## 2.2 Need for the Project

Additional aviation support to serve eastern Montana is needed to:

- Improve coverage and availability for military training and rescue response
    - Emergency response time
    - Prioritizing people and work-life balance
    - Enhance/expand training opportunities and enable flight operations
- Reduce costs
    - Reduced need for flights between Helena and locations in eastern Montana (fuel, time, aircraft wear and tear)
    - Reduced travel to Helena for training/duty for soldiers

A location is needed that has or can accommodate a hangar for the helicopters needed for training and operations. In addition, air traffic control is needed so training can take place in all weather conditions.

## 2.3 Description of the No Action Alternative

Under the No Action Alternative, no new aviation facilities would be operated on the eastern side of Montana. Training and emergency responses would continue to occur out of Helena. Emergency response by MTARNG to eastern Montana would require the time to mobilize, fly from Helena to Billings (approximately 1.5 hours) and refuel (approximately 1 hour) when weather permits. MTARNG personnel from eastern parts of Montana would travel to Helena monthly for drill weekends.

## 2.4 Description of the Preferred Alternative

The LAASF would be located in a hangar that is privately-owned by Billings Flying Service (BFS), located immediately west of the Billings Logan International Airport (refer to Figure 1). Up to two temporary portable offices would be located on the property adjacent to the hangar. Personal vehicles would be parked in the gravel or asphalt lot adjacent to the hangar. The hangar is served by electricity and a septic system. Water is provided via a cistern.

The 14 fulltime personnel would live in their personal residences in Billings or the surrounding area and commute to the hangar daily. On drill weekends, the estimated 90 personnel would travel to the hangar from their residences. Given that Billings is the largest community in Montana and the higher number of MTARNG personnel who live in Billings compared to other locations, it is estimated that 20-30 soldiers would stay in local hotels during drill weekends. Flights during drill weekends would occur primarily during the day, but at least one-night flight per weekend would occur with the aircraft returning after dark, the timing of which would vary with the season.

Maintenance hover runs or flights would be 10 minutes or less per aircraft, when required, and would be conducted at the airport, away from established buildings. Maintenance test flights would follow established flight patterns north of Billings. The LAASF would support up to six (6) helicopters (including but not limited to the CH-47 [Chinook], UH-60 [Blackhawk], and UH-72 [Lakota]). No more than two maintenance test flights per helicopter per week are anticipated. Refueling would be done on-site, using a 5,000-gallon over-the-road tanker and a heavy expanded mobility tactical truck (HEMTT).

Annual training (AT) could occur at the LAASF about once every five years, likely beginning in 2026. Unlike other ATs where multiple units may train together, only the unit assigned to the LAASF would participate at these periodic events. Training activities (number of people, flights, etc.) would be the same as on a drill weekend but would extend over a two-week period.

The MTARNG would also aid local search and rescue services, along with assist local law enforcement when needed.

The LAASF would begin operations at the end of fiscal year (FY) 2022 or FY 2023 using federal funding. These facilities would fulfill needs in the short-term (approximately 5 to 10 years), but a larger, long-term facility would be needed in the future to accommodate the emerging growth needs and coverage requirements of the MTARNG aviation assets.

# 3. Methodology

Air quality impacts of the Preferred Alternative were estimated based on the net change of emissions. Implementation of the Preferred Alternative would increase the aircraft activity at the Billings Logan International Airport. Net emissions were evaluated using guidance found in the *Air Emissions Guide for Air Force Mobile Sources* (AFCEC 2020).

Aircraft emissions were estimated using the number of landing and take-offs (LTOs) and the number and duration of low flight patterns (LFPs). LTO counts were applied to engine setting profiles found in Table 2-4 of the Mobile Guide (AFCEC 2020) to determine total time in engine mode. Emission factors and fuel flow rates found in Table 2-8 of the same guidance were also used. Emission estimates for the CH-47 Chinook and the UH-72 Lakota were made using a surrogate aircraft. The CH-53 Sea Stallion emission profile was used as a surrogate for the CH-47 Chinook. The MH-139 was used as a surrogate for the UH-72 Lakota. Surrogates were selected based on similar mission capabilities, engine type and size. The equation for emissions is:

$$Emissions_P = T_{E,M} * FFR_{E,M} * EF_{P,E,M} * N_a$$

Where,

| | |
|---|---|
| $Emissions_P$ | = Emissions of each pollutant |
| $T_{E,M}$ | = Operating Time for each engine and mode |
| $FFR_{E,M}$ | = Fuel Flow Rate for each engine and mode |
| $EF_{P,E,M}$ | = Emission Factor for each pollutant, engine and mode |
| $N_a$ | = Number of engines for each aircraft |

A summary of the LTO data used can be found in Table 3-1.

**Table 3-1. Proposed Additional Annual Aircraft Operations**
*Aircraft Operations by Aircraft Type and Sortie*

| Aircraft | LTO Count | LFP Count | LFP Duration (min) |
|---|---|---|---|
| CH-47 Chinook | 122 | 1171 | 2.9 |
| UH-60 Black Hawk | 122 | 1171 | 2.9 |
| UH-72 Lakota | 122 | 659 | 2.9 |

Auxiliary Power Units (APUs) were also included in the analysis of emissions for the UH-60 Black Hawk. An APU is a small engine that provides power to an aircraft before or after take-off while the aircraft engine is not on. An APU typically operates for 1 hour per Black Hawk LTO.

Military tactical vehicles were estimated based on vehicle miles traveled. Heavy Expanded Mobility Tactical Trucks (HEMMTs), High Mobility Multipurpose Wheeled Vehicles (HMMWVs or Humvees), and Light Military Tactical Vehicles (LMTVs) were included in the analysis. Proposed annual military operations are included in Table 3-2. HEMMTs were modeled as Heavy-Duty Diesel Vehicles (HDDVs) and LMTVs and Humvees were modeled as Light Duty Diesel Vehicles (LDDV). Emission factors from Table 5-21 of the AFCEC Mobile Guidance (AFCEC 2020) were applied to mileage estimates. Forklift operation was estimated using emission factors from Table 3-6 of the AFCEC Mobile Guidance (AFCEC 2020). The forklift annual usage was estimated as 104 hours per year, with an engine size of 55 horsepower and a 30% load factor.

**Table 3-2. Proposed Annual Military Vehicle Operations**
*Tactical Vehicle Population Estimate*

| Aircraft | Number of Vehicles |
|---|---|
| HEMMT | 4 |
| LMTV | 2 |
| HMMWV | 8 |

# 4. Existing Conditions

The USEPA determines if geographical areas meet federal national ambient air quality standards and state-specific air quality standards. If an area meets the standards, it is considered to be an “attainment area.” If an area does not meet a standard for a specific pollutant, it is referred to as a “nonattainment area.” Once a state has taken measures to reduce emissions and the area has met the standards and additional redesignation requirements in the Clean Air Act, it can be redesignated as a “maintenance area.” Table 4-1 provides the state and federal standards for each criteria pollutant that the USEPA monitors. Billings is a maintenance area for the carbon monoxide and sulfur dioxide.

**Table 4-1. National Ambient Air Quality Standards**

| Air Pollutant | Average Time | Federal National Ambient Standards | | Montana Ambient Air Quality Standards |
|---|---|---|---|---|
| | | Primary | Secondary | All |
| **Carbon monoxide** | 1-hour<br>8-hour | 35 ppm(1)<br>9 ppm | --<br>-- | 23 ppm<br>9 ppm |
| **Nitrogen dioxide** | 1-hour<br>Annual | 100 ppb(2)<br>53 ppb | --<br>53 ppb | 0.30 ppm<br>0.05 ppm |
| **Ozone** | 8-hour<br>1-hour | 0.07 ppm<br>-- | 0.07 ppm<br>-- | --<br>0.10 ppm |
| **$PM_{10}$** | 24-hour<br>Annual | 150 µg/$m^3$ (3)<br>-- | --<br>-- | 150 µg/$m^3$<br>50 µg/$m^3$ |
| **$PM_{2.5}$** | 24-hour<br>Annual | 35 µg/$m^3$<br>12 µg/$m^3$ | 35 µg/$m^3$<br>15 µg/$m^3$ | --<br>-- |
| **Settled Particulates** | 30-day average | -- | -- | 10 g/$m^2$ (4) |
| **Sulfur dioxide** | 1-hour<br>3-hour<br>24-hour<br>Annual | 75 ppb<br>--<br>0.14 ppm<br>0.03 ppm | --<br>0.50 ppm<br>--<br>-- | 0.50 ppm<br>--<br>0.10 ppm<br>0.02 ppm |
| **Lead** | 90-day<br>Calendar Quarter | 0.15 µg/$m^3$ | 0.15 µg/$m^3$ | 1.5 µg/$m^3$ |
| **Hydrogen sulfide** | 1-hour | -- | -- | 0.05 ppm |
| **Visibility** | Annual | -- | -- | $3x10^{-5}$/m scattering coefficient |

Source: USEPA 2021c and State of Montana 2021

(1) ppm = parts per million; (2) ppb = parts per billion; (3) µg/$m^3$ = microgram per cubic meter (4) g/$m^2$ = grams per square meter

# 5. Impact Assessment

Emissions were found to have minimal impact on current air quality. Emission estimates were found to be very low, and not in exceedance of any threshold that may indicate a potential significant impact. Emission estimates can be found in Table 5-1.

**Table 5-1. Estimated Annual Emissions (tons)**

*Criteria Pollutant Emissions (tons) by Activity*

| Activity | NOx (ton) | SOx (ton) | CO (ton) | VOC (ton) | PM10 (ton) | PM2.5 (ton) |
|---|---|---|---|---|---|---|
| CH-47 LTO | 0.39 | 0.03 | 0.47 | 0.17 | 0.09 | 0.08 |
| CH-47 LFP | 0.83 | 0.05 | 0.1 | 0.03 | 0.14 | 0.12 |
| UH-72 LTO | 0.04 | 0.01 | 0.92 | 0.05 | 0.05 | 0.05 |
| UH-72 LFP | 0.05 | 0.01 | 0.35 | 0.03 | 0.04 | 0.04 |
| UH-60 LTO | 0.19 | 0.01 | 0.25 | - | 0.04 | 0.03 |
| UH-60 LFP | 0.42 | 0.02 | 0.13 | - | 0.08 | 0.07 |
| UH-60 APU | 0.06 | 0.02 | 0.58 | - | - | - |
| HEMMT | 1.3E-03 | 3.2E-06 | 4.7E-04 | 1.3E-04 | 3.4E-05 | 3.1E-05 |
| LMTV | 2.0E-04 | 2.0E-06 | 4.6E-04 | 1.4E-04 | 4.0E-06 | 4.0E-06 |
| HMMWV | 1.6E-04 | 1.6E-06 | 1.8E-03 | 1.1E-04 | 3.2E-06 | 3.2E-06 |
| Forklift | 1.9E-02 | 1.6E-03 | 1.3E-02 | 3.6E-03 | 2.3E-03 | 2.2E-03 |
| **Total:** | **2.00** | **0.15** | **2.82** | **0.28** | **0.44** | **0.39** |

## 5.1 No Action Alternative

The No Action Alternative would not result in a change from the current operation and would require current levels of commuting for the soldiers.

## 5.2 Preferred Alternative

The Preferred Alternative would result in minimal emission increases from aircraft and APUs. The increases due to increased aircraft operations were found to be insignificant when compared to the General Conformity thresholds. Table 5-2 gives a summary of estimated emissions with comparison to those thresholds.

**Table 5-2. Estimated LAASF Annual Emissions and General Conformity De Minimis Thresholds (tons/year)**

| Pollutant | $NO_x$ | $SO_x$ | CO | VOC | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Estimated Emissions | 2.0 | 0.15 | 2.8 | 0.28 | 0.44 | 0.39 |
| General Conformity Threshold | 100 | 100 | 100 | 100 | 100 | 100 |
| Potentially Significant Impact | No | No | No | No | No | No |

Since the training and maintenance that would occur at the LAASF is currently occurring at the Helena AASF, the emissions would not be new, but rather relocated from Helena to Billings. Further, the emissions that would be generated travelling between Helena to Billings to respond to emergencies, both by aircraft and soldiers travelling to Helena to report to duty, would no longer be required. Overall, the net change of emission due to this action, when also considering the vehicle emissions, is likely to be a reduction in emissions or neutral.

