



Operational Range Assessment Altus Air Force Base

Air Force Operational Range Assessment Program

December 2018

Background

DoD uses and manages operational ranges to support national security objectives and maintain the high state of operational readiness essential to its mission requirements. The Department conducts non-regulatory, proactive, and comprehensive operational range assessments (ORAs) to support the long-term sustainability of these ranges while protecting human health and the environment. The purpose of an ORA is to determine if there is a release or substantial threat of a release of munitions constituents from an operational range to an off-range area that exceeds an applicable regulatory standard or creates a potential unacceptable risk to human health or the environment.

The USAF Operational Range Assessment Program (ORAP), established to comply with DoD policy, sets forth procedures for consistently conducting ORAs throughout the Air Force. The USAF ORAP assessment methodology uses an installation-wide approach to verify the ORAP inventory and accomplish range-specific assessments. An Air Force ORA is comprised of two primary phases: Qualitative Assessment, Phase 1 and Quantitative Assessment, Phase 2 (if required).

- A Qualitative Assessment, Phase 1, encompasses records review, interviews, and a visual survey.
- A Quantitative Assessment, Phase 2, encompasses records review, interviews, visual survey, and environmental media sampling.

Installation Overview

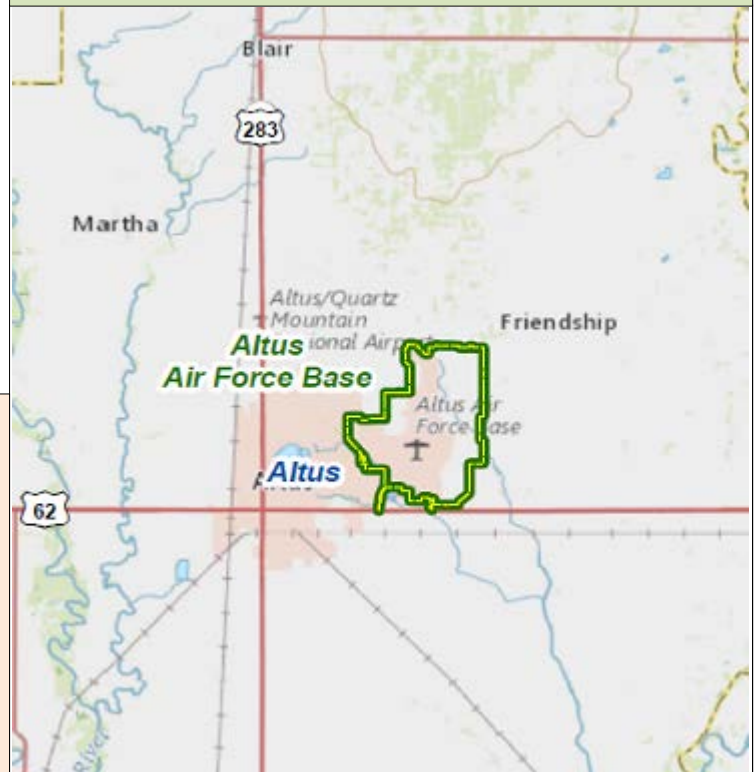
Altus Air Force Base (AFB), part of the Air Education and Training Command (AETC), is located in eastern Jackson County, approximately four miles east-northeast of Altus, Oklahoma. Altus AFB manages a geographically separate unit, Sooner Drop Zone, which encompasses approximately 960 acres and is located 23 miles southwest in Harmon County, Oklahoma.

ORAP Findings: November 2017 ORA Report

- Migration mechanisms at Altus AFB were identified as unlikely to transport munitions constituents (MC) to off-range locations.
- No actual or potential off-range migration of MC exists for the areas assessed at Altus AFB.
- No unacceptable risks to human health or the environment were identified for the areas evaluated at Altus AFB.

Next Steps

Altus AFB is scheduled to be assessed in accordance with USAF and DoD policy specifying periodic assessment at least every five years or sooner if significant changes occur that may impact assessment decisions.



Installation Overview Continued

During implementation of the ORAP at Altus AFB, three ranges were verified as eligible and assessed under the USAF ORAP – a Small Arms Range (SAR), an Explosive Ordnance Disposal (EOD) Range, and a Grenade Range (GR). The Sooner Drop Zone is used for aerial drops of simulated cargo loads, as training activities do not involve the use of munitions or other ordnance the area was determined to be ineligible for an assessment under the ORAP.

The following summarizes USAF ORAP efforts for the SAR, EOD, and GR. This is the second ORA at the SAR and EOD Range, and initial ORA at the GR.

SAR Assessment Overview

The SAR, encompassing approximately 0.97 acres, is located along Altus AFB's southwestern boundary. The SAR was constructed in the 1950s and has been modified over the years to include a covered firing line, a concrete floor, overhead baffles, sidewalls, and a covered steel bullet trap. However, a historic berm remains in place. The range is used weekly by USAF personnel for proficiency training, and since 2005, only frangible munitions have been permitted.

The 2012 Phase 1 identified the historic berm as the primary source and leaching to groundwater as the only likely MC migration route. However, a complete exposure pathway was not identified due to soil and groundwater data from a nearby study in which no metals identified as MCs of concern were detected.

The 2018 Phase 1 confirmed a suspected MC source and potential infiltration to groundwater as the only likely MC transport mechanism. Due to site conditions and prior sample results, the ORA deemed it unlikely MC (historical or current) are migrating. No complete human and ecological exposure pathways were identified.

- The ORA recommended the Installation address the historic earthen berm to reduce potential MC (metals) availability in the environment.

EOD Range Assessment Overview

The EOD Range encompasses approximately 55 acres and is located in the southeastern portion of the Base. The range was activated in the 1950s and currently consists of a circular soil berm surrounded by an open grassy field. From 1953 to 1968 burning operations were reportedly conducted. The range, not used since the late 1960s, is still authorized for emergency use.

The 2012 Phase 1 identified a potential source of MC in soils capable of migrating to groundwater. However, all interactions were deemed incomplete due to site conditions as well as soil and groundwater sampling data indicating no detections of explosives and no metals in groundwater above background levels.

The 2018 Phase 1 verified MC from historic use may have been deposited in soils; however, due to prior geophysical and media investigations the ORA effort determined minimal, if any, MC would be available in the environment. Leaching to groundwater was identified as a potential transport route; however, due to conditions all mechanisms were deemed unlikely to transport MC, if present. All exposure pathways were deemed incomplete.

GR Assessment Overview

The GR, encompassing approximately 19 acres, is located in the northwestern portion of the Base. The range, active since 2012, is utilized a few times a year by USAF personnel for weapon qualification training with practice grenades. The range consists of three firing points and four targets within an open grass field.

The initial 2018 ORA Phase 1 indicates MC may have been deposited in soils near or at firing points and target (impact) areas. However, the potential availability of MC is significantly reduced due to munitions use and maintenance activities, debris collected following each training event. Leaching to groundwater was identified as a potential transport route, but due to environmental conditions all mechanisms were deemed unlikely to transport MC, if present. All exposure pathways deemed incomplete.

For more information on this assessment or the Air Force Operational Range Assessment Program contact the Ranges Subject Matter Expert, Technical Branch, Environmental Quality Directorate, Air Force Civil Engineer Center For more information on the DoD Operational Range Assessment Program visit <https://denix.osd.mil/orap/home/>