8.01 OVERVIEW

Cheyenne Mountain Air Force Station (AFS) is owned and operated by Air Force Space Command (AFSPC) and hosts the activities of several tenant units.

Figure 8.1

CHEYENNE MOUNTAIN AFS QUICK FACTS

<table>
<thead>
<tr>
<th>DATE FOUNDED</th>
<th>1967</th>
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<tr>
<td>DIVISION</td>
<td>21ST SPACE WING</td>
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<tr>
<td>LAND AREA</td>
<td>568 ACRES</td>
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<tr>
<td>MILITARY PERSONNEL</td>
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<td>CIVILIAN EMPLOYEES</td>
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Soldiers from the 4th Infantry Division at Fort Carson conduct an exercise at Cheyenne Mountain AFS (photo by 1st Stryker Brigade Combat Team, 4th Infantry Division).
Table 8.1
CHEYENNE MOUNTAIN AFS COMPATIBILITY ISSUES

KEY ISSUES:
1. **Land Use Regulations** – Existing residential development in the Broadmoor Bluffs neighborhood creates most of the compatibility issues, primarily trespassing, airspace use, and the need for fire mitigation on properties along the installation perimeter.
2. **Transportation** – Viable routes between Peterson Air Force Base (AFB) and Cheyenne Mountain AFS via State Highway 115 and North American Aerospace Defense Command (NORAD) Road must be maintained during wildfire or other emergencies.
3. **Stormwater** – Development north of NORAD Road could increase stormwater runoff onto the road and State Highway 115 if not properly mitigated.
4. **Airspace** – Civilian use of airspace (including unmanned aircraft systems (UAS) near Cheyenne Mountain AFS) increases the risk of a midair collision and surveillance of the missions at the installation.
5. **Frequency Spectrum** – Cheyenne Mountain AFS must regularly work with local and regional spectrum users to mitigate potential spectrum interference.
6. **Wildfire** – Wildfire management in the Broadmoor Bluffs neighborhood varies from house to house and poses a fire risk to the neighborhood and the installation. Management of the surrounding forestlands will require moth and beetle mitigation.

<table>
<thead>
<tr>
<th></th>
<th>AIR FORCE ACADEMY</th>
<th>FORT CARSON</th>
<th>PETERSON AFB</th>
<th>CHEYENNE MOUNTAIN AFS</th>
<th>SCHRIEVER AFB</th>
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Note: x indicates issue studied related to this installation.
Figure 8.2
REGIONAL INSTALLATION MAP

Legend
- Cheyenne Mountain AFS
- Railroads
- 2 Mile Plan Notification Area
- Highways
- Cities and Towns
- Local Roads

Data Source: PPACG

2018 Colorado Springs Regional Joint Land Use Study
CHEYENNE MOUNTAIN AFS MISSION AND OPERATIONAL FOOTPRINT

Cheyenne Mountain AFS is an Air Force Space Command (AFSPC) installation assigned to the 21st Space Wing (SW) at Peterson AFB that hosts missions, units, and/or elements from United States Strategic Command (USSTRATCOM), United States Northern Command (USNORTHCOM), NORAD, the Defense Intelligence Agency, the Defense Information Systems Agency, and the Air Force Technical Applications Center. The Cheyenne Mountain Operations Center served as the NORAD and USNORTHCOM command center from February 1967 to May 2008, when it was redesignated as the NORAD and USNORTHCOM Alternate Command Center.

The installation does not anticipate growth in employees, but future mission adjustments could occur. Increased traffic and other changes in installation needs regarding encroachment are not expected since the mission operational footprint should remain relatively static. Figure 8.3, Cheyenne Mountain AFS Growth Map, shows that nearly all population growth around Cheyenne Mountain AFS has occurred since 1940.

For more information about Cheyenne Mountain AFS, visit www.norad.mil/About-NORAD/Cheyenne-Mountain-Air-Force-Station/.
Figure B3
CHEYENNE MOUNTAIN AFS GROWTH MAP

Legend
- Cheyenne Mountain AFS
- 2 Mile Plan Notification Area
- Railroads
- Highways
- Cities and Towns
- Local Roads

Structures Key:
- Pre-1940s Existing Structures
- Structures Built Since 1940s

Data Source: Pikes Peak Regional Building Department, PPACG
8.02 COMPATIBILITY ISSUES

REGIONAL COORDINATION
Please see Chapter 4, Compatibility, for a complete discussion.

BUILT ENVIRONMENT AND MILITARY READINESS

Land Use Regulations
Colorado House Bill 10-1205 created requirements (C.R.S. 29-20-105.6) for local governments to “provide to the installation commanding officer and the flying mission commanding officer, or their designees, information relating to proposed zoning changes, and amendments to the local government's comprehensive plan, or land development regulations that, if approved, would affect the use of any area within two miles of the military installation.”

Areas outside of the 2-mile buffer that may impact military operations should be mapped to assist planners with evaluating development that may affect issues such as roads, potential vertical obstructions, and stormwater.

Existing residential development in the Broadmoor Bluffs neighborhood along the installation boundary creates most of the compatibility issues for the installation, primarily trespassing, airspace use by aircraft and drones, and the need for fire mitigation on properties along the installation perimeter. Remaining vacant lands near the installation also have the potential to affect the mission. Strategies related to this installation focus on strengthening processes and communication to effectively address these potential impacts and ensure recreational land use, trail development, and transportation network enhancements continue to preserve and support Cheyenne Mountain AFS missions (as a component of the Peterson AFB mission footprint).