# 6. Mitigation Measures

No mitigation measures for the Preferred Alternative are recommended at this time.

# 7. References

Air Force Civil Engineer Center (AFCEC). 2020. *Air Emissions Guide For Air Force Mobile Sources*

Montana Army National Guard (MTARNG). 2021. Billings MTARNG Data Validation Package

# Record of Non-Applicability (RONA)

In Accordance with the Clean Air Act General Conformity Rule (40 CFR Part 51)

**Development and Operation of a Limited Army Aviation Support Facility in Billings, Montana**

## 1.0 Action Description

The Montana Army National Guard (MTARNG), in coordination with the National Guard Bureau (NGB), is proposing to develop and operate a Limited Army Aviation Support Facility (LAASF) out of an existing hangar in Billings, Montana located immediately west of the Billings Logan International Airport. The LAASF would support up to 6 helicopters (including but not limited to the CH-47 [Chinook], UH-60 [Blackhawk], and UH-72 [Lakota]). The LAASF would also operate military tactical vehicles. Operation of 4 Heavy Expanded Mobility Tactical Trucks (HEMMTs), 8 High Mobility Multipurpose Wheeled Vehicles (HMMWVs or Humvees), 2 Light Military Tactical Vehicles (LMTVs), and 1 forklift were included in the analysis. Operations would begin during the fourth quarter of FY 2022 or first quarter of FY 2023.

## 2.0 Analysis

General Conformity under the Clean Air Act, Section 176 was evaluated according to the requirements of 40 CFR 93, Subpart B. Total emissions were estimated on a calendar-year basis for steady state operations. Emissions were estimated using guidance found in the Air Force Civil Engineer Center (AFCEC) *Air Emissions Guide for Air Force Mobile Sources* (2020).

Based on the estimated emissions, the requirements of this rule are not applicable because they are below the General Conformity threshold values. Supporting documentation and emission estimates are attached.

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22 March 2022

LTC Adel Johnson
Environmental Program Manager
Montana Army National Guard

Date

# Air Emission Calculations

Summary Tables

**Table 1. LAASF Annual Emissions and General Conformity De Minimis Thresholds (tons/year)**

| | $NO_x$ | $SO_x$ | CO | VOC | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| Total Steady State Emissions | 2.0 | 0.15 | 2.8 | 0.28 | 0.44 | 0.39 |
| General Conformity Threshold | 100 | 100 | 100 | 100 | 100 | 100 |

**Table 2. Emissions by Activity (tons/year)**

| Activity | $NO_x$ | $SO_x$ | CO | VOC | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| CH-47 Landing / Take-off (LTO) | 0.39 | 3.00E-02 | 0.47 | 0.17 | 0.09 | 0.08 |
| CH-47 Low Flight Pattern (LFP) | 0.83 | 5.00E-02 | 0.1 | 0.03 | 0.14 | 0.12 |
| UH-72 LTO | 0.04 | 1.00E-02 | 0.92 | 0.05 | 0.05 | 0.05 |
| UH-72 LFP | 0.05 | 1.00E-02 | 0.35 | 0.03 | 0.04 | 0.04 |
| UH-60 LTO | 0.19 | 1.00E-02 | 0.25 | - | 0.04 | 0.03 |
| UH-60 LFP | 0.42 | 2.00E-02 | 0.13 | - | 0.08 | 0.07 |
| UH-60 Auxiliary Power Unit (APU) | 0.06 | 2.00E-02 | 0.58 | - | - | - |
| HEMMT | 1.3E-03 | 3.2E-06 | 4.7E-04 | 1.3E-04 | 3.4E-05 | 3.1E-05 |
| LMTV | 2.0E-04 | 2.0E-06 | 4.6E-04 | 1.4E-04 | 4.0E-06 | 4.0E-06 |
| HMMWV | 1.6E-04 | 1.6E-06 | 1.8E-03 | 1.1E-04 | 3.2E-06 | 3.2E-06 |
| Forklift | 1.9E-02 | 1.6E-03 | 1.3E-02 | 3.6E-03 | 2.3E-03 | 2.2E-03 |
| **Total:** | 2.00 | 0.15 | 2.82 | 0.28 | 0.44 | 0.39 |

**Table 3. Aircraft Operational Data**

| Aircraft | LTO Count | LFP Count | Duration of LFP (min) |
|---|---|---|---|
| CH-47 | 122 | 1171 | 2.9 |
| UH-60 | 122 | 1171 | 2.9 |
| UH-72 | 122 | 659 | 2.9 |

**Table 4. On-road Vehicle Operational Data**

| Vehicle Type | Classification | Total Vehicle Miles Traveled |
|---|---|---|
| HEMMT | HDDV | 240 |
| LMTV | LDDT | 120 |
| HMMWV | LDDT | 480 |

**Table 5. Off-road Vehicle Operational Data**

| Engine Type | Horsepower Rating | Load Factor | Hrs/Year |
|---|---|---|---|
| Forklift (Diesel) | 55 | 30 | 104 |

**Table 6. Aircraft Emission Factors**

| Aircraft / Mode[1],[2] | Fuel Flowrate (lb/hr) | $NO_x$ (lb/1000lb fuel) | $SO_x$ (lb/1000lb fuel) | CO (lb/1000lb fuel) | VOC (lb/1000lb fuel) | $PM_{10}$ (lb/1000lb fuel) | $PM_{2.5}$ (lb/1000lb fuel) |
|---|---|---|---|---|---|---|---|
| CH-47 / Idle | 260 | 2.62 | 0.56 | 51.83 | 19.87 | 2.36 | 2.12 |
| CH-47 / Approach | 1287 | 8.54 | 0.56 | 1.94 | 0.4 | 1.97 | 1.77 |
| CH-47 / Intermediate | 1511 | 9.65 | 0.56 | 1.2 | 0.38 | 1.61 | 1.45 |
| CH-47 / Military | 1661 | 10.92 | 0.56 | 0.67 | 0.39 | 1.61 | 1.45 |
| CH-47 / Afterburner | 1721 | 11.42 | 0.56 | 0.49 | 0.31 | 1.61 | 1.45 |
| UH-60 / Idle | 134 | 3.36 | 0.56 | 46.24 | 0.5 | 1.48 | 1.33 |
| UH-60 / Approach | 469 | 10.95 | 0.56 | 5.12 | 0.02 | 1.26 | 1.13 |
| UH-60 / Intermediate | 626 | 11.87 | 0.56 | 3.51 | 0.01 | 2.22 | 2.00 |
| UH-60 / Military | 725 | 11.43 | 0.56 | 2.81 | 0.01 | 2.61 | 2.33 |
| UH-72 / Idle | 156 | 1.77 | 0.56 | 117.85 | 7.89 | 3.95 | 3.56 |
| UH-72 / Approach | 180 | 1.95 | 0.56 | 94.99 | 1.33 | 4.18 | 3.76 |
| UH-72 / Intermediate | 328 | 5.03 | 0.56 | 33.69 | 3.29 | 4.15 | 3.73 |
| UH-72 / Military | 449 | 4.73 | 0.56 | 10.91 | 0.71 | 3.34 | 3.01 |
| UH-72 / Afterburner | 612 | 8.18 | 0.56 | 3.88 | 0.20 | 4.30 | 3.87 |

*(1) Air Emissions Guide for Air Force Mobile Sources, AFCEC (2020), Table 2-8*

*(2) Emission factors for engines T64-GE-413, T700-GE-700, and PT6A-68 used for CH-47, UH-60 and UH-72 respectively.*

**Table 8. APU Emission Factors (lb/hr)**

| Engine[1] | $NO_x$ | $SO_x$ | CO | VOC | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| UH-60 APU | 1.01 | 0.25 | 9.46 | 0.04 | - | - |

*(1) Air Emissions Guide for Air Force Mobile Sources, AFCEC (2020), Table 2-8*

**Table 8. Vehicle Emission Factors**

| Vehicle | $NO_x$ | $SO_x$ | CO | VOC | $PM_{10}$ | $PM_{2.5}$ |
|---|---|---|---|---|---|---|
| HDDV (g/mi) [1] | 5.057 | 0.012 | 1.774 | 0.494 | 0.128 | 0.118 |
| LDDT (g/mi) [1] | 0.308 | 0.003 | 3.493 | 0.213 | 0.006 | 0.006 |
| Forklift (lb/1000 hp-hr) [2] | 22 | 1.9 | 15 | 4.21 | 2.7 | 2.62 |

*(1) Air Emissions Guide for Air Force Mobile Sources, AFCEC (2020), Table 5-21*

*(2) Air Emissions Guide for Air Force Mobile Sources, AFCEC (2020), Table 3-6*

Back to Intro

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# Emissions Summary

**Guidance**

The total GHG emissions from each source category are provided below. You may also use this summary sheet to fill out the *Annual GHG Inventory Summary and Goal Tracking Form* as this calculator only quantifies one year of emissions at a time.

https://www.epa.gov/climateleadership/center-corporate-climate-leadership-annual-ghg-inventory-summary-and-goal-tracking

By entering the data below into the appropriate cell of the *Annual GHG Inventory Summary and Goal Tracking Form,* you will be able to compare multiple years of data.

If you have multiple Calculator files covering sub-sets of your inventory for a particular reporting period, sum each of the emission categories (e.g. Stationary Combustion) to an organizational total, which then can be entered into the *Annual GHG Inventory Summary and Goal Tracking Form*.

(A) Enter organization information into the orange cells. Other cells on this sheet will be automatically calculated from the data entered in the sheets in this workbook. Blue cells indicate required emission sources if applicable. Green cells indicate scope 3 emission sources and offsets, which organizations may optionally include in their inventory.

(B) The "Go To Sheet" buttons can be used to navigate to the data entry sheets.

**Organizational Information:**

| | |
|---|---|
| Organization Name: | Billings LAASF - Change of Emissions Only |
| | Montana Department of Military Affairs/MT Army National Guard |
| Organization Address: | 1956 Mt Majo Street, P.O. Box 4789<br>Fort Harrison, MT 59636-4789 |
| Inventory Reporting Period: | *Calendar year* |
| Start: | *1/1/2021* |
| End: | *12/31/2021* |
| Name of Preparer: | Nancy Shelton |
| Phone Number of Preparer: | 602-686-3237 |
| Date Prepared: | 3/16/2022 |

## Summary of Organization's Emissions:

### *Scope 1 Emissions*

| | | | |
|---|---|---|---|
| Go To Sheet | Stationary Combustion | 35 | $CO_2$-e (metric tons) |
| Go To Sheet | Mobile Sources | 0 | $CO_2$-e (metric tons) |
| Go To Sheet | Refrigeration / AC Equipment Use | 0 | $CO_2$-e (metric tons) |
| Go To Sheet | Fire Suppression | 0 | $CO_2$-e (metric tons) |
| Go To Sheet | Purchased Gases | 0 | $CO_2$-e (metric tons) |

### *Location-Based Scope 2 Emissions*

| | | | |
|---|---|---|---|
| Go To Sheet | Purchased and Consumed Electricity | 32 | $CO_2$-e (metric tons) |
| Go To Sheet | Purchased and Consumed Steam | 0 | $CO_2$-e (metric tons) |

### *Market-Based Scope 2 Emissions*

| | | | |
|---|---|---|---|
| Go To Sheet | Purchased and Consumed Electricity | 40 | $CO_2$-e (metric tons) |
| Go To Sheet | Purchased and Consumed Steam | 0 | $CO_2$-e (metric tons) |

### *Total organization Emissions*

| | | |
|---|---|---|
| Total Scope 1 & Location-Based Scope 2 | 66 | $CO_2$-e (metric tons) |
| Total Scope 1 & Market-Based Scope 2 | 75 | $CO_2$-e (metric tons) |

Back to Intro

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# Emissions Summary

**Guidance**

The total GHG emissions from each source category are provided below. You may also use this summary sheet to fill out the *Annual GHG Inventory Summary and Goal Tracking Form* as this calculator only quantifies one year of emissions at a time.

https://www.epa.gov/climateleadership/center-corporate-climate-leadership-annual-ghg-inventory-summary-and-goal-tracking

By entering the data below into the appropriate cell of the *Annual GHG Inventory Summary and Goal Tracking Form,* you will be able to compare multiple years of data.

If you have multiple Calculator files covering sub-sets of your inventory for a particular reporting period, sum each of the emission categories (e.g. Stationary Combustion) to an organizational total, which then can be entered into the *Annual GHG Inventory Summary and Goal Tracking Form*.

(A) Enter organization information into the orange cells. Other cells on this sheet will be automatically calculated from the data entered in the sheets in this workbook. Blue cells indicate required emission sources if applicable. Green cells indicate scope 3 emission sources and offsets, which organizations may optionally include in their inventory.

(B) The "Go To Sheet" buttons can be used to navigate to the data entry sheets.

**Organizational Information:**

| | |
|---|---|
| Organization Name: | Billings LAASF - Total Emissions |
| | Montana Department of Military Affairs/MT Army National Guard |
| Organization Address: | 1956 Mt Majo Street, P.O. Box 4789<br>Fort Harrison, MT 59636-4789 |
| Inventory Reporting Period: | *Calendar year* |
| Start: | *1/1/2021* |
| End: | *12/31/2021* |
| Name of Preparer: | Nancy Shelton |
| Phone Number of Preparer: | 602-686-3237 |
| Date Prepared: | 3/16/2022 |

## Summary of Organization's Emissions:

### *Scope 1 Emissions*

| | | | |
|---|---|---|---|
| Go To Sheet | Stationary Combustion | 35 | $CO_2$-e (metric tons) |
| Go To Sheet | Mobile Sources | 1,053 | $CO_2$-e (metric tons) |
| Go To Sheet | Refrigeration / AC Equipment Use | 0 | $CO_2$-e (metric tons) |
| Go To Sheet | Fire Suppression | 0 | $CO_2$-e (metric tons) |
| Go To Sheet | Purchased Gases | 0 | $CO_2$-e (metric tons) |

### *Location-Based Scope 2 Emissions*

| | | | |
|---|---|---|---|
| Go To Sheet | Purchased and Consumed Electricity | 32 | $CO_2$-e (metric tons) |
| Go To Sheet | Purchased and Consumed Steam | 0 | $CO_2$-e (metric tons) |

### *Market-Based Scope 2 Emissions*

| | | | |
|---|---|---|---|
| Go To Sheet | Purchased and Consumed Electricity | 40 | $CO_2$-e (metric tons) |
| Go To Sheet | Purchased and Consumed Steam | 0 | $CO_2$-e (metric tons) |

### *Total organization Emissions*

| | | |
|---|---|---|
| Total Scope 1 & Location-Based Scope 2 | 1,119 | $CO_2$-e (metric tons) |
| Total Scope 1 & Market-Based Scope 2 | 1,128 | $CO_2$-e (metric tons) |

# Appendix E. Example Scoping Letter, Distribution List, and Comment Responses

**DEPARTMENTS OF THE ARMY AND AIR FORCE**

**JOINT FORCE HEADQUARTERS - MONTANA**
P.O. Box 4789, 1956 Mt Majo Street
Fort Harrison, Montana 59636-4789

August 6, 2021

SUBJECT: Intergovernmental and Interagency Coordination of Environmental Planning in Support of an Environmental Assessment of the Montana Army National Guard's Proposed Billings Limited Army Aviation Support Facility

Airport Administration
Billings Logan International Airport
1901 Terminal Circle
Billings, MT 59105

Dear Sir or Madam:

The National Guard Bureau (NGB) and Montana Army National Guard (MTARNG) are preparing an Environmental Assessment (EA) to identify the environmental impacts associated with the use and operation of the proposed Billings Limited Army Aviation Support Facility (LAASF). The proposed facility would be located at a privately owned hangar adjacent to the Billings Logan International Airport at 2121 Hangar Drive, Billings, Yellowstone County, Montana (see Figure 1 in Enclosure 1). The LAASF would alleviate the limited aviation assets available in eastern Montana, northern Wyoming, and western North and South Dakota and would allow MTARNG's ability to train soldiers more fully.

Generally, this action would include the leasing of the hangar and the operation and light maintenance of up to six helicopters. The action does not include construction of new facilities or modification of existing facilities. Two temporary mobile office units would be located on site to accommodate administrative and training activities. The facility would be fenced. Existing utilities and septic system would be used. Refueling would be done on-site, using a 5,000-gallon over-the-road tanker and a heavy expanded mobility tactical truck (HEMTT).

The Billings LAASF would be supported by up to 14 full-time employees. Drill weekends would occur once a month, and up to 60 personnel would attend. Parking would be onsite in the vicinity of the hangar. Personnel who travel for drill weekends would lodge and dine in the Billings area. Training would take place on Friday evenings and all-day Saturday and Sunday. Transitional movements (arrival/departure) would occur at the hangar, and flights would occur within established airport traffic pattern areas or away from Billings airspace.

As this Proposed Action is federally funded, we are preparing an EA that will evaluate the environmental, cultural, and socioeconomic impacts associated with the Proposed Action, pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [USC] §4321 *et seq*.); the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] Parts 1600-1508); and Environmental Analysis of Army Actions; Final Rule, 29 March 2002 (32 CFR Part 651); as well as the Army National Guard NEPA Handbook – *Guidance on Preparing Environmental Documentation for Army National Guard Actions in Compliance with the National Environmental Policy Act of 1969* (NGB, October 2011).

**Information Request:** While MTARNG maintains a wealth of current environmental, cultural, and socioeconomic data associated with the project location and vicinity, we are seeking your input on any specific environmental issues or concerns your agency may have. *Information your agency can provide on any of the following environmental issues (at or in the vicinity of the Proposed Action) would be appreciated:*

-Potential environmental concerns or issues;
-Surface- and ground-water resources, including streams, wetlands, floodplains, open water features, wells, and local aquifers;
-Federal- or state-listed threatened or endangered species, or any species proposed for such listing or critical habitat for such species that may occur within a one-mile radius around the proposed LAASF site;
-Parks, nature preserves, conservation areas, designated wild or scenic rivers, migratory bird habitats, or special wildlife issues;
-Natural resource issues;
-Cultural resources issues and/or Native American concerns;
-Pertinent soils and geologic data;
-Traffic, noise, or socioeconomic concerns;
-Land use or public health and safety concerns;
-Air quality concerns; and/or
-Additional environment concerns or issues.

Data you make available will provide valuable and necessary input into the NEPA analytical process. As part of the NEPA process, local citizens, groups, and agencies, among others, will have ample future opportunity to review and comment on the information and alternatives addressed in the document.

**Other Agencies and Organizations:** A list of contacts to whom this request was sent is provided in Enclosure 2. *Should you know of any additional parties that may have data or concerns relevant to this Proposed Action, please forward them a copy of this letter, include their information in your response, or contact us directly with this information*.

We look forward to and welcome your participation in this analysis. **Please respond on or before September 7, 2021,** to enable us to complete this phase of the project within the scheduled timeframe. If you are not interested in this project and do not wish receive follow-up notices, please notify us by mail or e-mail, and we will remove you from our project mailing list.

**Please send your written response via regular mail or e-mail (preferred) to:**

Montana Army National Guard
JFHQ-MT
Attn: Environmental Office
1956 Mt. Majo Street, P.O. Box 4789
Fort Harrison, MT 59636-4789
rebekah.l.myers2.nfg@mail.mil

POC for this action is Rebekah Myers at 406-324-3087. Thank you in advance for your participation in this process.

Sincerely,

J. PETER HRONEK
Major General, Montana National Guard
The Adjutant General

Enclosures

# Enclosure 1
# Project Location


**Figure 1. Project Location**

## Enclosure 2

## List of Parties Contacted

## Federal Agencies

Mr. Joe Nye
Federal Aviation Administration
Helena FSDO
2725 Skyway Drive
Helena, MT 89602-1213

Ms. Jodi Bush, Field Supervisor
Ecological Services, Helena Field Office
U.S. Fish and Wildlife Service
585 Shepard Way, Suite 1
Helena, MT 59601

Montana Operations Region 8
U.S. Environmental Protection Agency
10 West 15th Street, Suite 3200
Helena, MT 59626

## Tribes

Mr. Timothy Davis, Chairman
Blackfeet Nation Tribe
P.O. Box 850
All Chiefs Square
Browning, MT 59417

Mr. Floyd Azure, Chairman
Fort Peck Assiniboine & Sioux Tribes
P.O. Box 1027
501 Medicine Bear Road
Poplar, MT 59255

Ms. Shelly Fyant, Chairwoman
Confederated Salish & Kootenai Tribes
P.O. Box 278
42487 Complex Boulevard
Pablo, MT 59855

Mr. Frank Whiteclay, Chairman
The Crow Tribe of Indians
P.O. Box 19
Bacheeitche Avenue
Crow Agency, MT 59022

Mr. Andrew Werk Jr., President
Fort Belknap Indian Community
656 Agency Main Street
Harlem, MT 59526

Mr. Harlan Baker, Chairman
Chippewa Cree Tribe
P.O. Box 544
Box Elder, MT 59521

Ms. Donna Fisher, President
Northern Cheyenne Tribe
P.O. Box 128
600 Cheyenne Avenue
Lame Deer, MT 59043

Mr. Devon Boyer, Chairman
Shoshone-Bannock Tribes of the Fort Hall Reservation
P.O. Box 306
Fort Hall, ID 83203

Mr. Thor Hoyte, Attorney
Crow Tribe of Indians
6405 Hawks Prairie Road NE
Olympia, WA 98516

Mr. Gerald Gray, Chairman
Little Shell Chippewa Tribe
625 Central Avenue West
Great Falls, MT 59401

Mr. Bobby Komardley, Chairman
Apache Tribe of Oklahoma
P.O. Box 1330
Anadarko, OK 73005

## State Agencies

Mr. John Tubbs
Montana Department of Natural Resources and Conservation (DNRC)
1625 11th Avenue
Helena, MT 59601

Ms. Sierra Farmer
Montana DNRC
1625 11th Avenue
Helena, MT 59601

Mr. Chris Dorrington
Montana Department of Environmental Quality
1520 East Sixth Avenue
Helena, MT 59620-0901

Ms. Sierra Farmer
Montana DNRC
1625 11th Avenue
Helena, MT 59601

Mr. Henry Worsech
Montana Department of Fish, Wildlife, and Parks
1420 East Sixth Avenue
Helena, MT 59620-0701

Ms. Jen Lane
Montana Department of Environmental Quality
1520 East Sixth Avenue
Helena, MT 59620-0901

Mr. Malcom Long
Montana Department of Transportation
P.O. Box 211001
Helena, MT 59620-1001

Ms. Linnaea Schroeer
Montana Department of Fish, Wildlife, and Parks
1420 East Sixth Avenue
Helena, MT 59620-0701

Mr. Peter Brown
Montana State Historic Preservation Office
1301 East Lockey Avenue
Helena, MT 59620

Mr. Tom Gocksch
Montana Department of Transportation
P.O. Box 211001
Helena, MT 59620-1001

## Local Agencies

Mr. Bill Cole, Mayor
City of Billings
210 North 27th Street
Billings, MT 59101

Mr. Chris Kukulski, City Administrator
City of Billings
210 North 27th Street
Billings, MT 59101

City Council
City of Billings
P.O. Box 1178
Billings, MT 59103

Mr. John Ostlund
Yellowstone County Commissioner
P.O. Box 35000
Billings, MT 59107

Mr. Donald Jones
Yellowstone County Commissioner
P.O. Box 35000
Billings, MT 59107

Mr. Denis Pitman
Yellowstone County Commissioner
P.O. Box 35000
Billings, MT 59107