Transportation
Viable routes between Peterson AFB and Cheyenne Mountain AFS (shown on Figure 8.2, Regional Installation Map) using State Highway 115 and NORAD Road must be maintained during wildfire or other emergencies. There is no access to NORAD Road from the south for new development, and all development on the north side of NORAD Road must use the current access point to Broadmoor Bluffs or directly access State Highway 115. The current plat for Broadmoor Bluffs #12, the subdivision adjacent to the northern installation boundary, no longer indicates an emergency access easement that would allow Cheyenne Mountain AFS to provide emergency assistance during a wildfire or other incident. The installation recommends this easement be reestablished to provide a route for emergency services to access the neighborhood during a potential evacuation scenario.

PPACG’s small-area forecast data was used to show where future growth may occur to inform transportation planning processes; see Figure 8.4, Cheyenne Mountain AFS Small-Area Jobs Forecast, and Figure 8.5, Cheyenne Mountain AFS Small-Area Residential Unit Forecast. The maps reflect the forecasted changes in jobs and residential units, respectively, based on state forecasted population growth. Both maps indicate that growth is likely to continue in this area.
Figure 8.4
CHEYENNE MOUNTAIN AFS SMALL-AREA JOBS FORECAST

Data Source: PPACG
Figure 8.5
CHEYENNE MOUNTAIN AFS SMALL-AREA RESIDENTIAL UNIT FORECAST

Legend
- Cheyenne Mountain AFS
- Railroads
- 2 Mile Plan Notification Area
- Highways
- Local Roads

Small Area Forecast Residential Unit Data:
- RU Loss - 2015-2045
- RU Gain - 2015-2045
- RU No Change - 2015-2045

Data Source: PPACG
Stormwater
When Cheyenne Mountain AFS was constructed in the 1960s, it was isolated, and its stormwater runoff had no impact on the surrounding countryside, which was mainly agricultural in nature. Since the 1960s there has been significant development north of the installation, including Broadmoor Bluffs homes adjacent to the installation perimeter.

Stormwater runoff passes through Cheyenne Mountain AFS into Cheyenne Mountain State Park, Broadmoor Bluffs, State Highway 115, and Fort Carson. Stormwater and slope stability management studies were completed in spring 2018, and the installation is developing projects to address deficiencies and problem areas. Impacts to NORAD Road were included in the studies, as well as residential runoff impacts along NORAD Road and State Highway 115. Development north of NORAD Road could increase stormwater runoff onto the road and State Highway 115 if not properly mitigated. Since the 100-year flood event in September 2013, Cheyenne Mountain AFS has invested approximately $7 million in storm drainage improvements on the installation.

Airspace
Receiving and departing helicopter flights occur several times per year at Cheyenne Mountain AFS with approaches and departures over Cheyenne Mountain State Park. The helipad is not currently registered with, or acknowledged by, the Federal Aviation Administration (FAA) as a component of the National Airspace System. A project is underway to repair the helipad and bring it up to the standards required for an Air Force limited-use helipad with single-direction ingress/egress that will then be registered and annotated on appropriate FAA documents. Existing urban development; rising terrain to the west, north, and south; density altitude; and the influence that these geographic realities have on weather patterns can produce real challenges to any type of flight operations near the installation and along the entire Rocky Mountain Front Range. In addition to the helipad, Cheyenne Mountain AFS also has a landing zone (LZ) to receive either larger or additional helicopters for emergency response and evacuation of personnel.

Civilian use of airspace (either manned or UAS) near and above Cheyenne Mountain AFS increases the risk of a midair collision and surveillance of the missions at the installation. The registration of the helipad with the FAA, coupled with potential inclusion in and enforcement of the FAA’s 14 Code of Federal Regulations (CFR) Part 107, Small Unmanned Aircraft Systems, will help mitigate this risk.

Frequency Spectrum
Cheyenne Mountain AFS communication systems are primarily underground and do not pose a visual or spectrum impact on the community. In 2006, Colorado Springs updated its telecommunications facilities ordinance to codify the public participation process and encourage comments on the land use compatibility of all proposed commercial mobile radio service facilities. This process allows Cheyenne Mountain AFS spectrum managers to protect its interests from spectrum competition while promoting regular communication with local and regional spectrum users to mitigate any potential spectrum interference in the region.
NATURAL RESOURCE FACTORS

Wildfires
Significant work has been done by Cheyenne Mountain AFS and Cheyenne Mountain State Park, on a cooperative basis, to thin timber stands and clear-cut scrub oak to create a 30- to 40-foot fire break along the southern perimeter of the installation. The proximity of Broadmoor Bluffs housing along the northern perimeter of Cheyenne Mountain AFS creates a true Wildland/Urban Interface (WUI), where structures built within flammable vegetation pose an elevated risk for wildfire. Although the Colorado Springs Fire Department has a very active public education presence through the National Fire Prevention Association’s Firewise USA program, mitigated spaces in Broadmoor Bluffs vary from house to house and pose a fire risk to the neighborhood and the installation. Additional funding, local government staff, and resident education and action programs would help reduce the wildfire risk shared by the installation and the community.

The greatest need is for Cheyenne Mountain AFS and the U.S. Forest Service District Office for Pike National Forest to collaborate on mitigating the Tussock moth and Western spruce budworm infestations, which resulted in significant forest kills immediately to the south and southwest of the installation.