Airport Administration
Billings Logan International Airport
1901 Terminal Circle
Billings, MT 59105

Big Sky Search and Rescue
P.O. Box 160063
Big Sky, MT 59716

**Local Agencies (continued)**

Stillwater County Search and Rescue
P.O. Box 729
Columbus MT 59019

Carbon County Search and Rescue
235 Upper Red Lodge Creek Road
Red Lodge, MT 59068

Chief Pepper Valdez
Billings Fire Department
210 North 27th Street
Billings, MT 59101

Mr. Rich St. John
Billings Police Department
220 North 27th Street
Billings, MT 59101

Mr. Mike Linder
Yellowstone County Sheriff
2323 2nd Ave North
Billings, MT 59101

Mr. Shawn Lesnik
Musselshell County Sheriff
820 Main Street
Roundup, MT 59072

Mr. Lawrence C. Big Hair
Bighorn County Sheriff
121 3rd Street West
Hardin, MT 59034

Mr. Charles Kem
Stillwater County Sheriff
400 East 3rd Avenue North
Columbus, MT 59109

Mr. Josh McQuillan
Carbon County Sheriff
102 Broadway Avenue North
Red Lodge, MT 59068

Mr. Robert Pallas
Golden Valley Sheriff
107 Kemp Street
Ryegate, MT 59074

Mr. Wayne Robinson
Treasure County Sheriff
307 Rapelje Avenue
Hysham, MT 59038

Captain Philip Schmidt
Civil Air Patrol
P.O. Box 1887
Great Falls, MT 59403

**From:** St. John, Rich
**To:** Myers, Rebekah L NFG NG MTARNG (USA)
**Subject:** [Non-DoD Source] Billings LAASF
**Date:** Tuesday, August 17, 2021 9:39:55 AM

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Writing to acknowledge receipt of Major General Hronek's letter dated 8/6/21. The Billings PD anticipates no issues with the proposed project with the expection of a slight increase in traffic on drill days.

CITY OF Billings

**Rich St. John**
Chief of Police
Billings Police Department
stjohnr@*billingsmt.gov* < Caution-mailto:stjohnr@billingsmt.gov >

**billingsmt.gov < Caution-https://www.ci.billings.mt.us >**

P.O. Box 1554 • Billings, MT 59103
P 406.657.8472 F 406.657.8417

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Billings
PUBLIC
WORKS

August 20, 2021

ENVIRONMENTAL AFFAIRS
2251 Belknap Ave
Billings, MT 59101

Montana Army National Guard
JFHQ-MT
Attn: Environmental Office
1956 Mt. Majo Street, P.O. Box 4789
Fort Harrison, MT 59636-4789

Dear Ms. Myers,

This letter is in regard to requested information on possible environmental issues at the proposed facility at 2121 Hangar Drive. To our divisions knowledge there is no environmental issues at this site. However, there are water resources we want you to be aware of and future construction in the area.

Billings Logan International Airport has a storm water system which connects to an onsite collection pond and drains into Alkali Creek. Alkali Creek does eventually discharge to the Yellowstone River, which is considered an "impaired" water body. Please note that storm water does not receive treatment before discharging to the Yellowstone River.

A new commercial subdivision will be starting construction for Yellowstone Landing and Chinook Warehouse, just south of the proposed facility. Access to the facility may be impacted due to construction work on Hangar Drive. We have already received a Storm Water Pollution Prevention Plan (SWPPP) for this commercial subdivision noting installation of storm water utilities and a storm water detention pond on site at this area.

Please call or email if you have any questions.

Sincerely:

Boris Krizek

Boris Krizek
Environmental Engineer
krizekb@billingsmt.gov

| | |
|---|---|
| From: | Martin, Jacob |
| To: | Myers, Rebekah L NFG NG MTARNG (USA) |
| Subject: | [Non-DoD Source] Montana Army National Guard"s Proposed Billings Limited Army Aviation Support Facility |
| Date: | Thursday, August 19, 2021 2:05:14 PM |



Dear Ms. Meyers:

Thank you for your August 6, 2021, letter, requesting U.S. Fish and Wildlife Service (USFWS) comment on the proposed leasing and use of existing hangar space in Billings, Yellowstone County, Montana. The proposed project would involve use and maintenance of up to 6 helicopters. New facilities would not be constructed and existing facilities would not be modified.

The USFWS reviewed your letter. Based on the information provided, we have no comments regarding federally listed or proposed threatened or endangered species or other trust species. Additional information regarding listed species that may occur within the project footprint may be obtained using the IPaC project-planning tool, which streamlines the USFWS environmental review process at Caution-https://ecos.fws.gov/ipac/ < Caution-https://ecos.fws.gov/ipac/ > .

Thank you for the opportunity to comment. If you have any questions or comments about this correspondence, please contact me via reply email or at the address or phone numbers, below.

Sincerely,

Jacob M. (Jake) Martin
Assistant Field Supervisor
Montana Ecological Services Office
585 Shephard Way, Suite 1
Helena, Montana 59601
(406) 422-8524 (cell, preferred, I'm teleworking)
(406) 430-9007 (office)
jacob_martin@fws.gov

# *Yellowstone County*

**COMMISSIONERS**
(406) 256-2701
(406) 256-2777 (FAX)

P.O. Box 35000
Billings, MT 59107-5000
commission@co.yellowstone.mt.gov

Montana Air National Guard
JFHQ-MT
Attn: Environmental Office
1956 Mt. Majo Street
PO Box 4789
Fort Harrison, MT 59636-4789

rebekah.l.meyers2.nfg@mail.mil

August 17, 2021

J. Peter Hronek
Major General, Montana National Guard

Thank you for your letter of August 6, 2021 requesting information relating to an Environmental Assessment of the Montana Army National Guard's proposed Billings Limited Army Aviation Support Facility.

We are not aware of any potential environmental concerns or issues in the proposed area. We are not aware of any threatened or endangered species within a one-mile radius of the proposed area. There are no parks, nature preserves, conservation areas or other special wildlife issues. We are also not aware of any natural resource issues or concerns.

The area is near the Billings Airport and has normal traffic volumes for such. We are not aware of air quality concerns, or any other additional environmental concerns or issues.

Thank you for your consideration of this area, for a Limited Army Aviation Support Facility. Should you need any additional information – or have further questions, please contact us.

Sincerely,

Donald W. Jones, Yellowstone County Commissioner

Denis Pitman, Yellowstone County Commissioner

John Ostlund, Yellowstone County Commissioner

# Appendix F. Section 106 Consultation Responses

**DEPARTMENTS OF THE ARMY AND AIR FORCE**

**JOINT FORCE HEADQUARTERS - MONTANA**
P.O. Box 4789, 1956 Mt Majo Street
Fort Harrison, Montana 59636-4789

April 13, 2022

SUBJECT: Draft Environmental Assessment and National Historic Preservation Act Consultation for the development and operation of proposed Limited Army Aviation Support Facility, Billings, Montana

Mr. Peter Brown
Montana State Historic Preservation Office
1301 East Lockey Avenue
Helena, MT 59620

Dear Mr. Brown:

The Montana Army National Guard (MTARNG) proposes to operate a Limited Army Aviation Support Facility (LAASF) from a hangar that MTARNG currently leases in Billings, Yellowstone County, Montana (Enclosure 1). The operation of the proposed LAASF qualifies as an undertaking subject to review under Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (*54 USC 306108, implementing regulations at 36 CFR Part 800*). The undertaking is also subject to the National Environmental Policy Act of 1969 (NEPA) (*42 United States Code [USC] 4321 et seq.*), and National Guard Bureau (NGB) and MTARNG have prepared a Draft Environmental Assessment (EA) in accordance with NEPA, the Council on Environmental Quality Regulations Implementing the Procedural Provisions of NEPA (*40 Code of Federal Regulations [CFR] Parts 1500-1508*), and *32 CFR Part 651* (*Environmental Analysis of Army Actions*, Final Rule). The MTARNG intends to complete Section 106 consultation in conjunction with the NEPA process.

The Draft EA is available for review and comment and can be accessed online at: www.mt.gov/dma/CFMO/index, upon request (406-324-3087 or rebekah.l.myers2.nfg@army.mil), or at the Billings Public Library, 510 N. Broadway, Billings, MT 59101.

The purpose of this letter is to initiate consultation under Section 106 of the NHPA, present the project's area of potential effects (APE), project finding of effect, and to solicit any comments from your agency on this undertaking.

**Description of the Undertaking**

The proposed undertaking would expand MTARNG aviation capabilities to the eastern portion of Montana to better accommodate soldier training and the community by having air assets more readily available in that geographic region. The additional aviation support to serve eastern Montana is needed to improve coverage and availability for military training and emergency response, and to reduce costs by reducing flight time to eastern Montana. To achieve this goal, the proposed undertaking would operate up to six helicopters out of an existing leased hangar located west of Billings Logan International Airport. Helicopters proposed for use consist of, but are not limited to, Blackhawk/UH-60, Chinook/CH-47, or Lakota/UH-72 types.

The hangar was constructed in 2019 and is currently in use by the Billings Flying Service. Up to two temporary portable offices would be located on the property adjacent to the hangar. Personal vehicles would be parked in the gravel or asphalt lot adjacent to the hangar. The hangar is served by electricity and a septic system. Water is provided via a cistern. No ground disturbance would be required as part of this undertaking.

On weekdays, two to three helicopter training flights per day would originate from the proposed LAASF hangar for a total of 10-15 flights per work week. An additional 2-3 flights per day per aircraft would occur during drill weekends, which commence on Thursday or Friday and conclude on Sunday evenings. Flights would occur primarily during the day, but at least one training flight per weekend would occur at night with the aircraft returning after dark, the timing of which would vary with the season. The LAASF would operate for one additional Saturday per month for two to three flights per aircraft.

Maintenance activities are anticipated to include maintenance hover runs or flights for every 100 hours of flight time or after 14-days of storage. The hover runs or flights would typically be 50-60 minutes or less per aircraft, when required, and hover runs would be conducted at the airport. An estimated 150 maintenance runs would occur per year. Refueling would be done on-site, using a 5,000-gallon over-the-road tanker. The Montana Department of Military Affairs Environmental Office would develop a Spill Prevention Control and Countermeasures plan. The unit would arrange for portable secondary containment for storing all fuel trucks. Other support vehicles that would potentially be used at the LAASF include light medium tactical vehicles, high mobility multipurpose wheeled vehicles, trailers, and a forklift.

Annual training (AT) would occur at the LAASF about once every five years, anticipated to begin in 2026. Unlike other AT events where multiple units may train together, only the unit assigned to the LAASF would participate at these periodic events. Training activities (number of people, flights, etc.) would be the same as on a drill weekend but would extend

over a 15-day period. All flights would follow historically established flight paths out of the hangar.

**Definition of the APE**

This undertaking does not include any land acquisition or ground disturbance and no direct effects to historic properties would occur, therefore no direct APE was established. Potential project effects would be limited to helicopter overflight. Therefore, NGB and MTARNG have determined that the assessment of *indirect effects* for this undertaking focus on the potential indirect visual and auditory effects to historic properties.

The indirect APE for potential visual and auditory effects was established based on two factors: the inbound and outbound flight paths and the calculated noise levels. Enclosure 2 depicts the indirect APE analysis area. Visual impacts would occur if Proposed Action changed the view or character of the historic property's surroundings. Auditory impacts would potentially occur if additional noise is generated. This would occur in areas where the noise contour depicted in Enclosure 2 deviates from the shaded area of the same color. In these areas, potential indirect impacts could occur. The outermost contour, where deviation primarily occurs, represents a noise level that is approximately the same as a quiet office.

**Identification of Historic Properties in the Indirect APE**

Efforts to identify historic properties located within the indirect APE of this undertaking included review of MTCRIS files, as well as the National Register of Historic Places (NRHP) database. Research efforts focused on the identification of those properties for which NRHP integrity aspects of setting or feeling would be a primary qualifier for their eligibility. A total of three NRHP-listed historic districts and 14 individual NRHP-listed buildings were identified within the indirect APE (Enclosure 2; Table 1).

**Table 1. Historic Properties within the Indirect APE**

| Map ID | NRHP Listing No. | Property Name | Address | Date Listed | NRHP Criteria |
|---|---|---|---|---|---|
| ***NRHP-Listed Historic Districts*** | | | | | |
| A | 06000333 | Billings Townsite Historic District | 2600 (2528), 2604-2606, 2608, 2610-2614, and 2624 Montana Avenue | 4/21/2006 | A, C |
| B | 06001224 | Black Otter Trail | Black Otter Trail | 1/5/2007 | A |
| C | 79001427 | Billings Historic District | Roughly bounded by N. 23rd St., N. 25th St., 1st St., and Montana Ave | 3/15/1979 | unknown |

| Map ID | NRHP Listing No. | Property Name | Address | Date Listed | NRHP Criteria |
|---|---|---|---|---|---|
| ***Individual NRHP-Listed Buildings*** | | | | | |
| 1 | 72000739 | Billings Chamber of Commerce Building | 303 N. 27th Ave. | 1/20/1972 | unknown |
| 2 | 77000822 | Austin North House | 622 N. 29th St. | 11/23/1977 | unknown |
| 3 | 72000740 | Parmly Billings Memorial Library | 2822 Montana Ave. | 10/19/1972 | unknown |
| 4 | 82003182 | Prescott Commons | Rimrock Rd. | 4/30/1982 | unknown |
| 5 | 86000847 | Masonic Temple | 2806 3rd Ave. | 4/17/1986 | unknown |
| 6 | 86000678 | Billings Post Office and Courthouse | 2602 1st Ave. | 3/14/1986 | unknown |
| 7 | 02000105 | The Electric Building | 113-115 Broadway | 3/1/2002 | A, C |
| 8 | 05001279 | Acme Building | 109-111 N. Broadway | 11/9/2005 | A, C |
| 9 | 08001228 | Oliver Building | 2702 Montana Ave. | 11/6/2008 | A, C |
| 10 | 08001227 | L&L Building | 2624 Minnesota Ave. | 11/10/2008 | A, C |
| 11 | 10000489 | Dude Rancher Lodge | 415 N. 29th St. | 7/22/2010 | A, C |
| 12 | 13000153 | Babcock Theater Building | 114-124 N. 28th and 2808-2812 2nd Ave. | 4/9/2013 | A, C |
| 13 | 13000369 | Northern Hotel | 19 N. Broadway | 6/12/2013 | A, C |
| 14 | 15000574 | McMullen Hall | 1500 University Dr. | 9/8/2015 | A, C |

**Indirect Visual Effects**

Given that the proposed flight paths that would be implemented by the MTARNG would follow existing, in-use flight paths from the leased hangar and the adjacent Billings Logan International Airport, any visual effects to historic properties would be temporary and limited in duration. There would be no new or additional sources of lighting. Any historic property within the project's indirect APE has been crossed by these flight paths from the historic era up to the present day. The aircraft are consistent in size and noise generation with those that currently use the flight paths and those that have used the flight paths in the past. It is NGB and MTARNG's determination that historic properties in the indirect APE would therefore not be visually affected by the introduction of additional LAASF flights.

**Indirect Auditory Effects**

Sound is created when an object vibrates and radiates part of its energy as acoustic pressure or waves through a medium, such as air, water, or a solid object. Sound levels are expressed in units called decibels (dB). Noise is generally defined as any loud or undesired sound. Noise levels are also expressed in dB. Since the human ear does not respond equally to all frequencies (or pitches), measured noise levels are often adjusted or weighted to correspond to the frequency of human hearing and the human perception of loudness. The weighted noise level is designated as the A-weighted noise level in decibels (otherwise known as dBA).

Around a military or civilian airfield, the noise environment is normally described in terms of the time-averaged sound level generated by aircraft operating at that facility. For this project, operations consist of the existing fixed-wing and rotary-wing flight activities conducted during an average annual day, including arrivals and departures at the airfield, flight patterns in the general vicinity of the airfield, and maintenance operations.

The indirect APE for this project has been created based on the noise modeling and analysis conducted for the Draft EA. The indirect APE is defined by the 50 dBA contour for the Proposed Action and impacts were determined based on changes resulting from the action as compared to the No Action scenario.

As demonstrated in Enclosure 2, most of the historic properties within the indirect APE fall within areas where the existing noise generated by airport use and the future noise levels with the Proposed Action are the same. For these properties, no indirect auditory effect is anticipated. The exception is Building 3/Parmly Billings Memorial Library; Building 9/Oliver Building and Building 10/L&L Building (Table 1; Enclosure 2). These buildings fall at the far southern range of the indirect APE, where a slight increase in noise (an estimated 0.1-0.2dBA) is expected. This is within accepted state, national, local levels of noise. For these buildings, noise levels are not a character-defining feature. Further, these properties are located in a developed urban environment, and the slight increase in ambient noise is not considered to be significant enough to adversely affect the historic setting or feeling of these buildings. No vibration would occur.

**Request for Comment**

The MTARNG asks that you share your initial comments regarding any known architectural, archaeological, tribal, or other historic properties that may be in the proposed indirect APE and your comments regarding the proposed indirect APE. Further, we are requesting comment on the project finding of “no adverse effect to historic properties.” We request that you provide your responses within thirty (30) days, or by May 19, 2022, per 36 CFR 800.4(d)(1)(i). If no response is received, we will assume that you have no comments on our

finding of project effect and will proceed with this undertaking. If you have any questions about this project, please contact Rebekah Myers at 406-324-3087 or rebekah.l.myers2.nfg@army.mil.

Sincerely,

Adel Johnson
Lieutenant Colonel, MTARNG
Environmental Program Manager

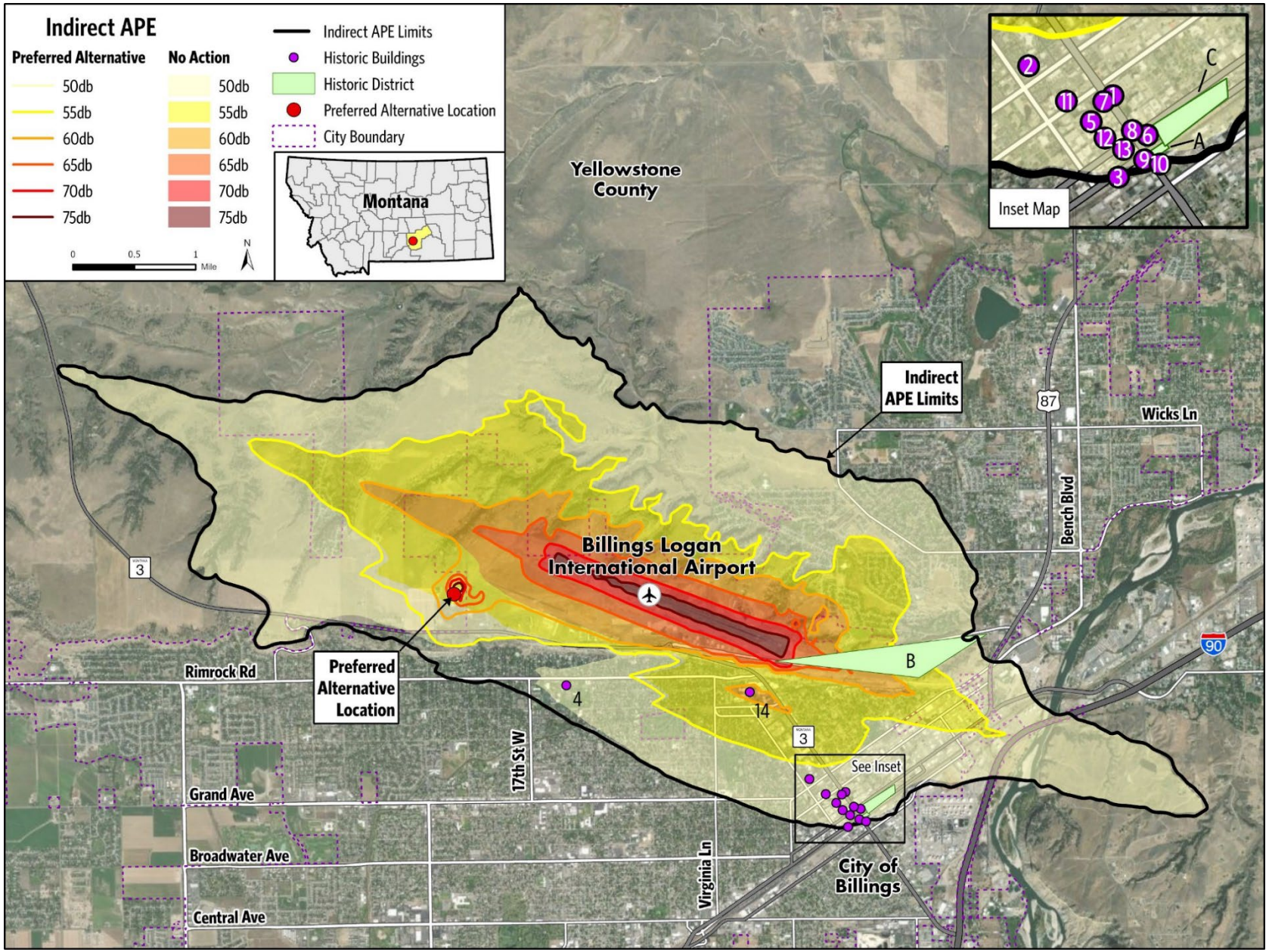
s

# Enclosure 1
# Project Location


**Enclosure 1. Project Location**

# Enclosure 2

# Proposed Indirect APE and Historic Properties




**Enclosure 2. Proposed Indirect APE and Historic Properties**

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April 27, 2022

Adel Johnson
Joint Force Headquarters – Montana
1956 Mt Majo Street
Fort Harrison, Montana 59636-4789

Re: NHPA Development and Operation of Proposed Limited Army Aviation Support Facility, Billings MT

Dear Lt Col Johnson,

Thank you for your letter (received April 19, 2022) regarding the Limited Army Aviation Support Facility in Billings. We concur on your determination of No Adverse Effect.

If you have any questions or concerns, do not hesitate to contact me at (406) 444-7719 or Laura.Evilsizer@MT.gov. Thank you for consulting with us.

Sincerely,

Laura Evilsizer

Laura Evilsizer, M.A.
Compliance Officer, Deputy SHPO
Montana State Historic Preservation Office

225 North Roberts Street
P.O. Box 201201
Helena, MT 59620-1201
(406) 444-2694
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FILE: MTARNG/National Guard Bureau – 2022 - 2022041905

## Myers, Rebekah L NFG NG MTARNG (USA)

**From:** Teanna Limpy <teanna.limpy@cheyennenation.com>
**Sent:** Wednesday, June 1, 2022 6:09 PM
**To:** Myers, Rebekah L NFG NG MTARNG (USA)
**Subject:** [Non-DoD Source] Draft EA Response-Aviation Support Facility

Ms. Myers,

I have reviewed the informational letter provided regarding request for consultation regarding Development and Operation of Proposed Limited Army Aviation Support Facility in Billings, MT. I apologize for the late response, but wanted to follow-up to see if any tribes have responded to this request. Initially, the only question I have at this time is in regards to vehicle traffic within the boundaries. Is there fencing around the access roads and areas to prevent vehicle traffic from going outside that established ROW? I ask this because, while we know the historic properties within the project area, we do not know of any potential site of significance to our nation exists. We would have a great idea of any sites in the area if we were able to participate in any surveys previously conducted in years past.

Thanks,

***Teanna Limpy, Director***
***Tribal Historic Preservation Office***
***Northern Cheyenne Tribe***
***14 E. Medicine Lodge Drive***
***PO Box 128***
***Lame Deer, MT. 59043***
***Office: 406-477-4838/8113***
***Direct: 406-477-4839***
***Work Cell: 406-740-0420***

# Appendix G. Draft EA Comment Matrix

MTARNG Development and Operation of a Limited Army Aviation Support Facility
Draft EA Comment Response Matrix

| Commenter | Mode | Date | Category | Comment | Response |
|---|---|---|---|---|---|
| Susan,Gregory Hogan | E-mail | 9-May-22 | Noise | For public comment: We would like to go on record on being totally AGAINST the LAASF operation in Billings. We were told when Blaine helicopter moved it's operation to Highway 3, there would be minimal helicopter traffic, the noise equivalent to a big truck and helicopters would not fly over the city only north of the rims. These are all lies. When Chinook type helicopters fly over, our whole house shakes and the noise is very disruptive. We were told at our Neighborhood Task force meeting that two to three helicopter training flights per day could originate here. Weekend drills would be even more. Our airport and Blaine's operation is far too close to neighboring houses and in fact, too close to the city. Ideally we should move the airport further away, similar to what Bozeman has done. Please find a different location that is farther from a major city. | Based on the noise study, noise levels in neighborhoods due south of the proposed hangar on top of the Rims will increase between 3 and 5 decibels Day-Night Average Sound Level (DNL) to levels below 60DNL. Noise levels below the Rims would be lower at less than 55DNL. The Federal Aviation Administration (FAA) has determined that noise levels below 65DNL is compatible with residential land uses and considered average for suburban residential areas. For additional information, please refer to Sections 3.3 and 4.3 of the Environmental Assessment (EA) and the project noise report at https://dma.mt.gov/CFMO/index, and/or FAA's *Community Response to Noise* at https://www.faa.gov/regulations_policies/policy_guidance/noise/community#:~:text=FAA%20has%20adopted%20DNL%2065,levels%20on%20maps%20for%20reference |
| Howard Evans, LCDR USN (ret) | E-mail | 13-May-22 | Noise | *"…the proposed location is the furthest from residential development and located in an area neighbors are accustomed to aircraft noise"* It is true that Rimtop residents built homes with the knowledge of airport operations, but that acceptance was based on fixed wing operations. The introduction of rotary wing aircraft to the neighborhood changes the conditions entirely. The noise level and pressure wash from rotary operations are far more offensive and less bearable than the noise generated by fixed wing operations. Billings City and Yellowstone County officials who have attested to the acceptance of current airport operations do not live in the area and have no first hand knowledge of the conditions in the Rimtop neighborhood. | During the alternatives analysis, consideration was given to the distance from a potential hangar location to the neighborhoods for each alternative location. Of the three sites, Billings was located the greatest distance from neighborhoods. Your comment about expectations is acknowledged. The statement cited has been removed from the EA. For additional information, please refer to Sections 2.4 3.3 and 4.3 of the EA and the project noise report at https://dma.mt.gov/CFMO/index, and/or FAA's Community Response to Noise at https://www.faa.gov/regulations_policies/policy_guidance/noise/community#:~:text=FAA%20has%20adopted%20DNL%2065,levels%20on%20maps%20for%20reference |

MTARNG Development and Operation of a Limited Army Aviation Support Facility
Draft EA Comment Response Matrix

| Commenter | Mode | Date | Category | Comment | Response |
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| Howard Evans, LCDR USN (ret) | E-mail | 13-May-22 | Flight Pattern | *"Maintenance test flights would follow established flight patterns north of Billings"*<br>The flight pattern statement doesn't address training flight or emergency operations. What flight path will training flights take? At what altitude will flights be at when crossing residential areas? What patterns will be followed for daily operations, emergency calls?<br>Several residents, including me, along Highway 3 have experienced several instances of low, but probably legal, helicopter flights over their property, the frequency of which seems to be increasing. The established flight pattern to the north is a myth or is ignored. Many of the flights follow an east to west path, flying parallel to Hwy 3 in close proximity to existing residences. Flights are so close, low and loud as to rattle dishes in the cupboard. | Both training flights and emergency flights (by MTARNG and other emergency services providers) were included in the noise model developed for this project.<br>Flight paths used in the noise report were provided by the Billings International Airport and are available on the MTARNG website at https://dma.mt.gov/CFMO/index. The Tower at the airport will dictate which flight path to use. It is anticipated that 20% of flights will go to the north, 40% to the west and 40% to the east.<br>The height of helicopters over Hwy 3 would be 1,000 feet above ground level at the closest point to any community unless weather, air traffic control, or an emergency dictates otherwise. For additional information, please reference Section 2.2 of the EA. |
| Howard Evans, LCDR USN (ret) | E-mail | 13-May-22 | Emergency Response | *"The purpose of the Proposed Action is to increase National Guard readiness and expand MTARNG aviation capabilities and fill an existing coverage deficiency for helicopters reaching portions of eastern Montana."* SAR and other emergency services are recognized to be a vital mission of MTARNG, but these operations are not described in the document. Manning levels to provide 24/7/365 emergency operations are not supported by the proposed 14 man crew. Readiness requires training and materiel readiness, ergo additional flights. The impact of this mission was not addressed in the LAASF EAS. | Under the current conditions and the no action alternative, MTARNG would continue to respond to emergencies in eastern Montana, which would include some landings and take offs from Billings Logan International Airport. Under the proposed action, these MTARNG operations would also occur, but the commute from Helena would be eliminated which would improve the speed at which response could be made and would potentially allow the ARNG to participate in more rescue/emergency actions. All flights would follow the approved flight paths agreed upon with the airport and as directed by the airport Tower. These flights as well as the flights of other emergency services were considered in the noise modeling prepared for this project. |

MTARNG Development and Operation of a Limited Army Aviation Support Facility
Draft EA Comment Response Matrix

| Commenter | Mode | Date | Category | Comment | Response |
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| Howard Evans, LCDR USN (ret) | E-mail | 13-May-22 | Traffic | *"Highway 3 would be a controlled access roadway and that entry from Highway 3 to AJ Way would be via a right-turn lane."*<br>Highway 3 is not a controlled access highway, nor are there current plans indicating that it will be. This simplification of AJ Way access doesn't address eastbound traffic or access to the highway from AJ Way during periods of heavy traffic. Highway 3 is a two lane road with no turn lanes in the vicinity of AJ Way. Traffic approaching AJ Way from the west will need to make a left hand turn into the street, crossing heavy west bound traffic and stopping east bound traffic. The study does not analyze the traffic volume during peak transit hours which most impact traffic flow and safety. As a resident of the area I have often experienced inattentive drivers which necessitated continuation past an intended turn, or the following driver passing on the right shoulder. One episode resulted in a car roll-over. As a point of interest, AJ Way is the only authorized road providing access from and egress to Highway 3. There is an unpaved, unauthorized "road" on the east end of the property which may further complicate traffic patterns.<br>Until appropriate road construction can be accomplished, I would recommend that speed limit be reduced and limits enforced. Appropriate warning signs should also be erected. Peak time traffic will be a challenge during drill periods.<br>I believe that all parties would benefit from a public meeting to answer any questions and express their concerns. I request such a meeting be scheduled as soon as possible. | The correction regarding a controlled access road has been made in the EA. Coordination with the County and Montana Department of Transportation (MDT) has been ongoing. Highway 3 is under MDT's jurisdiction. All changes or improvement to the road and speed limit are at MDT's discretion and conducted when analysis indicates improvements are warranted, typically based on FHWA standards. Additional information regarding the current and projected level of service at the intersections with AJ Way and Huey Way has been added in Section 4.9.1 of the Final EA. Approximately 90 personnel would report for drill or annual training occurrences, arriving by 10AM on Thursdays or 7PM on Fridays and leaving at 11PM on these weekdays (see Section 2.2 of EA). On Saturdays and Sundays, personnel would arrive prior to the 7AM or 8AM start time and leave at 5PM on Saturdays and 330PM on Sundays. The anticipated traffic at the arrival and departure times including the MTARNG personnel would be lower than the current traffic during peak hours (7:15-8:15AM and 4:30-5:30PM). When personnel are arriving/departing, the wait time at the AJ Way and Highway 3 intersection would be approximately 14-17 seconds per car, compared to the 27 seconds per car anticipated during the peak travel times without MTARNG personnel. The wait times for the Huey Way intersection are anticipated to be about the same. A public open house meeting was held on 6/29/2022 at the Boothill Inn and Suites to address comments and answer questions. |

MTARNG Development and Operation of a Limited Army Aviation Support Facility
Draft EA Comment Response Matrix

| Commenter | Mode | Date | Category | Comment | Response |
|---|---|---|---|---|---|
| Dennis Martin | E-mail | 18-May-22 | Flight Paths | My name is Dennis Martin and I reside at 2110 Cullen Court, Billings MT 59102. My telephone number is 406-672-3693. I am retired and the area of my residence is one block off 17th Street West and Colton Blvd. I was recently given the information in the Billings Gazette regarding the proposed National Guard Aviation Center to be located at the airport west of the main terminal and wish to respond in kind. Currently the air traffic pattern brings most small aircraft including private and Rocky Mountain College aviation students DIRECTLY over my house. This begins on several days a week beginning at 6:30 am and continues intermittently all day long. In fact there are two aircraft that buzz over my house around 2:30am and I assume they are mail carriers from smaller cities. When you combine the noise from a small aircraft and currently a few helicopters including the hospital's helicopter, it sounds like a war zone in my neighborhood. I'm not sure why the air traffic pattern brings all the aircraft over the middle of this city rather than heading north to loop around to their destination. I am assuming the National Guard training helicopters will also follow the same air traffic pattern bringing additional noise and vibration directly over my house. Therefore I am against bringing this training facility to Billings. Although you noted it would be more cost effective to have it in Billings but I believe it belongs in a less populated area such as Laurel or Miles City. Cost should never take precedence over the quality of life. I hope you will reconsider your plans. | All MTARNG flights would be along approved flight paths and would be dictated by the Tower at the airport. It is anticipated that 20% of flights will go to the north, 40% to the west and 40% to the east. Flights over residential areas will be a minimum of 1,000 feet over the rim and would be substantially higher over the portions of Billings below the rims. The majority of MTARNG flights will be during daylight hours, and night flights (approximately 3% of all flights) will typically be flown at times of year where it gets dark earlier.<br>All flight paths for existing and proposed operations are included in the noise report that is available on the MTARNG website at https://dma.mt.gov/CFMO/index. Additional information on flight patterns and noise can be found in Sections 2.4, 3.3 and 4.3 of the EA. |

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MTARNG Development and Operation of a Limited Army Aviation Support Facility
Draft EA Comment Response Matrix

| Commenter | Mode | Date | Category | Comment | Response |
|---|---|---|---|---|---|
| Dennis Martin | E-mail | 18-May-22 | Noise | Thank you Rebekah for your prompt response. Yes I was able to find the details that you sent with your response email. It's complicated and is hard for me to follow all of the proposed details but if I follow the flight pattern you propose, the helicopters will head east from the helipad along the rimrocks and then head south in the area of North 27th street? If that is correct then I could assume the additional noise level would be minimal in my neighborhood. However in looking at the increase in the noise level of area SO2 and SO4 (which I live in the middle of the two zones)would indicate the fifth and sixth largest increase in noise of all neighborhoods within all zones? I know I'm just the little guy and it probably doesn't matter what my opinion is but Noise is Noise no matter what decibel you put on it. This will just bring more noise to the already nosiest city in Montana (my opinion). | As depicted in Figure 4-1 of the EA, the noise for the area indicated (between S02 and S04) would increase between 1-2 dB and would be within the 55-60 dB range, which at worst is 5 dB below the acceptable noise threshold for residential uses (65 dBA) established by the FAA (14 CFR 150). As for the fifth or sixth largest increase for neighborhoods, we do not have the limits of every neighborhood to quantify in such a manner. However, Figure 4-1 provides the noise levels and shows where noise levels would increase. The shaded areas identify the current noise levels as shown in the legend. Where the line moves away from the shaded area of the same color, an increase in noise is expected. For example, south of the proposed action, the orange, dark yellow, and light yellow lines all extend south of the associated shaded areas. The areas between the lines and the same color shading is where noise levels increase compared to existing conditions. For additional information on flight patterns and noise, please see Sections 2.4, 3.3, and 4.3 of the EA. |

MTARNG Development and Operation of a Limited Army Aviation Support Facility
Draft EA Comment Response Matrix

| Commenter | Mode | Date | Category | Comment | Response |
|---|---|---|---|---|---|
| Jim and Theresa Helus | E-mail | 18-May-22 | Traffic | My husband and I have lived at 3362 Stony Ridge Rd. for 27 years. We are extremely concerned about the proposed National Guard facility at BFS. Traffic on Highway 3 has already become a nightmare, and we anticipate that Guardsmen will just add to that situation. Our street directly leads into AJ Way, and with the building of the facilities that BFS already has going on, traffic pulling in and out of our street and theirs will be even more dangerous! | Coordination with the County and Montana Department of Transportation (MDT) has been ongoing. Highway 3 is under MDT's jurisdiction. All changes or improvement to the road and speed limit are at MDT's discretion and conducted when analysis indicates improvements are warranted, typically based on FHWA standards. Additional information regarding the current and projected level of service at the intersections with AJ Way and Huey Way has been added in Section 4.9.1 of the Final EA. Approximately 90 personnel would report for drill or annual training occurrences, arriving by 10AM on Thursdays or 7PM on Fridays and leaving at 11PM on these weekdays. On Saturdays and Sundays, personnel would arrive prior to the 7AM or 8AM start time and leave at 5PM on Saturdays and 330PM on Sundays. The anticipated traffic at the arrival and departure times including the MTARNG personnel would be lower than the current traffic during peak hours (7:15-8:15AM and 4:30-5:30PM).<br>When personnel are arriving/departing, the wait time at the AJ Way and Highway 3 intersection would be approximately 14-17 seconds per car, compared to the 27 seconds per car anticipated during the peak travel times without MTARNG personnel. The wait times for the Huey Way intersection are anticipated to be about the same. |
| Jim and Theresa Helus | E-mail | 18-May-22 | Noise<br>Traffic | Noise not only from traffic, but the BFS helicopters has directly impacted our neighborhood. Added traffic and more noise from additional helicopters will be intolerable! | Your comment has been added to the project record. For additional information pertaining to noise, please see section 3.3 and 4.3 of the EA and for additional information regarding traffic please see Section 3.8. of the EA. |

MTARNG Development and Operation of a Limited Army Aviation Support Facility
Draft EA Comment Response Matrix

| Commenter | Mode | Date | Category | Comment | Response |
|---|---|---|---|---|---|
| Lyle Gabrian and Valerie Dehostos | E-mail | 19-May-22 | Flight Pattern Noise | We are residents at 3142 Zimmerman Place, Billings, MT, a neighborhood that may be affected by the proposed Limited Army Aviation Support Facility, LAASF, in Billings, MT. We are not opposed to the LAASF; however, we do request that flight patterns that will result from the LAASF proposal be directed away from current established neighborhoods along highway 3 including our neighborhood at Zimmerman Place. Our neighborhood has quite a few young children and any increased noise levels resulting from the proposed LAASF could be detrimental to them. Flight patterns should be directed as far north of these neighborhoods as feasible. We appreciate your consideration to our requests. In addition, it may be beneficial to all parties to have a public meeting to answer any questions and hear other concerns the neighbors along the Highway 3 Corridor may have to the LAASF. | Based on the noise study, noise levels will increase in the Zimmerman Circle vicinity by a small fraction of a decibel to approximately 50 dB. The noise level would be defined by the Federal Interagency Committee on Urban Noise (FICUN) as a "slight." It is below than the 65 dBA DNL Federal Aviation Administration (FAA) threshold for significant noise exposure for residential land uses (14 CFR 150) and average for quiet suburban residential areas. For additional information please refer to Sections 3.3 and 4.3 of the Draft Environmental Assessment (EA) and https://www.faa.gov/regulations_policies/policy_guidance/noise/community#:~:text=FAA%20has%20adopted%20DNL%2065,levels%20on%20maps%20for%20reference<br>A public open house meeting was held on 6/29/2022 at the Boothill Inn and Suites to address comments and answer questions. |
| Jim Decker | E-mail | 17-May-22 | Traffic | Increased higher traffic volumes on Hwy 3 due to new staffing personnel and the periodic training sessions that could account for up to 90 or more personnel on full capacity at the facility. The draft EA suggested that such traffic increases would be mitigated by the construction of a right turn only (westbound) lane onto AJ Way from Hwy 3. This assumption is in error as traffic would need to turn left (eastbound) onto AJ Way as well. Left turn traffic from Hwy 3 is already at a very dangerous level without the increases in associated traffic because of the new facility. Correct mitigation would require a left turn lane in the center of Hwy 3 to accommodate left turn traffic in both directions, and a likely reduction in the posted speed limit below the current 50mph…that most drivers today assume is only a suggestion. | Coordination with the County and Montana Department of Transportation (MDT) has been ongoing. Highway 3 is under MDT's jurisdiction. All changes or improvement to the road and speed limit are at MDT's discretion and conducted when analysis indicates improvements are warranted, typically based on FHWA standards. Additional information regarding the current and projected level of service at the intersections with AJ Way and Huey Way has been added in Section 4.9.1 of the Final EA. Approximately 90 personnel would report for drill or annual training occurrences, arriving by 10AM on Thursdays or 7PM on Fridays and leaving at 11PM on these weekdays. On Saturdays and Sundays, personnel would arrive prior to the 7AM or 8AM start time and leave at 5PM on Saturdays and 330PM on Sundays. The anticipated traffic at the arrival and departure times including the MTARNG personnel would be lower than the current traffic during peak hours (7:15-8:15AM and 4:30-5:30PM). See Section 2.2 of EA.<br>When personnel are arriving/departing, the wait time at the AJ Way and Highway 3 intersection would be approximately 14-17 seconds per car, compared to the 27 seconds per car anticipated during the peak travel times without MTARNG personnel. The wait times for the Huey Way intersection are anticipated to be about the same. |

MTARNG Development and Operation of a Limited Army Aviation Support Facility
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| Jim Decker | E-mail | 17-May-22 | Noise | Increased noise levels that would occur from the addition of 6 or more Lakota and other aircraft during the training and response activity from emergency and firefighting requirements. Even though the single main rotor aircraft are much quieter than the Chinook twin rotor equipment of Billings Flying Service, the additional volume will be a disadvantage to our community residents. The Chinooks are extremely loud and are at times uncomfortable to listen to. This fact is in direct conflict with the statement "In addition, the proposed location is the furthest from residential development and located in an area neighbors are accustomed to aircraft noise" as stated in lines 26 & 27 of pg iv of the Executive Summary of the Environmental Assessment. | During the alternatives analysis, consideration was given to the distance from the hangar location to the neighborhoods for each alternative location. Of the three alternative sites, the Billings location was the greatest distance from neighborhoods (EA Section 2.4). You comment about expectations is acknowledged. The statement you cited has been removed from the EA. Please note that for a Limited Army Aviation Support Facility (which is proposed in this action), the regulations limit the number of aircraft to 7 or less (National Guard Regulation 415-10, paragraph 4-3). MTARNG proposes no more than 6 aircraft. |

MTARNG Development and Operation of a Limited Army Aviation Support Facility
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| Jim Decker | E-mail | 17-May-22 | Flight Patterns | Flight patterns as identified and outlined in the EA, are acceptable - even the traffic that would be southbound or to the southeast - as long as the aircraft remained north of Hwy 3 for the first half mile of travel to mitigate overflight of our development. Spring, summer and fall outdoor activities are already adversely impacted by the Chinook flights occurring regularly – weekend and weekday – and at low flight elevations above our homes, especially as they approach the helipad at BFS. We are hopeful that "The Guard" would be very cognizant of our residential communities and minimize any disruptions to the enjoyment of our quiet way of life. The Sky Ranch Association was established in 1972. As homeowners, we have enjoyed living in this area for the past 50 years. Even though the landscape around the airport and the growth of the airport has changed over the years, we were accustomed to fixed wing aircraft noise that quickly diminishes after takeoff, but certainly not the noise associated with the increasing number of helicopter flights. The flights directly over our residential homes and the hovering of helicopters at the facility north of Highway 3 are not aircraft noise we have been accustomed to hearing. It is loud and troublesome -especially from constant hovering of the Chinooks during training and testing. We would appreciate your attention given to the specifics listed above; as we anticipate the positive contributions your new facility should bring to the region. It has been suggested to me that an informational meeting with "The Guard" for nearby residents at the proposed facility would be beneficial for questions that will likely continue to accumulate. It would be a welcome change for many who have expressed confusion about what is happening there. | The Proposed MTARNG flight path along Highway 3 that was analyzed in the Draft EA has been shifted to the north to extend over the airport rather than Hwy 3. In addition, the percentage of flights traveling out along Highway 3 has been reduced to 40% of flights, with 40% flying to the west, and 20% flying to the north. This information is included in Sections 2.2 and 4.3.1 of the Final EA, and the noise report for this project has been updated to reflect these changes. The majority of night flights conducted by the MTARNG would be flown during fall and winter when the days are shorter and can be completed earlier in the day. All flights in noise sensitive areas will be at least 1000 feet above ground level.<br>All flight paths for existing and proposed operations are included in the noise report that is available on the MTARNG website at https://dma.mt.gov/CFMO/index.<br>A public open house meeting was held on 6/29/2022 at the Boothill Inn and Suites to address comments and answer questions. |

MTARNG Development and Operation of a Limited Army Aviation Support Facility
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| Commenter | Mode | Date | Category | Comment | Response |
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| Dave and Elaine Kinnard | E-mail | 19-May-22 | Future Readiness Center | This entire assessment process is premised on "leased premises". The EA talks only about presently leasing a hangar and pad from Billings Flying Service when it is our understanding that the Guard has in the past year closed on the purchase of a several parcels of land to the west across AJ Way. This appears bluntly to be a politically disingenuous attempt to sell the concept of a smaller leased facility serving six copters when the actual long-range plan is for the Guard to own its own land and build larger facilities "to accommodate the emerging growth needs and coverage requirements" (See EA Section 2.2) supporting more copters at the second location in the next 10 years. How can the public be expected to reasonably comment on the temporary plan when there is a bigger and more complex unknown plan hiding in the wings with different levels of impact? Why not discuss those crucial facts in the EA? | This proposal is for operations out of the leased hangar only. MTARNG has acquired 20 acres adjacent to the proposed hangar location, and funding was awarded in August 2022 for the design and construction of a new facility. However, there is currently no design available. This is addressed in Section 2.2 of the EA. An additional NEPA document that would include the opportunity for public involvement and comment would be prepared when there is sufficient design and project definition to analyze potential impacts and obtain public and agency input, including consideration of traffic and noise. A permanent facility would not change the number of aircraft that can operate from the leased hangar/out of a Limited Army Aviation Support Facility. |
| Dave and Elaine Kinnard | E-mail | 18-May-22 | Traffic | The City and County, in conjunction with MDOT, have spent hundreds of thousands of dollars studying this access and similar access points into Billings and have concluded that the Highway 3 corridor in particular should be "enhanced as a scenic entryway to the City" and that it should be utilized to "enhance recreational and aesthetic opportunities along the Rims". *Highway 3 Corridor Study, Final Report, April 2015.* We don't believe an additional LAAS helicopter facility close to Highway 3 meets that challenge, particularly if drivers, bikers and walkers on the Skyline Trail are watching low level takeoffs headed southeast down the highway. The draft assessment states that if the proposed action is approved, the facility would employ 14 full-time employees and up to 90 additional personnel on drill weekends. Those employees would obviously not have public transportation available to them and would individually create a very substantial effect on traffic generated both on and off Highway 3 and AJ Way, in addition to the semis and other trucks that would service the facility and courier services that would make multiple deliveries to and from the same. The number of serious injury accidents has multiplied since BFS built their facilities and they continue to build more for either rent or sale. | Coordination with the County and MDT has been ongoing. Highway 3 is under MDT's jurisdiction. All changes or improvement to the roads are at MDT's discretion and conducted when analysis indicates improvements are warranted typically based on FHWA standards. Additional information regarding the current and projected level of service at the intersections with AJ Way and Huey Way has been added in Section 4.9.1 of the Final EA. The anticipated traffic at the times that the MTARNG personnel would arrive/depart would be lower than the current traffic during peak hours (7:15-8:15 and 4:30-5:30). When personnel are arriving/departing, the wait time at the AJ Way and Highway 3 intersection would be approximately 14-17 seconds per car, compared to the 27 seconds per car anticipated during the peak travel times without MTARNG personnel. The wait times for the Huey Way intersection are anticipated to be about the same. Fights arriving and departing from the airport will continue. The flight paths for the MTARNG have shifted towards the north and extend over the airport rather than Hwy 3 (see Section 2.2 of EA). Aircraft flying over the airport will not change the current condition for drivers or bikers and walkers on the Skyline Trail. |

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| Dave and Elaine Kinnard | E-mail | 18-May-22 | Noise | The analysis of noise effects almost appears to say that since the present location in Helena does not disturb the neighbors, a new Billings location shouldn't either. The Helena airport facility where the operation utilizes just airport runways is much more remote and away from residences than what is proposed for Billings. Secondly, the entire Appendix A appears premised on the POI noise analysis of Blue Ridge Research and Consulting. While admitting that the preferred location is located on the Rimrocks approximately 500 feet above most of the city it drew upon 35 Points Of Impact (POI) throughout the city with only a few up on the rimrocks even close to the preferred location, let alone adjacent to our subdivision extremely close to the location – the very area having the overall highest POI from the preferred location. The study appears to overlook that in addition to the activities of Billings Flying Service, there is the almost daily presence of two hospital "HELP" flight helicopters that typically fly the shortest distance between two points and other state or federal owned copters that also use some of the same airspace especially in fire season. The current commercial helicopter operators serving the two hospitals use the hangars on the west end of the airport for their storage, fuel and maintenance operations. When combined with the occasional direct low level direct overflights of the BFS helicopters it becomes a noisy mess. As a light sleeper, I cannot be persuaded that sleeping with windows closed is positive or that the nighttime noise levels are "acceptable". | The Draft EA indicates that under the proposed action, noise currently generated or that would be generated in Helena under the no action alternative associated with the use of these aircraft would no longer occur in Helena and would be introduced to Billings (Section 4.3.1). The Blue Ridge Research Consulting model that generates the noise contours is based on the noise sources (e.g., runways, helipads, number or and headings of the different types of aircraft, etc.) and not the POIs. The POIs are selected to provide information regarding noise levels at particular locations. The contours in Figure 4-1 of the Draft EA provide the modeled noise levels for the proposed action and are another means of identifying future predicted noise levels. POI R07 is in the Sky Ranch Community. Models included flight paths, aircraft, and flight numbers from Billings Flying Service and medical flights. MTARNG would follow the flight paths agreed upon with the Billings Logan International Airport tower and comply with the Tower's instruction on which flight path to use for each flight regardless of the purpose of the flight (training or emergency). The acceptable noise threshold is established by FAA's regulation (14 CFR 150). |
| Teanna Limpy (THPO) | E-mail | 1-Jun-22 | Cultural | I have reviewed the informational letter provided regarding request for consultation regarding Development and Operation of Proposed Limited Army Aviation Support Facility in Billings, MT. I apologize for the late response, but wanted to follow-up to see if any tribes have responded to this request. Initially, the only question I have at this time is in regards to vehicle traffic within the boundaries. Is there fencing around the access roads and areas to prevent vehicle traffic from going outside that established ROW? I ask this because, while we know the historic properties within the project area, we do not know of any potential site of significance to our nation exists. We would have a great idea of any sites in the area if we were able to participate in any surveys previously conducted in years past. | Vehicle traffic would remain on paved surfaces. No ground disturbance would occur under this MTARNG-proposed action. AJ Way is a city road and is not fenced. No vehicle use off the existing transportation infrastructure is authorized under this action. MTARNG will continue to coordinate with the Northern Cheyenne Tribe during any future action that would involve ground disturbing activities.<br>No other tribes responded to the request. |

MTARNG Development and Operation of a Limited Army Aviation Support Facility
Draft EA Comment Response Matrix

| Commenter | Mode | Date | Category | Comment | Response |
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| Howard Evans, LCDR USN (ret) | E-mail | 30-May-22 | Noise | Are you governed by AR 95-1 Army Flight Regulations? If so, I have two immediate areas of concern: Article 2-10 Local Flying Rules and Article 2-16 Noise Abatement. Both topics are major neighborhood concerns and information regarding the procedures to be followed to satisfy both requirements would be most welcome. | MTARNG would comply with federal, state, and local regulations, including AR 95-1. Noise would be below the 65 dBA Federal Aviation Administration (FAA) threshold for significant noise exposure for residential land uses and considered average for suburban residential areas. For additional information please refer to Sections 3.3 and 4.3 of the Draft Environmental Assessment (EA) and https://www.faa.gov/regulations_policies/policy_guidance/noise/community#:~:text=FAA%20has%20adopted%20DNL%2065,levels%20on%20maps%20for%20reference |
| Howard Evans, LCDR USN (ret) | E-mail | 30-May-22 | Safety | AJ Way, the road leading to the facility, has been paved but in my opinion, doesn't include a right turn lane off the highway and road safety is a major neighborhood issue. Speeds beyond the posted 50 MPH and inattentive driving continue to cause concern when exiting or entering the highway. An injury accident has already occurred at the intersection of AJ Way and Highway 3. Any consideration you can make or influence you can assert to improve the safety of your service members and the general population would be welcome. | Coordination with the County and Montana Department of Transportation (MDT) is ongoing. Highway 3 is under MDT's jurisdiction. All changes or improvement to the roads are at MDT's discretion and conducted when analysis indicates improvements are warranted typically based on FHWA standards. |
| Howard Evans, LCDR USN (ret) | E-mail | 13-Jun-22 | Invitation to Rimrock Neighborhood Task Force meeting | I am a board member of the Rimrock Neighborhood Task Force and am inviting you in that capacity to present Montana Army National Guard plans and operations for the proposed LAASF to our membership on 20 July 2022.there are two basic issues; traffic safety on Highway 3 and flight operations. Other concerns may be addressed at an open meeting. Our purpose in inviting the Montana Army National Guard Public Affairs Office is to be proactive in creating a dialog to discuss any issues which may, through misunderstanding or lack of information, make the establishment of the LAASF in our neighborhood contentious and unwelcome. | A public open house meeting was held on 6/29/2022 at the Boothill Inn and Suites to address comments and answer questions. Members of the Rimrock Neighborhood Task Force were invited to attend. This information has been added to EA Section 1.5. |
| Howard Evans, LCDR USN (ret) | E-mail | 20-Jun-22 | Information regarding drill periods | Please give a brief overview of what a drill period entails | During a drill weekend, up to 90 personnel would arrive on either a Thursday (at 10AM) or a Friday (at 7PM) and train until 11PM. Saturday personnel would arrive at 7AM and leave at 530PM. Sunday they would arrive 8AM and leave at 330PM. Training includes classroom time as well as 2-3 flights per day. A detailed description of all activities that would occur under the proposed action are identified in Section 2.2 of the EA. The EA can be accessed on the MTARNG website at https://dma.mt.gov/CFMO/index. |

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| Howard Evans, LCDR USN (ret) | E-mail | 20-Jun-22 | Noise/ flight paths | Provide a diagram of approved flight plans with altitudes specified. Describe the effect of the proposed decibel increase in the neighborhoods south of Highway 3 and how was the base level determined? Why were no noise change estimates done for Rehberg Ranch? Noise varies by aircraft. Provide a noise profile for each model to be stationed at the LAASF and effect on residents. | Noise methods (Section 2.3), flight tracks (Section 3.1.1), flight profiles with altitudes by air frame (Appendix B), and modeling results and noise-level contours (Figures 5-1 and 5-2) are included in the noise study prepared for this MTARNG project. Noise impacts are summarized in the Final EA in Figure 4 and Section 4.3. The documents are available online: https://dma.mt.gov/CFMO/index. Rehberg Ranch noise levels are included in the EA (Rifle Creek Trail Community) and would be approximately 53 dB. Noise methods are included in the noise document and the EA. |
| Howard Evans, LCDR USN (ret) | E-mail | 20-Jun-22 | Traffic and safety | Do you propose any traffic control measures at the intersection of AJ Way, Stoney Ridge and Highway 3? Have you proposed a reduction is speed limit to increase safety? What measures are you prepared to take or to request to make access and egress at AJ Way safer for your soldiers and the Billings community? | Under the Proposed Action, 90 MTARNG soldiers would travel to and from the LAASF outside of peak travel hours (Section 2.2 of EA). Coordination with the County and MDT is ongoing. Highway 3 is under MDT's jurisdiction. All changes or improvement to the roads are at MDT's discretion and conducted when analysis indicates improvements are warranted typically based on FHWA standards. |
| Howard Evans, LCDR USN (ret) | E-mail | 20-Jun-22 | Future development | With realization that this study only covers the use of an existing hangar, it is known that an additional 20 acres west of the current proposed facility have been purchased by The Department of Military Affairs. Please address the intended use of the property and any relevant time-lines. | This proposal is for operations out of the leased hangar only. MTARNG has acquired 20 acres adjacent to the proposed hangar location, and funding was awarded in August 2022 for the design and construction of a new facility. However, there is currently no design available. An additional NEPA document that would include the opportunity for public involvement and comment would be prepared when there is sufficient design and project definition to analyze potential impacts and obtain public and agency input, including consideration of traffic and noise (Section 2.2). A permanent facility would not change the number of aircraft that can operate from the leased hangar/out of a Limited Army Aviation Support Facility. |
| Howard Evans, LCDR USN (ret) | E-mail | 21-Jul-22 | Formation flights | Will there be formation or multiple aircraft flights from the Billings LAASF? | Most of the MTARNG flights would be single aircraft operations; however, some multi-ship operations would occur. Multi-ship flights would depart the airspace immediately and would not use the traffic pattern. |

MTARNG Development and Operation of a Limited Army Aviation Support Facility
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| Howard Evans, LCDR USN (ret) | E-mail | 21-Jul-22 | Vibration | Has the instability of the sandstone rimrocks been considered as a possible hazard. The sandstone rimrocks are fragile, with many fissures and loose boulders. Periodically, for reasons unknown to me, a boulder will break loose and crash into a residence. The concern is that the vibrations caused by rotors may loosen boulders and open fissures. The possibilities are worth investigating so the Guard doesn't shoulder the blame should a rockfall occur. | According to a study conducted by Terracon (Rockfall Potential Evaluation Rimrocks to Valley Bike and Pedestrian Feasibility Study 2016), "Freeze/thaw periods, wetting and drying periods, and erosional effects are the main causes of rockfall along the rimrocks with toppling failure mechanisms as the primary way in which the rockfalls occur." The study goes on to note that "failures do not occur in a uniform manner that can be readily projected by monitoring." It is unknown to what extent, if any, the vibrations associated with helicopters, airplanes, trucks, etc. near the rims affects the stability of the hillside. |
| Howard Evans, LCDR USN (ret) | E-mail | 21-Jul-22 | Noise Complaints | To whom should noise complaints regarding MTARNG activities be directed? | Noise complaints can be addressed to the MTARNG Public Affairs Office at (406) 324-3007/3009 which would then be routed to the State Aviation Officer for follow-up. |
| Open House Comments | | | | | |
| John R. Larson | Meeting | 29-Jun-22 | Jobs/aviation | Billings needs 14 good jobs. Having aviation assets in Eastern Montana will provide easier access for events like the recent floods. Site should be able to support _____ aviation movement | Comment has been included in the project record. |
| Christina Miller | Meeting | 29-Jun-22 | flight paths | You need to reference in several places in the EA that the flight path maps are found under noise or audible section of the EA. I read the EA but missed these maps as "noise" did not seem the obvious place for flight path to me. | MTARNG has updated the EA to reflect where flight paths can be found (Section 2.2). |